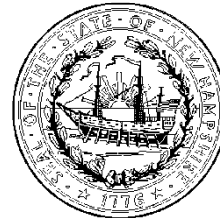


## APPENDIX V

State of New Hampshire  
Department of Environmental Services  
Air Resources Division



# TITLE V OPERATING PERMIT

Permit No: **TV-0065**  
Date Issued: **December 24, 2020**

This certifies that:  
**Berlin Station, LLC**  
**One Cate Street**  
**Portsmouth, NH 03801**

has been granted a Title V Operating Permit for the following facility and location:

**Burgess BioPower**  
**One Community Street**  
**Berlin, NH 03570**

**Facility ID No:** 3300790137  
**ORISPL:** 58054  
**Application No:** 14-0441, received on October 24, 2014 (Initial Title V Operating Permit);  
Additional information received on May 22, 2020.

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V application referenced above, filed with the New Hampshire Department of Environmental Services under the signature of the responsible official certifying to the best of his knowledge that the statements and information therein are true, accurate and complete.

Responsible Officials: **Robert Desrosiers (603) 319-4485**  
**Dammon Frecker (603) 334-1130**  
Technical Contact: **Ryan Carrier (603) 752-8401**  
Designated Representative: **Robert Desrosiers**

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of the Code of Federal Regulations, Title 40, Part 70.

This Permit is effective upon issuance and expires on **November 30, 2025**.

*Craig Wright*  
**COPY**

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Director  
Air Resources Division

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**ABBREVIATIONS**

ARD	Air Resources Division
AAL	Ambient Air Limit
acf	actual cubic foot
ASTM	American Society of Testing and Materials
BACT	best Available Control technology
Btu	British thermal units
CAA	Clean Air Act
CAS	Chemical Abstracts Service
CEMS	Continuous Emissions Monitoring System
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon monoxide
DER	Discrete Emissions Reduction
DES	New Hampshire Department of Environmental Services (the department)
Env-A	New Hampshire Code of Administrative Rules - Air Resources Division
ERC	Emission Reduction Credit
ft	foot or feet
ft <sup>3</sup>	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
HCl	Hydrogen chloride
Hg	Mercury
hp	horsepower
hr	hour
LAER	Lowest Achievable Control Technology
lb	pound
MM	million
MW	megawatt
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Oxides of Nitrogen
NSPS	New Source Performance Standard
PM <sub>10</sub>	Particulate Matter < 10 microns
ppm	parts per million
ppmv	parts per million volume
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RICE	Reciprocating Internal Combustion Engine

RSA	Revised Statutes Annotated
RTAP	Regulated Toxic Air Pollutant
scf	standard cubic foot
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
tpy	tons per consecutive 12-month period
ULSD	Ultra-low sulfur diesel
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

**FACILITY SPECIFIC TITLE V OPERATING PERMIT CONDITIONS****I. Facility Description of Operations**

Burgess BioPower (Burgess) is a biomass-fired electricity generating facility with a nominal gross output of 75 megawatts. The facility includes a biomass-fired bubbling fluidized bed (BFB) boiler, a wet cooling tower, an emergency generator and a fire pump engine. Burgess is a major source under the federal Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) programs. PSD/NNSR/Temporary Permit TP-0054 was issued on July 26, 2010 for the construction of this facility. Temporary Permit TP-0235, issued on April 5, 2019, established startup and shutdown limitations for the boiler. Burgess also holds an acid rain permit AR-0005.

The biomass boiler is equipped with a dry sorbent injection system for acid gas control (if necessary), a pulse-jet fabric filter (PJFF) to control the emissions of particulate matter (PM), and a tail-end selective catalytic reduction (SCR) system to control the emissions of nitrogen oxides (NO<sub>x</sub>). The SCR system utilizes 19% aqueous ammonia (NH<sub>3</sub>), which is injected into the flue gases to remove NO<sub>x</sub> emissions. The boiler stack is equipped with a continuous emissions monitoring system (CEMS) to monitor NO<sub>x</sub>, carbon monoxide (CO), diluent gas oxygen (O<sub>2</sub>) and a second NO<sub>x</sub> analyzer for determining ammonia slip by differential NO<sub>x</sub> measurements. The boiler stack is also equipped a flue gas flow monitoring system, and a continuous opacity monitoring system (COMS). A second process emissions monitoring system (not required by the permit) located in the duct work between the PJFF outlet and SCR inlet, is utilized to measure O<sub>2</sub>, sulfur dioxide (SO<sub>2</sub>) and uncontrolled NO<sub>x</sub>. These process measurements are utilized along with the stack CEMS measurements in order to monitor and control the operation of the air pollution control equipment.

Burgess is a major source for NO<sub>x</sub> and CO emissions and is therefore required to obtain a Title V Operating Permit.

**II. Permitted Activities**

In accordance with all of the applicable requirements identified in the Permit, the Owner or Operator is authorized to operate the devices and/or processes identified in Sections III, IV, V, and VI within the terms and conditions specified in this Permit.

**III. Emission Unit Identification**

**A. Significant Activities**

The activities identified in Table 1 are subject to and regulated by this Title V Operating Permit.

<b>Table 1 - Significant Activities</b>			
<b>Emission Unit ID</b>	<b>Device Identification</b>	<b>Installation Date</b>	<b>Maximum Design Capacity and Permitted Fuel Type(s)</b>
EU01	Bubbling fluidized bed boiler Manufacturer: Babcock & Wilcox Boiler is equipped with an oxygen trim system, over-fire air and flue gas recirculation.	October 2011 (construction commenced) October 2013 (Initial boiler startup)	<u>Primary Combustion Chamber</u> 1,013 MMBtu/hr - Clean wood chips equivalent to 113 tons/hr, assuming a moisture content of 45% and a heating value of 4,500 Btu/lb for biomass <sup>1</sup> <u>Four Startup Burners</u> Each 60 MMBtu/hr - No. 2 Fuel oil/ULSD equivalent to 430 gal/hr for each burner
EU02	4-Cell Wet Cooling Tower SPX Cooling Technologies Model No. F499-4.0-4	October 2013	Nominal circulation rate = 50,000 gal/min
EU03	315 hp Fire Pump Engine Manufacturer: John Deere Model year: 2012 Model No. JU6H-UFAD98 Serial No. PF606881231 16	October 24, 2013	2.1 MMBtu/hr Ultra-low sulfur diesel (ULSD) - equivalent to 15 gal/hr, assuming a heating value of 137,000 Btu/gal
EU04	755 hp Emergency Generator Manufacturer: John Deere Model year: 2016 Model No: 6135HFG75 Serial No. RG6135G007267	June 2016	4.86 MMBtu/hr ULSD - equivalent to 35.5 gal/hr

**B. Stack Criteria**

The following devices at the Facility shall have exhaust stacks that discharge vertically, without obstruction, and meet the criteria in Table 2:

<b>Table 2 - Stack Criteria</b>			
<b>Stack #</b>	<b>Emission Unit</b>	<b>Minimum Height (feet above ground surface)</b>	<b>Maximum Exit Diameter (feet)</b>
ST01	EU01	320	11.25
ST02	EU02	48 (each cell)	31.6 (each cell)

<sup>1</sup> The heat input rate of the boiler varies depending on the moisture content, temperature and other characteristics of the wood fuel.

#### **IV. Insignificant Activities Identification**

All activities at this facility, which meet the criteria identified in Env-A 609.04, shall be considered insignificant activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this Permit.

#### **V. Exempt Activities Identification**

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this Permit.

#### **VI. Pollution Control Equipment Identification**

With the exception of sorbent injection (PCE3), air pollution control equipment listed in Table 3 shall be operated at all times that the associated devices are operating in order to meet permit conditions. Sorbent injection shall be used as necessary to meet the SO<sub>2</sub> and sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>) emission limitations.

<b>Table 3 - Pollution Control Equipment Identification</b>			
<b>Pollution Control Equipment ID</b>	<b>Description</b>	<b>Purpose</b>	<b>Emission Unit Controlled</b>
PCE1	Pulse-jet fabric filter	Control of particulate matter emissions	EU01
PCE2	Selective Catalytic Reduction System with ammonia injection <sup>2</sup> (cold side)	Control of NO <sub>x</sub> emissions	EU01
PCE3	Sorbent Injection (as needed)	Control of SO <sub>2</sub> emissions	EU01

#### **VII. Alternative Operating Scenarios**

No alternative operating scenarios were identified for this permit.

<sup>2</sup> See Table 5, Item 3.



**VIII. Applicable Requirements**

**A. State-only Enforceable Operational and Emission Limitations**

The Owner or Operator shall be subject to the state-only<sup>3</sup> operational and emission limitations identified in Table 4 below:

<b>Table 4 - State-only Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Applicable Requirements</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Citation</b>
1.	<u>24-hour and Annual Ambient Air Limit</u> The emissions of any Regulated Toxic Air Pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual Ambient Air Limit (AAL) as set forth in Env-A 1450.01, <i>Table Containing the List Naming All Regulated Toxic Air Pollutants</i> . <sup>4</sup>	Facility wide	Env-A 1400
2.	<u>Emission Standard for Ammonia Slip</u> Ammonia slip emissions shall be limited to 10 ppm (dry volume) at 6% oxygen based on a calendar day average.	EU01/PCE2	TP-0054

<sup>3</sup> The term “state-only requirement” is used to refer to those requirements that are not federally enforceable but are state requirements as defined in Env-A 105.18.

<sup>4</sup> Env-A 1450.01, *Table Containing the List Naming All Regulated Toxic Air Pollutants*, is typically updated annually. The updates can be found at <http://des.nh.gov/organization/commissioner/legal/rulemaking/index.htm#aair>

**B. Federally Enforceable Operational and Emission Limitations**

The Owner or Operator shall be subject to the federally enforceable operational and emission limitations identified in Table 5 below:

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Requirement</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1.	<p><u>Emission Standard for NOx</u></p> <p>NOx emissions from the boiler shall be limited as follows:</p> <p>a.) 0.060 lb/MMBtu of heat input based on a 30-day rolling average, excluding periods of startup and shutdown;</p> <p>b.) 0.10 lb/MMBtu of heat input based on a 30-day rolling average, including periods of startup and shutdown; and</p> <p>c.) 244.5 tons per consecutive 12-month period (tpy). This emission limit applies at all times including the periods of startup and shutdown.</p>	EU01	TP-0054, TP-0235, Env-A 618 Lowest Achievable Emission Rate (LAER) & Env-A 619 Best Available Control Technology (BACT)
2.	<p><u>Emission Standard for CO</u></p> <p>CO emissions from the boiler shall be limited as follows:</p> <p>a.) 0.075 lb/MMBtu of heat input based on a calendar day average, excluding periods of startup and shutdown;</p> <p>b.) 0.15 lb/MMBtu of heat input based on a 30-day rolling average, including periods of startup and shutdown; and</p> <p>c.) 307.3 tpy; This emission limit applies at all times including the periods of startup and shutdown.</p>	EU01	TP-0054, TP-0235 & Env-A 619 BACT
3.	<p><u>Startup and Shutdown Definitions</u></p> <p>a.) Startup means the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy for producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends two hours after ammonia injection commences.</p> <p>b.) During the startup periods, the operation of the SCR system, including ammonia injection, shall begin as soon as practicable after the inlet gas temperature to the SCR exceeds 400°F.</p> <p>c.) For the purposes of compliance with Subpart JJJJJ, boiler startup means: either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy (such as steam or hot water) from the boiler is supplied for heating and/or producing electricity, or for any other purpose.</p> <p>d.) Shutdown means the period in which cessation of operation of the</p>	EU01	TP-0235, Env-A 618 & Env-A 619  40 CFR 63 Subpart JJJJJ  Env-A 618, Env-A 619 &

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Requirement</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
	boiler is initiated for any purpose. Shutdown begins when the boiler no longer supplies useful thermal energy (such as steam or hot water) for heating, cooling, or process purposes or generates electricity, or when no fuel is being fed to the boiler, whichever is earlier. Shutdown ends when the boiler no longer supplies useful thermal energy for heating, cooling, or process purposes or generates electricity, and no fuel is being combusted in the boiler.		40 CFR 63 Subpart JJJJJ
4.	<u><i>Emission Standard for Particulate Matter</i></u> a.) Filterable particulate matter emissions shall be limited to 0.010 lb/MMBtu of heat input <sup>5</sup> .	EU01	Env-A 619 & TP-0054
	b.) Filterable particulate matter emissions shall be limited to 0.030 lb/MMBtu of heat input.		40 CFR 63.11201 Subpart JJJJJ & 40 CFR 60.43b(h) Subpart Db
5.	<u><i>Emission Standard for SO<sub>2</sub></i></u> SO <sub>2</sub> emissions shall be limited to 0.012 lb/MMBtu of heat input.	EU01	Env-A 619 & TP-0054
6.	<u><i>Emission Standard for sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>)</i></u> H <sub>2</sub> SO <sub>4</sub> emissions shall be limited to 0.002 lb/MMBtu of heat input.	EU01	Env-A 619 & TP-0054
7.	<u><i>Emission Standard for Hydrogen Chloride (HCl)</i></u> HCl emissions shall be limited to 0.000834 lb/MMBtu of heat input.	EU01	TP-0054 40 CFR 63 Subpart B (Case-by-Case MACT)
8.	<u><i>Emission Standard for Mercury</i></u> Mercury emissions shall be limited to 0.000003 lb/MMBtu of heat input.	EU01	TP-0054 40 CFR 63 Subpart B (Case-by-Case MACT)
9.	<u><i>Facility-Wide Hazardous Air Pollutants (HAPs) Emission Limitation</i></u> Facility-wide emissions of HAPs (as defined in Section 112 of the 1990 Clean Air Act Amendments) shall be limited to less than 10 tpy for any individual HAP and 25 tpy for all HAPs combined.	Facility Wide	TP-0235
10.	<u><i>Fuel Oil Annual Capacity Factor</i></u> The boiler shall operate at an annual capacity factor for fuel oil of 5% or less.	EU01	TP-0054 & Env-A 4602.45 <i>More stringent than</i> 40 CFR 60.44b(1)(1)

<sup>5</sup> This emission limitation is more stringent than Env-A 2003.03 *Particulate Emission Standards for Fuel Burning Devices Installed After January 1, 1985*.

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Requirement</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
11.	<u>Fuel Oil Startup Limitation</u> Fuel oil shall only be burned in the boiler during startup.	EU01	TP-0054 & Env-A 619
12.	<u>Facility-wide Annual Emission Limit for NO<sub>x</sub></u> Facility-wide emissions of NO <sub>x</sub> shall be limited to 245 tpy.	Facility-wide	TP-0054, Env-A 618 & Env-A 619
13.	<u>Standard for Opacity</u> The opacity from the boiler shall not exceed 10 percent (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Compliance with the opacity limit shall be determined through a continuous opacity monitoring system.	EU01	TP-0054 & Env-A 619 <i>More stringent than</i> 40 CFR 60.43b(f) (NSPS Subpart Db) & Env-A 2002.02
14.	<u>Activities Exempt from Visible Emission Standards</u> No more than one of the following two exemptions shall be taken at a time: a.) During periods of startup, shutdown and malfunction, average opacity shall not exceed 20% except for one period of 6 continuous minutes in any 60-minute period; or b.) During periods of soot blowing, grate cleaning, and cleaning of fires, average opacity shall be allowed to be in excess of 20%, but not more than 27% for one period of 6 continuous minutes in any 60-minute period.	EU01	TP-0054 & Env-A 619
15.	<u>Emission Standard for Particulate Drift</u> Particulate matter emissions from the cooling tower shall be limited to 0.0005% by weight of the cooling water flow rate.	EU02	TP-0054 & Env-A 619
16.	<u>Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970</u> The average opacity from fuel burning devices installed after May 13, 1970 shall not exceed 20 percent for any continuous 6-minute period. <sup>6</sup>	EU03 & EU04	Env-A 2002.02 (formerly Env-A 1202 effective 12-27-90)
17.	<u>Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985</u> The particulate matter emissions from fuel burning devices installed on or after January 1, 1985 shall not exceed 0.30 lb/MMBtu.	EU03 & EU04	Env-A 2003.03 formerly (Env-A 1202 effective 12-27- 90)

<sup>6</sup> Compliance with the visible emission standard shall be determined, upon request by the department, using 40 CFR 60, Appendix A, Method 9 or other department approved method.

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	Requirement	Applicable Unit	Regulatory Basis
18.	<u>Operating Limitations for Emergency Engines</u> Each emergency engine shall be limited to 500 hours of operation during any consecutive 12 month period.	EU03 & EU04	Env-A 1301.02(j)
19.	<u>Operating Limitations for Emergency Engines</u> a.) Each emergency engine shall only operate: 1. As a mechanical or electrical power source only during an emergency which is defined in Env-A 1302.17 as an unforeseeable condition that is beyond the control of the owner or operator that: i. Results in an interruption of electrical power from the electricity supplier to the premises; ii. Requires an interruption of electrical power from the electricity supplier to the premises in order to enable the owner or operator to repair damage from fire, flood, or any other catastrophic event, natural or man-made; or iii. Requires operation of an emergency generator to minimize damage from fire, flood, or any other catastrophic event, natural or man-made; 2. During scheduled maintenance checks and readiness testing, as recommended by federal, state or local government, the manufacturer, the vendor or the insurance company associated with the engine, for a maximum of 100 hours per calendar year <sup>7</sup> . b.) The term emergency generator does not include an engine for which the owner or operator of such engine is party to any other agreement to sell electrical power from such engine to an electricity supplier or otherwise receives any reduction in the cost of electrical power for agreeing to produce power during periods of reduced voltage or reduced power availability.	EU03 & EU04	Env-A 103.11, Env-A 1302.17 & 40 CFR 60.4211(f) (Subpart III)
20.	<u>Emergency Engine Operating Requirements</u> The Owner or Operator of the emergency engine shall: a.) Operate and maintain the engine according to the manufacturer’s emission-related written instructions or change only the emission-related settings in a way that is permitted by the manufacturer; and b.) Operate and maintain the engine to meet the emission standards over the entire life of the engine.	EU03 & EU04	40 CFR 60.4206 & 60.4211 (Subpart III)

<sup>7</sup> The Owner or Operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency engine beyond 100 hours per calendar year.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
21.	<p><u>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines - Fuel Sulfur Requirement</u>            The sulfur content of diesel fuel burned in the emergency engines shall not exceed 15 ppm (0.0015 percent sulfur by weight).</p>	EU03 & EU04	40 CFR 60.4207 (Subpart III)
22.	<p><u>NESHAP - General Requirements</u>            a.) At all times the Owner or Operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.            b.) The general duty to minimize emissions does not require the Owner or Operator to make any further efforts to reduce emissions if levels required by this standard have been achieved.            c.) Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.            d.) The Owner or Operator must minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, the Owner or Operator must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.</p>	EU01	40 CFR §63.11205 & 63.11223(g) Subpart JJJJJ
23.	<p><u>NESHAP - Tune-up Requirements</u>            Conduct a tune-up of the boiler as specified in Table 6, Item 16.</p>	EU01	40 CFR 63.11201(b) & 63.11223 Subpart JJJJJ
24.	<p><u>NESHAP - Operating Limits</u>            a.) Demonstrate continuous compliance with the PM emission limit in Table 5, Item 4.b by:                1. Collecting the opacity monitoring system data according to §63.11224(e) and §63.11221;                2. Reducing the opacity monitoring data to 6-minute averages;                3. Maintaining opacity to less than or equal to 10 percent (daily block average).            b.) Maintain the 30-day rolling average boiler operating load such that it does not exceed 110 percent of the average operating load recorded during the most recent performance stack test. Following each performance stack test and until the next performance test, comply with the operating limit for operating load condition as specified here.            c.) These operating limits apply at all times, except during periods of startup and shutdown.</p>	EU01	40 CFR 63.11201(c), 63.11212(c), 63.11222 & Tables 3 & 7 to Subpart JJJJJ

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
25.	<p><u><i>NSPS General Provisions</i></u></p> <p>a.) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source;</p> <p>b.) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.</p>	EU01	40 CFR 60.11(d) & (g) Subpart A
26.	<p><u><i>Permit Deviations</i></u></p> <p>In the event of a permit deviation, the Owner or Operator shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit conditions.</p>	Facility wide	Env-A 911.03
27.	<p><u><i>Control of Fugitive Dust</i></u></p> <p>The Owner or Operator shall take precautions specified in Env-A 1002.03(b) to prevent, abate, and control the emission of fugitive dust.</p>	Facility wide	Env-A 1002
28.	<p><u><i>Accidental Release Program Requirements</i></u></p> <p>The quantities of regulated chemicals stored at the facility are less than the applicable threshold quantities established in 40 CFR 68.130. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities:</p> <p>a.) Identify potential hazards which result from such releases using appropriate hazard assessment techniques;</p> <p>b.) Design and maintain a safe facility;</p> <p>c.) Take steps necessary to prevent releases; and</p> <p>d.) Minimize the consequences of accidental releases that do occur</p>	Facility wide	CAAA 112(r)(1)
29.	<p><u><i>Sulfur Limit of Liquid Fuel</i></u></p> <p>The sulfur content of distillate fuel oil/diesel burned in the boiler shall not exceed 0.0015% by weight.</p>	EU01	TP-0054, Env-A 619 & Env-A 1603.03

**C. Annual SO<sub>2</sub> Allowance Programs**

1. The biomass boiler (EU01) is regulated under the federal Acid Rain Program, Phase II. In accordance with 40 CFR 73, Burgess BioPower is not allocated any SO<sub>2</sub> allowances pursuant to the Federal Acid Rain Program.
2. Allowances lawfully held or acquired by the Permittee under the acid rain provisions of the Clean Air Act, including the applicable sections of 40 CFR 72 and 40 CFR 73, shall be governed by the following:
  - a. Emissions from the affected unit shall not exceed any SO<sub>2</sub> allowances held by the affected unit as of the compliance deadline;
  - b. The number of SO<sub>2</sub> allowances held by the affected unit shall not be limited;
  - c. The Permittee shall not use SO<sub>2</sub> allowances to avoid compliance with any other applicable requirement of either state or federal rules or of the provisions of the Clean Air Act; and
  - d. Any SO<sub>2</sub> allowances held by the Permittee shall be accounted for according to the procedures established in the applicable provisions of 40 CFR 72 and 40 CFR 73.
3. The attached Acid Rain Permit application, dated August 10, 2017, is hereby incorporated by reference into this Permit.

**D. Emission Reductions Trading Requirements – State Only Enforceable**

The Owner or Operator did not request emissions reductions trading in its operating permit application. At this point, the department has not included any permit terms authorizing emissions trading in this permit. All emission reduction trading, must be authorized under the applicable requirements of either Env-A 3000 *Emissions Reductions Credits Trading Program*, or Env-A 3100 *Discrete Emissions Reductions Trading Program* and 42 U.S.C §§7401 et seq. (the “Act”), and must be provided for in this permit.



### E. Monitoring and Testing Requirements

The Owner or Operator is subject to the monitoring and testing requirements as identified in Table 6 below:

<b>Table 6 - Monitoring/Testing Requirements</b>					
<b>Item #</b>	<b>Parameter</b>	<b>Method of Compliance</b>	<b>Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1.	NOx and diluent gas	a.) Operate and maintain a NOx-diluent CEMS (consisting of a NOx pollutant concentration monitor and a O <sub>2</sub> diluent gas monitor) with an automated data acquisition and handling system for measuring and recording: <ol style="list-style-type: none"> <li>1. NOx concentration (in ppm);</li> <li>2. O<sub>2</sub> concentration (in % O<sub>2</sub>); and</li> <li>3. NOx emission rate (in lb/MMBtu).</li> </ol> b.) Account for total NOx emissions, both NO and NO <sub>2</sub> , either by monitoring for both NO and NO <sub>2</sub> or by monitoring for NO only and adjusting the emissions data to account for NO <sub>2</sub> .           c.) Calculate hourly, quarterly and annual NOx emission rates (in lb/MMBtu) by combining the NOx concentration (in ppm), diluent concentration (in percent O <sub>2</sub> ), and percent moisture (if applicable) according to the procedures in 40 CFR 75 Appendix F.	Continuous	EU01	Env-A 808.02, 40 CFR §§75.10(a)(2) & 75.12(c)
2.	Heat Input Rate	Determine the heat input rate (in MMBtu/hr) for every hour or part of an hour any fuel is combusted following the procedures in 40 CFR 75 Appendix F.	Hourly	EU01	40 CFR 75.10(c)
3.	Stack volumetric flow rate	To measure and record stack volumetric gas flow, operate and maintain a flow monitoring system that meets the following requirements: <ol style="list-style-type: none"> <li>a.) All differential pressure flow monitors shall have an automatic blow-back purge system installed and in wet conditions, shall have the capability for drainage of the sensing lines; and</li> <li>b.) The stack flow monitoring system shall have the capability for manual calibration of the transducer while the system is on-line and for a zero check.</li> </ol>	Continuous	EU01	40 CFR 75 & Env-A 808.03
4.	CO	Operate and maintain a CEMS for measuring carbon monoxide. The CO CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 4.	Continuous	EU01	Env-A 808 & TP-0054

<b>Table 6 - Monitoring/Testing Requirements</b>					
<b>Item #</b>	<b>Parameter</b>	<b>Method of Compliance</b>	<b>Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
5.	SO <sub>2</sub>	Operate and maintain a SO <sub>2</sub> continuous emission monitoring system with an automated data acquisition and handling system for measuring and recording SO <sub>2</sub> concentration (in ppm), volumetric gas flow (in scfh) and SO <sub>2</sub> mass emissions (in lb/hr) discharged to the atmosphere.	Continuous	EU01	Env-A 808, 40 CFR §§75.10(a)(1) & 75.11
6.	Opacity	Operate and maintain a continuous opacity monitoring system with an automated data acquisition and handling system for measuring and recording the opacity of emissions (in percent opacity) discharged to the atmosphere.	Continuous	EU01	40 CFR §§75.10(a)(4) & 75.14
7.	COMS Operating Requirements	<p>a.) The COMS shall be capable of completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.</p> <p>b.) All opacity data shall be reduced to 6-minute averages calculated in accordance with the provisions of 40 CFR 51 Appendix M.</p> <p>c.) The COMS shall include a means to display instantaneous values of percent opacity.</p>	As specified	EU01	40 CFR 75.10(d), 40 CFR 63.11224(e) & Env-A 808.03
8.	Minimum Specifications for CEMS	<p>All gaseous CEMS shall meet the following minimum specifications, as applicable:</p> <p>a.) A gaseous CEMS shall average and record the data for each calendar hour.</p> <p>b.) A “valid hour” of data means a minimum of 42 minutes of gaseous or opacity CEM system readings taken in any calendar hour, during which time the CEM is not in an out of control period as defined in Env-A 808.01(g), and the facility on which the CEM is installed is in operation.</p> <p>c.) All gaseous CEMS shall:</p> <ol style="list-style-type: none"> <li>1. Include a means to display instantaneous values of gaseous emission concentrations; and</li> <li>2. Complete a minimum of one cycle of operation, which shall include measuring, analyzing, and data recording for each successive one-minute period for systems measuring gaseous emissions, unless a longer time</li> </ol>	Hourly	EU01	Env-A 808.01 & Env-A 808.03

Table 6 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		period is approved in accordance with Env-A 809.			
9.	General CEMS & COMS Audit Requirements	The Owner or Operator shall: a.) Conduct CEMS/COMS audits in accordance with Env-A 808.07 through Env-A 808.10 & 40 CFR 75 (as applicable). b.) Notify the department at least: 1. 30 days prior to the performance of a relative accuracy test audit (RATA); and 2. 2 weeks prior to any other planned audit or test procedure.	Quarterly	EU01	Env-A 808.07 through 808.10
10.	Out of Control Periods for COMS	The out of control periods for COMS are defined as follows: a.) The time period beginning with the completion of the daily calibration drift check where the CD, as calculated pursuant to 40 CFR 60.13(d)(1), exceeds 2% opacity for 5 consecutive days, and ending with the CD check after corrective action has occurred that results in the performance specification drift limits being met; b.) The time period beginning with the completion of a daily CD check preceding the daily CD check that results in the CD being greater than 5% opacity and ending with the CD check after corrective action has occurred that results in the performance specification drift limits being met; c.) The time period beginning with the completion of a quarterly opacity audit where the CEM system fails any of the audits required by Env-A 808.10 and ending with successful completion of the same audit after corrective action has occurred; or d.) The time period beginning with the completion of the zero alignment check required by 40 CFR 60, Appendix F, Procedure 3, section 10.3 where the zero alignment error exceeds 2 percent opacity and ending after corrective action is taken that results in a successful zero alignment check.	N/A	EU01	Env-A 808.01(g)(2)
11.	CEMS Data	a.) The Owner or Operator of a source with a	N/A	EU01	Env-A 808.11

Table 6 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
	Availability Requirements	<p>CEM shall operate the CEM at all times during operation of the source, except for periods of CEM breakdown, repairs, calibration checks, preventive maintenance, and zero/span adjustments.</p> <p>b.) The percent CEM data availability shall be maintained at a minimum of 90% on a calendar quarter basis for all opacity monitors, gaseous concentration monitors, and stack volumetric flow monitors, or any substitute monitoring methods approved as part of the CEM monitoring plan required by Env-A 808.04.</p> <p>c.) The percent CEM data availability shall be calculated as specified in Env-A 808.11(c) or (d).</p>			
12.	Substitute Emission Data	<p><u>Requirement for Substitute Emission Data</u>                      Any facility that uses the emissions data collected by a gaseous CEM system to calculate and report its annual emissions in accordance with Env-A 900 shall comply with the following:</p> <p>a.) For any facility operating hour during which the gaseous CEM system has not collected a valid hour of CEM system data, the Owner or Operator shall submit to the department substitute emission data for those hours which has been generated using one of the following methods:</p> <ol style="list-style-type: none"> <li>1. The missing data substitution procedures specified in 40 CFR 75, Subpart D;</li> <li>2. If the missing data occurred during a period of steady-state operation, and not during a period of start-up, shutdown, or malfunction:                             <ol style="list-style-type: none"> <li>i. An average of the valid hours of CEM system emissions data collected prior to and after the period of missing data, where the number of hours before and the number of hours after are both at least equal or more than the number of missing hours of data; and</li> </ol> </li> </ol>	N/A	EU01	Env-A 808.12

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<ul style="list-style-type: none"> <li>ii. The substituted data is representative of the missing data, being at the same heat input rate, electric generating rate, or steam load;</li> <li>3. If the missing data occurred during a start-up, shutdown, or malfunction of the device, substitute data collected by the CEM during a similar period of start-up, shutdown or malfunction, respectively; or</li> <li>4. An alternative method of data substitution that meets the following criteria:                             <ul style="list-style-type: none"> <li>i. The alternative method was included in the monitoring plan submitted pursuant to Env-A 808.04;</li> <li>ii. The alternative method provides for representative emissions for the conditions of operation of the device during the period of missing data equivalent to the substitution methods described above; and</li> <li>iii. The alternative method was approved by DES as part of its approval of the monitoring plan pursuant to Env-A 808.04.</li> </ul> </li> <li>b.) For CEM systems and emissions subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall follow those requirements for substituting emissions data in order to calculate emission totals or emission averages as required by 40 CFR 75.</li> <li>c.) For CEM systems and emissions not subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall include substitute emissions data in the calculation of total daily, monthly, quarterly, and annual emissions generated by the permitted device to quantify total actual emissions.</li> <li>d.) Substitute emission data shall not be used in the calculation of emissions totals or</li> </ul>			

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		averages in order to determine or demonstrate compliance with emissions standards. e.) Substitute data shall not be included in the calculation of data availability.			
13.	NOx & CO	<u>NOx and CO Rolling Averages</u> a.) To demonstrate compliance with the emission limits in Table 5, Items 1.a, 1.b and 2.b, a 30-day rolling average shall be calculated from all of the valid hourly averages collected for the 30-day operating period using the following equation: $E_a = \frac{1}{n} \sum_{i=1}^n E_i \quad - \text{Eq. (1)}$ E <sub>a</sub> = 30-day rolling average, lb/MMBtu E <sub>i</sub> = Hourly average pollutant rate for hour “i,” lb/MMBtu. n = the number of valid hourly values collected over 30 boiler operating days. b.) While calculating the 30-day rolling average NOx lb/MMBtu emission rate in Table 5, Item 1.a, startup hours shall be excluded from Eq. (1). c.) A new 30-day rolling average shall be calculated for each boiler operating day <sup>8</sup> .	Daily	EU01	Env-A 808 & TP-0235
14.	CO & NH <sub>3</sub>	<u>Valid Averaging Period</u> The number of hours of valid CEM data required for the determination of compliance with a calendar day average emission standard (e.g., CO lb/MMBtu emission limit in Table 5, Item 2.a or NH <sub>3</sub> slip concentration limit in Table 4, Item 2 shall be 18 hours.	Daily	EU01	Env-A 808.14

<sup>8</sup> Boiler operating day means a 24-hour period that begins at midnight and ends the following midnight during which any fuel is combusted at any time in the boiler. It is not necessary for the fuel to be combusted the entire 24-hour period.

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
15.	Ammonia slip	<p>The Owner or Operator shall operate and maintain an ammonia slip CEMS for measuring and recording ammonia slip as follows:</p> <ul style="list-style-type: none"> <li>a.) The ammonia monitoring system shall be challenged with an ammonia calibration gas on a calendar quarter basis in accordance with Env-A 808.07 and Env-A 808.08;</li> <li>b.) The gas shall be certified as at least 5% accurate and be within the range of 5 - 15 ppm;</li> <li>c.) The ammonia calibration gas shall be sent through the ammonia sampling system three separate times, alternating with a secondary gas (air, zero gas, stack gas, etc.). If the average difference between the value of the calibration gas and the response of the monitoring system to the gas exceeds 5% of the gas value (equivalent to less than 95% or greater than 105% NH<sub>3</sub>-to-NO converter efficiency), then use a factor to correct the response of the ammonia monitoring system to equal the value of the calibration gas (equivalent to 100% converter efficiency);</li> <li>d.) Prior to applying the correction factor, the NH<sub>3</sub>-to-NO conversion efficiency shall be greater than or equal to 80%. An efficiency less than 80% means the measuring system is out of control as defined in Env-A 808.01(g)(1)c;</li> <li>e.) The annual relative accuracy test audit of the system shall be done using as the Reference Method either EPA Conditional Test Method CTM-027, the differential NO<sub>x</sub> method, or a department-approved alternative (if the differential NO<sub>x</sub> method is used, the NH<sub>3</sub>-to-NO converter efficiency of the as the Reference Method sampling system shall be ≥ 90%);</li> <li>f.) Relative accuracy of the ammonia measurement system shall be within 20% of the reference method or +/-4 ppm; and</li> <li>g.) The results of the converter efficiency check shall be submitted to the department quarterly and shall include the NH<sub>3</sub> calibration gas certification sheet.</li> </ul>	Continuous	EU01/PCE2	TP-0235 & Env-A 808

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
16.	Tune-up	<p><u>Boiler Tune-up Requirement</u></p> <p>The Owner or Operator shall conduct a performance tune-up of the boiler as follows:</p> <ul style="list-style-type: none"> <li>a.) As applicable, inspect the burner, and clean or replace any components of the burner as necessary;<sup>9</sup></li> <li>b.) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer’s specifications, if available;</li> <li>c.) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly<sup>9</sup>;</li> <li>d.) Optimize total emissions of carbon monoxide. This optimization shall be consistent with the manufacturer’s specifications, if available, and with any nitrogen oxide requirement to which the unit is subject; and</li> <li>e.) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made. Measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made. Measurements may be taken using a portable CO analyzer.</li> </ul>	Every 5 years	EU01	40 CFR 63.11223 Subpart JJJJJ
17.	PM	<p><u>Stack Testing Requirements for PM</u></p> <p>The Owner or Operator shall conduct stack testing to demonstrate compliance with the particulate matter emission limit in Table 5, Item 4.</p>	Every 5 years (within 61 months) after the previous performance test	EU01	40 CFR 63.11220(b)(2) Subpart JJJJJ

<sup>9</sup> The burner inspection and the inspection of the system controlling the air-to-fuel ratio may be delayed until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection. Units that produce electricity for sale may delay the inspection(s) until the first outage, not to exceed 72 months from the previous inspection.



**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
18.	PM	The performance stack tests shall be conducted in accordance with the requirements in Env-A 800, 40 CFR §63.7(c), (d), (f) and (h) and 40 CFR 63 Subpart JJJJJ, Table 4. During the performance test, collect boiler operating load data as follows: a.) Collect operating load data (fuel feed rate or steam generation data) every 15 minutes during the entire period of the performance test; b.) Determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test; and c.) Determine the average of the three test run averages during the performance test, and multiply this by 1.1 (110%) as your operating limit.	Each stack test	EU01	Env-A 800, 40 CFR §§ 63.11210, 63.11211 & 63.11212 Subpart JJJJJ
19.	Stack Testing Scheduling & Protocol	Compliance testing shall be planned and carried out in accordance with the following schedule: a.) The Owner or Operator must submit a Notification of Intent to conduct a performance test at least 60 days before the performance stack test is scheduled to begin. b.) A pre-test protocol shall be submitted to the department at least 30 days prior to the commencement of testing in accordance with Env-A 802.04; c.) The Owner or Operator and any contractor retained by the owner or operator to conduct the test shall meet with a department representative in person or by telephone at least 15 days prior to the test date to finalize the details of the testing; d.) A pre-test meeting may be held less than 15 days prior to the test date so long as implementation of any testing or operation changes resulting from the meeting can be carried out prior to the scheduled test date and the scheduled test integrity is not jeopardized; and e.) The final test report shall be submitted to the department within 60 days after the completion of testing <sup>10</sup> .	Each stack test	EU01	40 CFR 63.11225(a)(3) & Env-A 802

<sup>10</sup> Within 60 days of completing each performance test required under Subpart JJJJJ, the Owner or Operator must submit

Table 6 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
20.	Stack Testing - Operating Conditions	Compliance stack testing shall be conducted under one of the following operating conditions: a.) Between 90 and 100 percent, inclusive, of maximum production rate or rated capacity; b.) A production rate at which maximum emissions occur; or c.) At such operating conditions agreed upon during a pre-test meeting conducted pursuant to Env-A 802.05.	Each stack test	EU01	Env-A 802.10
21.	Opacity	<u>Demonstrating Continuous Compliance with the Subpart JJJJJ PM Emission Limit</u> a.) The Owner or Operator shall calculate and record 6-minute averages from the opacity monitoring data and determine and record the daily block average of recorded readings, except as provided in §63.11221(c). b.) For purposes of collecting opacity data, the Owner or Operator must operate the COMS as specified in §63.11221(b). For purposes of calculating data averages, the Owner or Operator must use all the data collected during all periods in assessing compliance, except that certain data must be excluded as specified in §63.11221(c). Periods when COMS data are unavailable may constitute monitoring deviations as specified in §63.11221(d).	Continuous	EU01	40 CFR 63.11224 Subpart JJJJJ

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the performance test reports to EPA’s Webfire database using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA’s Central Data Exchange (<https://cdx.epa.gov/>).

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
22.	Boiler Operating Load	<p><u>Demonstrating Continuous Compliance with the Subpart JJJJJ PM Emission Limit</u></p> <p>a.) Collect operating load data (fuel feed rate or steam generation data) every 15 minutes;</p> <p>b.) Reduce the data to 30-day rolling averages using Eq. 3 specified in §63.11224(d);</p> <p>c.) For purposes of collecting data, operate the CPMS as specified in §63.11221(b);</p> <p>d.) For purposes of calculating data averages, all the data collected during all periods in assessing compliance must be used, except that certain data must be excluded as specified in §63.11221(c). Periods when CPMS data are unavailable may constitute monitoring deviations as specified in § 63.11221(d).</p>	Continuous	EU01	40 CFR 63.11224 Subpart JJJJJ
23.	CMS Data Collection	<p>a.) The Owner or Operator must monitor and collect data as specified here and the site-specific monitoring plan required by §63.11205(c).</p> <p>b.) The Owner or Operator must operate the monitoring system and collect data at all required intervals at all times the affected source is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods (see 40 CFR §63.8(c)(7)), repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks, required zero and span adjustments, and scheduled continuous monitoring system (CMS) maintenance as defined in the site-specific monitoring plan (specified in Table 8, Item 10). A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The Owner or Operator is required to complete monitoring system repairs in response to</p>	As specified	EU01	40 CFR 63.11205 & 63.11221 Subpart JJJJJ

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.</p> <p>c.) Data collected during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or quality control activities may not be used in calculations used to report emissions or operating levels.</p> <p>d.) Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan), failure to collect required data is a deviation of the monitoring requirements.</p>			
24.	Pressure drop	Pressure across the fabric filter shall be monitored continuously. Normal operating range is 5-10 inches of water.	Continuous	EU01/PCE1	40 CFR 70.6(a)(3)
25.	Gas Temperature	Flue gas temperature at the inlet to the fabric filter shall be monitored continuously. Normal temperature is less than or equal to 450°F.	Continuous	EU01/PCE1	40 CFR 70.6(a)(3)
26.	Hours of Operation	Each emergency engine shall be equipped with a non-resettable hour meter (either mechanically geared or electronic sensor device).	Continuous	EU03 & EU04	40 CFR 60.4209 Subpart III
27.	Sulfur Content of Liquid Fuels	Conduct testing in accordance with appropriate ASTM test methods or retain documentation in accordance with Table 8, Item 6 in order to demonstrate compliance with the sulfur content limitation provisions specified in this permit for liquid fuels.	For each delivery of fuel oil/diesel to the facility	Facility Wide	Env-A 806.02 & Env-A 806.05

<b>Table 6 - Monitoring/Testing Requirements</b>					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
28.	To Be Determined	When conditions warrant, the department may require the Owner or Operator to conduct stack testing in accordance with USEPA or other department approved methods.	Upon request by the department	Facility Wide	RSA 125-C:6, XI

#### **F. Compliance Assurance Monitoring (40 CFR 64)**

1. The biomass boiler (EU01) is subject to compliance assurance monitoring (CAM) for particulate matter.
2. The fabric filter shall be properly operated and maintained to control particulate matter emissions from EU01.
3. The Owner or Operator shall comply with the monitoring requirements included in the following Table 7:

<b>Table 7 - Compliance Assurance Monitoring for PCE1</b>	
1. Indicator	Triboelectric signal
Approach	Triboelectric monitors are installed (one on each outlet duct of the six PJFF compartments). An alarm will sound when the signal reaches preset limits, indicating possible failed bags or other component of the monitoring system.
2. Indicator Range	Triboelectric signal trends are displayed continually in the control room. Any abnormalities in the trends are investigated and addressed as needed. An excursion is defined as a triboelectric signal greater than 60% of the scale for 15 seconds. Excursions trigger an inspection, corrective action, and a reporting requirement.
3. Performance Criteria	A probe is located in the outlet duct of each of the 6 compartments. The signal produced by each triboelectric monitor is generally proportional to the particulate mass flow from that PJFF compartment. An increase in the triboelectric signal indicates an increase in particulate emissions from the baghouse.
A.) Data Representativeness	
B.) Verification of Operational Status	N/A
C.) QA/QC Practices and Criteria	The triboelectric probes are periodically (at least monthly) inspected and cleaned. The monitor has been factory adjusted and no other QA/QC practices are needed.
D.) Monitoring Frequency	The triboelectric signal is monitored continuously.
i. Data Collection Procedures	Real-time signals are displayed on a monitor in the control room (typically 10 minutes of data at 1 second capture interval), and data is automatically logged and archived in the system.
ii. Averaging Period	None

4. Proper maintenance (40 CFR 64.7(b))

At all times, the Owner or Operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
5. Continued operation (40 CFR 64.7(c))

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Owner or Operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of these CAM requirements, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Owner or Operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
6. Response to excursions or exceedances (40 CFR 64.7(d))
  - i. Upon detecting an excursion or exceedance, the Owner or Operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
  - ii. Determination of whether the Owner or Operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
  - iii. If the Owner or Operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Owner or Operator shall promptly notify the department and, if necessary, submit a significant modification to the Title V operating permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

7. Quality Improvement Plan (QIP) Requirements (40 CFR 64.8)
  - i. If the indicator range specified in Table 7 for PCE1 accumulate excursions over 5% of the rolling 12-month operating time for the boiler (EU01), the Owner or Operator shall develop and implement a Quality Improvement Plan.
  - ii. The QIP shall include procedures for evaluating the control performance problems. Based on the evaluation, modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
    - a. Improve preventive maintenance practices.
    - b. Operational changes.
    - c. Appropriate improvements to control methods.
    - d. Other steps to improve control performance.
    - e. More frequent or improved monitoring.
  - iii. If a QIP is required, the Owner or Operator shall develop and implement a QIP as expeditiously as practicable and shall notify the department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

### G. Recordkeeping Requirements

The Owner or Operator shall be subject to the recordkeeping requirements identified in Table 8 below:

<b>Table 8 - Recordkeeping Requirements</b>				
Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
1.	<u>Record Retention and Availability</u> Keep the records required by this permit on file. These records shall be available for review by the department upon request.	Retain for a minimum of 5 years unless longer as specified	Facility wide	Env-A 902, Env-A 3211 & 40 CFR 70.6(a)(3)(ii)(B)
2.	<u>Certificate of Representation</u> a.) Complete and retain a certificate of representation for a designated representative or an alternate designated representative including the elements pursuant to 40 CFR 72.24, <i>Certificate of Representation</i> . b.) The certificate of representation required in a. shall be retained beyond the 5-year minimum period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.	Maintain at the facility at all times	EU01	40 CFR 72.9(f) & 40 CFR 72.24
3.	<u>General Recordkeeping Requirements for Combustion Devices</u> For each fuel burning device at the facility, the owner or operator shall keep records of fuel utilization in accordance with the following: a.) Type (e.g. biomass) and amount of fuel burned in each device,	Daily & Monthly	EU01	Env-A 903.03 & 40 CFR 60.49b(d)
	b.) Type, amount of fuel burned and hours of operation for each emergency engine.	Monthly	EU03 & EU04	Env-A 903.03
4.	<u>Fuel Annual Capacity Factors</u> Maintain records of the annual capacity factor individually for fuel oil and biomass. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.	Monthly & 12-month rolling	EU01	40 CFR 60.49b(d)
5.	<u>Opacity NSPS Subpart Db Recordkeeping Requirement</u> Maintain records of opacity.	Continuously	EU01	40 CFR 60.49b(f)
6.	<u>Liquid Fuel Oil Recordkeeping Requirements</u> a.) In lieu of sulfur testing pursuant to Table 6,	Whenever there is a change in fuel supplier but at least	EU03 & EU04	Env-A 806.05 & Env-A 903.03



**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	Item 27, the Owner or Operator may maintain a written statement from the fuel supplier that the sulfur content of the fuel as delivered does not exceed state or federal standards for that fuel.	annually		
	b.) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil as specified in 40 CFR 60.42b(k), shall obtain and maintain at the facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the oil meets the fuel sulfur limit specified in Table 5, Item 29.	For each delivery of fuel oil	EU01	40 CFR 60.49b(r)
7.	<p><u>General NOx Recordkeeping Requirements</u>                      Record and maintain the following information:</p> <p>a.) Identification of each fuel burning device.</p> <p>b.) Operating schedule during the high ozone season (June 1 through August 31) for each fuel burning device identified in a. above, including:</p> <ol style="list-style-type: none"> <li>1. Typical hours of operation per calendar day;</li> <li>2. Typical days of operation per calendar month;</li> <li>3. Design heat input rate input rate in MMBtu/hr.</li> </ol> <p>c.) The following NOx emissions data for each combustion device identified above:</p> <ol style="list-style-type: none"> <li>1. Actual NOx emissions per month;</li> <li>2. Typical high ozone day NOx emissions, in pounds per day; and</li> <li>3. The emission factors and the origin of the emission factors used to calculate the NOx emissions.</li> </ol>	Maintain Data for Annual Report	EU01, EU03 & EU04	Env-A 905.02
8.	<p><u>Recordkeeping for Sources or Devices with Add-on NOx Air Pollution Control Equipment</u>                      Maintain records of the following information:</p> <p>a.) The air pollution control device identification number, type, model number, and manufacturer;</p> <p>b.) Installation date;</p> <p>c.) Unit controlled;</p> <p>d.) Type and location of the capture system, capture</p>	Maintain at the facility at all times	EU01/PCE2	Env-A 905.03

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	efficiency percent, and method of determination; e.) Information as to whether or not the air pollution control device is always in operation when the fuel burning device or incinerator it is serving is in operation; and f.) The destruction or removal efficiency of the add-on air pollution control equipment, including the following information: 1. Destruction or removal efficiency, in percent; 2. Date tested; 3. The emission test results, if tested, including: i. The inlet NOx concentration in ppm; ii. The outlet NOx concentration in ppm; and iii. The method of determination of the concentrations in a. and b. above; and 4. The method of determining destruction or removal efficiency, if not tested.			
9.	<u><i>VOC Emission Statements Recordkeeping Requirements</i></u> If the actual annual VOC emissions from all permitted devices located at the Facility are greater than or equal to 10 tpy, then record the following information: a.) Identification of each VOC-emitting process or device; b.) The operating schedule during the high ozone season (June 1 through August 31) for each VOC-emitting process or device identified in a. above, including: 1. Typical hours of operation per day; and 2. Typical days of operation per calendar month. c.) The following VOC emission data from all VOC-emitting processes or devices above, including: 1. Actual VOC emissions for: i. The calendar year, in tons; and	Maintain Data for Annual Report	EU01, EU03 & EU04	Env-A 904

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	ii. A typical high ozone season day during that calendar year, in pounds per day; and  2. The emission factors and the origin of the emission factors used to calculate the VOC emissions.			
10.	<u>CEM Monitoring Plan</u> a.) Maintain the CEM monitoring plan which contains: 1. Sufficient information to demonstrate that all unit SO <sub>2</sub> emissions, NO <sub>x</sub> emissions, CO emissions, CO <sub>2</sub> emissions and opacity are monitored and reported. 2. The information specified in 40 CFR 75.53 and Env-A 808.04. b.) Revise or update the monitoring plan whenever the Owner or Operator makes a replacement, modification or change that could affect the CEMS or COMS or other approved monitoring method.	Maintain on a continuous basis and update as necessary	EU01	40 CFR 63.11205, 40 CFR 75.53 & Env-A 808.04
11.	<u>Quality Assurance/Quality Control (QA/QC) Plan for Opacity or Gaseous CEMS</u> a.) Maintain the QA/QC plan that contains written procedures for implementation of a QA/QC program that meets the criteria specified in 40 CFR 60, Appendix F, Procedure 1, section 3 for each gaseous CEM system and 40 CFR 60, Appendix F, Procedure 3 for the opacity CEM system. The QA/QC plan shall contain the following information: 1. A schedule of, and description of, all maintenance activities that are required by the CEM manufacturer or that might have an effect on the operation of the system, including a summary of the results of any performance specification testing that was performed in accordance with Env-A 808.05(e) or (f); 2. A description of how the audits and testing required by this part will be performed; and 3. Examples of the reports that will be used to document the audits and tests required by	Maintain on site	EU01	Env-A 808.06

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	Env-A 808; b.) Review the QA/QC plan and all data generated by its implementation at least once a year; c.) Revise or update the QA/QC plan, as necessary, based on the results of the annual review; d.) Make the revised QA/QC plan available for on-site review by the department at any time.			
12.	<u>General Acid Rain Recordkeeping Provisions</u> Maintain records of: a.) Opacity, operating parameters (operating time, heat input, volumetric flow rate & load), diluent monitor data, SO <sub>2</sub> , NO <sub>x</sub> & CO <sub>2</sub> emissions and percent monitor availability; and b.) The causes of any missing data periods and the actions taken to correct such causes.	Maintain on a continuous basis	EU01	40 CFR 75.57
13.	<u>Certification, Quality Assurance and Quality Control Records</u> a.) Maintain records of the information required pursuant to 40 CFR 75.59 and 75.73(b) which includes the certification, quality assurance, and quality control records. b.) These shall include records of all daily & 7-day calibration error tests, daily interference checks, cycle time tests, linearity checks and relative accuracy test audits, as applicable.	Maintain on a continuous basis	EU01	40 CFR 75.59 & 75.73
14.	<u>Monitoring Records</u> Maintain records of data required to be monitored pursuant to Tables 6 & 7 including: a.) Records of monitoring data, monitor performance data, corrective action actions taken, any written QIP required pursuant to Condition VIII.F. of this permit and any activities undertaken to implement the QIP. b.) Maintenance and inspections conducted on the fabric filter and the SCR.	Maintain on a continuous basis	EU01	40 CFR 70.6(a)(3)(ii) & 40 CFR 64.9

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
15.	<p><u>Startup/Shutdown Records</u>                      Maintain records of the occurrence and duration of:</p> <ul style="list-style-type: none"> <li>a.) Startup, shutdown, or malfunction in the operation of the affected facility;</li> <li>b.) Any malfunction of the air pollution control equipment; and</li> <li>c.) Any periods during which a continuous monitoring system or monitoring device is inoperative.</li> </ul>	Each occurrence	EU01	40 CFR 60.7(b)
16.	<p><u>Boiler Startup and Shutdown Plan (SSP)</u>                      SSP must be maintained onsite and available upon request during inspection.</p>	Maintain on site	EU01	Env-A 906.01
17.	<p><u>NESHAP – Recordkeeping Requirements</u>                      The Owner or Operator shall maintain the following records:</p> <ul style="list-style-type: none"> <li>a.) Each notification and report that was submitted, including all documentation supporting Initial Notifications, or Notification of Compliance Status submitted;</li> <li>b.) As applicable, records that document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 and §63.11223 as specified below:                             <ul style="list-style-type: none"> <li>1. Records must identify the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer’s specifications to which the boiler was tuned.</li> <li>2. Records of monthly fuel use for the boiler, including the type of fuel and amount used.</li> <li>3. Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.</li> <li>4. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control,</li> </ul> </li> </ul>	Maintain on a continuous basis	EU01	40 CFR 63.11225(c) Subpart JJJJJ

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	<p style="text-align: center;">or monitoring equipment to its normal or usual manner of operation.</p> <p style="text-align: center;">5. Records of opacity data.</p>			
18.	<p><u>Additional Recordkeeping Requirements: Facility-wide emission limitations</u></p> <p>Maintain a 12-month running total of HAP emissions for the purpose of demonstrating that the total emissions of these pollutants are below the thresholds specified in Table 5, Item 9.</p>	Monthly	Facility Wide	Env-A 906 & TP-0235
19.	<p><u>Regulated Toxic Air Pollutants</u></p> <p>Compliance was demonstrated at the time of permit issuance as described in the department's Application Review Summary for application #14-0441. The source must update the compliance demonstration using one of the methods provided in Env-A 1405 if:</p> <p>a.) There is a revision to the list of RTAPs lowering the AAL or de minimis value for any RTAP emitted from the Facility;</p> <p>b.) The amount of any RTAP emitted is greater than the amount that was previously evaluated;</p> <p>c.) An RTAP that was not evaluated in the Application Review Summary will be emitted; or</p> <p>d.) Stack conditions (e.g. air flow rate) change.</p>	Update prior to process changes and within 90 days of each revision of Env-A 1400	Facility Wide	Env-A 902.01 State-only Requirement
20.	<p><u>Permit Deviation Recordkeeping</u></p> <p>Recordkeeping of deviations from Permit requirements shall be conducted in accordance with Condition XXVII of this Permit.</p>	Maintain up-to-date data	Facility Wide	Env-A 911

**H. Reporting Requirements**

1. Pursuant to Env-C 203.02(b), *Date of Issuance or Filing*, written documents shall be deemed to have been filed with or received by the department on the actual date of receipt by the department, as evidenced by a date stamp placed on the document by the department in the normal course of business.
2. All emissions data submitted to the department shall be available to the public. Claims of confidentiality for any other information required to be submitted to the department pursuant to this permit shall be made at the time of submission in accordance with Env-C 208.04, *Initial Claim of Confidentiality*.
3. The Owner or Operator shall be subject to the reporting requirements identified in Table 9 below:

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
1.	<p><u>General Reporting Requirements</u></p> <p>a.) Each report shall be separately and clearly labeled with:</p> <ol style="list-style-type: none"> <li>1. The name, mailing address and physical address of the source covered by the report;</li> <li>1. The operating period covered by the report;</li> <li>2. The permit number and condition or item number that requires the report submittal;</li> <li>3. The type of report, using the name of the report as specified in the reporting condition in the permit, that is being submitted; and</li> <li>4. The date the report was prepared;</li> </ol> <p>b.) An owner or operator who submits a report that is a revision to a previously-submitted report shall clearly identify the revised report with the information specified in Table 9, Item 1.a. above, and indicate which portions of the report have been revised;</p> <p>c.) The owner or operator may submit more than one report with a single cover, provided the owner or operator clearly identifies each report being submitted using the information required in Table 9, Items 1.a. and 1.b. above, if applicable, for each report; and</p> <p>d.) The owner or operator shall submit reports as paper documents or by electronic means.</p>	For each report submitted to the department	Facility wide	Env-A 907.01
2.	<p><u>Certificate of Accuracy Statement</u></p> <p>Any report submitted to the DES and/or USEPA shall include the certification of accuracy statement outlined in</p>	With each report	Facility wide	40 CFR 70.6(c)(1)

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	Section XXI.B. of this Permit and shall be signed by the responsible official.			
3.	<p><u><i>Semi-annual Permit Deviation and Monitoring Report</i></u>            The Owner or Operator shall submit a semi-annual permit deviation and monitoring report, which contains:</p> <p>a.) Summaries of all monitoring and testing requirements contained in this permit; and</p> <p>b.) A summary of all permit deviations (recorded and reported as per Section XXVII) and excursions (as specified in Section VIII.F.6 and Table 9, Item 17) that have occurred during the reporting period.</p>	Semi-annually received by DES no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year.	Facility wide	Env-A 907.03(b) & 40 CFR 70.6(a)(3)(iii)(A)
4.	<p><u><i>Annual Emissions Report</i></u>            Submit an annual emissions report which shall include the following information:</p> <p>a.) Actual calendar year emissions from each device of NO<sub>x</sub>, CO, SO<sub>2</sub>, VOCs, HAPs (speciated by individual HAP or CAS number), CO<sub>2</sub>e, filterable PM/PM<sub>10</sub>/PM<sub>2.5</sub>, condensable PM, and ammonia.</p> <p>b.) The methods used in calculating such emissions in accordance with Env-A 705.03, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fees</i>.</p> <p>c.) The information recorded in accordance with Table 8, Item 3.</p>	Annually (received by DES no later than April 15 <sup>th</sup> of the following year)	EU01-EU04	Env-A 907.02
5.	<p><u><i>Payment of Emission-Based Fee</i></u>            Payment of the emission based fees shall be conducted in accordance with Section XXIII of this Permit.</p>	Annually (received by DES no later than May 15 <sup>th</sup> of the following year)	EU01-EU04	Env-A 705.04(b)
6.	<p><u><i>Annual Compliance Certification</i></u>            Annual compliance certification shall be submitted in accordance with Section XXI of this Permit.</p>	Annually (received by DES no later than April 15 <sup>th</sup> of the following year)	Facility wide	40 CFR 70.6(c)(1)



**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
7.	<p><u>NOx Reporting Requirements</u>                      Include the following information in the annual emissions report required in Table 9, Item 3:                      a.) A breakdown of NOx emissions by month; and                      b.) All data recorded pursuant to Table 8, Item 7.</p>	<p>Annually (received by DES no later than April 15<sup>th</sup> of the following year)</p>	<p>EU01, EU03 &amp; EU04</p>	<p>Env-A 909.03</p>
8.	<p><u>Data Availability Restoration Plan</u>                      If the Owner or Operator of the source discovers that it has failed to meet the percent data availability requirement in the previous calendar quarter or in the calendar quarter in which it is currently operating:                      a.) Notify DES by telephone, fax, or e-mail (<a href="mailto:pdeviations@des.nh.gov">pdeviations@des.nh.gov</a>) within 10 days of discovery of the permit deviation.                      b.) Submit a plan to the department, within 30 days of discovery, specifying in detail the steps it plans to take in order to meet the availability requirements for future calendar quarters.                      c.) Implement the plan to meet the data availability requirements no later than 30 days after the end of the quarter of failure.</p>	<p>As specified</p>	<p>EU01</p>	<p>Env-A 911.04(c) (State-only) &amp; Env-A 808.11(e)</p>
9.	<p>In the event that the Owner or Operator replaces a damaged or malfunctioning CEM system component in order to maintain the collection of valid CEM data, and the replacement requires the CEM system to be recertified in accordance with Env-A 808.05(e), (f), or (g), then the owner or operator shall notify the department within one working day of the replacement and shall submit a revision to the CEM monitoring plan within 30 days of the replacement if the replaced component results in a change in the information contained in the previously-approved monitoring plan.</p>	<p>As specified</p>	<p>EU01</p>	<p>Env-A 808.04</p>
10.	<p><u>NESHAP – Performance Test Reports</u>                      a.) Within 60 days after the date of completing each performance test specified in Table 6, Item 17, the Owner or Operator must submit the results of the performance tests to the department and EPA.                      b.) Stack test data must be reported to EPA through CDX (<a href="https://cdx.epa.gov/">https://cdx.epa.gov/</a>) as specified in §63.11225(e).</p>	<p>As specified</p>	<p>EU01</p>	<p>Env-A 802 &amp; 40 CFR 63.11225(e) Subpart JJJJJ</p>

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
11.	<p><u>CEMS &amp; COMS QA/QC Plan Updates</u></p> <p>a.) No later than April 15<sup>th</sup> of each year, either:</p> <ol style="list-style-type: none"> <li>1. Submit to DES the revised QA/QC plan and the reasons for each change, and certify in writing that the Owner or Operator is implementing the revised QA/QC plan; or</li> <li>2. Certify in writing that no changes have been made to the plan and that the Owner or Operator will continue to implement the existing QA/QC plan.</li> </ol> <p>b.) If DES requests a revision to the QA/QC plan pursuant to Env-A 808.06(d), the Owner or Operator shall submit a revised plan within 45 days of the date of the request.</p>	Annually by April 15 <sup>th</sup>	EU01	Env-A 808.06
12.	<p><u>NESHAP – Annual Compliance Certification Report</u></p> <p>a.) The Owner or Operator must prepare, by March 1 of each year, and submit to the department <u>as specified in b.)</u>, an annual compliance certification report for the previous calendar year containing the information specified below:</p> <ol style="list-style-type: none"> <li>1. Company name and address.</li> <li>2. Statement by a responsible official, with the official’s name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. The notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:                     <ol style="list-style-type: none"> <li>i. “This facility complies with the requirements in § 63.11223 to conduct a 5-year tune-up of the boiler.”</li> <li>ii. For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act:                             <p>“No secondary materials that are solid waste were combusted in any affected unit.”</p> </li> <li>iii. “This facility complies with the requirement in §§63.11214(d) and 63.11223(g) to minimize the boiler’s time spent during startup and shutdown and to conduct startups and shutdowns according to the </li> </ol> </li> </ol>	Prepared annually no later than March 1 <sup>st</sup> and submit to EPA Region 1 and the department upon request	EU01	40 CFR 63.11225(b) Subpart JJJJJ

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>manufacturer’s recommended procedures or procedures specified for a boiler of similar design if manufacturer’s recommended procedures are not available.’’</p> <p>3. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.</p> <p>4. The total fuel use by each affected boiler subject to an emission limit, for each calendar month within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by you or EPA through a petition process to be a non-waste under §241.3(c), whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of §241.3, and the total fuel usage amount with units of measure.</p> <p>b.) The Owner or Operator must submit the report by March 15<sup>th</sup> if there were any instances described by Item a.)3. above.</p>			
13.	<p><u>Acid Rain Program - Quarterly Reports</u></p> <p>a.) Submit to DES &amp; EPA quarterly reports which contain:</p> <ol style="list-style-type: none"> <li>1. The data and information in 40 CFR 75.64(a), (b) &amp; (c) and 75.73(f).</li> <li>2. NOx emissions in lb/hr for every hour during the control period and cumulative quarterly and seasonal NOx emission data in pounds.</li> <li>3. SO<sub>2</sub> and NOx emissions in lb/hr for every hour during the year and cumulative quarterly and annual SO<sub>2</sub> and NOx emissions data in pounds.</li> <li>4. A certification by the Designated Representative that the component and system identification codes and formulas in the quarterly electronic reports represent current operating conditions</li> <li>5. Explanatory text or comments, so long as the information is provided in a format that is compatible with the other data required to be reported under 40 CFR 75.64.</li> </ol> <p>b.) Reports shall be submitted in electronic format using EPA’s electronic reporting (EDR) convention.</p>	Quarterly (no later than 30 days following the end of each quarterly reporting period)	EU01	40 CFR 75.64 & 40 CFR 75.73(f)
14.	<u>Quarterly Emission Reports</u>	Quarterly	EU01	Env-A 808.13

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>Submit to DES emission reports containing the following information:</p> <ul style="list-style-type: none"> <li>a.) The information required to be submitted by 40 CFR 60, 40 CFR 63, or 40 CFR 75, relative to installation, calibration, operation and maintenance of a certified gaseous or opacity CEM system;</li> <li>b.) All information included in the emission report shall be clearly indicated, labeled, and formatted such that compliance with all emissions standards to which the source is subject, can be determined and any periods of excess emissions, substitution of missing or invalid CEM data, CEM calibration, CEM maintenance, or startup, shutdown, or malfunction can be easily identified;</li> <li>c.) The daily averages of gaseous and opacity CEM measurements and calculated emission rates in the units of the emissions standards;</li> <li>d.) For those sources subject to any emission standard that is a rolling average of more than one operating day, the rolling average emission rate reported for each day during the reporting period;</li> <li>e.) Excess emission data recorded by the CEM system, including:                             <ul style="list-style-type: none"> <li>1. The date and time of the beginning and ending of each period of excess emission;</li> <li>2. The actual emissions measured by the CEM system during the excess emission;</li> <li>3. The total amount of emissions above the emissions limit, or percent above the emissions limit, during the period of excess emissions;</li> <li>4. The specific cause of the excess emission; and</li> <li>5. The corrective action taken;</li> </ul> </li> <li>f.) If no excess emissions have occurred, a statement to that effect;</li> <li>g.) A statement as to whether the CEM system was inoperative, repaired, or adjusted during the reporting period;</li> <li>h.) If the CEM system was inoperative, repaired, or adjusted during the reporting period, the following information:                             <ul style="list-style-type: none"> <li>1. The date and time of the beginning and ending of each period when the CEM was inoperative;</li> <li>2. The reason why the CEM was inoperative;</li> <li>3. The corrective action taken;</li> </ul> </li> <li>i.) For all “out of control periods” the following information:</li> </ul>	<p>(received by DES no later than 30 days following the end of each calendar quarter)</p>		

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<ol style="list-style-type: none"> <li>1. Beginning and ending times of the out of control period;</li> <li>2. The reason for the out of control period;</li> <li>3. The corrective action taken.</li> </ol> <p>j.) The date and time of the beginning and ending of each period when the source of emissions which the CEM system is monitoring was not operating;</p> <p>k.) The span value, as defined in Env-A 101.176, and units of measurement for each analyzer in the CEM system;</p> <p>l.) When calibration gas is used, the following information:</p> <ol style="list-style-type: none"> <li>1. The calibration gas concentration;</li> <li>2. If a gas bottle was changed during the quarter:                             <ol style="list-style-type: none"> <li>i. The date of the calibration gas bottle change;</li> <li>ii. The gas bottle concentration before the change;</li> <li>iii. The gas bottle concentration after the change;</li> </ol> </li> <li>3. The expiration date for all calibration gas bottles used.</li> </ol> <p>m.) The percent data availability calculated in accordance with Env-A 808.11 for each gaseous and opacity monitor in the CEM system;</p> <p>n.) The quarterly report submittal shall be consistent with the information previously submitted in the CEM System Monitoring Plan and approved by the department.</p>			
15.	<p><u>NSPS Semi-annual Excess Emissions Reports</u>                      Submit semi-annual reports to DES and EPA:</p> <p>a.) For any excess emissions that occurred during the reporting period. For the purpose of 40 CFR 60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the NSPS standard of 20%.</p> <p>b.) Certifying that only very low sulfur oil meeting the definition in §60.42b(k)(2) was combusted in the boiler during the reporting period.</p>	Postmarked within 30 days of the end of the 6-month reporting period	EU01	40 CFR 60.49b(h), (r), (v) & (w)

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
16.	<p><u>Update to Air Pollution Dispersion Modeling Impact Analysis</u></p> <p>If an update to the Facility’s air pollution dispersion modeling impact analysis is required pursuant to Env-A 606.02, submit the information required pursuant to Env-A 606.04:</p> <p>e.) With the Permit application submitted for the change which triggered the analysis; or</p> <p>f.) Within 15 days of completion of the change which triggered the analysis, if a Permit application is not required.</p>	As specified	Facility wide	Env-A 910.01
17.	<p><u>Monitoring Parameter Excursion</u></p> <p>In the event of an excursion of the any monitored parameter specified in Table 7, lasting more than 48 hours in duration:</p> <p>a.) Notify the department of the permit deviation and excess emissions by telephone (603-271-1370), fax (603-271-7053) or e-mail (pdeviations@des.nh.gov), within 24 hours of discovery of the permit deviation, unless it is a Saturday, Sunday, or state legal holiday, in which event, the department shall be notified on the next day which is not a Saturday, Sunday, or state legal holiday;</p> <p>b.) Submit a written report of the deviation on paper or by electronic means to the department within 10 days of discovery of the permit deviation reported above. The report shall include all of the following information:</p> <ol style="list-style-type: none"> <li>1. Facility name;</li> <li>2. Facility address;</li> <li>3. Name of the responsible official;</li> <li>4. Facility telephone number;</li> <li>5. A description of the permit deviation, including the applicable permit number and permit condition(s);</li> <li>6. The probable cause of the permit deviation;</li> <li>7. The date and time of the discovery of the permit deviation;</li> <li>8. The actual date(s) and time(s) of the permit deviation;</li> <li>9. The duration of the permit deviation, including the date and time that the device, process or air pollution control equipment returned to operation in compliance with an enforceable emission limitation or operating condition;</li> </ol>	As specified	EU01	Env-A 911.04(d) State-only enforceable

Table 9 - Applicable Reporting Requirements				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	10. The specific device, process or air pollution control equipment that contributed to the permit deviation; 11. Any corrective measures taken to address the permit deviation; 12. Preventative measures taken to prevent future permit deviations; 13. The type and amount of any excess emissions that occurred as a result of the permit deviation, if applicable; and 14. If applicable, the calculation or estimation used to quantify the excess emissions.			
18.	<u>Permit Deviation Reporting Requirements</u> Report permit deviations that cause excess emissions in accordance with Condition XXVII.	As specified	EU01 - EU04	Env-A 911.04(a)

**IX. Requirements Currently Not Applicable**

The following requirements are not currently applicable to the facility:

40 CFR 63 Subpart DDDDD *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* - Not applicable to the biomass boiler (EU01) because Burgess is an area source of HAPs.

**GENERAL TITLE V REQUIREMENTS**

**X. Issuance of a Title V Operating Permit**

- A. This Permit is issued in accordance with the provisions of Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the five (5) years after issuance of this Permit.
- B. Permit expiration terminates the Owner or Operator's right to operate the emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is received by the department at least 6 months before the expiration date.

**XI. Title V Operating Permit Renewal Procedures**

Pursuant to Env-A 609.07(b), an application for renewal of this Permit shall be considered timely if it is **received by the department** at least six months prior to the designated expiration date of the current Title V operating permit.

**XII. Application Shield**

Pursuant to Env-A 609.08, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of

this part until the Director takes final action on the application.

### **XIII. Permit Shield**

- A. Pursuant to Env-A 609.09(a), a permit shield shall provide that:
1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and
  2. The Owner or Operator need not comply with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and specifically identified in Section IX of this Title V Operating Permit as not applicable to the stationary source or area source.
- B. The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.09(b). It shall not apply to certain conditions as specified in Env-A 609.09(c) that may be incorporated into this Permit following permit issuance by DES.
- C. If a Title V Operating Permit and amendments thereto issued by the DES does not expressly include or exclude an applicable requirement or a state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the Owner or Operator shall comply with the provisions of said requirement to the extent that it applies to the Owner or Operator, or device.
- D. If DES determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.
- E. Pursuant to Env-A 609.09(f), nothing contained in Section XIII of this Permit shall alter or affect the ability of the DES to reopen this Permit for cause in accordance with Env-A 609.19 or to exercise its summary abatement authority.
- F. Pursuant to Env-A 609.09(g), nothing contained in this section or in any Title V operating permit issued by the DES shall alter or affect the following:
1. The ability of the DES to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;
  2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;
  3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the EPA Administrator under that section;
  4. 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;
  5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;



6. The ability of the DES or the EPA Administrator to obtain information about a stationary source, area source, or device from the Owner or Operator pursuant to section 114 of the CAA; or
7. The ability of the DES or the EPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

#### **XIV. Reopening for Cause**

The Director shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.19(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.19(b) through (g).

#### **XV. Administrative Permit Amendments**

- A. Pursuant to Env-A 612.01, the Owner or Operator may implement the changes addressed in the request for an administrative permit amendment as defined in Env-A 101 immediately upon filing the request with the DES.
- B. Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

#### **XVI. Operational Flexibility**

- A. Pursuant to Env-A 612.02, the Owner or Operator subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Section XVI. B through E of this permit, as applicable. At this point, the department has not included any Permit terms authorizing emissions trading in this Permit.
  1. The change is not a modification under any provision of Title I of the CAA;
  2. The change does not cause emissions to exceed the emissions allowable under the Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;
  3. The Owner or Operator has obtained any temporary permit required by Env-A 600;
  4. The Owner or Operator has provided written notification to the director and administrator of the proposed change and such written notification includes:
    - a. The date on which each proposed change will occur;
    - b. A description of each such change;
    - c. Any change in emissions that will result;
    - d. A request that the operational flexibility procedures be used; and
    - e. The signature of the responsible official, consistent with Env-A 605.04(b);
  5. The change does not exceed any emissions limitations established under any of the following:

- a. The New Hampshire Code of Administrative Rules, Env-A 100-3800;
  - b. The CAA; or
  - c. This Title V Operating Permit; and
6. The Owner or Operator, DES, and EPA have attached each written notice required above to their copy of this Title V Operating Permit.
- B. For changes involving the trading of emissions, the Owner or Operator must also meet the following conditions:
1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;
  2. The Owner or Operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes to the Title V Operating Permit which qualify under a federally- enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;
  3. The Director has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce emissions trades; and
  4. The written notification required above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.
- C. For off-permit changes, the Owner or Operator must also meet the following conditions:
1. Each off-permit change meets all applicable requirements and does not violate any existing permit term or condition;
  2. The written notification required above is made contemporaneously with each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.04;
  3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;
  4. The Owner or Operator keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this Permit, and the emissions resulting from those changes; and
  5. The written notification required above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.
- D. For section 502(b)(10) changes, the Owner or Operator must also meet the following conditions:

1. The written notification required above is made at least 7 days prior to the proposed change; and
  2. The written notification required above includes any permit term or condition that is no longer applicable as a result of the change.
- E. Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) change shall not qualify for the permit shield under Env-A 609.09.

**XVII. Minor Modifications**

- A. Prior to implementing a minor permit modification, the Owner or Operator shall submit a written request to the Director in accordance with the requirements of Env-A 612.05(b).
- B. The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.05(c) through (g).
- C. Pursuant to Env-A 612.05(j), the permit shield specified in Env-A 609.09 shall not apply to minor permit amendments under Section XVII. of this Permit.
- D. Pursuant to Env-A 612.05(a), the Owner or Operator shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the Director of a request for a minor permit amendment.

**XVIII. Significant Permit Modifications**

- A. Pursuant to Env-A 612.06, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.06(a)(1) through (5).
- B. Prior to implementing the significant permit amendment, the Owner or Operator shall file a written request to the Director which includes all the information as referenced in Env-A 612.06(c) and (d) and shall be issued an amended Title V Operating Permit from the DES. The Owner or Operator shall be subject to the provisions of RSA 125-C:15 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Title V Operating Permit.
- C. The Director shall take final action on the significant permit amendment in accordance with the Procedures specified in Env-A 612.06(e) and (f).
- D. The owner or operator shall obtain an amended title V operating permit incorporating the significant permit modification prior to implementing such modification, except as provided in Env-A 609.07(a)(3).

**XIX. Title V Operating Permit Suspension, Revocation or Nullification**

- A. Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:
  1. The Owner or Operator has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order or permit condition in force and applicable to it; or
  2. The emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.
- B. The Director shall nullify any Permit if, following a hearing in accordance with RSA 541-

A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

## **XX. Inspection and Entry**

EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6, VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

## **XXI. Certifications**

### **A. Compliance Certification Report**

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify for the previous calendar year that the facility is in compliance with the requirements of this permit. The report shall be submitted annually, no later than April 15<sup>th</sup> of the following year. The report shall be submitted to the DES and to the U.S. Environmental Protection Agency – Region I. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5), the report shall describe:

1. The terms and conditions of the Permit that are the basis of the certification;
2. The current compliance status of the source with respect to the terms and conditions of this Permit, and whether compliance was continuous or intermittent during the reporting period;
3. The methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
4. Any additional information required by the DES to determine the compliance status of the source.

### **B. Certification of Accuracy Statement**

All documents submitted to the DES shall contain a certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

"I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents 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."

### **C. All reports submitted to DES (except those submitted as emission based fees as outlined in Section XXIII of this Permit) shall be submitted to the following address:**

New Hampshire Department of Environmental Services  
Air Resources Division  
29 Hazen Drive  
P.O. Box 95

Concord, NH 03302-0095  
 ATTN: Section Supervisor, Compliance Bureau

All reports submitted to EPA shall be submitted to the following address:

EPA-New England, Region 1  
 5 Post Office Square Suite 100  
 Mail Code 04-2  
 Boston, MA 02109-3912

## **XXII. Enforcement**

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the DES and/or EPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the Owner or Operator from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit. In accordance with 40 CFR 70.6 (a)(6)(ii), the Owner or Operator shall not claim as a defense 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 this Permit.

## **XXIII. Emission-Based Fee Requirements**

- A.** Env-A 705.02, *Annual Emission Fee*<sup>11</sup>: The owner or operator shall pay to the department an annual emission fee that includes a baseline emission fee as specified in Condition XXIII.E and an emission-based fee calculated each calendar year as per Condition XXIII.D.
- B.** Env-A 705.05, *Payment of Annual Emission Fee*: The owner or operator shall pay to the department the annual emission fee no later than May 15 for the previous calendar year's emissions. For example, the annual emission fee for the calendar year 2019 shall be received on or before May 15, 2020.
- C.** Env-A 705.03, *Determination of Actual Emissions for use in Calculating of Emission-based Fee*: The owner or operator shall determine the total actual annual emissions from all the emission units listed in Table 1 for each calendar year in accordance with the methods specified in Env-A 705.03.
- D.** Env-A 705.04, *Calculation of Emission-based Fee*: The owner or operator shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 705.04 and the following equation:

$$FEE = E * DPT$$

where:

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<sup>11</sup> For additional information on annual emission fee, visit the Department's website at: <https://www.des.nh.gov/air/industrial-sources/compliance-reporting>

FEE = The annual emission-based fee for each calendar year as specified in Env-A 705.

E = Total actual emissions as determined pursuant to Condition XXIII.C;

If the facility's actual annual emissions as determined by Condition XXIII.C are greater than 250 tons, the total emissions shall be adjusted by multiplying those emissions over 250 tons by a factor of 1.1 as shown below:

Adjusted E =  $\{250 + [(actual\ annual\ emissions - 250) \times 1.1]\}$

DPT = Dollar per ton rate, calculated by the department as per Env-A 705.04(b).

- E. Env-A 705.06, *Payment of Annual Baseline Emission Fee*: Pursuant to Env-A 705.07(d), the annual baseline fee for this facility is \$75,000.
- F. Pursuant to Env-A 705.06(c), if the owner or operator is not required to pay an emission-based fee for any calendar year because the Facility had zero emissions and zero hours of operation, the annual baseline fee shall be \$500 in lieu of the fee stated in Condition XXIII.E.

#### **XXIV. Duty To Provide Information**

In accordance with 40 CFR 70.6 (a)(6)(v), upon the DES's written request, the Owner or Operator shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Owner or Operator shall furnish to the DES copies of records that the Owner or Operator is required to retain by this Permit. The Owner or Operator may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Env-A 103 at the time such information is submitted to DES. DES shall evaluate such requests in accordance with the provisions of Env-A 103.

#### **XXV. Property Rights**

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

#### **XXVI. Severability Clause**

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

#### **XXVII. Permit Deviation**

Deviations are instances where any Permit condition is violated. In accordance with Env-A 911, *Recordkeeping and Reporting Requirements for Permit Deviations*, the Owner or Operator shall maintain records and report to the DES deviations from Permit requirements as follows:

- A. Recordkeeping Requirement - All Deviations - In accordance with Env-A 911.03, in the event of a permit deviation, the Owner or Operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels; and record the information per Env-A 911.03(b).

- B. Excess Emissions Reporting Requirement - Excess Emission Deviations Only - In the event the permit deviation causes excess emissions, the Owner or Operator of the affected device, process, or air pollution control equipment shall:
1. Notify DES by telephone, fax, or e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)) within 24 hours of discovery of the permit deviation<sup>12</sup>; and
  2. Submit a written report in accordance with Env-A 911.04(a)(2) within 10 days of the discovery of the permit deviation reported in Section XXVII B.
- C. Reporting Requirements for Permit Deviations Continuing for Greater Than 9 Consecutive Days - In the event the deviation does not cause an excess emission but continues for a period greater than 9 consecutive days, the Owner or Operator of the affected device, process, or air pollution control equipment shall notify the department of the subsequent corrective actions to be taken by telephone, fax, or e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)) on the tenth day of the permit deviation<sup>12</sup>.
- D. Semi-Annual Summary Report - Pursuant to Env-A 911.05, the Owner or Operator shall submit a summary of all permit deviations previously reported pursuant to Section XXVII B. and C. and a list of all permit deviations recorded pursuant to Section XXVII A. to DES in the Semi-Annual Permit Deviation and Monitoring report due January 31<sup>st</sup> and July 31<sup>st</sup> of each calendar year covering the periods of July 1<sup>st</sup> through December 31<sup>st</sup> and January 1<sup>st</sup> through June 30<sup>th</sup>, respectively, or an alternative time period approved by DES pursuant to Env-A 912.
- E. Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.

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<sup>12</sup> Unless it is Saturday, Sunday or a state legal holiday, in which event DES shall be notified on the next business day.



# Acid Rain Permit Application **RECEIVED NEW HAMPSHIRE**

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

AUG 14 2017

This submission is:  new  revised  for ARP permit renewal

AIR RESOURCES DIVISION

## STEP 1

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

Burgess BioPower	NH	58054
Facility (Source) Name	State	Plant Code

## 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(c)(1)
ST01	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes



Facility (Source) Name (from STEP 1)
--------------------------------------

**STEP 3****Read the standard requirements.****Permit Requirements**

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

**Monitoring Requirements**

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

**Sulfur Dioxide Requirements**

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

**Nitrogen Oxides Requirements**

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

**STEP 3, Cont'd.**

**Excess Emissions Requirements**

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

**Recordkeeping and Reporting Requirements**

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

**Liability**

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

Burgess BioPower

Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

Effect on Other Authorities

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

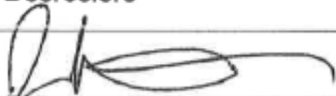
- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

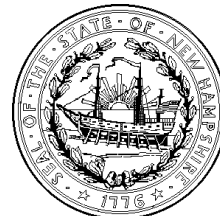
STEP 4

Certification

Read the certification statement, sign, and date.

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

Name Robert Desrosiers	
Signature 	Date 8.10.17



# TITLE V OPERATING PERMIT

Permit No: **TV-0058**

Date Issued: **November 13, 2017**

**Administrative Amendment:** December 12, 2018

This certifies that:

**Essential Power Newington, LLC**  
**13860 Ballantyne Corporate Place, Suite 300**  
**Charlotte, NC 28277**

has been granted a Title V Operating Permit for the following facility and location:

**Newington Energy**  
**200 Shattuck Way**  
**Newington, NH 03801**  
**Rockingham County**

Facility ID No: **3301590793**

ORIS Code: **55661**

Application No: **14-0486**, received on December 23, 2014

**18-0254**, received November 29, 2018 – Request for Permit Amendment

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V application referenced above filed with the New Hampshire Department of Environmental Services under the signature of the responsible official certifying to the best of his knowledge that the statements and information therein are true, accurate and complete.

Responsible Official

Thomas Fallon, Authorized Representative

Alternate Responsible Official

John Pierce, Authorized Representative

Technical Contact

John Pierce, Authorized Representative

Designated Representative

John Pierce Authorized Representative

Authorized Account Representative

John Pierce, Authorized Representative

Authorized Legal Counsel

Felix M. Khalatnikov, VP & Associate General Counsel

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of the Code of Federal Regulations, Title 40, Part 70.

This Permit is effective upon issuance and expires on **October 31, 2022**.

*Craig Wright*  
**COPY**

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Director

Air Resources Division

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## ABBREVIATIONS

AAL	Ambient Air Limit
AAR	Authorized account representative
AP-42	Compilation of Air Pollutant Emission Factors
ARD	Air Resources Division
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BTU	British Thermal Units
CAA	Clean Air Act
CAS	Chemical Abstract Service
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CGA	Cylinder Gas Audit
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
CT	Combustion turbine
DER	Discrete Emission Reduction
DES	New Hampshire Department of Environmental Services (the department)
DLN	Dry low NO <sub>x</sub>
DSCF	Dry standard cubic foot
Env-A	New Hampshire Code of Administrative Rules - Air Resources Division
ERC	Emission Reduction Credit
FR	Federal Register
GCP	Good Combustion Practices
gpm	Gallons per minute
H <sub>2</sub> SO <sub>4</sub>	Sulfuric Acid Mist
HAP	Hazardous Air Pollutant
HHV	High heating value
hr	Hour
HRSG	Heat recovery steam generator
LAER	Lowest Achievable Emission Rate
lb	Pound
lb/hr	Pounds per hour
LNB	Low NO <sub>x</sub> Burner
mg/L	Milligrams per liter
mm	million
MMBtu	Million British Thermal Units
NAAQS	National Ambient Air Quality Standard

**ABBREVIATIONS (cont.)**

NATS	NO <sub>x</sub> allowance tracking system
NETS	NO <sub>x</sub> emissions tracking system
NH <sub>3</sub>	Ammonia
NO <sub>x</sub>	Oxides of Nitrogen
NO	Nitric oxide
NO <sub>2</sub>	Nitrogen dioxide
NSPS	New Source Performance Standard
NSR	New Source Review
PM <sub>10</sub>	Particulate Matter less than 10 microns diameter
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
ppmdv	Parts per million by dry volume
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RAA	Relative Accuracy Audit
RACT	Reasonably Available Control Technology
RATA	Relative Accuracy Test Audit
RICE	Reciprocating Internal Combustion Engine
RTAP	Regulated Toxic Air Pollutant
scf	Standard cubic feet
SCR	Selective catalytic reduction
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
TSP	Total Suspended Particulate Matter
TPY	Tons per consecutive 12-month period
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

## Facility Specific Title V Operating Permit Conditions

### I. Facility Description of Operations

Essential Power Newington, LLC d/b/a Newington Energy currently operates a nominal 532 Megawatt (MW) (at 95°F) (gross electrical output) combined cycle combustion turbine facility in Newington, New Hampshire. The facility consists of two combustion turbines (CTs) with two heat recovery steam generators (HRSGs) and a single steam turbine, one natural gas-fired auxiliary boiler, six natural gas-fired fuel gas heaters, one diesel-fired emergency generator and one diesel-fired emergency firewater pump. The CTs are capable of firing natural gas or oil, and can change fuels during operation, referred to as fuel transition. The facility is classified as a “combined cycle” plant, as it produces electrical power with two gas turbines and a steam turbine. Each combustion turbine is rated at approximately 154 MW (at 95°F). The exhaust gas from each turbine passes through separate HRSGs connected to a single steam turbine producing approximately an additional 224 MW. At lower ambient temperatures (0°F) the gas turbine output ratings would increase to approximately 195 MW each, producing a plant capacity of 614 MW.

The excess heat from the steam exhausting from the low pressure section of the steam turbine is removed by cooling water. The auxiliary boiler is used for freeze protection of the HRSGs during winter months and to initially provide sealing steam for the steam turbines. The facility operates six natural gas fired gas heaters to heat the pipeline natural gas for dew point control prior to distribution to the combustion turbines. The emergency generator is used to provide emergency lighting and control power, and maintain operation of lubricating pumps in the event of a system power outage. The diesel fired water pump is used for fire suppression when the electrical power system is down or the electric pump is not operable.

During limited hours, the facility will operate in a supplemental firing mode to boost power output. During the supplemental firing mode, duct burners within the HRSGs are fired to increase the heat of the exhaust gas from the combustion turbine. Air pollution control for the combustion turbines at the facility includes Selective Catalytic Reduction (SCR) system to control nitrogen oxides (NO<sub>x</sub>) while firing natural gas and a combustion control system to minimize carbon monoxide (CO). Water injection system is used for NO<sub>x</sub> control in conjunction with SCR while firing the turbines on distillate fuel oil. Emissions of CO, NO<sub>x</sub>, opacity and certain operational parameters are continuously monitored and recorded.

The Owner/Operator received Prevention of Significant Deterioration (PSD) permit # PSD 044-121NH10 from the United States Environmental Protection Agency (USEPA) and Temporary Permit FP-T-0036 on April 26, 1999 from the department. The facility is a major source for particulate matter and CO and is therefore required to obtain a Title V Operating Permit.

### II. Permitted Activities

In accordance with all of the applicable requirements identified in the Permit, the owner or operator is authorized to operate the devices and/or processes identified in Sections III, IV, V, and VI within the terms and conditions specified in this permit.



**III. Emission Unit Identification****A. Significant Activities**

The activities identified in Table 1 are subject to and regulated by this Title V Operating Permit.

<b>Table 1 - Significant Activity Identification</b>			
<b>Emission Unit ID</b>	<b>Description of Emission Unit</b>	<b>Installation Date</b>	<b>Maximum Design/Permitted Capacity</b>
EU01	Combustion Turbine #1 (designated as CT #1) with Heat Recovery Steam Generator General Electric Frame 7FA	June 2002  (modified 2015 <sup>1</sup> )	1. Combustion Turbines #1 and #2 shall each be limited to 2,221 MMBtu/hr (HHV) gross heat input while firing natural gas or 2,329 MMBtu/hr (HHV) gross heat input while firing distillate fuel oil.  2. Supplemental fuel firing in each HRSG shall be limited to 177.7 MMBtu/hr (HHV) gross heat input. Fuel is limited to natural gas only.
EU02	Combustion Turbine #2 (designated as CT #2) with Heat Recovery Steam Generator General Electric Frame 7FA	June 2002  (modified 2014 <sup>1</sup> )	
EU03	10-cell Wet Mechanical draft cooling tower equipped with high efficiency drift eliminators Manufactured by Marley	2002	1. Cooling Tower drift = 0.0005% of the circulating water flow rate 2. Nominal circulation rate = 150,000 gallons/minute
EU04	Auxiliary Boiler Hurst Boiler Model No. S2XID-G-600-200 Serial No. DS1750-200-1	June 2002	25.2 MMBtu/hr Natural gas - equivalent to 25,200 scf/hr (HHV)
EU05	Six Fuel Gas Heaters Laars Model No. 2400	August 2004	2.4 MMBtu/hr - each heater Natural gas - equivalent to 2,400 scf/hr (HHV) Each fuel gas heater is equipped with a low-NOx burner.
EU06	Emergency Generator Engine Cummins Model No. QSX15-G9 Serial No. TBD	June 2002	5.2 MMBtu/hr Distillate oil - equivalent to 37.1 gal/hr <sup>2</sup>
EU07	Fire Pump Engine John Deere Model No. JDFP-06WR Serial No. TBD	June 2002	1.9 MMBtu/hr Distillate oil - equivalent to 13.6 gal/hr

<sup>1</sup> Modified by installation of Advanced Gas Path (AGP) technology

<sup>2</sup> Based on a heating value of 140,000 BTU/gal for distillate oil

**B. Stack Criteria**

The following devices at the Facility shall have exhaust stacks that discharge vertically, without obstruction, and meet the criteria in Table 2:

<b>Table 2 - Stack Criteria</b>			
<b>Stack #</b>	<b>Emission Unit ID</b>	<b>Minimum Stack Height (Feet)</b>	<b>Maximum Stack Diameter (Feet)</b>
Stack 1	Combustion Turbine #1 (EU01)	150	16.75
Stack 2	Combustion Turbine #2 (EU02)	150	16.75
Stack 3	10 Cooling Tower Exhaust Fans (EU03)	54.5	33.7
Stack 4	Auxiliary Boiler <sup>3</sup> (EU04)	38	2
Stack 5	Six Fuel Gas Heaters (EU05)	50	4.0

**IV. Insignificant Activities Identification**

All activities at this facility, which meet the criteria identified in Env-A 609.04, shall be considered insignificant activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this Permit.

**V. Exempt Activities Identification**

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this permit.

**VI. Pollution Control Equipment Identification**

Air pollution control equipment listed in Table 3 shall be operated at all times that the associated devices are operating in order to meet permit conditions.

<sup>3</sup> The stack for this device has a rain sleeve.

Table 3 - Pollution Control Equipment Identification			
Pollution Control Equipment ID	Description	Purpose	Emission Unit Controlled
PCE1	1. Dry low-NOx (DLN) in conjunction with Selective Catalytic Reduction (SCR) - for natural gas combustion 2. Water injection system in conjunction with SCR - for distillate oil combustion	For NOx Control	EU01
PCE2	1. Dry low-NOx (DLN) in conjunction with Selective Catalytic Reduction (SCR) - for natural gas combustion 2. Water injection system in conjunction with SCR - for distillate oil combustion	For NOx Control	EU02
PCE3	Each cooling tower cell is equipped with a single layer of drift eliminator plus a suspended layer of honeycomb cooling tower fill.	To minimize water drift losses and plume visibility	EU03

**VII. Alternative Operating Scenarios**

No alternative operating scenarios were identified for this permit.

**VIII. Applicable Requirements**

**A. State-only Enforceable Operational and Emission Limitations**

The owner or operator shall be subject to the state-only<sup>4</sup> operational and emission limitations identified in Table 4 below:

Table 4 - State-only Enforceable Operational and Emission Limitations			
Item #	Applicable Requirements	Applicable Emission Unit	Regulatory Citation
1.	<u>24-hour and Annual Ambient Air Limit</u> The emissions of any Regulated Toxic Air Pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual Ambient Air Limit (AAL) as set forth in Env-A 1450.01, <i>Table of All Regulated Toxic Air Pollutants</i> .	Facility Wide	Env-A 1400
2.	<u>Revisions of the List of RTAPs</u> In accordance with RSA 125-I:5 IV, if the department revises the list of RTAPs or their respective AALs or classifications under RSA 125-I:4, II and III, and as a result of such revision the owner or operator is required to obtain or modify the permit under the provisions of RSA 125-I or RSA 125-C, the owner or operator shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such permit or permit modification.	Facility Wide	RSA 125-I:5, IV
3.	<u>Visible Emission Limits</u> a. Except as provided in “b.” below, the average opacity from each combustion turbine shall not exceed 20 percent for any continuous 6-minute period.	EU01 & EU02	PSD Permit 044-121NH10 Env-A 2002.02

<sup>4</sup> The term “state-only requirement” is used to refer to those requirements that are not federally enforceable but are state requirements as defined in Env-A 101.186.

**Table 4 - State-only Enforceable Operational and Emission Limitations**

Item #	Applicable Requirements	Applicable Emission Unit	Regulatory Citation
	b. During fuel transition, opacity may not exceed 27 percent for any 6-minute period.		Env-A 604.01 & TP-0208

**B. Federally Enforceable Operational and Emission Limitations**

The owner or operator shall be subject to the federally enforceable operational and emission limitations identified in Table 5 below:

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Citation
1.	The Owner/Operator is permitted to combust pipeline natural gas and distillate oil in the combustion turbines. a. The sulfur content of distillate oil shall be limited to 0.0015% by weight. b. Gaseous fuel shall contain no more than 2.5 grains of sulfur per 100 standard cubic feet. <sup>5</sup>	EU01 & EU02	PSD Permit 044-121NH10 & TP-B-0526
2.	The combustion of distillate fuel oil in combustion turbines #1 and #2 combined shall be limited to 33,120,000 gallons during any 12 consecutive month period.	EU01 & EU02	TP-B-0526
3.	Combustion turbines #1 and #2 shall not fire natural gas and fuel oil simultaneously except during periods of transition from one fuel to the other. Such transition periods shall, to the extent practical, be minimized.	EU01 & EU02	PSD Permit 044-121NH10
4.	Combustion of supplemental fuel in the HRSGs shall be limited to natural gas only.	EU01 & EU02	PSD Permit 044-121NH10
5.	Supplemental fuel firing for the duct burners shall not exceed 320 million cubic feet (mmcf) of natural gas during any 12 consecutive month period <sup>6</sup> .	EU01 & EU02	PSD Permit 044-121NH10 & TP-B-0526
6.	With the exception of startup, shutdown and combustion turbine tuning periods, the Owner/Operator shall operate the SCR systems at all times to reduce NOx emissions.	EU01 & EU02	TP-B-0526
7.	SCR shall be operated in accordance with the procedures established in the catalyst management plan <sup>7</sup> .	PCE1 & PCE2	PSD Permit 044-121NH10

<sup>5</sup> The SO<sub>2</sub> limit for EU01 and EU02 of 0.0071 lb/MMBtu for gas firing in Table 5A is equivalent to a fuel sulfur content of 2.5 grains of sulfur per 100 cubic feet of gas. This equivalent fuel sulfur content is much lower than the 20 grain/100 cf limit that is the threshold for fuel sulfur monitoring requirements under NSPS Subpart KKKK (40 CFR 60.4330(a)(2)).

<sup>6</sup> Note that the restriction on the hours of operation (1,800 hours/yr - each duct burner) that was included in a previous permit has been replaced with an equivalent fuel throughput. (Minor modification to TV-0058 dated December 16, 2011, application 11-0129)

<sup>7</sup> The facility submitted an updated catalyst management plan in October 2015.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Citation
8.	The combustion turbines shall comply with the following emission limitations:	EU01 & EU02	PSD Permit 044-121NH10 & TP-B-0526

Pollutant	Emission Limitation	Control Technology	Averaging Time
Sulfur Dioxide (Gas Firing)	0.0071 lb/MMBtu <sup>8</sup>	Low Sulfur Fuels (BACT)	3 hour rolling
Sulfur Dioxide (Oil Firing)	0.0015 lb/MMBtu <sup>8</sup>	Low Sulfur Fuels (BACT)	3 hour rolling
Carbon Monoxide (Gas Firing)	15 ppmdv @ 15% O <sub>2</sub> at all loads	Low NOx Burner with Good Combustion Practices (BACT)	1 hour block average
Carbon Monoxide (Oil Firing)	20 ppmdv @ 15 %O <sub>2</sub> at 75 to 100% load 30 ppmdv @ 15%O <sub>2</sub> at 50 to 74% load	Low NOx Burner with Good Combustion Practices (BACT)	1 hour block average
TSP/PM <sub>10</sub> (Gas Firing)	0.015 lb/MMBtu	Low Sulfur Fuels (BACT)	1 hour block average
TSP/PM <sub>10</sub> (Oil Firing)	0.040 lb/MMBtu	Low Sulfur Fuels (BACT)	1 hour block average
Opacity	20%	Good Combustion Practices	6 minute block average
Nitrogen Oxides (Gas Firing)	2.5 ppmdv @ 15% O <sub>2</sub> <sup>9</sup>	Low NOx Burner with SCR (LAER/BACT)	3 hour block average
Nitrogen Oxides (Oil Firing)	9.0 ppmdv @ 15% O <sub>2</sub> <sup>9</sup>	Low NOx Burner with Water Injection and SCR (LAER/BACT)	1 hour block average
VOCs (Gas Firing)	0.002 lb/MMBtu	Good Combustion Practices	1 hour block average
VOCs (Oil firing)	0.0038 lb/MMBtu	Good Combustion Practices	1 hour block average
Sulfuric Acid Mist (H <sub>2</sub> SO <sub>4</sub> ) (Gas Firing)	0.00083 lb/MMBtu	Low Sulfur Fuels (BACT)	1 hour block average
Sulfuric Acid Mist (Oil Firing)	0.0116 lb/MMBtu	Low Sulfur Fuels (BACT)	1 hour block average
Ammonia	10 ppmdv @ 15% O <sub>2</sub>	N/A	24 hour block average

- Emission limits for nitrogen oxides apply at all times, except during start-up, shutdown and combustion turbine tuning.
- Emission limits for carbon monoxide apply at all times, except during start-up and shutdown.
- Emission limits for sulfur dioxide, particulate matter, volatile organic compounds and ammonia apply at all times.

<sup>8</sup> Both CTs are also subject to less restrictive SO<sub>2</sub> emission limits, equivalent to 0.060 lb/MMBtu, for any fuel (NSPS Subpart KKKK at 40 CFR 60.4330(a)(2)).

<sup>9</sup> Both CTs are also subject to less restrictive NOx emission limits of 15 ppm NOx (at 15% O<sub>2</sub>) for natural gas and 42 ppm NOx (15% O<sub>2</sub>) for other fuels, as a modified turbine rated > 850 MMBtu/hr (NSPS Subpart KKKK Table 1). Compliance with these Subpart KKKK NOx limits is based on a 30-day rolling average. However, compliance with the existing NOx limits for oil and gas firing of 2.5 and 9.0 ppmvd would also result in compliance with the Subpart KKKK limits of 15 and 42 ppm for the 30-day rolling average.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Citation																																				
9.	<p>Maximum hourly emissions of regulated pollutants from <u>each</u> combustion turbine shall be limited as specified in Table 5B below:</p> <table border="1" data-bbox="224 468 1102 1022"> <thead> <tr> <th colspan="4" data-bbox="224 468 1102 510">Table 5B - Maximum Hourly Emission Rates</th> </tr> <tr> <th data-bbox="224 510 407 594">Pollutant</th> <th data-bbox="407 510 657 594">Maximum Rate lb/hr on Natural Gas @ 100% load and 0° F</th> <th data-bbox="657 510 914 594">Maximum Rate lb/hr on Fuel Oil @ 100% load and 0° F</th> <th data-bbox="914 510 1102 594">Averaging Time</th> </tr> </thead> <tbody> <tr> <td data-bbox="224 594 407 678">NOx</td> <td data-bbox="407 594 657 678">19.48</td> <td data-bbox="657 594 914 678">77.60</td> <td data-bbox="914 594 1102 678">1-hour (oil) &amp; 3-hour (NG) block average</td> </tr> <tr> <td data-bbox="224 678 407 741">SO<sub>2</sub></td> <td data-bbox="407 678 657 741">6.3</td> <td data-bbox="657 678 914 741">3.33</td> <td data-bbox="914 678 1102 741">3-hour rolling average</td> </tr> <tr> <td data-bbox="224 741 407 804">CO</td> <td data-bbox="407 741 657 804">71.16</td> <td data-bbox="657 741 914 804">104.98</td> <td data-bbox="914 741 1102 804">1-hour block average</td> </tr> <tr> <td data-bbox="224 804 407 856">TSP/PM<sub>10</sub></td> <td data-bbox="407 804 657 856">11.00</td> <td data-bbox="657 804 914 856">20.00</td> <td data-bbox="914 804 1102 856">1-hour block average</td> </tr> <tr> <td data-bbox="224 856 407 909">Sulfuric Acid Mist (H<sub>2</sub>SO<sub>4</sub>)</td> <td data-bbox="407 856 657 909">0.92</td> <td data-bbox="657 856 914 909">0.5</td> <td data-bbox="914 856 1102 909">1-hour block average</td> </tr> <tr> <td data-bbox="224 909 407 972">VOCs</td> <td data-bbox="407 909 657 972">4.23</td> <td data-bbox="657 909 914 972">8.43</td> <td data-bbox="914 909 1102 972">1-hour block average</td> </tr> <tr> <td data-bbox="224 972 407 1022">Ammonia</td> <td data-bbox="407 972 657 1022">28.84</td> <td data-bbox="657 972 914 1022">31.91</td> <td data-bbox="914 972 1102 1022">24-hour block average</td> </tr> </tbody> </table> <p data-bbox="224 1035 1102 1098">The above emission rates are calculated based on heating values of 1,000 Btu/scf for Natural Gas and 140,000 Btu/gallon for distillate oil.</p>	Table 5B - Maximum Hourly Emission Rates				Pollutant	Maximum Rate lb/hr on Natural Gas @ 100% load and 0° F	Maximum Rate lb/hr on Fuel Oil @ 100% load and 0° F	Averaging Time	NOx	19.48	77.60	1-hour (oil) & 3-hour (NG) block average	SO <sub>2</sub>	6.3	3.33	3-hour rolling average	CO	71.16	104.98	1-hour block average	TSP/PM <sub>10</sub>	11.00	20.00	1-hour block average	Sulfuric Acid Mist (H <sub>2</sub> SO <sub>4</sub> )	0.92	0.5	1-hour block average	VOCs	4.23	8.43	1-hour block average	Ammonia	28.84	31.91	24-hour block average	EU01 & EU02	TP-B-0526
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Pollutant	Maximum Rate lb/hr on Natural Gas @ 100% load and 0° F	Maximum Rate lb/hr on Fuel Oil @ 100% load and 0° F	Averaging Time																																				
NOx	19.48	77.60	1-hour (oil) & 3-hour (NG) block average																																				
SO <sub>2</sub>	6.3	3.33	3-hour rolling average																																				
CO	71.16	104.98	1-hour block average																																				
TSP/PM <sub>10</sub>	11.00	20.00	1-hour block average																																				
Sulfuric Acid Mist (H <sub>2</sub> SO <sub>4</sub> )	0.92	0.5	1-hour block average																																				
VOCs	4.23	8.43	1-hour block average																																				
Ammonia	28.84	31.91	24-hour block average																																				

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Citation																																													
10.	<p>Maximum 12-month rolling emissions of regulated pollutants shall be limited as specified in Table 5C below:</p> <table border="1" data-bbox="227 504 1097 1045"> <thead> <tr> <th colspan="5" data-bbox="227 504 1097 562">Table 5C - Maximum 12-Month Rolling Emissions Limits</th> </tr> <tr> <th data-bbox="227 562 365 730">Pollutant</th> <th data-bbox="365 562 560 730">Maximum Rate on Natural Gas (for two CTs combined) (tons)</th> <th data-bbox="560 562 722 730">Maximum Rate on Fuel Oil<sup>a</sup> (for two CTs combined) (tons)</th> <th data-bbox="722 562 917 730">Maximum Rate for Two CTs Combined on Both Fuels<sup>b</sup> (tons)</th> <th data-bbox="917 562 1097 730">Emission Limits<sup>10</sup> (tons)</th> </tr> </thead> <tbody> <tr> <td data-bbox="227 730 365 772">NOx</td> <td data-bbox="365 730 560 772">151.4</td> <td data-bbox="560 730 722 772">93.1</td> <td data-bbox="722 730 917 772">223.8</td> <td data-bbox="917 730 1097 772">229.5</td> </tr> <tr> <td data-bbox="227 772 365 814">SO<sub>2</sub></td> <td data-bbox="365 772 560 814">55.2</td> <td data-bbox="560 772 722 814">4.0</td> <td data-bbox="722 772 917 814">55.2</td> <td data-bbox="917 772 1097 814">56.4</td> </tr> <tr> <td data-bbox="227 814 365 856">CO</td> <td data-bbox="365 814 560 856">464.3</td> <td data-bbox="560 814 722 856">126.0</td> <td data-bbox="722 814 917 856">526.7</td> <td data-bbox="917 814 1097 856">529.7</td> </tr> <tr> <td data-bbox="227 856 365 898">PM<sub>10</sub></td> <td data-bbox="365 856 560 898">96.4</td> <td data-bbox="560 856 722 898">24.0</td> <td data-bbox="722 856 917 898">107.2</td> <td data-bbox="917 856 1097 898">119.1<sup>11</sup></td> </tr> <tr> <td data-bbox="227 898 365 961">Sulfuric Acid Mist</td> <td data-bbox="365 898 560 961">12.3</td> <td data-bbox="560 898 722 961">17.0</td> <td data-bbox="722 898 917 961">27.6</td> <td data-bbox="917 898 1097 961">27.6</td> </tr> <tr> <td data-bbox="227 961 365 1003">VOCs</td> <td data-bbox="365 961 560 1003">32.9</td> <td data-bbox="560 961 722 1003">10.1</td> <td data-bbox="722 961 917 1003">38.5</td> <td data-bbox="917 961 1097 1003">39.0</td> </tr> <tr> <td data-bbox="227 1003 365 1045">Ammonia</td> <td data-bbox="365 1003 560 1045">245.3</td> <td data-bbox="560 1003 722 1045">38.3</td> <td data-bbox="722 1003 917 1045">256.4</td> <td data-bbox="917 1003 1097 1045">256.4</td> </tr> </tbody> </table> <p data-bbox="227 1056 1097 1245">                     a. Maximum rate on fuel oil for two combustion turbines combined - Assumes that the facility combusts 33,120,000 gal/yr of distillate fuel oil.                      b. For all pollutants except SO<sub>2</sub>, assumes that the combustion turbines combust 33,120,000 gal/yr combined and combust natural gas for the remaining period. For SO<sub>2</sub>, emission calculations assume operation on natural gas for 8,760 hrs/yr at 100% load.                 </p>	Table 5C - Maximum 12-Month Rolling Emissions Limits					Pollutant	Maximum Rate on Natural Gas (for two CTs combined) (tons)	Maximum Rate on Fuel Oil <sup>a</sup> (for two CTs combined) (tons)	Maximum Rate for Two CTs Combined on Both Fuels <sup>b</sup> (tons)	Emission Limits <sup>10</sup> (tons)	NOx	151.4	93.1	223.8	229.5	SO <sub>2</sub>	55.2	4.0	55.2	56.4	CO	464.3	126.0	526.7	529.7	PM <sub>10</sub>	96.4	24.0	107.2	119.1 <sup>11</sup>	Sulfuric Acid Mist	12.3	17.0	27.6	27.6	VOCs	32.9	10.1	38.5	39.0	Ammonia	245.3	38.3	256.4	256.4	EU01 – EU07	TP-B-0526
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11.	The Owner/Operator shall, to the extent practical, minimize emissions from the combustion turbines during startup, shutdown and fuel transition, inclusive of opacity.	EU01 & EU02	TP-B-0526																																													
12.	Combustion turbine startup shall be defined as the period of time from initiation of turbine firing until steady state operation above 55% load at ambient conditions.	EU01 & EU02	TP-B-0150																																													
13.	Combustion turbine shutdown shall be defined as the period from steady-state operation at or below 55% load at ambient conditions to cessation of fuel combustion in the turbine.	EU01 & EU02	TP-B-0526																																													
14.	Combustion turbine fuel transitions shall be defined as the period of time from the reduction of load below 55% load on one fuel, or the introduction of the other fuel, whichever occurs first, to the achievement of compliance at steady state operation above 55% load on the other fuel at ambient conditions. Each fuel transition shall be achieved as soon as practical and in no case shall exceed 180 minutes.	EU01 & EU02	TP-B-0150																																													

<sup>10</sup> Includes emissions from combustion turbines, cooling tower, auxiliary boiler, fuel gas heaters, emergency generator and fire pump combined.

<sup>11</sup> Includes 11.2 tpy from cooling tower.

Table 5 - Federally Enforceable Operational and Emission Limitations															
Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Citation												
15.	<p>When firing on natural gas or distillate fuel oil, the Owner/Operator shall comply with the following emission limits per each CT unit for each startup and shutdown event:</p> <table border="1"> <thead> <tr> <th colspan="3">Table 5D - Startup and Shutdown Emission Limits For Each Event</th> </tr> <tr> <th></th> <th>CO Limit (pounds) Per Turbine</th> <th>NOx Limit (pounds) Per Turbine</th> </tr> </thead> <tbody> <tr> <td>Startup</td> <td>1,800</td> <td>750</td> </tr> <tr> <td>Shutdown</td> <td>780</td> <td>170</td> </tr> </tbody> </table>	Table 5D - Startup and Shutdown Emission Limits For Each Event				CO Limit (pounds) Per Turbine	NOx Limit (pounds) Per Turbine	Startup	1,800	750	Shutdown	780	170	EU01 & EU02	TP-B-0526
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Startup	1,800	750													
Shutdown	780	170													
16.	The emission limits for startup conditions shall apply for fuel transition periods.	EU01 & EU02	TP-B-0526												
17.	<p><u>Quarterly Tuning of Combustion Turbines – NOx Emissions</u></p> <p>a. The Owner/Operator may conduct up to 16 hours of emissions tuning per rolling 12-month period per combustion turbine without injection of ammonia. During these periods, the NOx emission limit in Tables 5A and 5B will not apply.</p> <p>b. The Owner/Operator shall monitor NOx emissions during tuning and shall meet the:</p> <p style="margin-left: 40px;">i. NOx RACT limits<sup>12</sup> (hourly average), and</p> <p style="margin-left: 40px;">ii. Annual NOx emission limits contained in Table 5C of this permit.</p> <p>-----</p> <p>c. The NSPS subpart KKKK NOx limits, assessed on a 30-day rolling average basis as described in 40 CFR 60.4380(b), applies at all times, including tuning activities.</p>	EU01 & EU02	TP-B-0526 (as amended 11/26/08 under #08-0049) & Env-A 1306.03 ----- 40 CFR 60.14(g) & 40 CFR 60.4320												
18.	The Cooling Tower shall be equipped with high efficiency drift eliminators to minimize water drift losses and plume visibility. Drift from the Cooling Tower shall be limited to 0.0005% of the circulating water flow rate.	EU03	PSD Permit 044-121NH10												
19.	Natural gas consumption for the auxiliary boiler shall be limited to 50,400,000 cubic feet per consecutive 12-month period.	EU04	TP-B-0483												
20.	<p><u>Fuel Sulfur Content</u></p> <p>a. The sulfur content of No. 2 fuel oil burned in the emergency generator and fire pump shall not exceed 0.40 percent by weight.</p> <p>-----</p> <p>b. Effective July 1, 2018, sulfur content of the No. 2 fuel oil shall not exceed 0.0015% by weight.</p>	EU06 & EU07	Env-A 1603.01 (formerly Env-A 402, effective 12-24-90) TP-B-0483 ----- RSA 125-C:10-d												

<sup>12</sup> Env-A 1306.03, *Emission Standards for Combustion Turbines*, under (a)(2): For gas-fired turbines with oil back-up, NOx emissions shall be limited at all times to the more stringent of 42 ppmvd firing gas, corrected to 15% O2, or 0.155 lb per million Btu, or 65 ppmvd firing oil, corrected to 15% O2, or 0.253 lb per million Btu.



Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Citation
21.	Operating hours for the emergency generator shall be limited to 500 hours during any consecutive 12-month period as determined from the non-resettable hour meter.	EU06	TP-B-0483
22.	Operating hours for the fire pump engine shall be limited to 500 hours during any consecutive 12-month period as determined from the non-resettable hour meter.	EU07	TP-B-0483
23.	<u>Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970</u> The average opacity from fuel burning devices installed after May 13, 1970 shall not exceed 20 percent for any continuous 6-minute period <sup>13</sup> .	EU04 <sup>14</sup> through EU07	Env-A 2002.02 (formerly Env-A 1202, effective 12-27-90)
24.	<u>Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985</u> The particulate matter emissions from fuel burning devices installed on or after January 1, 1985 shall not exceed 0.30 lb/MMBtu.	EU04 through EU07	Env-A 2003.03 (formerly Env-A 1202, effective 12-27-90)
25.	<u>Fuel Gas Heaters NOx Limits</u> NOx emissions from each of the six fuel gas heaters shall not exceed 9.9 ppm at 3% O <sub>2</sub> and 0.012 lb/MMBtu.	EU05	NOx RACT Order ARD-04-001
26.	<u>Accidental Release Program Requirements</u> The Owner/Operator stores anhydrous ammonia in quantities above the level specified in 40 CFR 68, Section 112(r). The Owner/Operator shall operate the facility in accordance with the risk management plan.	Facility Wide	40 CFR 68 CAAA §112(r)(1)
27.	<u>Protection of Stratospheric Ozone</u> If the owner or operator performs maintenance on, or services, repairs, or disposes of appliances containing regulated ozone depleting substances, the owner or operator shall comply with the standards for <i>Recycling and Emissions Reduction</i> pursuant to 40 CFR 82, Subpart F.	Facility wide	40 CFR 82 Subpart F
28.	<u>Limitations on Operating Scenarios for Emergency Engines</u> The emergency generator and fire pump shall only operate: <ul style="list-style-type: none"> <li>a. As a mechanical or electrical power source when the primary power source for the facility is not available during an emergency such as for a power outage, or in case of a fire, and</li> <li>b. During normal maintenance and testing as recommended by the manufacturer.</li> </ul>	EU06 & EU07	Env-A 1302.15 & Env-A 101.671

<sup>13</sup> Compliance with visible emission limitations shall be determined using 40 CFR 60, Appendix A, Method 9, upon request by the department.

<sup>14</sup> EU01 and EU02 opacity limits are listed in Table 5A for normal operation

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Citation
29.	<p><u>Emergency Engine Operating Limits</u></p> <p>a. The emergency generator and fire pump shall each be limited to 100 hours per year of operation for maintenance checks and readiness testing;</p> <p>b. The emergency generator and fire pump may each operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.</p>	EU06 & EU07	40 CFR 63.6640(f) Subpart ZZZZ
30.	<p><u>Requirements for Emergency Engines</u></p> <p>The fire pump and emergency generator shall be operated as follows:</p> <p>a. Change oil and filter annually;</p> <p>b. Inspect air cleaner annually and replace as necessary;</p> <p>c. Inspect hoses and belts annually and replace as necessary;</p> <p>d. Minimize idle time during startup and minimize startup time to a period needed for appropriate and safe loading, not to exceed 30 minutes; and</p> <p>e. Operate and maintain the engine according to the manufacturer's emission-related operation and maintenance instructions.</p>	EU06 & EU07	40 CFR 63.6603 & 40 CFR 63.6625 Subpart ZZZZ
31.	<p><u>NESHAP General Provisions</u></p> <p>At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p> <p>For emergency engines subject to 40 CFR 63, Subpart ZZZZ, the owner or operator shall maintain compliance with the emission limitations and operating limitations in Subpart ZZZZ that apply to the Owner/Operator at all times.</p>	EU06 & EU07	40 CFR 63.6605 Subpart ZZZZ
32.	<p><u>NSPS General Requirements</u></p> <p>a. The owner or operator must operate and maintain the stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.</p> <p>b. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the facility.</p> <p>c. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate</p>	EU01 EU02 & EU04	40 CFR 60.4333  40 CFR 60.11(d)  40 CFR 60.11(g)

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Citation
	performance or compliance test or procedure had been performed.		
33.	The Owner/Operator shall maintain a program of best management practices for the minimization of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust.	EU01 & EU02	PSD Permit 044-121NH10

**C. Annual SO<sub>2</sub> Allowance Programs**

1. In accordance with 40 CFR Part 73, SO<sub>2</sub> allowances pursuant to the Federal Acid Rain Program for this facility are allocated as indicated in the following table:

Table 10 - SO <sub>2</sub> Allowance Allocation (tons)					
	2015	2016	2017	2018	2019
EU01	0	0	0	0	0
EU02	0	0	0	0	0

2. Compliance
  - a. Pursuant to 40 CFR 73.35, the Owner or Operator shall comply with the SO<sub>2</sub> emission limitation requirements.
  - b. At the end of each calendar year, the Owner or Operator shall hold sufficient SO<sub>2</sub> allowances equivalent to the SO<sub>2</sub> emissions during that calendar year.
3. General Provisions
 

Pursuant to Env-A 611.07, SO<sub>2</sub> allowances lawfully held or acquired by the owner or operator under the acid rain provisions of the Clean Air Act, including 40 CFR 72 shall be governed by the following:

  - a. Emissions from the affected units shall not exceed any SO<sub>2</sub> allowances held by the affected unit;
  - b. The number of SO<sub>2</sub> allowances held by the affected units shall not be limited;
  - c. The owner or operator shall not use SO<sub>2</sub> allowances to avoid compliance with any other applicable requirement of either state or federal rules or of the provisions of the Clean Air Act; and
  - d. Any SO<sub>2</sub> allowances held by the owner or operator shall be accounted for according to the procedures established in the applicable provisions of 40 CFR 72 and 40 CFR 73.
4. Excess Emissions Requirements
 

Pursuant to 40 CFR 72.9(e) if the affected source has excess emissions in any calendar year, the Owner or Operator shall:

  - a. Submit a proposed offset plan as required under 40 CFR 77;

- b. Pay the required penalty without demand and pay upon demand the interest on that penalty, as required by 40 CFR 77; and
  - c. Comply with the terms of an approved offset plan as required by 40 CFR 77.
5. Allowance Transfer

The owner or operator shall transfer allowances according to the procedures in 40 CFR 73.50.

6. Phase II Acid Rain Permit Application

The attached Phase II Acid Rain Permit application, dated October 5, 2006, is hereby incorporated by reference into this permit. The Owner and Operator shall comply with the requirements set forth in the Phase II Acid Rain Permit Application and this permit.

#### **D. Emission Reductions Trading Requirements**

In accordance with Env-A 3100 *Discrete Emissions Reductions Trading Program* and “Notice of Intent to Use DERs” originally submitted by the Owner/Operator on June 19, 2002 and annually thereafter, the Owner/Operator shall be allowed to use DERs to offset NOx emissions.

#### **E. Ozone Season NOx Budget Trading Program (Env-A 3200)**

1. NOx Allowance Allocation

NOx allowances shall be allocated to the Owner/Operator according to the methodology in Env-A 3205.03, *Allowance Allocation Methodology*.

2. General Provisions

- a. Ozone Season NOx Emissions Cap

Pursuant to Env-A 3206.02(a)(1) and Env-A 3212.05, NOx emissions during any control period<sup>15</sup> shall not exceed the amount of NOx allowances held in the Owner/Operator’s NOx Allowance Tracking System (NATS) compliance account for that control period as of the allowance transfer deadline of November 30.

- b. Allowance Banking (Env-A 3208)

- i. Pursuant to Env-A 3208.01, *Retention of Unused Allowances*, the banking of allowances shall be permitted to allow the retention of unused allowances from one year to a future year in either a compliance account, an overdraft account, or a general account.
- ii. Pursuant to Env-A 3208.02, *Account Designation*, unless otherwise permitted under Env-A 3208.04, unused allowances as of the end of the allowance transfer deadline shall be retained in the compliance, overdraft, or general account and designated as banked allowances after the NATS administrator has made all deductions for a given control period from the compliance account or overdraft account pursuant to Env-A 3212.03.
- iii. The Owner/Operator shall comply with the NOx allowance banking provisions pursuant to Env-A 3208.03, *Requirements for Use*.

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<sup>15</sup> Control period means the period beginning May 1 of each year and ending on September 30 of the same year, inclusive.

## c. Conversion of Allowances to DERs

Pursuant to Env-A 3205.04, the Owner/Operator may convert unused allowances to DERs in accordance with procedures for DER generation pursuant to Env-A 3103. Upon conversion, the Owner/Operator shall surrender those converted allowances as if they had been used for actual emissions. Under no other circumstances shall unused allowances be converted to, or used as, DERs or ERCs.

## d. Request for Deduction of Allowances (Env-A 3212.02)

- i. Each year prior to November 30, the AAR shall request the NATS administrator to deduct current year allowances from the compliance account or overdraft account equivalent to the number of available allowances to cover the NOx emissions during the current control period.
- ii. This request shall be submitted by the AAR to the NATS administrator no later than the allowance transfer deadline, November 30.
- iii. This request shall identify the compliance account or overdraft account from which the deductions should be made.
- iv. This request shall:
  1. Identify the serial numbers of the allowances to be deducted, if desired by the source; or
  2. Not identify serial numbers, in which case allowances usable for that compliance year shall be deducted in the order of their arrival into the unit's account, with allocated allowances being deducted first, followed by the deduction of transferred allowances.

## 3. Excess Emissions and Enforcement Provisions (Env-A 3214)

- a. If emissions exceed the allowances held by the Owner/Operator by the allowance transfer deadline (November 30), the NATS administrator shall automatically deduct three tons of allowances from the next control period for every ton of excess emissions from the Owner/Operator's compliance account or overdraft account.
- b. In accordance with RSA 125-J:4-a, for purposes of enforcement of the NOx Budget Program, in determining the number of days of violation, any excess emissions for the control period shall presume that each day in the control period of 153 days, constitutes a day in violation unless the Owner/Operator can demonstrate, through use of verifiable emissions data that a lesser number of days should be considered. In addition, each ton of excess emissions shall constitute a separate violation.

## 4. Allowance Transfer and Use

- a. Pursuant to Env-A 3207.01, *Marketable Emissions Authorization*, an allowance shall be a marketable emissions authorization that may be bought, sold, or traded at any time during any year, not just the current year.
- b. The Owner/Operator shall comply with the NOx allowance transfer procedures of Env-A 3207.03.

**F. Carbon Dioxide (CO<sub>2</sub>) Budget Trading Program (Env-A 4600)**

1. CO<sub>2</sub> Allowance Requirements (Env-A 4605.01)
  - a. The owner or operator of each CO<sub>2</sub> budget source and each CO<sub>2</sub> budget unit at the source shall hold CO<sub>2</sub> allowances available for compliance deductions under Env-A 4605.04, as of the CO<sub>2</sub> allowance transfer deadline, in the source's compliance account, in an amount not less than the total CO<sub>2</sub> emissions from fossil fuel-fired generation for the control period from all CO<sub>2</sub> budget units at the source, as determined in accordance with Env-A 4605, Env-A 4607, Env-A 4609.18, and VIII.F.1.c, below.
  - b. CO<sub>2</sub> allowances shall be held in, deducted from, or transferred among CO<sub>2</sub> allowance tracking system accounts in accordance with Env-A 4606, Env-A 4607, Env-A 4608, and Env-A 4700.
  - c. For the purpose of determining compliance with Env-A 4600, total tons of CO<sub>2</sub> emissions for a control period<sup>16</sup> shall be calculated as the sum of all recorded hourly emissions, or the tonnage equivalent of the recorded hourly emissions rates, in accordance with Env-A 4609, with any remaining fraction of a ton equal to or greater than 0.50 ton rounded up to equal one ton and any fraction of a ton less than 0.50 ton rounded down to equal zero tons.
2. CO<sub>2</sub> Allowance Limitations (Env-A 4605.02)
  - a. A CO<sub>2</sub> allowance shall be a limited authorization to emit one ton of CO<sub>2</sub> in accordance with the CO<sub>2</sub> budget trading program.
  - b. A CO<sub>2</sub> allowance shall not be deducted, in order to comply with the requirements of Env-A 4605.01(a), for a control period that ends prior to the year for which the CO<sub>2</sub> allowance was allocated.
  - c. A CO<sub>2</sub> offset allowance shall not be deducted, in order to comply with the requirements of Env-A 4605.01(a), beyond the applicable percent limitations set out in Env-A 4605.04(b).
  - d. Subject to Env-A 4605.02(e) and (f), no provision of the CO<sub>2</sub> budget trading program, the CO<sub>2</sub> budget permit application, or the CO<sub>2</sub> budget permit shall be construed to limit the authority of the department to terminate or limit such authorization.
  - e. A CO<sub>2</sub> allowance shall not constitute a property right.
3. Allowances Available for Compliance Deduction (Env-A 4605.04)
  - a. CO<sub>2</sub> allowances that meet the following criteria shall be available to be deducted for compliance with the requirements of Env-A 4605 for a control period:
    - i. For CO<sub>2</sub> allowances other than CO<sub>2</sub> offset allowances, the allowances are from allocation years that fall within a prior control period or the same control period for which the allowances will be deducted; and
    - ii. The CO<sub>2</sub> allowances are:

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<sup>16</sup> Control period means compliance period as defined in New Hampshire RSA 125-O:20, IV.

1. Held in the CO<sub>2</sub> budget source's compliance account as of the CO<sub>2</sub> allowance transfer deadline for that control period; or
  2. Transferred into the compliance account by a CO<sub>2</sub> allowance transfer correctly submitted for recordation under Env-A 4608.01 by the CO<sub>2</sub> allowance transfer deadline for that control period;
- b. As provided in RSA 125-O:22, II, a CO<sub>2</sub> budget source may use offset allowances for up to 3.3 percent of its compliance obligation, subject to the following:
- i. If the department determines that there has been a stage one trigger event, the CO<sub>2</sub> budget source may use up to 5 percent; and
  - ii. If the department determines that there has been a stage 2 trigger event, the CO<sub>2</sub> budget source may use up to 10 percent.
- c. CO<sub>2</sub> allowances shall not be available for current compliance if the allowances were deducted for excess CO<sub>2</sub> emissions for a prior control period under Env-A 4605.08.
- d. Allowances deducted for the purpose of compliance shall not be available for any other purpose.
4. Excess CO<sub>2</sub> Emissions Requirements (Env-A 4605.07)
- The owner or operator of a CO<sub>2</sub> budget source that has excess CO<sub>2</sub> emissions in any control period shall:
- a. Forfeit the CO<sub>2</sub> allowances required for deduction under Env-A 4605.08, provided CO<sub>2</sub> offset allowances shall not be used to cover any part of such excess CO<sub>2</sub> emissions; and
  - b. Pay any fine, penalty, or assessment or comply with any other remedy imposed under RSA 125-O:22, V.
5. Deductions for Excess CO<sub>2</sub> Emissions (Env-A 4605.08)
- a. As provided by RSA 125-O:22, V, the deduction of CO<sub>2</sub> allowances for excess CO<sub>2</sub> emissions shall equal to 3 times the number of the source's excess CO<sub>2</sub> emissions.
  - b. Within 14 calendar days of receipt of notice by from the regional organization<sup>17</sup> that a shortage exists, the source shall transfer sufficient allowances into its compliance account to cover the shortage.
  - c. No CO<sub>2</sub> offset allowances shall be deducted to account for the source's excess CO<sub>2</sub> emissions.
  - d. Any CO<sub>2</sub> allowance deduction required under 5.a, above, shall not affect the liability of the owner(s) and operator(s) of the CO<sub>2</sub> budget source or the CO<sub>2</sub> units at the source for any fine, penalty, or assessment, and shall not affect the obligation of the owner(s) and operator(s) to comply with any other remedy, for the same violation, as ordered under applicable state law.
6. Determination of Violations and Deduction of Allowances (Env-A 4605.11)
- a. For purposes of determining the number of days of violation, if a CO<sub>2</sub> budget source has excess CO<sub>2</sub> emissions for a control period, each day in the control

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<sup>17</sup> Regional organization as defined in NH RSA 125-O:20, XIII

period shall constitute a day of violation unless the owner(s) and operator(s) of the unit demonstrate that a lesser number of days should be considered; and

b. Each ton of excess CO<sub>2</sub> emissions shall constitute a separate violation.

7. Submission of CO<sub>2</sub> Allowance Transfers (Env-A 4608.01)

Any CO<sub>2</sub> AAR seeking recordation of a CO<sub>2</sub> allowance transfer shall submit the transfer request to the regional organization in accordance with Env-A 4608.01(b).

**G. Monitoring and Testing Requirements**

The owner or operator is subject to the monitoring and testing requirements as contained in Table 6 below:

Table 6 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency of Method	Applicable Emission Unit	Regulatory Citation
1.	Total sulfur content of fuel	<p>The owner or operator may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 0.060 lb SO<sub>2</sub>/MMBtu heat input. The owner or operator must use one of the following sources of information to make the required demonstration:</p> <ol style="list-style-type: none"> <li>1. The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil is 0.05 weight percent (500 ppmw)<sup>18</sup> or less and the total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet; or</li> <li>2. Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 0.060 lb SO<sub>2</sub>/MMBtu heat input. 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 40 CFR 75 is required.</li> </ol>	<p>For natural gas if fuel sampling is used, sample annually and whenever fuel supply source changes.</p> <p>For fuel oil, if fuel sampling is used, follow frequency and procedures specified in Section 2.2 of App. D to 40 CFR 75</p>	EU01 & EU02	40 CFR 60.4365 Subpart KKKK & 40 CFR 75
2.	Sulfur Content of Liquid Fuels	Conduct testing in accordance with appropriate ASTM test methods <b>or</b> retain delivery tickets in accordance with Table 7, Item #10 in order to demonstrate compliance with the sulfur content limitation provisions specified in this permit for liquid fuels.	For each delivery of fuel oil to the facility	Facility Wide	40 CFR 60.334 <sup>19</sup> , Env-A 806.02, Env-A 806.05 & 40 CFR 75, App. D

<sup>18</sup> See sulfur in fuel oil limit in Table 5, Item 1. See also SO<sub>2</sub> emission limits for both natural gas and fuel oil in Table 5A

<sup>19</sup> Please see DES' letter dated January 13, 2003 approving the Custom Fuel Monitoring Schedule.



**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Applicable Emission Unit	Regulatory Citation
3.	CO	The owner or operator shall operate and maintain a continuous emission monitoring system (CEMS) for measuring carbon monoxide. The CO CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 4 and Env-A 808.	Continuously	EU01 & EU02	PSD Permit 044-121NH10 & Env-A 808
4.	NOx	<p>a. The owner or operator shall operate and maintain a NOx-diluent CEMS (consisting of a NOx pollutant concentration monitor and an O<sub>2</sub> diluent gas monitor) with an automated data acquisition and handling system for measuring and recording NOx concentration (in ppm), O<sub>2</sub> concentration (in percent O<sub>2</sub>) and NOx emission rate (in lb/MMBtu). The Owner/Operator shall account for total NOx emissions, both NO and NO<sub>2</sub>, either by monitoring for both NO and NO<sub>2</sub> or by monitoring for NO only and adjusting the emissions data to account for NO<sub>2</sub>.</p> <p>b. The owner or operator shall calculate hourly, quarterly and annual NOx emission rates (in lb/MMBtu) by combining the NOx concentration (in ppm), diluent concentration (in percent O<sub>2</sub>), and percent moisture (if applicable) according to the procedures in 40 CFR 75 Appendix F.</p> <p>c. The owner or operator shall ensure that the NOx CEMS is in operation and monitoring emissions from each of the combustion turbines at all times that the emission unit combusts any fuel except during periods of calibration, quality assurance, or preventive maintenance, performed pursuant to 40 CFR 75.21 and Appendix B of 40 CFR 75, periods of repair, periods of backups of data from the data acquisition and handling system, or recertification performed pursuant to 40 CFR 75.20.</p>	Continuously	EU01 & EU02	40 CFR 75.10(a)(2), 75.10(d) & 75.12(c)

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Applicable Emission Unit	Regulatory Citation
5.	NO <sub>x</sub> Mass Emissions	a. The owner or operator shall calculate hourly NO <sub>x</sub> mass emissions (in lbs) by multiplying the hourly NO <sub>x</sub> emission rate (in lbs/MMBtu) by the hourly heat input rate (in MMBtu/hr) and the unit or stack operating time.  b. The owner or operator shall also calculate quarterly and cumulative year-to-date NO <sub>x</sub> mass emissions and cumulative NO <sub>x</sub> mass emissions for the ozone season (in tons) by summing the hourly NO <sub>x</sub> mass emissions according to the procedures in Appendix F, Section 8 of 40 CFR 75.	Hourly, quarterly, and cumulative year-to-date	EU01 & EU02	40 CFR 75.72 & Env-A 3212
6.	Ozone season heat input & NO <sub>x</sub> emission rate	<u>Additional ozone season calculation procedures for special circumstances</u>  a. The owner or operator of a unit that is required to calculate ozone season heat input for purposes of providing data needed for determining allocations, shall do so by summing the unit's hourly heat input determined according to the procedures in 40 CFR 75 for all hours in which the unit operated during the ozone season.  b. The owner or operator of a unit that is required to determine ozone season NO <sub>x</sub> emission rate (in lbs/MMBtu) shall do so by dividing ozone season NO <sub>x</sub> mass emissions (in lbs) determined in accordance with 40 CFR 75, by heat input determined in accordance with Item # 6.a above.	During ozone season	EU01 & EU02	40 CFR 75.75(a) & (b)
7.	Oxygen	The oxygen content of the flue gas shall be monitored continuously to correct the measured emission rates of NO <sub>x</sub> , CO & ammonia to 15% O <sub>2</sub> . The oxygen CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 3 and Env-A 808.	Continuously	EU01 & EU02	PSD Permit 044-121NH10
8.	Fuel flow	The owner or operator shall measure and record the flow rate of fuel combusted by each combustion turbine. The fuel flow rate shall be measured with an in-line fuel flow meter and automatically recorded with a data acquisition and handling system.	Continuously	EU01 & EU02	40 CFR 75, Appendix D, Section 2.1
9.	Ammonia slip	The Owner or Operator shall operate and maintain a CEMS for measuring ammonia slip.	Continuously	EU01 & EU02	Env-A 808

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Applicable Emission Unit	Regulatory Citation
10.	Opacity	The COMS shall meet the applicable requirements of 40 CFR 60, Appendix B, Performance Standard 1; Appendix F, Procedure 3; and Env-A 808.	Continuously	EU01 & EU02	PSD Permit 044-121NH10
11.	SO <sub>2</sub>	The owner or operator shall use applicable procedures specified in 40 CFR 75, Appendix D, <i>Optional SO<sub>2</sub> Emissions Data Protocol for Gas-fired and Oil-fired Units</i> to calculate SO <sub>2</sub> emissions.	As specified in the regulation	EU01 & EU02	40 CFR 75, Appendix D
12.	CO <sub>2</sub>	The owner or operator shall use applicable procedures specified in 40 CFR 75, Appendix G, <i>Determination of CO<sub>2</sub> Emissions</i> to calculate CO <sub>2</sub> emissions. Please note that equation G-1 in Appendix G of 40 CFR 75 shall not be used to determine CO <sub>2</sub> emissions under Env-A 4609.	As specified in the regulation	EU01 & EU02	40 CFR 75, Appendix G & Env-A 4609
13.	Heat input rate	The owner or operator shall determine the heat input rate (in MMBtu/hr) to each unit for every hour or part of an hour any fuel is combusted following the procedures in 40 CFR 75 Appendix F.	Hourly	EU01 & EU02	40 CFR 75.10(c)
14.	NO <sub>x</sub> CEMS Hourly Operating Requirements	The owner or operator shall ensure that the NO <sub>x</sub> CEMS and components meet the following operating requirements: <ul style="list-style-type: none"> <li>a. The owner or operator shall ensure that each CEM is capable of completing a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute interval;</li> <li>b. The owner or operator shall reduce all NO<sub>x</sub> concentration and NO<sub>x</sub> emission rate data collected by the monitors to hourly averages;</li> <li>c. The owner or operator shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour;</li> <li>d. Failure of a NO<sub>x</sub> concentration monitor or NO<sub>x</sub>-diluent CEMS to acquire the minimum number of data points for calculation of an hourly average shall result in the failure to obtain a valid hour of data and the loss of such component data for the entire hour;</li> <li>e. For a NO<sub>x</sub>-diluent monitoring system, an hourly average NO<sub>x</sub> emission rate in lb/MMBtu is valid only if the minimum number of data points is acquired by both the NO<sub>x</sub> pollutant concentration monitor and the diluent monitor (O<sub>2</sub>); and</li> <li>f. If a valid hour of data is not obtained, the owner or operator shall estimate and record emissions for the missing hour by means of the automated data acquisition and handling system, in accordance with the applicable procedure for missing data substitution in 40 CFR 75, Subpart D.</li> </ul>	Hourly	EU01 & EU02	40 CFR 75.10(d)

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Applicable Emission Unit	Regulatory Citation
15.	Minimum Specifications for all CEMS	<p>The owner or operator shall ensure that each CEMS meets the following operating requirements:</p> <ul style="list-style-type: none"> <li>a. The CEM system for measuring opacity emissions shall average the opacity data to result in consecutive, non-overlapping 6-minute averages;</li> <li>b. The CEM system for measuring gaseous emissions shall average and record the data for each calendar hour;</li> <li>c. All CEM systems shall include a means to display instantaneous values of percent opacity and gaseous emissions and complete a minimum of one cycle of operation which shall include measuring, analyzing, and data recording for each successive 5-minute period for systems measuring gaseous emissions and each 10-second period for systems measuring opacity, unless a longer time period is approved in accordance with Env-A 809; and</li> <li>d. A valid hour of CEM emissions data, as defined in Env-A 808.01(i), means a minimum of 42 minutes of CEM readings taken in any calendar hour, during which the CEM is not in an out of control period, as defined in Env-A 808.01(g), and the facility is in operation<sup>20</sup>.</li> </ul>	N/A	EU01 & EU02	<p>Env-A 808.03</p> <p>Env-A 808.01(i)</p>
16.	General Audit Requirements	<ul style="list-style-type: none"> <li>a. CEM audits shall be conducted in accordance with Env-A 808.07.</li> <li>b. The owner or operator shall notify the department at least 30 days<sup>21</sup> prior to the performance of a RATA.</li> <li>c. Testing may be performed on a date other than that already provided in the notice under Item #16.b above as long as notice of the new date is provided either in writing or by telephone, and the notice is provided as soon as practicable after the new testing date is known, but no later than twenty-four (24) hours in advance of the new date of testing. Written notification may be provided by mail, facsimile or electronic mail.</li> </ul>	Quarterly	EU01 & EU02	<p>Env-A 808.07 &amp; 40 CFR 75.61(a)(5)</p>

<sup>20</sup> Please note that 40 CFR 75 requires hourly averages to be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. 40 CFR 75 allows an hourly average to be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) if data are unavailable as a result of the performance of calibration, quality assurance, or preventive maintenance activities pursuant to 40 CFR 75.21 and 40 CFR Appendix B or backups of data from the data acquisition and handling system, or recertification, pursuant to 40 CFR 75.20.

<sup>21</sup> Please note that pursuant to 40 CFR 75.61(a)(5), the Owner/Operator is required to notify the department at least 21 days prior to the first scheduled day of testing. This requirement is less stringent than Env-A 808.07(c).

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Applicable Emission Unit	Regulatory Citation
		d. The owner or operator shall provide at least 2 weeks' notice prior to any other planned audit or test procedure.			
17.	Gaseous CEM Audit Requirements	Audit requirements for gaseous CEM systems shall be performed in accordance with procedures described in 40 CFR 60, Appendix F, Env-A 808.08 and 40 CFR 75, Appendix B.	Quarterly	EU01 & EU02	Env-A 808.08, 40 CFR 75.21 & 40 CFR 75.74(a)
18.	Opacity CEM Audit Requirements	Audit requirements for opacity CEM systems shall be performed in accordance with procedures described in Env-A 808.11 and 40 CFR 60, Appendix F, Procedure 3 Section 10.3.	Quarterly	EU01 & EU02	Env-A 808.11
19.	Reference Test Methods for Certification & Recertification of NOx CEMS	The owner or operator shall use the reference test methods listed in 40 CFR 75.22 and included in Appendix A to 40 CFR 60 to conduct monitoring system tests for certification or recertification of CEMS.	During certification or recertification tests	EU01 & EU02	40 CFR 75.22
20.	Recertification of NOx CEMS	Whenever the owner or operator makes a replacement, modification, or change in a certified continuous emission monitoring system that may significantly affect the ability of the system to accurately measure or record the requisite data, the owner or operator shall recertify the continuous emission monitoring system according to the procedures outlined in 40 CFR 75.20(b).	As specified	EU01 & EU02	40 CFR 75.20, 40 CFR 75.70(d), Env-A 3212.06 & Env-A 3212.10
21.	Out-of-control periods for NOx CEMS	<p>a. Whenever a CEMS fails a quality assurance audit or any other audit, the system is out-of-control and the owner or operator shall follow the procedures for out-of-control periods in 40 CFR 75.24.</p> <p>b. If an out-of-control period occurs to a monitor or CEMS, the owner or operator shall take corrective action and repeat the tests applicable to the out of control parameter as described in 40 CFR 75, Appendix B.</p> <p>i. For daily calibration error tests, an out of control period occurs when the calibration error of a pollutant concentration monitor exceeds the applicable specification in Section 2.1.4 of Appendix B of 40 CFR 75.</p> <p>ii. For quarterly linearity checks, an out of control period occurs when the error in linearity at any of the three gas concentrations (low, mid-range, and high) exceeds the applicable specification in 40 CFR 75 Appendix A.</p> <p>iii. For relative accuracy test audits (RATA), an out of control period occurs when the relative accuracy exceeds the applicable specification in Appendix A of 40 CFR 75.</p>	As specified by regulation	EU01 & EU02	40 CFR 75.21(e)(2) 40 CFR 75.24 & Env-A 3210.08

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Applicable Emission Unit	Regulatory Citation
		c. When a monitor or continuous emission monitoring system is out-of-control, any data recorded by the monitor or monitoring system are not quality-assured and shall not be used in calculating monitor data availabilities pursuant to 40 CFR 75.32. d. When a CEMS is out of control, the owner or operator shall apply the procedures in 40 CFR 75, Subpart D for missing data substitution from the affected units.			
22.	Missing Data Substitution Procedures for 40 CFR 75	The owner or operator shall provide substitute data for each affected unit according to the missing data procedures in Subpart D of 40 CFR 75 whenever the unit combusts any fuel and a valid, quality-assured hour of NO <sub>x</sub> emission rate data (in lb/MMBtu) has not been measured or recorded for an affected unit by the certified NO <sub>x</sub> -diluent continuous emission monitoring system.	As specified by regulation	EU01 & EU02	40 CFR 75.30
23.	NO <sub>x</sub> Mass Emissions Provisions-Prohibitions	The Owner/Operator is prohibited from the following: a. Using alternative monitoring system, reference method, or any other alternative for the required CEMS without approval through petition process in 40 CFR 75.70(h). b. Discharging or allowing discharge of NO <sub>x</sub> emissions without accounting for all emissions in accordance with the provisions of Subpart H, except as provided in 40 CFR 75.74. c. Disrupting the CEMS or any other approved emission monitoring method, and thereby avoid monitoring and recording NO <sub>x</sub> mass emissions, except for periods of re-certification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the provisions of 40 CFR 75. d. Retiring or permanently discontinuing the use of the CEMS, or any other approved emission monitoring system except under one of the following circumstances: i. During a period that the unit is covered by a retired unit exemption that is in effect under the state or federal NO <sub>x</sub> mass emission reduction program that adopts the requirements of 40 CFR 75 Subpart H; ii. The owner or operator is monitoring NO <sub>x</sub> mass emissions from the affected unit with another certified monitoring system approved, in accordance with the provisions of 40 CFR 75.70(d); or	Continuously	EU01 & EU02	40CFR 75.70(c) & Env-A 3210.03

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Applicable Emission Unit	Regulatory Citation
		iii. The designated representative submits notification of the date of certification testing of a replacement monitoring system in accordance with 40 CFR 75.61.			
24.	NOx Mass Emissions - Petitions for Alternatives	The owner or operator may submit a petition to the department and USEPA requesting an alternative to any requirement of 40 CFR 75 Subpart H. Such a petition shall meet the requirements of 40 CFR 75.66 and any additional requirements established by Env-A 3200.	Not applicable	EU01 & EU02	40 CFR 75.70(h) and Env-A 3200
25.	Quality Assurance Test for fuel flow meters	The owner or operator shall test the accuracy of each fuel flowmeter at least once every four fuel flowmeter QA operating quarters, as defined in 40 CFR 72.2. Notwithstanding this requirement, no more than 20 successive calendar quarters shall elapse after the quarter in which a fuel flowmeter was last tested for accuracy without a subsequent flowmeter accuracy test having been conducted. The QA test for the flowmeter shall be conducted more frequently if required by manufacturer specifications.	Once every four operating quarters	EU01 & EU02	40 CFR 75, Appendix D, Section 2.1.6
26.	Data Availability Requirements	<p>a. The owner or operator of a source with a CEM shall operate the CEM at all times during the operation of the source, except for periods of CEM breakdown, repairs, calibration checks, preventive maintenance, and zero/span adjustments.</p> <p>b. The percentage CEM data availability for opacity and all gaseous concentration monitors shall be maintained at a minimum of 90% on a calendar quarter basis.</p>	N/A	EU01 & EU02	Env-A 808.12 & TP-B-0526

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Applicable Emission Unit	Regulatory Citation
27.	Data Availability Calculations	<p>The Owner/Operator shall use the following equation for calculating percentage data availability:</p> $\text{Percentage Data Availability} = \frac{(VH + CalDT) \times 100}{(OH - AH)}$ <p>Where:</p> <p>VH = Number of valid hours of CEM data in a given time period for which the data availability is being calculated when the plant is in operation;</p> <p>CalDT = Number of hours, not to exceed one hour per day, during facility operation when the CEM is not operating due to the performance of the daily CEM calibrations as required in 40 CFR 60, Appendix F or 40 CFR 75, Appendix B, section 2.1;</p> <p>OH = Number of facility operating hours during a given time period for which the data availability is being calculated; and</p> <p>AH = Number of hours during facility operation when the performance of quarterly audits as required by those procedures specified in Env A 808.08 through Env-A 808.11, as applicable, require that the CEM be taken out of service in order to conduct the audit.</p>	As specified	EU01 & EU02	Env-A 808.12
28.	Efficiency test for auxiliary boiler	<p><u>NOx RACT Testing for Auxiliary Boilers</u></p> <p>The owner or operator of an auxiliary boiler with heat input rates of at least 5,000,000 Btu per hour but less than 50,000,000 Btu per hour shall comply with the requirements of Env-A 1303.02, which are stated below:</p> <ol style="list-style-type: none"> <li>a. Before April 1st of each year:                     <ol style="list-style-type: none"> <li>i. Perform an efficiency test using the test procedures specified in chapter 3, Combustion Efficiency Tables, Taplin, Harry, R., Fairmont Press, 1991; and</li> <li>ii. Adjust the combustion process of the boiler in accordance with the procedures specified in chapter 5, Combustion Efficiency Tables, Taplin, Harry R., Fairmont Press, 1991; and</li> </ol> </li> <li>b. Maintain, in a permanently bound log book or in an electronic format the following information:                     <ol style="list-style-type: none"> <li>i. The date(s) on which:                             <ol style="list-style-type: none"> <li>3. The efficiency test was conducted; and</li> <li>4. The combustion process was last adjusted;</li> </ol> </li> <li>ii. The name(s), title and affiliation of the person(s) who:</li> </ol> </li> </ol>	Annually	EU04	Env-A 1305.02, 1312.02 & Env-A 803.04



**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Applicable Emission Unit	Regulatory Citation
		1. Conducted the efficiency test; and 2. Made the adjustments; iii. The NOx emission concentration, in ppmvd, corrected to 15% oxygen, after the adjustments are made; iv. The CO emission concentration, in ppmvd, corrected to 15% oxygen, after the adjustments are made; and v. The opacity readings.			
29.	Efficiency test for fuel gas heaters	Perform annual efficiency tests to determine the combustion efficiency (percent), the NOx emission concentration (ppmvd), CO concentration (ppmvd), oxygen levels (percent) and carbon dioxide levels (percent).	Annually	EU05	NOx RACT Order ARD-04-001
30.	Hours of Operation	<u>Emergency Engine Operating Hours</u> The fire pump and emergency generator shall each be equipped with a non-resettable hour meter.	Continuous	EU06 EU07	40 CFR 63.6625 Subpart ZZZZ
31.	To Be Determined	When conditions warrant, the department may require the owner or operator to conduct stack testing in accordance with USEPA or other department approved methods.	Upon request by the department	Facility Wide	RSA 125-C:6 XI
32.	Electrical Generation Output	Calculate and record the net electrical output in MW-hr. <hr/> Calculate and record the gross electrical output in MW-hr.	Monthly	EU01 & EU02	Env-A 3205.03(c) & (d) <hr/> 40 CFR 75 Subpart H
33.	Requirement for Substitute Emission Data	Any facility that uses the emissions data collected by a gaseous CEM system to calculate and report its annual emissions in accordance with Env-A 900 shall comply with the following: a. For any facility operating hour during which the gaseous CEM system has not collected a valid hour of CEM system data, the Owner or Operator shall submit to the department substitute emission data for those hours which has been generated using <u>one</u> of the following methods: i. The missing data substitution procedures specified in 40 CFR 75, Subpart D; ii. If the missing data occurred during a period of steady-state operation, and not during a period of start-up, shutdown, or malfunction: 1. An average of the emissions data for the hours prior to and after the period of	N/A	EU01 & EU02	Env-A 808.13

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Applicable Emission Unit	Regulatory Citation
		<p>missing data during which valid CEM data was collected, or</p> <ol style="list-style-type: none"> <li>2. Representative emissions data for the device at the same heat input rate, electric generating rate, or steam load;</li> <li>iii. If the missing data occurred during a start-up, shutdown, or malfunction of the device, substitute data collected by the CEM during a similar period of start-up, shutdown or malfunction, respectively; or</li> <li>iv. An alternative method of data substitution that meets the following criteria:                             <ol style="list-style-type: none"> <li>1. The alternative method was included in the monitoring plan submitted pursuant to Env-A 808.04;</li> <li>2. The alternative method provides for representative emissions for the conditions of operation of the device during the period of missing data equivalent to the substitution methods described in (i) through (iii), above; and</li> <li>3. The alternative method was approved by the department as part of its approval of the monitoring plan pursuant to Env-A 808.04.</li> </ol> </li> <li>b. For CEM systems and emissions not subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall include substitute emissions data in the calculation of total daily, monthly, quarterly, and annual emissions generated by the permitted device to quantify total actual emissions;</li> <li>c. Substitute emission data shall not be used in the calculation of emissions totals or averages in order to determine or demonstrate compliance with emissions standards; and</li> <li>d. Substitute data shall not be included in the calculation of data availability.</li> </ol>			
34.	Valid averaging period	<p>The number of hours of valid COM/CEM system data required for the calculation and determination of compliance with:</p> <ol style="list-style-type: none"> <li>a. 24-hour emission standard period shall be 18 hours of valid data; and</li> <li>b. 3-hour emission standard period shall be 2 hours of valid data.</li> </ol>	N/A	EU01 & EU02	Env-A 808.17

**H. Recordkeeping Requirements**

The owner or operator shall be subject to the recordkeeping requirements identified in Table 7 below:

<b>Table 7 - Applicable Recordkeeping Requirements</b>				
<b>Item #</b>	<b>Applicable Recordkeeping Requirement</b>	<b>Records Retention/Frequency</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Citation</b>
1.	<u>Record Retention</u> Unless otherwise noted, the owner or operator shall retain records of all required monitoring data, recordkeeping and reporting requirements and support information for a period of at least 5 years <sup>22</sup> from the date of origination <sup>23</sup> .	Retain for a minimum of 5 years	Facility wide	Env-A 902.01(a), Env-A 3213, 40 CFR 70.6(a)(3)(ii)(B) and 40 CFR 72.9(f)
2.	<u>Certificate of Representation</u> The owner or operator shall complete and retain a certificate of representation for a designated representative or an alternate designated representative including the elements pursuant to 40 CFR 72.24, <i>Certificate of representation</i> . This certificate of representation shall be retained at the facility beyond the 5-yr period (as required by Item #1 above) until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.	Maintain at the facility at all times	EU01 & EU02	40 CFR 72.9(f) & 40 CFR 72.24
3.	<u>Record Retention</u> The owner or operator shall maintain annual records of actual emissions for each significant activity for determination of emission based fees.	Maintain at facility at all times	Facility wide	Env-A 705.03
4.	<u>Air Pollution Control Device Operational Records</u> The owner or operator shall maintain records of all malfunctions, routine maintenance, and other downtimes of any air pollution control equipment in whole or part. These records must be available for review by the department/USEPA upon request.	At each occurrence	PCE1, PCE2 & PCE3	Env-A 906.01 & TP-B-0526
5.	<u>General Recordkeeping Requirements for Sources with Continuous Emissions Monitoring Systems</u> The Owner/Operator shall maintain records for the continuous emission monitoring systems in accordance with Env-A 800 and all applicable federal regulations. The records shall be maintained in a permanent form suitable for inspection.	Maintain on a continuous basis	EU01 & EU02	Env-A 903.04, TP-B-0526, & 40 CFR 60 Subpart A Section 60.7(f)

<sup>22</sup> Ten (10) years for records kept for CO2 budget trading as contained in Table 7, Item 20 below

<sup>23</sup> Note that record retention for five years is more stringent than the three year record retention required in some sections of 40 CFR 75 and 40 CFR 60.

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/Frequency	Applicable Emission Unit	Regulatory Citation
6.	<p><u>Combustion Turbine Operations</u>                      The Owner/Operator shall maintain records of the following information by device on a calendar day basis:</p> <ul style="list-style-type: none"> <li>a. Hours of operation, including any startup, shutdown, or malfunction;</li> <li>b. Time frames when duct burner supplemental fuel firing is utilized;</li> <li>c. The total daily fuel consumption by device (in cubic feet for natural gas and in gallons for fuel oil);</li> <li>d. The total daily amount of ammonia, in pounds, used in the SCR Systems; and</li> <li>e. Records of combustion turbine tuning conducted in accordance with Item #21 of Table 5.</li> </ul>	Maintain on a continuous basis	EU01 & EU02	PSD Permit 044-121NH10 & Env-A 906.01
7.	<p>The Owner/Operator shall maintain the following records:</p> <ul style="list-style-type: none"> <li>a. Records of stack testing for PM, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOCs, NH<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub>;</li> <li>b. COM/CEM system audits;</li> <li>c. NO<sub>x</sub> RACT testing for the auxiliary boiler and the fuel gas heaters; and</li> <li>d. Records of each start-up and shutdown event (including NO<sub>x</sub> and CO emissions data) for the combustion turbines.</li> </ul>	Maintain on a continuous basis	EU01 through EU05	Env-A 906.01 & TP-B-0526
8.	<p><u>General Recordkeeping Requirements for Combustion Devices</u>                      For each fuel burning device at the facility, the Owner or Operator shall keep records of fuel utilization in accordance with the following:</p> <ul style="list-style-type: none"> <li>a. Amount and type of fuel consumed;</li> <li>b. Hours of operation for the emergency generator and the fire pump; and</li> <li>c. The occurrence and duration of any startup, shutdown, or malfunction in the operation of the auxiliary boiler.</li> </ul>	Monthly	EU04, EU05, EU06 & EU07	Env-A 903.03, 40 CFR 60.48c(g) & 40 CFR 60.7(b)
9.	<p><u>Gaseous Fuel Recordkeeping Requirements</u>                      Maintain <b>one</b> of the following documents:</p> <ul style="list-style-type: none"> <li>a. Sulfur content as percent sulfur by weight or in grains per 100 cubic feet of fuel; or</li> <li>b. Documentation that the fuel source is from a utility pipeline.</li> </ul>	Annually and whenever the fuel supply source changes (if fuel sampling is used)	EU01, EU02, EU04, EU05 & EU06	Env-A 903.03 & 40 CFR 75, App. D
10.	<p><u>Liquid Fuel Oil Recordkeeping Requirements</u>                      In lieu of sulfur testing pursuant to Table 6, Item #2, the owner or operator may maintain fuel delivery tickets that contain a written statement from the fuel supplier that the sulfur content of the fuel as delivered does not exceed state or federal standards for that fuel.</p>	For each delivery of fuel oil/diesel to the facility	Facility Wide	Env-A 806.05 & 40 CFR 75, App. D

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/Frequency	Applicable Emission Unit	Regulatory Citation
11.	<p><u>General NO<sub>x</sub> Recordkeeping</u></p> <p>The owner or operator shall record the following information and maintain such records at the facility:</p> <ul style="list-style-type: none"> <li>a. Identification of each combustion device;</li> <li>b. Operating schedule during the <i>high ozone season</i> (June 1 through August 31) for each combustion device identified in Item #11.a above, including:                             <ul style="list-style-type: none"> <li>i. Typical hours of operation per day;</li> <li>ii. Typical days of operation per calendar month;</li> <li>iii. Number of weeks of operation;</li> <li>iv. Type and amount of each fuel burned;</li> <li>v. Heat input rate in MMBtu/hr;</li> <li>vi. Actual NO<sub>x</sub> emissions for the calendar year and a typical high ozone day during that calendar year; and</li> <li>vii. Emission factors and the origin of the emission factors used to calculate the NO<sub>x</sub> emissions.</li> </ul> </li> </ul>	Maintain Data for Annual Report	Facility wide	Env-A 905.02 & TP-B-0526
12.	<p><u>Recordkeeping for Sources or Devices with Add-on NO<sub>x</sub> Air Pollution Control Equipment</u></p> <p>The owner or operator shall record and maintain the following information for the add-on NO<sub>x</sub> air pollution control equipment:</p> <ul style="list-style-type: none"> <li>a. The air pollution control device identification number, type, model number, and manufacturer;</li> <li>b. Installation date;</li> <li>c. Unit(s) controlled;</li> <li>d. Type and location of the capture system, capture efficiency percent, and method of determination;</li> <li>e. Information as to whether or not the air pollution control device is always in operation when the fuel burning device it is serving is in operation; and</li> <li>f. The destruction or removal efficiency of the add-on air pollution control equipment, including the following information:                             <ul style="list-style-type: none"> <li>i. Destruction or removal efficiency, in percent;</li> <li>ii. Date tested;</li> <li>iii. The emission test results, if tested, including the inlet and the outlet concentration in ppm and the method of determination of the concentration; and</li> <li>iv. The method of determining destruction or removal efficiency, if not tested.</li> </ul> </li> </ul>	Maintain on a continuous basis	EU01 & EU02	Env-A 905.03 & TP-B-0526

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/Frequency	Applicable Emission Unit	Regulatory Citation
13.	<p><u>VOC Emission Statements Recordkeeping Requirements</u>                      If the actual annual VOC emissions from the Facility are greater than or equal to 10 tpy, then record the following information:</p> <ul style="list-style-type: none"> <li>a. Identification of each VOC-emitting process or device;</li> <li>b. The operating schedule during the high ozone season for each VOC-emitting process or device identified in a. above, including:                             <ul style="list-style-type: none"> <li>i. Typical hours of operation per day; and</li> <li>ii. Typical days of operation per calendar month.</li> </ul> </li> <li>c. The following VOC emission data:                             <ul style="list-style-type: none"> <li>i. Actual calendar year VOC emissions, in tons, from each VOC-emitting process or device identified in Item # 13.a above;</li> <li>ii. A typical high ozone season day VOC emissions, in pounds per day, from each VOC-emitting process or device identified in Item #13.a above; and</li> <li>iii. The emission factors and the origin of the emission factors used to calculate the VOC emissions.</li> </ul> </li> </ul>	Maintain on a continuous basis	Facility wide	Env-A 904.02
14.	<p><u>QA/QC Plan</u>                      The owner or operator of a source operating a gaseous CEM system shall:</p> <ul style="list-style-type: none"> <li>a. Prepare and maintain a quality assurance/quality control (QA/QC) plan, which shall contain written procedures for implementation of its QA/QC program that meets the criteria specified in 40 CFR 60, Appendix F, Procedure 1, section 3 for each CEM system;</li> <li>b. Review the QA/QC plan and all data generated by its implementation at least once each year;</li> <li>c. Revise or update the QA/QC plan, as necessary, based on the results of the annual review, by:                             <ul style="list-style-type: none"> <li>1. Document the replacement of any damaged or malfunctioning CEM system components in order to maintain the collection of valid CEM data and to maximize data availability;</li> <li>2. Document any changes made to the CEM system or changes to any information provided in the monitoring plan submitted in accordance with Env-A 808.04;</li> <li>3. Including a schedule of, and describing, all maintenance activities that are required by the COM/CEM manufacturer or that might have an effect on the operation of the system;</li> <li>4. Describing how the audits and testing required by Env-A 808 will be performed; and</li> <li>5. Including examples of the reports that will be</li> </ul> </li> </ul>	Review annually and revise as necessary	EU01 & EU02	Env-A 808.06 & TP-B-0526

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/Frequency	Applicable Emission Unit	Regulatory Citation
	<p>used to document the audits and tests required by Env-A 808;</p> <p>d. Make the revised QA/QC plan available for on-site review by the department at any time;</p> <p>e. No later than April 15 of each year, either:</p> <p>i. Submit to the department the revised QA/QC plan and the reasons for each change, and certify in writing that the Owner or Operator is implementing the revised QA/QC plan; or</p> <p>ii. Certify in writing that no changes have been made to the plan and that the Owner or Operator will continue to implement the existing QA/QC plan.</p>			
15.	<p><u>Monitoring Plan</u></p> <p>a. The owner or operator shall prepare and maintain a monitoring plan. The monitoring plan shall contain the information in 40 CFR 75.53(e)(1) in electronic format and the information in 40 CFR 75.53(e)(2) in hardcopy format. The monitoring plan shall also contain information regarding the usage of optional protocol in Appendix D of 40 CFR 75 for estimating heat input and/or SO<sub>2</sub> mass emissions.</p> <p>b. The owner or operator shall update the monitoring plan by the deadline specified in Table 8, Item #13 whenever the owner or operator makes a replacement, modification, or change in the certified CEMS including a change in the automated data acquisition and handling system that affects information reported in the monitoring plan (e.g., a change to a serial number for a component of a monitoring system).</p>	Maintain on a continuous basis and update as necessary	EU01 & EU02	40 CFR 75.53, 40 CFR 75.73, Env-A 3210.11 & Env-A 4609
16.	<p><u>General Recordkeeping Provisions</u></p> <p>a. For each affected unit, the owner or operator shall maintain records of operating parameters (operating time, heat input and load), SO<sub>2</sub>, NO<sub>x</sub> and CO<sub>2</sub> emissions.</p> <p>b. Missing data records: The owner or operator shall record the causes of any missing data periods and the actions taken by the owner or operator to correct such causes.</p>	Maintain on a continuous basis	EU01 & EU02	40 CFR 75.57
17.	<p><u>Certification, Quality Assurance and Quality Control Record Provisions</u></p> <p>The owner or operator shall maintain records of certification and QA/QC tests. This shall include records of all daily &amp; 7-day calibration tests, cycle time tests, linearity checks and relative accuracy test audits, as applicable.</p>	Maintain on a continuous basis	EU01 & EU02	40 CFR 75.59
18.	<p><u>Catalyst Management Plan</u></p> <p>The catalyst management plan shall be maintained at the facility and must be available for review by the department/US EPA upon request.</p>	Maintain on a continuous basis	PCE1 & PCE2	Env-A 906.01

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/Frequency	Applicable Emission Unit	Regulatory Citation
19.	<p><u>Regulated Toxic Air Pollutants</u></p> <p>Maintain records documenting compliance with Env-A 1400. Compliance was demonstrated at the time of permit issuance as described in the department's Application Review Summary for application #14-0486.</p> <p>The source must update the compliance demonstration using one of the methods provided in Env-A 1405 if:</p> <ol style="list-style-type: none"> <li>There is a revision to the list of RTAPs lowering the AAL or De minimis Value for any RTAP emitted from the Facility;</li> <li>The amount of any RTAP emitted is greater than the amount that was evaluated in the Application Review Summary (e.g., use of a coating will increase);</li> <li>An RTAP that was not evaluated in the Application Review Summary will be emitted (e.g., a new coating will be used); or</li> <li>Stack conditions (e.g. air flow rate) change.</li> </ol>	Update prior to process changes and within 90 days of each revision of Env-A 1400	Facility Wide	Env-A 902.01 (State-only requirement)
20.	<p><u>CO<sub>2</sub> Budget Trading Program Recordkeeping Requirements</u></p> <p>Unless otherwise provided, the owner or operator of the CO<sub>2</sub> budget source and each CO<sub>2</sub> budget unit at the source shall keep on site each of the following documents for a period of 10 years from the date the document is created:</p> <ol style="list-style-type: none"> <li>The account certificate of representation for the CO<sub>2</sub> AAR for the source and each CO<sub>2</sub> budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation prepared in accordance with Env-A 4604.05, provided that the certificate and documents shall be retained on site at the source beyond such 10-year period until such documents are superseded because of the submission of a new account certificate of representation changing the CO<sub>2</sub> AAR;</li> <li>All emissions monitoring information, in accordance with Env-A 4609 and 40 CFR 75;</li> <li>Copies of all reports, compliance certifications and other submissions and all records made or required under Env-A 4600; and</li> <li>Copies of all documents used to complete a CO<sub>2</sub> budget permit application and any other submission under the CO<sub>2</sub> Budget Trading Program or to demonstrate compliance with the requirements of Env-A 4600.</li> </ol>	Retain for a minimum of 10 years	EU01 & EU02	Env-A 4605.03(a)



**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/Frequency	Applicable Emission Unit	Regulatory Citation
21.	<u>Operation Log for the Emergency Generator and Fire Pump Engines</u> The owner or operator shall keep records of: a. Hours of operation of each engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation; and. b. Maintenance conducted on the emergency stationary generator and fire pump engines.	Keep a running Log	EU06 & EU07	40 CFR 63.6655 Subpart ZZZZ
22.	<u>Projected Actual Emissions Applicability Test Recordkeeping Requirements</u> Maintain records of actual annual emissions of PM, PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CO and CO <sub>2e</sub> from each combustion turbine. These records must be kept for a period of 10 years following the AGP modification project. PM <sub>10</sub> and PM <sub>2.5</sub> emissions shall include condensable particulate matter.	Monthly and consecutive 12-month period	EU01 & EU02	40 CFR 52.21(r)(6) & Env-A 906.01 & TP-0150
23.	<u>NSPS General Provisions - Recordkeeping Requirements</u> Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	On a continuous basis	EU01 & EU02	40 CFR 60.7(b)
24.	<u>Deviation Recordkeeping</u> Recordkeeping of deviations from Permit requirements shall be conducted in accordance with Section XXVII of this Permit.	Maintain up-to-date data	Facility Wide	Env-A 911

### I. Reporting Requirements

- A. Pursuant to Env-C 203.02(b), *Date of Issuance or Filing*, written documents shall be deemed to have been filed with or received by the department on the actual date of receipt by the department, as evidenced by a date stamp placed on the document by the department in the normal course of business.
- B. All emissions data submitted to the department shall be available to the public. Claims of confidentiality for any other information required to be submitted to the department pursuant to this permit shall be made at the time of submission in accordance with Env-A 103, *Claims of Confidentiality*.
- C. The owner or operator shall be subject to the reporting requirements<sup>24</sup> identified in Table 8 below:

<sup>24</sup> NH rules cited in this condition as Federally Enforceable are contained in the EPA-approved State Implementation Plan (SIP), or they are awaiting USEPA approval and are at least as stringent as the SIP rule. Each citation of a non-SIP rule is followed by the effective date of that rule.

**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
1.	<p><u>General Reporting Requirements</u></p> <p>Any report submitted to the department and/or USEPA shall include the certification of accuracy statement outlined in Section XXI.B of this Permit and shall be signed by the responsible official.</p>	As specified in Section XXI. B.	Facility Wide	40 CFR 70.6(c)(1)
2.	<p><u>Annual Emissions Report</u></p> <p>The owner or operator shall submit an annual emissions report which shall include the following information:</p> <p>a. Actual calendar year emissions from each device of NO<sub>x</sub>, CO, SO<sub>2</sub>, total VOCs, HAPs (speciated by individual HAP or CAS number), CO<sub>2e</sub>, total filterable and condensable PM, filterable PM<sub>10</sub>, filterable PM<sub>2.5</sub>, ammonia, lead, and RTAPs (speciated by individual RTAP or CAS number)<sup>25</sup>;</p> <p>b. The methods used in calculating such emissions in accordance with Env-A 705.02, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fee</i>; and</p> <p>c. All information recorded in accordance with Table 7, Items 3 and 8.</p>	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	EU01 – EU07	Env-A 907.02 (formerly Env-A 907.01, effective 4-21-2007)
3.	<p><u>Emission Based Fees Report</u></p> <p>Annual reporting of emission based fees shall be conducted in accordance with Section XXIII of this Permit.</p>	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	EU01 – EU07	Env-A 705.04
4.	<p><u>Semi-annual Permit Deviation and Monitoring Report</u></p> <p>The owner or operator shall submit a semi-annual permit deviation and monitoring report, which contains:</p> <p>a. Summaries of all monitoring and testing requirements contained in this permit; and</p> <p>b. A summary of all permit deviations that have occurred during the reporting period.</p>	Semi-annually received by the department no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year	Facility wide	40 CFR 70.6(a)(3)(iii)(A) & Env-A 911
5.	<p><u>Quarterly Reports</u></p> <p>The Owner/Operator shall submit a quarterly report containing all information required by Item #6 of Table 7. This report shall also include data for each startup/shutdown event (duration and CO &amp; NO<sub>x</sub> emissions from each unit) that occurred during the reporting period.</p>	Quarterly (no later than 30 days following the end of each quarterly reporting period)	EU01 & EU02	Env-A 910 & TP-B-0526

<sup>25</sup> The required list of pollutants to be included in the annual report is listed in the currently state-approved regulation, Env-A 907.02 and is more stringent than the SIP-approved version of the rule.

**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
6.	<p><u>NO<sub>x</sub> Reporting Requirements</u>                      The owner or operator shall submit to the department, annually (no later than April 15<sup>th</sup> of the following year), a report of data required by Item #11 of Table 7.</p>	<p>Annually                      (received by the department no later than April 15<sup>th</sup> of the following year)</p>	<p>Facility wide</p>	<p>Env-A 909                      &amp;                      TP-B-0526</p>
7.	<p><u>VOC Emission Statements Reporting Requirements</u>                      If the actual annual VOC emissions for the Facility are greater than or equal to 10 tpy, then include the following information with the annual emission report:                      a. Facility information, including:                          1. Source name;                          2. Standard Industrial Classification (SIC) code;                          3. North American Industrial Classification System (NAICS) code;                          4. Physical and mailing addresses; and                      b. A breakdown of VOC emissions reported pursuant to Table 8, Item #2 by month; and                      c. All data recorded pursuant to Table 7, Item #13.</p>	<p>Annually                      (received by the department no later than April 15<sup>th</sup> of the following year)</p>	<p>Facility wide</p>	<p>Env-A 908                      (effective 4-21-2007)</p>
8.	<p><u>Quarterly Emission Reports</u>                      The owner or operator shall submit to the department quarterly emission reports containing the following information:                      a. Excess emission data recorded by the CEM system, including:                          1. The date and time of the beginning and ending of each period of excess emission;                          2. The actual emissions measured by the CEM system during the excess emissions;                          3. The total amount of emissions above the emissions limit, or the percent above the emissions limit, during the period of excess emissions;                          4. The specific cause of the excess emission; and                          5. The corrective action taken.                      b. If no excess emissions have occurred, a statement to that effect;                      c. For gaseous measuring CEM systems, the daily averages of the measurements made and emission rates calculated;                      d. A statement as to whether the CEM system was inoperative, repaired, or adjusted during the reporting period;                      e. If the CEM system was inoperative, repaired, or adjusted during the reporting period, the following information:                          1. The date and time of the beginning and ending of each period when the CEM was inoperative;                          2. The reason why the CEM was inoperative;                          3. The corrective action taken; and</p>	<p>Quarterly                      (received by the department no later than 30 days following the end of each quarterly reporting period)</p>	<p>EU01 &amp;                      EU02</p>	<p>Env-A 808.13,                      Env-A 808.14,                      Env-A 808.15,                      Env-A 808.18,                      Env-A 910                      &amp;                      TP-B-0526                        Env-A 910                      (effective 4-21-2007)</p>

**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>4. The percent data availability calculated in accordance with Item #27 of Table 6 for each diluent and pollutant analyzer in the CEM system.</p> <p>f. For all “out of control periods” the following information;</p> <ol style="list-style-type: none"> <li>1. Beginning and ending times of the out of control period;</li> <li>2. The reason for the out of control period; and</li> <li>3. The corrective action taken.</li> </ol> <p>g. The date and time of the beginning and ending of each period when the source of emissions which the CEM system is monitoring was not operating;</p> <p>h. The span value, as defined in Env-A 101.178 and units of measurement for each analyzer in the CEM system and units of measurement for each instrument; and</p> <p>i. When calibration gas is used, the following information:</p> <ol style="list-style-type: none"> <li>1. The calibration gas concentration;</li> <li>2. If a gas bottle was changed during the quarter:                     <ol style="list-style-type: none"> <li>i. The date of the calibration gas bottle change;</li> <li>ii. The gas bottle concentration before the change;</li> <li>iii. The gas bottle concentration after the change; and</li> </ol> </li> <li>3. The expiration date for all calibration gas bottles used;</li> </ol> <p>j. Emissions data to demonstrate compliance with the short term emission limits listed in Tables 5A and 5B for NOx and CO, specifically:</p> <ol style="list-style-type: none"> <li>1. 1-hour block averages of the measurements made and emission rates calculated for CO;</li> <li>2. 1-hour (for oil firing) &amp; 3-hour (for natural gas firing) block averages of the measurements made and emission rates calculated for NOx;</li> </ol> <p>k. Emissions data required by Item #8.j above shall be submitted to the department electronically.</p> <ol style="list-style-type: none"> <li>1. Even if sufficient valid hours have been measured by the CEM system necessary for calculation of a valid averaging period as defined in Env-A 808.17, the Owner or Operator shall still report for any invalid hours that occurred during the emission standard period the substitute data, as approved in accordance with Env-A 808.13, that will be used to determine the source's total emissions; and</li> </ol> <p>m. All information required above shall be clearly indicated, labeled, and formatted such that compliance with all emissions standards to which the source is subject, can be determined and any periods of excess emissions, substitution of missing or invalid CEM data, CEM calibration, CEM maintenance, or startup, shutdown, or malfunction can be easily identified.</p>			

**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
9.	<p><u>NSPS Subpart KKKK Excess Emission Reports</u></p> <p>a. Submit excess emissions and monitoring systems performance reports and/or summary report forms to USEPA and the department, which shall include the following information:</p> <ol style="list-style-type: none"> <li>1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.</li> <li>2. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the facility, the nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.</li> <li>3. The date and time identifying each period during which the continuous monitoring systems was inoperative except for zero and span checks and the nature of the system repairs or adjustments.</li> <li>4. When no excess emissions have occurred or the continuous monitoring systems have not been operative, repaired, or adjusted, such information shall be stated in the report.</li> </ol> <p>b. For turbines using continuous emission monitoring, as described in 40 CFR §§60.4335(b) and 60.4345:</p> <ol style="list-style-type: none"> <li>1. An excess emission is any unit operating period in which the 30-day rolling average NOx emission rate exceeds the applicable emission limit specified in Table 5, Item 17. For the purposes of this requirement, a “30-day rolling average NOx emission rate” is the arithmetic average of all hourly NOx emission data in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NOx emissions rates for the preceding 30 unit operating days if a valid NOx emission rate is obtained for at least 75 percent of all operating hours.</li> <li>2. A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NOx concentration, O2 concentration, or megawatts.</li> <li>3. For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.</li> </ol>	Semi-annually (no later than 30 days following the end of each 6-month period)	EU01 & EU02	40 CFR 60.7(c), 40 CFR 60.4395, & TP-0150

**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
10.	<p><u>CEMS Recertification Reports</u></p> <p>Within 45 calendar days after completing all recertification tests, the owner or operator shall submit to USEPA and the department the electronic and hardcopy information contained in 40 CFR 75.63.</p>	As specified	EU01 & EU02	40 CFR 75.63, 75.73 and Env-A 3212
11.	<p><u>Performance Specification Testing Reports</u></p> <p>The owner or operator shall submit to the department a written report summarizing the testing within 30 days of the completion of the test.</p>	As specified	EU01 & EU02	Env-A 808.05
12.	<p><u>Relative Accuracy Test Audit Reports</u></p> <p>a. Within 30 calendar days following the end of each quarter, the owner or operator shall submit to the department a written summary report of the results of all required audits that were performed in that quarter, in accordance with the following:</p> <ol style="list-style-type: none"> <li>1. For gaseous CEM audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1, section 7;</li> </ol> <p>b. If requested, the owner or operator shall submit a hardcopy RATA report to USEPA within 45 days after completing the RATA or within 15 days of receiving the request, whichever is later.</p>	<p>Quarterly (no later than 30 days following the end of each quarterly reporting period)</p> <p>Upon request by EPA</p>	EU01 & EU02	40 CFR 75.60(a)(6), 75.73(d), Env-A 3215 & Env-A 808.07(c)
13.	<p><u>Monitoring Plan Submittals</u></p> <p>a. Electronic copy: The owner or operator shall submit a complete, electronic, up-to-date monitoring plan to USEPA and the department as follows:</p> <ol style="list-style-type: none"> <li>1. No later than 21 days prior to the initial certification tests;</li> <li>2. At the time of recertification application submission;</li> <li>3. In each electronic quarterly report only if there have been changes to the plan (Item #14 of Table 8); and</li> <li>4. Whenever an update of the electronic monitoring plan information is required under 40 CFR 75.53(b).</li> </ol> <p>b. Hardcopy: The owner or operator shall submit all of the hardcopy information required by 40 CFR 75.53 to USEPA and the department prior to initial certification. Thereafter, the owner or operator shall submit hardcopy information only if that portion of the monitoring plan is revised. The owner or operator shall submit the required hardcopy information as follows: no later than 21 days prior to the initial certification test; with any certification or recertification application, if a hardcopy monitoring plan change is associated with the certification or recertification event; and within 30 days of any other event with which a hardcopy monitoring plan change is associated, pursuant to 40 CFR 75.53(b). Electronic submittal of all monitoring plan</p>	As specified	EU01 & EU02	40 CFR 75.62 & 40 CFR 75.73(e)

**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>information, including hardcopy portions, is permissible provided that a paper copy of the hardcopy portions can be furnished upon request.</p> <p>c. Contents: The monitoring plan shall contain the information specified in 40 CFR 75.53.</p> <p>d. Format: The designated representative shall submit each monitoring plan in a format specified by USEPA.</p>			
14.	<p><u>Quarterly Reports (required by Part 75)</u></p> <p>a. The owner or operator for an affected unit shall electronically report the data and information in 40 CFR 75.64(a), (b) &amp; (c) to USEPA and the department on a quarterly basis.</p> <p>b. Electronic format: Each quarterly report shall be submitted in a format to be specified by USEPA, including both electronic submission of data and (unless otherwise approved by USEPA) electronic submission of compliance certifications.</p> <p>c. Method of submission: All quarterly reports shall be submitted to USEPA by direct computer-to-computer electronic transfer via USEPA-provided software, unless otherwise approved by USEPA.</p> <p>d. Any cover letter text accompanying a quarterly report shall either be submitted in hardcopy to USEPA or be provided in electronic format compatible with the other data required to be reported under this section.</p> <p>e. Pursuant to Env-A 3214.02, the owner or operator shall also submit to the NOx Emissions Tracking System (NETS) administrator in the quarterly reports, NOx emissions in lb/hr for every hour during the control period and cumulative quarterly and seasonal NOx emission data in pounds.</p>	Quarterly (no later than 30 days following the end of each quarterly reporting period)	EU01 & EU02	40 CFR 75.64, 40 CFR 75.73(f), 40 CFR 75.57(f), 40 CFR 75.74, Env-A 3212 & Env-A 3214
15.	<p><u>Offset Plans for Excess Emissions of SO<sub>2</sub></u></p> <p>The designated representative shall submit an offset plan no later than 60 days after the end of any calendar year during which a unit has excess SO<sub>2</sub> emissions. The offset plan shall contain the information specified in 40 CFR 77.3(d).</p>	60 days after the end of any calendar year during which a unit has excess SO <sub>2</sub> emissions	EU01 & EU02	40 CFR 77.3
16.	<p><u>Electrical Generation Output Reporting</u></p> <p>The owner or operator shall report to the department monthly net and gross electrical output data of each affected source for the ozone season (May 1 - September 30).</p>	Annually (no later than April 15 <sup>th</sup> of the following year)	EU01 & EU02	Env-A 3205.03(f) & 40 CFR 75 Subpart H
17.	<p><u>Certification by the Designated Representative or the Alternate Designated Representative</u></p> <p>Any document submitted under the Acid Rain program shall be signed and certified by the designated representative or the alternate designated representative and include the statements pursuant to 40 CFR 72.21(a)(1) and (2).</p>	With each submittal	EU01 & EU02	40 CFR 72.21

**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
18.	<p><u><i>NOx Budget Program Compliance Certification</i></u></p> <p>For each control period, the AAR shall submit to the department an annual compliance certification containing the information listed in Env-A 3216.03.</p>	By November 30 <sup>th</sup> of each year	EU01 & EU02	Env-A 3213
19.	<p><u><i>CO<sub>2</sub> Budget Trading Program Reports</i></u></p> <p>The CO<sub>2</sub> AAR shall submit quarterly reports as follows:</p> <ol style="list-style-type: none"> <li>a. The CO<sub>2</sub> AAR shall report the CO<sub>2</sub> mass emissions data for the CO<sub>2</sub> budget unit, in an electronic format prescribed by the Administrator unless otherwise prescribed by the regional organization, for each calendar quarter beginning with the calendar quarter covering January 1, 2009 through March 31, 2009;</li> <li>b. The CO<sub>2</sub> AAR shall submit each quarterly report to the regional organization within 30 days following the end of the calendar quarter covered by the report, in the manner specified in Subpart H of 40 CFR 75 and 40 CFR 75.64;</li> <li>c. Quarterly reports shall be submitted for each CO<sub>2</sub> budget unit which include all of the data and information required in Subpart G of 40 CFR 75, except for opacity, NO<sub>x</sub>, and SO<sub>2</sub> provisions; and</li> <li>d. The CO<sub>2</sub> AAR shall include a compliance certification with, and in support of, each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that: <ol style="list-style-type: none"> <li>i. The monitoring data submitted were recorded in accordance with the applicable requirements of both 40 CFR 75 and Env-A 4600, including the quality assurance procedures and specifications; and</li> <li>ii. The CO<sub>2</sub> concentration values substituted for missing data under Subpart D of 40 CFR 75 do not systematically underestimate CO<sub>2</sub> emissions.</li> </ol> </li> </ol>	Quarterly (no later than 30 days following the end of each quarterly reporting period)	EU01 & EU02	Env-A 4609.16(c)
20.	<p><u><i>CO<sub>2</sub> Budget Trading Program Reporting</i></u></p> <p>Each submission under the CO<sub>2</sub> budget trading program shall be submitted, signed, and certified by the CO<sub>2</sub> AAR for each CO<sub>2</sub> budget source on behalf of which the submission is made. Each such submission shall include the certification statement by the CO<sub>2</sub> AAR as specified in Env-A 4604.02(a).</p>	N/A	EU01 & EU02	Env-A 4604.02(a)
21.	<p><u><i>Compliance Certification Report</i></u></p> <ol style="list-style-type: none"> <li>a. For each control period in which a CO<sub>2</sub> budget source is subject to the requirements of Env-A 4605, the CO<sub>2</sub> AAR of the source shall submit to the department by March 1 following the relevant control period, a compliance certification report.</li> <li>b. The CO<sub>2</sub> AAR shall include in the compliance certification report under (a), above, the following elements, in a format prescribed by the department:</li> </ol>	March 1 <sup>st</sup> following the relevant control period	EU01 & EU02	Env-A 4605.09



**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<ul style="list-style-type: none"> <li>i. Identification of the source and each CO<sub>2</sub> budget unit at the source;</li> <li>ii. At the CO<sub>2</sub> AAR's option, the serial numbers of the CO<sub>2</sub> allowances that are to be deducted from the source's compliance account under Env-A 4605.06 for the control period, including the serial numbers of any CO<sub>2</sub> offset allowances that are to be deducted subject to the limitations of Env-A 4605.04; and</li> <li>iii. The compliance certification specified in (c), below.</li> <li>c. In the compliance certification report required by (a), above, the CO<sub>2</sub> AAR shall certify, based on reasonable inquiry of those individuals with primary responsibility for operating the source and the CO<sub>2</sub> budget units at the source in compliance with the CO<sub>2</sub> Budget Trading Program, whether the source and each CO<sub>2</sub> budget unit at the source for which the compliance certification is submitted was operated during the calendar years covered by the report in compliance with the requirements of the CO<sub>2</sub> Budget Trading Program , including:                         <ul style="list-style-type: none"> <li>i. Whether the source was operated in compliance with the requirements of Env-A 4605;</li> <li>ii. Whether the monitoring plan applicable to each unit at the source has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute CO<sub>2</sub> emissions to the unit, in accordance with Env-A 4609;</li> <li>iii. Whether all CO<sub>2</sub> emissions from the units at the source were monitored or accounted for through the missing data procedures specified in 40 CFR 75 Subpart D, or 40 CFR 75 appendix D or appendix E and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with Env-A 4609. If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made;</li> <li>iv. Whether the facts that form the basis for certification under Env-A 4609 of each monitor at each unit at the source, or for using an excepted monitoring method or alternative monitoring method approved under Env-A 4609, if any, have changed; and</li> <li>v. If a change is required to be reported under (c)(iv), above, the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.</li> </ul> </li> </ul>			

**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
22.	<u>Deviation Reporting</u> Prompt reporting of deviations from Permit requirements shall be conducted in accordance with Section XXVII of this Permit.	Prompt reporting (within 24 hours of an occurrence)	Facility wide	40 CFR 70.6(a)(3)(iii)(B)
23.	<u>Annual Compliance Certification</u> Annual compliance certification shall be submitted in accordance with Section XXI of this Permit.	Annually (no later than April 15 <sup>th</sup> of the following year)	Facility wide	40 CFR 70.6(c)(1)
24.	<u>Projected Actual Emissions Applicability Test Reporting Requirements</u> Report annual emissions of PM, PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CO and CO <sub>2e</sub> from each combustion turbine. PM <sub>10</sub> and PM <sub>2.5</sub> emissions shall include condensable particulate matter.	Annually (received by the department within 60 days after the end of previous calendar year)	EU01 & EU02	40 CFR 52.21(r)(6),  Env-A 910 & TP-0150

**IX. Requirements Currently Not Applicable**

Requirements not currently applicable to the facility were not identified by the owner or operator.

**General Title V Operating Permit Conditions****X. Issuance of a Title V Operating Permit**

- A. This Permit is issued in accordance with the provisions of Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the five (5) years after issuance of this Permit.
- B. Permit expiration terminates the owner or operator's right to operate the emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is **received by the department** at least 6 months before the expiration date.

**XI. Title V Operating Permit Renewal Procedures**

Pursuant to Env-A 609.07(b), an application for renewal of this Permit shall be considered timely if it is **received by the department** at least six months prior to the designated expiration date of the current Title V operating permit.

**XII. Application Shield**

Pursuant to Env-A 609.08, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part until the department takes final action on the application.

**XIII. Permit Shield**

- A. Pursuant to Env-A 609.09(a), a permit shield shall provide that:
  1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in

this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and

2. The owner or operator need not comply with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and specifically identified in Section IX of this Title V Operating Permit as not applicable to the stationary source or area source.
- B. The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.09(b). It shall not apply to certain conditions as specified in Env-A 609.09(c) that may be incorporated into this Permit following permit issuance by the department.
- C. If a Title V Operating Permit and amendments thereto issued by the department does not expressly include or exclude an applicable requirement or a state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the owner or operator shall comply with the provisions of said requirement to the extent that it applies to the owner or operator, or device.
- D. If the department determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.
- E. Pursuant to Env-A 609.09(f), nothing contained in Section XIII of this Permit shall alter or affect the ability of the department to reopen this Permit for cause in accordance with Env-A 609.19 and Condition XIV, or to exercise its summary abatement authority pursuant to RSA 125-C : 15 , I.
- F. Pursuant to Env-A 609.09(g), nothing contained in this section or in any Title V operating permit issued by the department shall alter or affect the following:
1. The ability of the department to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;
  2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;
  3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the USEPA Administrator under that section;
  4. 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;
  5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;
  6. The ability of the department or the USEPA Administrator to obtain information about a stationary source, area source, or device from the owner or operator pursuant to section 114 of the CAA; or

7. The ability of the department or the USEPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

#### **XIV. Reopening for Cause**

The department shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.19(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the department shall follow the provisions specified in Env-A 609.19(b) through (g).

#### **XV. Administrative Permit Amendments**

- A. Pursuant to Env-A 612.01, the owner or operator may implement the changes addressed in the request for an administrative permit amendment as defined in Env-A 101 immediately upon submittal of the request.
- B. Pursuant to Env-A 612.01, the department shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

#### **XVI. Operational Flexibility**

- A. Pursuant to Env-A 612.02, the owner or operator subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Section XVI. B through E of this permit, as applicable. At this point, the department has not included any permit terms authorizing emissions trading in this permit.
  1. The change is not a modification under any provision of Title I of the CAA;
  2. The change does not cause emissions to exceed the emissions allowable under the Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;
  3. The owner or operator has obtained any temporary permit required by Env-A 600;
  4. The owner or operator has provided written notification to the department and USEPA Administrator of the proposed change and such written notification includes:
    - a. The date on which each proposed change will occur, or has occurred;
    - b. A description of each such change;
    - c. Any change in emissions that will result;
    - d. A request that the operational flexibility procedures be used; and
    - e. The signature of the responsible official, consistent with Env-A 605.04(b).
  5. The owner or operator has attached the written notice required above to its copy of the current Title V Operating Permit.
- B. For changes involving the trading of emissions, the owner or operator must also meet the following conditions:

1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions, including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;
  2. The owner or operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes at the permitted facility which qualify under a federally- enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;
  3. The department has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce emissions trades; and
  4. The written notification required in Condition XVI.A. above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.
- C. For off-permit changes, the owner or operator must also meet the following conditions:
1. Each off-permit change meets all applicable requirements and does not violate any existing permit term or condition;
  2. The owner or operator provides contemporaneously written notification to the department and the USEPA Administrator of each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.04;
  3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;
  4. The owner or operator keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this Permit, and the emissions resulting from those changes; and
  5. The written notification required in Condition XVI.A. above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.
- D. For section 502(b)(10) changes, the owner or operator must also meet the following conditions:
1. The written notification required in Condition XVI.A. above is made at least 7 days prior to the proposed change; and
  2. The written notification required in Condition XVI.A. above includes any permit term or condition that is no longer applicable as a result of the change.
- E. Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) change shall not qualify for the permit shield under Env-A 609.09.

**XVII. Minor Modifications**

- A. Prior to implementing a minor Title V Operating Permit modification, the owner or operator shall submit a written request to the department in accordance with the requirements of Env-A 612.05(b) through (d).
- B. The request for a minor permit modification shall include the following:
  - 1. An application form containing all information pertinent to the modification, including, if applicable, the information in Env-A 1709;
  - 2. The fee(s) specified in Env-A 702 through Env-A 705, as applicable;
  - 3. A description of the change, the emissions resulting from the change, and any new requirements that will apply if the change occurs;
  - 4. Where air pollution dispersion modeling is required for a source or device pursuant to Env-A 606.02, the information required pursuant to Env-A 606.03;
  - 5. The owner or operator's proposed draft permit conditions;
  - 6. Certification by a responsible official, consistent with the provisions of Env-A 605.04(b), that the proposed change meets the criteria for the use of the minor permit modification procedures; and
  - 7. A request that minor permit modification procedures be used.
- C. The department shall take final action on the minor permit modification request in accordance with the provisions of Env-A 612.05(e) through (g).
- D. Pursuant to Env-A 612.05(h), the owner or operator may implement the proposed change immediately upon filing a request for a minor permit modification with the department.
- E. Pursuant to Env-A 612.05(i), pending final action on the permit modification by the Department, the owner or operator shall comply with both the applicable requirements governing the change and the proposed permit conditions.
- F. Pursuant to Env-A 612.05(j), the permit shield specified in Env-A 609.09 shall not apply to minor permit modifications under Section XVII. of this Permit.
- G. Pursuant to Env-A 612.05(a), the owner or operator shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the department of a request for a minor permit modification.

**XVIII. Significant Permit Modifications**

- A. Pursuant to Env-A 612.06, a change at the facility shall qualify as a significant permit modification if it meets the criteria specified in Env-A 612.06(a)(1) through (5).
- B. Prior to implementing a significant permit modification, the owner or operator shall file a written request with the department which includes the following:
  - 1. An application form containing all information pertinent to the modification, including, if applicable, the supplemental information specified in Env-A 1709;
  - 2. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  - 3. The owner or operator's suggested draft permit conditions;

4. Certification by a responsible official, consistent with the provisions of Env-A 605.04(b), that the proposed change meets the criteria for the use of the significant permit modification procedures;
  5. A request that the significant permit modification procedures be used;
  6. Air pollution dispersion modeling impact analysis documentation in accordance with Env-A 606.04, as applicable; and
  7. The fee(s) specified in Env-A 702 through Env-A 705, as applicable.
- C. Pursuant to Env-A 612.06(d), the applicant shall forward a copy of the request for a significant permit modification, including those items listed in Condition XVIIIIB(1) through (4), to USEPA.
- D. The department shall take final action on the significant permit modification request in accordance with the provisions of Env-A 612.06 (e) and (f).
- E. Pursuant to Env-A 612.06(g), the owner or operator shall obtain an amended Title V Operating Permit from the department which incorporates the significant permit modification prior to implementing such modification, except as provided in Env A 609.07(a)(3).
- F. The owner or operator shall be subject to the provisions of RSA 125-C:15 if a request for a significant permit amendment is not filed with the department and/or the change is made prior to the issuance of an amended Title V Operating Permit.

#### **XIX. Title V Operating Permit Suspension, Revocation or Nullification**

Pursuant to RSA 125-C:13 and 541-A:30, the department may terminate, modify, revoke or reissue for cause any permit or authorization issued to an affected source, prior to expiration of such permit, consistent with the requirements of the Clean Air Act.

#### **XX. Inspection and Entry**

USEPA and department personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6,VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

#### **XXI. Certifications**

##### **A. Compliance Certification Report**

In accordance with 40 CFR 70.6(c), the Responsible Official shall certify for the previous calendar year that the facility is in compliance with the requirements of this Permit. The report shall be submitted annually, no later than April 15th of the following year. The report shall be submitted to the department and to the U.S. Environmental Protection Agency – Region 1. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5) and Env-A 907.04, the report shall include the following information for each and every requirement and condition of the effective permit:

1. The particular permit condition or item number that references each requirement, and a brief summary of the requirement;

- 2. The compliance status of the source with respect to the requirement and whether during the year compliance with the requirement was continuous, intermittent, not achieved, or not applicable;
- 3. The method(s) used to determine compliance, including a description of the monitoring, recordkeeping, and reporting requirements or test methods;
- 4. The frequency, either continuous or intermittent, of the method(s) used to determine compliance;
- 5. If compliance was not continuous, a description of each permit deviation; and
- 6. Any additional information required in order for the Department to determine the compliance status of the source.

**B. Certification of Accuracy Statement**

All documents submitted to the department shall contain a certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

"I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents 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."

All reports submitted to the department (except those submitted as emission based fees as outlined in Section XXIII of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services  
Air Resources Division  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095  
ATTN: Section Supervisor, Compliance Bureau

All reports submitted to USEPA shall be submitted to the following address:

EPA-New England, Region 1  
5 Post Office Sq. Suite 100  
Mail Code OES04-2  
Boston, MA 02109-3912  
Attn: Air Compliance Clerk

**XXII. Enforcement**

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the department and/or



USEPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the owner or operator from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

In accordance with 40 CFR 70.6 (a)(6)(ii), the owner or operator shall not claim as a defense 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 this Permit.

### **XXIII. Emission-Based Fee Requirements**

- A. Env-A 705.01, *Emission-based Fee*: The owner or operator shall pay to the department each year an emission-based fee for emissions from the facility.
- B. Env-A 705.02, *Determination of Actual Emissions for use in Calculating of Emission-based Fee*: The owner or operator shall determine the total actual annual emissions from the facility for each calendar year in accordance with the methods specified in Env-A 705.02.
- C. Env-A 705.03, *Calculation of Emission-based Fee*: The owner or operator shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 705.03 and the following equation:

$$FEE = E * DPT$$

where:

- FEE = The annual emission-based fee for each calendar year as specified in Env-A 705;  
E = Total actual emissions as determined pursuant to Condition XXIII.B; and  
DPT = The annual fee, in dollars per ton of emissions, which the department has calculated in accordance with Env-A 705.03<sup>26</sup>.

- D. Env-A 705.04, *Payment of Emission-based Fee*: The owner or operator shall submit, to the department, payment of the emission-based fee so that the department receives it on or before April 15<sup>th</sup> for emissions during the previous calendar year.

### **XXIV. Duty To Provide Information**

In accordance with 40 CFR 70.6 (a)(6)(v), the owner or operator shall furnish to the department, within a reasonable time, any information that the department 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 owner or operator shall also furnish to the department copies of records that the owner or operator is required to retain by this permit. The owner or operator may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Env-A 103 at the time such information is submitted to the department. The department shall evaluate such requests in accordance with the provisions of Env-A 103.

### **XXV. Property Rights**

Pursuant to 40 CFR 70.6 (a)(6)(iv), this permit does not convey any property rights of any sort, or any exclusive privilege.

<sup>26</sup> For additional information on emission-based fees, visit the DES website at:  
<http://des.nh.gov/organization/divisions/air/pehb/apps/fees.htm>

**XXVI. Severability Clause**

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

**XXVII. Permit Deviation**

Deviations are instances where any Permit condition is violated. In accordance with Env-A 911, *Recordkeeping and Reporting Requirements for Permit Deviations*, the Owner or Operator shall maintain records and report to the department deviations from Permit requirements as follows:

- A. *Recordkeeping Requirement - All Deviations* - In accordance with Env-A 911.03, in the event of a permit deviation, the Owner or Operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels; and record the information per Env-A 911.03(b).
- B. *Excess Emissions Reporting Requirement - Excess Emission Deviations Only* - In the event the permit deviation causes excess emissions, the Owner or Operator of the affected device, process, or air pollution control equipment shall:
  - i. Notify the department by telephone, fax, or e-mail (pdeviations@des.nh.gov) within 24 hours of discovery of the permit deviation<sup>27</sup>; and
  - ii. Submit a written report in accordance with Env-A 911.04(d) within 10 days of the discovery of the permit deviation reported in Section VIII B.
- C. *Reporting Requirements for Permit Deviations Continuing for Greater Than 9 Consecutive Days* - In the event the deviation does not cause an excess emission but continues for a period greater than 9 consecutive days, the Owner or Operator of the affected device, process, or air pollution control equipment shall notify the department of the subsequent corrective actions to be taken by telephone, fax, or e-mail (pdeviations@des.nh.gov) on the tenth day of the permit deviation<sup>2</sup>.
- D. *Semi-Annual Summary Report* - Pursuant to Env-A 911.05, the Owner or Operator shall submit a summary of all permit deviations previously reported pursuant to Section VIII B. and C. and a list of all permit deviations recorded pursuant to Section VIII A. to the department in the Semi-Annual Permit Deviation and Monitoring report due January 31<sup>st</sup> and July 31<sup>st</sup> of each calendar year covering the periods of July 1st through December 31st and January 1<sup>st</sup> through June 30<sup>th</sup>, respectively, or an alternative time period approved by the department pursuant to Env-A 912.
- E. *Data Availability Permit Deviations* - In the event of a permit deviation caused by a failure to comply with the data availability requirements of Env-A 800, the Owner or Operator shall:
  - i. Notify the department of the permit deviation by e-mail, telephone or fax within 10 days of discovery of the permit deviation;

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<sup>27</sup> Unless it is Saturday, Sunday or a state legal holiday, in which event the department shall be notified on the next business day.

- ii. Report the permit deviation to the department, as part of the emissions report required pursuant to Env-A 808.14; and
- iii. Submit a plan to the department, within 30 days of discovery, specifying in detail the steps it plans to take in order to meet the availability requirements for future calendar quarters and implement the plan to meet the data availability requirements no later than 30 days after the end of the quarter of failure.

Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.



United States  
Environmental Protection Agency  
Acid Rain Program

OMB No. 2060-0258

# Acid Rain Permit Application

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

This submission is:  New  Revised

### STEP 1

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

Newington Power Facility	NH	055601
Plant Name	State	ORIS Code

### STEP 2

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

a	b	c	d
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	New Units Commence Operation Date	New Units Monitor Certification Deadline
0001	Yes	N/A	N/A
0002	Yes	N/A	N/A
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

Newington Power Facility  
 Plant Name (from Step 1)

Acid Rain - Page 2

**STEP 3**

Read the  
 standard  
 requirements

**Permit Requirements**

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

**Monitoring Requirements**

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

**Sulfur Dioxide Requirements**

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

Newington Power Facility  
 Plant Name (from Step 1)

Acid Rain - Page 3

STEP 3,  
 Cont'd.

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

**Excess Emissions Requirements**

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

**Recordkeeping and Reporting Requirements**

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

**Liability**

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

Newington Power Facility  
Plant Name (from Step 1)

Acid Rain - Page 4

Step 3,  
Cont'd.

Liability, Cont'd.

- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

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

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

Read the certification statement, sign, and date

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

Name Alan J. Douglass	
Signature Alan J. Douglass	Date 4/5/07



# TITLE V OPERATING PERMIT

Permit No: **TV-0056**  
Date Issued: **August 2, 2021**

This certifies that:

**Granite Ridge Energy, LLC**  
**21 North Wentworth Avenue**  
**Londonderry, NH 03053**

has been granted a Title V Operating Permit for the following facility and location:

**Granite Ridge Energy, LLC**  
**21 North Wentworth Avenue**  
**Londonderry, NH 03053**

**Facility ID No: 3301590782**  
**ORISPL: 55170**  
**Application No: 20-0115** received April 28, 2020 - Renewal of Title V Operating Permit

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V application referenced above, filed with the New Hampshire Department of Environmental Services under the signature of the responsible official certifying to the best of his knowledge that the statements and information therein are true, accurate and complete.

Responsible Official	<b>Charles Parnell (781) 682-2522</b> <b>General Manager</b>
Alternate Responsible Official	<b>Patrick Blanchard (713) 830-8717</b> <b>Director-Env Svc. East</b>
Technical Contact	<b>Susan Prior (603) 552-1020</b> <b>EHS Specialist</b>
Designated Representative	<b>Charles Parnell</b>
Alternate Designated Representative	<b>Patrick Blanchard</b>
Authorized Account Representative	<b>Charles Parnell</b>
Alternate Authorized Account Representative	<b>Patrick Blanchard</b>

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of the Code of Federal Regulations, Title 40, Part 70.

This Permit is effective upon issuance and expires on **July 31, 2026**.

*Craig Wright*  
**COPY**

\_\_\_\_\_  
Director, Air Resources Division



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**ABBREVIATIONS**

ARD	Air Resources Division
AAL	Ambient Air Limit
acf	actual cubic foot
ASTM	American Society of Testing and Materials
BACT	Best Available Control Technology
Btu	British thermal units
CAA	Clean Air Act
CAS	Chemical Abstracts Service
CEMS	Continuous Emissions Monitoring System
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	CO <sub>2</sub> equivalent emissions
DER	Discrete Emission Reduction
Env-A	New Hampshire Code of Administrative Rules - Air Resources Division
ERC	Emission Reduction Credit
ft	foot or feet
ft <sup>3</sup>	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
HCl	Hydrogen chloride
HRS	Heat recovery steam generator
Hg	Mercury
hp	horsepower
hr	hour
LAER	Lowest Achievable Emission Rate
lb	pound
LPG	Liquefied Petroleum Gas
LNB	Low NOx burners
MM	million
MW	megawatt
NAAQS	National Ambient Air Quality Standard
NATS	NOx Allowance Tracking System
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NH <sub>3</sub>	Ammonia
NHDES	New Hampshire Department of Environmental Services (the department)
NOx	Oxides of Nitrogen
NSPS	New Source Performance Standard
OOC	Out of control
PM <sub>10</sub>	Particulate matter < 10 microns
PM <sub>2.5</sub>	Particulate matter < 2.5 microns
ppm	parts per million
ppmv	parts per million volume

PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RICE	Reciprocating Internal Combustion Engine
RSA	Revised Statues Annotated
RTAP	Regulated Toxic Air Pollutant
scf	standard cubic foot
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur dioxide
TSP	Total Suspended Particulates
tpy	tons per consecutive 12-month period
USEPA	United States Environmental Protection Agency
VER	Voluntary Emission Reduction
VOCs	Volatile Organic Compounds

**FACILITY SPECIFIC TITLE V OPERATING PERMIT CONDITIONS**

**I. Facility Description of Operations**

Granite Ridge Energy, LLC (GRE) operates a nominal 720 Megawatt (MW) combined cycle combustion turbine facility in Londonderry, NH. The GRE facility consists of two Siemens Westinghouse 501G combustion turbines (CTs) with two Vogt-NEM heat recovery steam generators (HRSGs), a single Siemens Westinghouse Type KN steam turbine (ST) and a cooling tower. Each combustion turbine is rated at approximately 243 MW. The exhaust gases from each turbine pass through separate HRSGs connected to a single steam turbine producing approximately an additional 248 MW. Each combustion turbine is equipped with a selective catalytic reduction (SCR) system to control nitrogen oxides (NOx) emissions.

The facility exceeds the Title V major source threshold for NOx and carbon monoxide (CO) and is therefore required to obtain a Title V Operating Permit.

**II. Permitted Activities**

In accordance with all of the applicable requirements identified in the Permit, the Owner or Operator is authorized to operate the devices and/or processes identified in Sections III, IV, V, and VI within the terms and conditions specified in this permit.

**III. Emission Unit Identification**

**A. Significant Activities**

The activities identified in Table 1 are subject to and regulated by this Title V Operating Permit.

<b>Table 1 - Significant Activities</b>			
<b>Emission Unit ID</b>	<b>Device Identification</b>	<b>Installation Date</b>	<b>Maximum Design Capacity and Permitted Fuel Type(s)<sup>1</sup></b>
EU01	Combustion Turbine #1 with dry- low NOx burners Manufacturer :Siemens Westinghouse Model # 501G Serial # 37A9010-1	2002	2,849 MMBtu/hr gross heat input while firing natural gas, nominal 2.849 mmcf/hr
EU02	Combustion Turbine #2 with dry- low NOx burners Manufacturer :Siemens Westinghouse Model # 501G Serial # 37A9011-1	2002	2,849 MMBtu/hr gross heat input while firing natural gas, nominal 2.849 mmcf/hr
EU03	Wet Mechanical Draft Cooling Tower - 12 cell cooling tower split in half (the basins are joined) Manufacturer: Marley Cooling Tower Company	2002	Circulation Rate = 140,000 gallons/minute

<sup>1</sup> The fuel consumption rates presented in Table 1 are based on the following assumed heating values:  
Natural Gas - 1,000 Btu/scf; and  
Diesel - 137,000 Btu/gal.

Table 1 - Significant Activities			
Emission Unit ID	Device Identification	Installation Date	Maximum Design Capacity and Permitted Fuel Type(s) <sup>1</sup>
EU04	240 hp Emergency Fire Pump Manufacturer: Clarke Model #: JU6H-UF60 Serial #: PE6068H140818	2002	1.41 MMBtu/hr, nominal 10.3 gal/hr of diesel

**B. Stack Criteria**

The following devices at the Facility shall have unobstructed<sup>2</sup> exhaust stacks that discharge vertically and meet the criteria in Table 2:

Table 2 - Stack Criteria		
Stack #	Minimum Height (feet above ground surface)	Maximum Exit Diameter (feet)
Combustion Turbine #1	132	20.67
Combustion Turbine #2	132	20.67
Cooling Tower Exhaust fans	64.3	36

**IV. Insignificant Activities Identification**

All activities at this facility, which meet the criteria identified in Env-A 609.04, shall be considered insignificant activities.

**V. Exempt Activities Identification**

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this permit.

**VI. Pollution Control Equipment Identification**

Air pollution control equipment listed in Table 3 shall be operated at all times that the associated devices are operating in order to meet permit conditions.

Table 3 - Pollution Control Equipment Identification			
Pollution Control Equipment ID	Description	Purpose	Emission Unit Controlled
PCE1	Selective Catalytic Reduction System <sup>3</sup>	For NOx Control	EU01

<sup>2</sup> There is no impediment to vertical flow and the exhaust stack extends at least 2 feet higher than any roofline within 10 feet of the exhaust stack exit, measured horizontally.

<sup>3</sup> The SCR systems (PCE1 and PCE2) are engaged after the ammonia injection permissible temperature is achieved (reference Table 5, Item 10).

Table 3 - Pollution Control Equipment Identification			
Pollution Control Equipment ID	Description	Purpose	Emission Unit Controlled
PCE2	Selective Catalytic Reduction System <sup>3</sup>	For NOx Control	EU02
PCE3	Each of the 12 cooling tower cells is equipped with a single layer of Marley drift eliminator plus a suspended layer of Marley honeycomb cooling tower fill	To minimize water drift losses and plume visibility	EU03

**VII. Alternative Operating Scenarios**

No alternative operating scenarios were identified for this permit.

**VIII. Applicable Requirements**

**A. State-only Enforceable Operational and Emission Limitations**

The Owner or Operator shall be subject to the state-only<sup>4</sup> operational and emission limitations identified in Table 4 below:

Table 4 - State-only Enforceable Operational and Emission Limitations			
Item #	Requirement	Applicable Unit	Regulatory Basis
1.	<u>24-hour and Annual Ambient Air Limit<sup>5</sup></u> The emissions of any Regulated Toxic Air Pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual Ambient Air Limit (AAL) as set forth in Env-A 1450.01, <i>Table of All Regulated Toxic Air Pollutants</i> .	Facility Wide	Env-A 1400
2.	<u>Revisions of the List of RTAPs</u> In accordance with RSA 125-I:5 IV, if the department revises the list of RTAPs or their respective AALs or classifications under RSA 125-I:4, II and III, and as a result of such revision the Owner or Operator is required to obtain or modify the permit under the provisions of RSA 125-I or RSA 125-C, the Owner or Operator shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such permit or permit modification.	Facility Wide	RSA 125-I:5 IV

<sup>4</sup> The term "state-only requirement" is used to refer to those requirements that are not federally enforceable but are state requirements as defined in Env-A 105.18.

<sup>5</sup> Env-A 1400, *Regulated Toxic Air Pollutants* is typically updated annually. Updates can be found at: <http://www.des.state.nh.us/organization/commissioner/legal/rules/index.htm#air>

**B. Federally Enforceable Operational and Emission Limitations**

The Owner or Operator shall be subject to the federally enforceable operational and emission limitations identified in Table 5 below:

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>																																							
<b>Item #</b>	<b>Applicable Requirement</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Cite</b>																																				
1.	The combustion of supplemental fuel in the HRSGs shall be prohibited.	EU01 and EU02	PSD Permit 045-121NH11																																				
2.	The sulfur content of pipeline natural gas shall be limited to 0.8 grains/100 scf. <sup>6</sup>	EU01 and EU02	PSD Permit 045-121NH11																																				
3.	<p>Each combustion turbine shall comply with the following emission limitations:</p> <table border="1" data-bbox="219 762 1101 1467"> <thead> <tr> <th colspan="4"><b>Table 6 - Emission Limitations</b></th> </tr> <tr> <th><b>Pollutant</b></th> <th><b>Emission Limitation</b></th> <th><b>Averaging Time</b></th> <th><b>Control Technology</b></th> </tr> </thead> <tbody> <tr> <td>Sulfur dioxide (SO<sub>2</sub>)</td> <td>0.0023 lb/MMBtu</td> <td>3-hour rolling</td> <td>Low Sulfur Fuels - Best Available Control Technology (BACT)</td> </tr> <tr> <td>CO</td> <td>15 ppmvd @ 15% O<sub>2</sub></td> <td>1-hour block average</td> <td>Good Combustion Practices (GCP) – (BACT)</td> </tr> <tr> <td>TSP/PM<sub>10</sub></td> <td>0.004 lb/MMBtu</td> <td>1-hour block average</td> <td>Low Sulfur Fuels – (BACT)</td> </tr> <tr> <td>NO<sub>x</sub></td> <td>2.5 ppmvd @ 15% O<sub>2</sub></td> <td>3-hour block average</td> <td>LNB with SCR - Lowest Achievable Emission Rate (LAER)</td> </tr> <tr> <td>VOCs</td> <td>0.0013 lb/MMBtu</td> <td>1-hour block average</td> <td>GCP</td> </tr> <tr> <td>Opacity</td> <td>20%</td> <td>6-minute block average</td> <td>GCP</td> </tr> <tr> <td>Ammonia</td> <td>10 ppmvd @ 15% O<sub>2</sub></td> <td>24-hour block average</td> <td>N/A</td> </tr> </tbody> </table> <p>a.) Emission limits in Tables 6 and 7 for CO and NO<sub>x</sub> apply at all times, except during start-up, shutdown and auto unload.</p> <p>b.) Emission limits for sulfur dioxide, particulate matter, volatile organic compounds, opacity and ammonia apply at all times.</p>	<b>Table 6 - Emission Limitations</b>				<b>Pollutant</b>	<b>Emission Limitation</b>	<b>Averaging Time</b>	<b>Control Technology</b>	Sulfur dioxide (SO <sub>2</sub> )	0.0023 lb/MMBtu	3-hour rolling	Low Sulfur Fuels - Best Available Control Technology (BACT)	CO	15 ppmvd @ 15% O <sub>2</sub>	1-hour block average	Good Combustion Practices (GCP) – (BACT)	TSP/PM <sub>10</sub>	0.004 lb/MMBtu	1-hour block average	Low Sulfur Fuels – (BACT)	NO <sub>x</sub>	2.5 ppmvd @ 15% O <sub>2</sub>	3-hour block average	LNB with SCR - Lowest Achievable Emission Rate (LAER)	VOCs	0.0013 lb/MMBtu	1-hour block average	GCP	Opacity	20%	6-minute block average	GCP	Ammonia	10 ppmvd @ 15% O <sub>2</sub>	24-hour block average	N/A	EU01 and EU02	PSD Permit 045-121NH11 and TP-0067
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<sup>6</sup> The natural gas sulfur content limit is streamlined with the 0.8% by weight (i.e., 8,000 ppmw) sulfur limit contained in 40 CFR 60 Subpart GG, *Standards of Performance for Stationary Gas Turbines*.



**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Cite																								
4.	<p>Maximum hourly emissions of regulated pollutants from each combustion turbine shall be limited as specified in Table 7 below:</p> <table border="1" data-bbox="323 464 992 991"> <thead> <tr> <th colspan="3">Table 7 - Maximum Hourly Emission Rates</th> </tr> <tr> <th>Pollutant</th> <th>Maximum Rate lb/hr on Natural Gas at 100% load and 0°F</th> <th>Averaging Time</th> </tr> </thead> <tbody> <tr> <td>NOx</td> <td>26.5</td> <td>3-hour block average</td> </tr> <tr> <td>SO<sub>2</sub></td> <td>6.6</td> <td>3-hour rolling average</td> </tr> <tr> <td>CO</td> <td>95.7</td> <td>1-hour block average</td> </tr> <tr> <td>TSP/PM<sub>10</sub></td> <td>11.4</td> <td>1-hour block average</td> </tr> <tr> <td>VOCs</td> <td>3.7</td> <td>1-hour block average</td> </tr> <tr> <td>Ammonia</td> <td>38.8</td> <td>24-hour block average</td> </tr> </tbody> </table> <p>The above emission rates are based on a heating value of 1,000 Btu/scf for natural gas.</p>	Table 7 - Maximum Hourly Emission Rates			Pollutant	Maximum Rate lb/hr on Natural Gas at 100% load and 0°F	Averaging Time	NOx	26.5	3-hour block average	SO <sub>2</sub>	6.6	3-hour rolling average	CO	95.7	1-hour block average	TSP/PM <sub>10</sub>	11.4	1-hour block average	VOCs	3.7	1-hour block average	Ammonia	38.8	24-hour block average	EU01 and EU02	PSD Permit 045-121NH11
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5.	<p>Facility wide emissions of regulated pollutants shall be limited as specified in Table 8 below:</p> <table border="1" data-bbox="313 1150 1016 1543"> <thead> <tr> <th colspan="2">Table 8 - Facility wide emission limits</th> </tr> <tr> <th>Pollutant</th> <th>Consecutive 12-Month Emissions (tpy)</th> </tr> </thead> <tbody> <tr> <td>NOx</td> <td>210</td> </tr> <tr> <td>SO<sub>2</sub></td> <td>51.3</td> </tr> <tr> <td>CO</td> <td>749</td> </tr> <tr> <td>TSP/PM<sub>10</sub></td> <td>97.4</td> </tr> <tr> <td>VOCs</td> <td>32</td> </tr> <tr> <td>Ammonia</td> <td>303</td> </tr> </tbody> </table> <p>a.) Assumes that the facility operates up to 8,760 hrs/yr on natural gas. Annual emission limit calculations are based on combustion turbine hourly emission rates at 100% load and 50°F.</p> <p>b.) NOx limit Includes 3.0 tpy from miscellaneous sources.</p> <p>c.) TSP/PM<sub>10</sub> limit includes 8.4 tpy from cooling towers.</p> <p>d.) VOCs limit includes 3.5 tpy from miscellaneous sources.</p>	Table 8 - Facility wide emission limits		Pollutant	Consecutive 12-Month Emissions (tpy)	NOx	210	SO <sub>2</sub>	51.3	CO	749	TSP/PM <sub>10</sub>	97.4	VOCs	32	Ammonia	303	Facility wide	FP-T-0144								
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Ammonia	303																										
6.	GRE shall, to the extent practical, minimize emissions from the combustion turbines during startup, shutdown and auto unload.	EU01 and EU02	PSD Permit 045-121NH11 and TP-0067																								

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Cite												
7.	<p><u>Start-up conditions:</u></p> <p>a.) Combustion turbine start-up shall be defined as the period of time from initiation of turbine firing until steady state operation at 75% load is achieved, unless low load combustion option (LLCO) is in operation for this unit. During LLCO operation, combustion turbine startup shall be defined as the period of time from initiation of turbine firing until steady state operation at 50% load is achieved.</p> <p>b.) A hot start-up shall be defined as the start-up of a combustion turbine within 48 hours of the last fire of that turbine.</p> <p>c.) A cold start-up shall be defined as the start-up of a combustion turbine more than 48 hours after that turbine has last been fired.</p> <p>d.) Each cold start-up shall be achieved as soon as practical and in no case shall exceed 600 minutes.</p> <p>e.) Each hot start-up shall be achieved as soon as practical and in no case shall exceed 350 minutes.</p>	EU01 and EU02	FP-T-0144												
8.	<p>GRE shall comply with the following emission limits per each combustion turbine unit for each start-up event:</p> <table border="1" data-bbox="219 1003 1101 1203"> <thead> <tr> <th colspan="3" data-bbox="219 1003 1101 1052"><b>Table 9 - Start-up Emission limits per each combustion turbine</b></th> </tr> <tr> <th data-bbox="219 1052 513 1100"><b>Start-up type</b></th> <th data-bbox="513 1052 807 1100"><b>CO Limit (tons)</b></th> <th data-bbox="807 1052 1101 1100"><b>NOx Limit (tons)</b></th> </tr> </thead> <tbody> <tr> <td data-bbox="219 1100 513 1150">Hot</td> <td data-bbox="513 1100 807 1150">10</td> <td data-bbox="807 1100 1101 1150">0.3</td> </tr> <tr> <td data-bbox="219 1150 513 1203">Cold</td> <td data-bbox="513 1150 807 1203">15</td> <td data-bbox="807 1150 1101 1203">0.5</td> </tr> </tbody> </table> <p>If the second combustion turbine is started after the first combustion turbine and the steam turbine has been operating at steady state levels, CO and NOx emissions from the first combustion turbine shall not be subject to the emission limits applicable during normal operations (i.e., emission limits specified in Table 6 of this permit) during the period that the first turbine is operated at lower loads to allow for the coupling<sup>7</sup> of the turbines. The emissions from the first combustion turbine during such a coupling transition are included within the above limits.</p>	<b>Table 9 - Start-up Emission limits per each combustion turbine</b>			<b>Start-up type</b>	<b>CO Limit (tons)</b>	<b>NOx Limit (tons)</b>	Hot	10	0.3	Cold	15	0.5	EU01 and EU02	FP-T-0144
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Hot	10	0.3													
Cold	15	0.5													

<sup>7</sup> Coupling of the turbines requires a reduction of load on the first combustion turbine from steady state levels to approximately 50%. The purpose of this load reduction is to allow the operational characteristics of the first combustion turbine and its associated HRSG to be synchronized with those of second turbine and its associated HRSG. The two turbines and HRSG systems are then ramped up together to full facility steady state operation.

Table 5 - Federally Enforceable Operational and Emission Limitations

Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Cite
9.	<p><u>Shutdown conditions:</u></p> <p>a.) A shutdown is defined as the period of time from manual shutdown initiation<sup>8</sup> to cessation of fuel combustion in the respective combustion turbine.</p> <p>b.) Each combustion turbine shutdown shall be achieved as soon as practical and shall be achieved within 210 minutes.</p> <p>c.) The emissions of CO generated by each unit during a shutdown event shall not exceed 4 tons.</p> <p>d.) The emissions of NO<sub>x</sub> generated by each unit during a shutdown event shall not exceed 0.1 tons.</p>	EU01 and EU02	FP-T-0144
10.	Ammonia injection into the catalyst bed shall be initiated only when the bed temperature is at or above 450°F. SCR systems shall be operated in accordance with the procedures established in the catalyst management plan submitted with Application #20-0115, and updated in accordance with Table 12, Item 24.	EU01 and EU02	PSD Permit 045-121NH11
11.	<p><u>Auto unload conditions:</u></p> <p>a.) An auto unload shall be defined as the period of time from an automatic protection response which results in a sudden reduction of combustion unit load to below 75% (or 50% when low load combustion option (LLCO) is in operation) until steady state operation at 75% load (or 50% load with LLCO) is achieved;</p> <p>b.) Each combustion turbine auto unload shall not exceed the time and emission limits specified in Table 5, Item 9. b.), c.) and d.).</p>	EU01 and EU02	TP-0067
12.	<p><u>NO<sub>x</sub> Reasonably Available Control Technology Emissions Standards for Combustion Turbines</u></p> <p>The hourly average NO<sub>x</sub> emissions from the gas-fired combustion turbine shall not exceed 25 ppmvd<sup>9</sup>, corrected to 15% O<sub>2</sub>, equivalent to 0.092 lb/MMBtu.</p>	EU01 and EU02	Env-A 1306.02
13.	<p><u>Cooling Tower Drift</u></p> <p>Cooling tower drift shall be limited to 0.0005% of the circulating water flow rate.</p>	EU03	PSD Permit 045-121NH11
14.	<p><u>Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970</u></p> <p>The average opacity from fuel burning devices installed after May 13, 1970 shall not exceed 20 percent for any continuous 6-minute period.</p>	EU04	Env-A 2002.02 (formerly Env-A 1202 effective 12-27-90)

<sup>8</sup> The Data Control System (DCS) sends a signal to the Data Acquisition and Handling System (DAHS) which determines the shutdown durations.

<sup>9</sup> The gas turbines are also subject to New Source Performance Standards (NSPS) for Stationary Gas Turbines (40 CFR 60, Subpart GG). For turbines using NO<sub>x</sub> CEMS, compliance with the NO<sub>x</sub> RACT limit is determined on a 24-hour calendar day average basis and compliance with the Subpart GG NO<sub>x</sub> limit is determined on a 4-hour rolling average basis. Both the NO<sub>x</sub> RACT and Subpart GG NO<sub>x</sub> limits apply at all times.

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Applicable Requirement</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Cite</b>
15.	<p><u>Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985</u></p> <p>Total suspended particulate matter emissions from fuel burning devices installed on or after January 1, 1985 shall not exceed 0.30 lb/MMBtu.</p>	EU04	Env-A 2003.03 Env-A 2002.02 (formerly Env-A 1202 effective 12-27-90)
16.	<p><u>Requirements for Emergency Stationary Reciprocating Internal Combustion Engines</u></p> <p>The fire pump shall be operated as follows:</p> <p>a.) Change oil and filter annually.<sup>10</sup>;</p> <p>b.) Inspect air cleaner annually;</p> <p>c.) Inspect hoses and belts annually, and replace as necessary;</p> <p>d.) Minimize idle time during startup and minimize startup time to a period needed for appropriate and safe loading, not to exceed 30 minutes; and</p> <p>e.) Operate and maintain the engine according to the manufacturer's emission-related operation and maintenance instructions.</p>	EU04	40 CFR 63.6603 and 40 CFR 63.6625 (40 CFR 63 Subpart ZZZZ)
17.	<p><u>Fire Pump Operation</u></p> <p>a.) The fire pump shall be limited to 500 hours of operation during any consecutive 12-month period.</p> <hr style="border-top: 1px dashed black;"/> <p>b.) The fire pump shall be limited to 100 hours per year of operation for maintenance checks and readiness testing.</p>	EU04	Env-A 1301.02(j)(1)  40 CFR 63.6640(f) Subpart ZZZZ
18.	<p><u>NESHAP General Provision</u></p> <p>a.) Maintain compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to the Owner or Operator at all times.</p> <p>b.) At all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Owner/Operator to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p>	EU04	40 CFR 63.6605 Subpart ZZZZ

<sup>10</sup> The facility has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement.

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Cite
19.	<p><u>NSPS General Provisions</u></p> <p>a.) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source;</p> <p>b.) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.</p>	EU01 and EU02	40 CFR 60.11(d) and 40 CFR 60.11(g)
20.	<p><u>Protection of Stratospheric Ozone</u></p> <p>If the Permittee performs maintenance on, or services, repairs, or disposes of appliances containing regulated ozone depleting substances, the Permittee shall comply with the standards for <i>Recycling and Emissions Reduction</i> pursuant to 40 CFR 82, Subpart F.</p>	Facility wide	40 CFR 82 Subpart F

**C. Annual SO<sub>2</sub> Allowance Programs**

1. The combustion turbines (EU01 and EU02) are regulated under the federal Acid Rain Program, Phase II. In accordance with 40 CFR 73, GRE is not allocated any SO<sub>2</sub> allowances pursuant to the Federal Acid Rain Program.
2. Allowances lawfully held or acquired by the Permittee under the acid rain provisions of the Clean Air Act, including the applicable sections of 40 CFR 72 and 40 CFR 73, shall be governed by the following:
  - a. Emissions from the affected unit shall not exceed any SO<sub>2</sub> allowances held by the affected unit as of the compliance deadline;
  - b. The number of SO<sub>2</sub> allowances held by the affected unit shall not be limited;
  - c. The Permittee shall not use SO<sub>2</sub> allowances to avoid compliance with any other applicable requirement of either state or federal rules or of the provisions of the Clean Air Act; and
  - d. Any SO<sub>2</sub> allowances held by the Permittee shall be accounted for according to the procedures established in the applicable provisions of 40 CFR 72 and 40 CFR 73.
3. The attached Acid Rain Permit application, dated April 7, 2020, is hereby incorporated by reference into this Permit.

**D. NOx Budget Trading Program (Env-A 3200)**

1. NOx Allowance Allocation  
NOx allowances shall be allocated to GRE according to the methodology in Env-A 3205.03, *Allowance Allocation Methodology*.
2. Ozone Season NOx Emissions Cap
  - a. Pursuant to Env-A 3206.02, NOx emissions during any control period<sup>11</sup> shall not exceed the amount of NOx allowances held in GRE's NOx Allowance Tracking System (NATS) compliance account for that control period as of the allowance transfer deadline of November 30.
  - b. GRE may obtain additional NOx allowances to comply with the NOx Budget Program.
3. Allowance Transfer and Use
  - a. Pursuant to Env-A 3207.01, *Marketable Emissions Authorization*, an allowance shall be a marketable emissions authorization that may be bought, sold, or traded at any time during any year, not just the current year.
  - b. Pursuant to Env-A 3207.02, *Limited Authorizations*, an allowance shall only be used for compliance with the NOx Budget Program in a designated compliance year by being in a compliance account as of the allowance transfer deadline of November 30, or by being transferred into the compliance account by an allowance transfer submitted by the allowance transfer deadline.
  - c. GRE shall comply with the NOx allowance transfer and use provisions of Env-A 3207.
  - d. Pursuant to Env-A 3207.09, *Price Disclosure*, subject to an initial claim of confidentiality in accordance with Env-C 208.04, GRE shall make available to any person, all information regarding transaction cost and allowance price.
4. Allowance Banking
  - a. Pursuant to Env-A 3208.01, *Retention of Unused Allowances*, the banking of allowances shall be permitted to allow the retention of unused allowances from one year to a future year in either a compliance account, an overdraft account, or a general account.
  - b. Pursuant to Env-A 3208.02, *Account Designation*, unused allowances as of the end of the allowance transfer deadline shall be retained in the compliance, overdraft, or general account and designated as banked allowances after the NATS administrator has made all deductions for a given control period from the compliance account or overdraft account pursuant to Env-A 3215.
  - c. GRE shall comply with the NOx allowance banking provisions pursuant to Env-A 3208.03, *Requirements for Use*.

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<sup>11</sup> Control period means the period beginning May 1 of each year and ending on September 30 of the same year, inclusive.

5. End-of-Season Reconciliation
  - a. Pursuant to Env-A 3204.02, *Limited Authorization*, GRE shall, no later than November 30 of each calendar year, hold quantities of NOx allowances in GRE's current year NATS accounts for each budget source that is equal to or greater than the total NOx emitted from that budget source during the period May 1 through September 30 of the subject year.
  - b. Request for Deduction of Allowances
    - i. Pursuant to Env-A 3213.02, each year prior to November 30, the AAR shall request the NATS administrator to deduct current year allowances from the compliance account or overdraft account equivalent to the number of available allowances to cover the NOx emissions during the current control period.
    - ii. This request shall be submitted by the AAR to the NATS administrator no later than the allowance transfer deadline, November 30.
    - iii. This request shall identify the compliance account or overdraft account from which the deductions should be made.
    - iv. This request shall identify the serial numbers of the allowances to be deducted, if desired by the source; or not identify serial numbers, in which case allowances usable for that compliance year shall be deducted in the order of their arrival into the unit's account, with allocated allowances being deducted first, followed by the deduction of transferred allowances.
6. Authorized Account Representative (Env-A 3209.04)
  - a. Only the AAR or alternate AAR shall request transfers of allowances in a NATS account.
  - b. The AAR or alternate AAR shall be responsible for all transactions and reports submitted to the NATS.
  - c. The alternative AAR shall have the same authority as the primary representative, however, all correspondence from the NATS administrator shall be directed to the primary AAR.
  - d. Pursuant to Env-A 3209.05(e), GRE shall replace an AAR by submitting a revised Account Certificate of Representation to the NATS administrator along with the information contained in Env-A 3209.05(b) and (c) and the name of the AAR who is being replaced.
7. Conversion of Allowances to Discrete Emissions Reductions (DERs)

Pursuant to Env-A 3205.04, GRE may convert unused allowances to DERs in accordance with the procedures for DER generation pursuant to Env-A 3103. Upon conversion, GRE shall surrender those converted allowances as if they had been used for actual emissions.
8. Prohibition on Property Rights (Env-A 3205.05)
  - a. Neither an allowance nor any future allocations, which are subject to modification by the department, shall constitute a security or other form of property.
  - b. An allowance shall not be used prior to the control period for which the allowance is allocated.

9. Excess Emissions and Enforcement Provisions (Env-A 3214)
  - a. If emissions exceed the allowances held by GRE by the allowance transfer deadline (November 30), the NATS administrator shall automatically deduct three tons of allowances from the next control period for every ton of excess emissions from GRE's compliance account or overdraft account.
  - b. In accordance with RSA 125-J:4-a, for purposes of enforcement of the NOx Budget Program, in determining the number of days of violation, any excess emissions for the control period shall presume that each day in the control period of 153 days, constitutes a day in violation unless GRE can demonstrate, through use of verifiable emissions data that a lesser number of days should be considered. In addition, each ton of excess emissions shall constitute a separate violation.

**E. Discrete Emissions Reduction Trading Program (Env-A 3100)**

In accordance with Env-A 3100 *Discrete Emissions Reductions Trading Program* and "Notice of Intent to Use DERs" originally submitted by GRE on April 18, 2002 and annually thereafter, GRE shall be allowed to use DERs to offset NOx emissions.

**F. Carbon dioxide (CO<sub>2</sub>) Budget Trading Program (Env-A 4600) -- State-only Enforceable**

1. CO<sub>2</sub> Allowance Requirements (Env-A 4605.01)
  - a. The Owner or Operator of each CO<sub>2</sub> budget source and each CO<sub>2</sub> budget unit at the source shall hold CO<sub>2</sub> allowances available for compliance deductions under Env-A 4605.04, as of the CO<sub>2</sub> allowance transfer deadline, in the source's compliance account, as follows:
    - i. In an amount not less than the total CO<sub>2</sub> emissions from fossil fuel-fired generation for the control period from all CO<sub>2</sub> budget units at the source less the CO<sub>2</sub> allowances deducted to meet the requirements of (2) below, with respect to the previous 2 interim control periods, as determined in accordance with Env-A 4605, Env-A 4607, Env-A 4609.18, and VIII.F.1.c, below; and
    - ii. An amount not less than the total CO<sub>2</sub> emissions for the interim control period from all CO<sub>2</sub> budget units at the source multiplied by 0.50.
  - b. CO<sub>2</sub> allowances shall be held in, deducted from, or transferred among CO<sub>2</sub> allowance tracking system accounts in accordance with Env-A 4606, Env-A 4607, Env-A 4608, and Env-A 4700.
  - c. For the purpose of determining compliance with Env-A 4600, total tons of CO<sub>2</sub> emissions for a control period<sup>12</sup> shall be calculated as the sum of all recorded hourly emissions, or the tonnage equivalent of the recorded hourly emissions rates, in accordance with Env-A 4609, with any remaining fraction of a ton equal to or greater than 0.50 ton rounded up to equal one ton and any fraction of a ton less than 0.50 ton rounded down to equal zero tons.
2. CO<sub>2</sub> Allowance Limitations (Env-A 4605.02)
  - a. A CO<sub>2</sub> allowance shall be a limited authorization to emit one ton of CO<sub>2</sub> in accordance with the CO<sub>2</sub> budget trading program.

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<sup>12</sup> Control period means compliance period as defined in New Hampshire RSA 125-O:20, IV.



- b. A CO<sub>2</sub> allowance shall not be deducted, in order to comply with the requirements of Env-A 4605.01(a), for a control period or interim control period that ends prior to the year for which the CO<sub>2</sub> allowance was allocated.
  - c. A CO<sub>2</sub> offset allowance shall not be deducted, in order to comply with the requirements of Env-A 4605.01(a), beyond the applicable percent limitations set out in Env-A 4605.04(b).
  - d. Subject to Env-A 4605.02(e) and (f), no provision of the CO<sub>2</sub> budget trading program, the CO<sub>2</sub> budget permit application, or the CO<sub>2</sub> budget permit shall be construed to limit the authority of the Department to terminate or limit such authorization.
  - e. A CO<sub>2</sub> allowance shall not constitute a property right.
3. Allowances Available for Compliance Deduction (Env-A 4605.04)
- a. CO<sub>2</sub> allowances that meet the following criteria shall be available to be deducted for compliance with the requirements of Env-A 4605 for a control period or an interim control period:
    - i. For CO<sub>2</sub> allowances other than CO<sub>2</sub> offset allowances, the allowances are from allocation years that fall within a prior control period or prior interim control period or the same control period or same interim control period for which the allowances will be deducted; and
    - ii. The CO<sub>2</sub> allowances are:
      - (a) Held in the CO<sub>2</sub> budget source's compliance account as of the CO<sub>2</sub> allowance transfer deadline for that control period or an interim control period; or
      - (b) Transferred into the compliance account by a CO<sub>2</sub> allowance transfer correctly submitted for recordation under Env-A 4608.01 by the CO<sub>2</sub> allowance transfer deadline for that control period or an interim control period;
    - iii. As provided in RSA 125-O:22, II, a CO<sub>2</sub> budget source may use offset allowances for up to 3.3 percent of its compliance obligation.
  - b. CO<sub>2</sub> allowances shall not be available for current compliance if the allowances were deducted for excess CO<sub>2</sub> emissions for a prior control period under Env-A 4605.08.
  - c. Allowances deducted for the purpose of compliance shall not be available for any other purpose.
4. Excess CO<sub>2</sub> Emissions Requirements (Env-A 4605.07)
- The Owner or Operator of a CO<sub>2</sub> budget source that has excess CO<sub>2</sub> emissions in any control period, or excess interim emissions for any interim control period, shall:
- a. Forfeit the CO<sub>2</sub> allowances required for deduction under Env-A 4605.08, provided CO<sub>2</sub> offset allowances shall not be used to cover any part of such excess CO<sub>2</sub> emissions; and
  - b. Pay any fine, penalty, or assessment or comply with any other remedy imposed under RSA 125-O:7 or RSA 125-O:22, V.
5. Deductions for Excess CO<sub>2</sub> Emissions (Env-A 4605.08)
- a. As provided by RSA 125-O:22, V, the deduction of CO<sub>2</sub> allowances for excess CO<sub>2</sub> emissions shall equal to 3 times the number of the source's excess CO<sub>2</sub> emissions.

- b. Within 14 calendar days of receipt of notice by from the regional organization<sup>13</sup> that a shortage exists, the source shall transfer sufficient allowances into its compliance account to cover the shortage.
  - c. No CO<sub>2</sub> offset allowances shall be deducted to account for the source's excess CO<sub>2</sub> emissions.
  - d. Any CO<sub>2</sub> allowance deduction required under 5.a, above, shall not affect the liability of the owner(s) and operator(s) of the CO<sub>2</sub> budget source or the CO<sub>2</sub> units at the source for any fine, penalty, or assessment, and shall not affect the obligation of the owner(s) and operator(s) to comply with any other remedy, for the same violation, as ordered under applicable state law.
6. Determination of Violations and Deduction of Allowances (Env-A 4605.11)
- a. For purposes of determining the number of days of violation, if a CO<sub>2</sub> budget source has excess CO<sub>2</sub> emissions for a control period, the following shall apply:
    - i. Each day in the control period in which insufficient allowances were in the source's compliance or general accounts to cover the excess CO<sub>2</sub> emissions shall constitute a day of violation unless the owner(s) and operator(s) of the unit demonstrate that a lesser number of days should be considered; and
    - ii. Each ton of excess CO<sub>2</sub> emissions shall constitute a separate violation.
  - b. For purposes of determining the number of days of violation, if a CO<sub>2</sub> budget source has excess CO<sub>2</sub> emissions for an interim control period, the following shall apply:
    - i. Each day in the interim control period in which insufficient allowances were in the source's compliance or general accounts to cover the excess CO<sub>2</sub> emissions shall constitute a day of violation unless the owner(s) and operator(s) of the unit demonstrate that a lesser number of days should be considered; and
    - ii. Each ton of excess CO<sub>2</sub> emissions shall constitute a separate violation.
7. Submission of CO<sub>2</sub> Allowance Transfers (Env-A 4608.01)
- Any CO<sub>2</sub> AAR seeking recordation of a CO<sub>2</sub> allowance transfer shall submit the transfer request to the regional organization in accordance with Env-A 4608.01(b).

**G. Monitoring and Testing Requirements**

The Owner or Operator is subject to the monitoring and testing requirements as contained in Table 10 below:

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<sup>13</sup> Regional organization as defined in NH RSA 125-O:20, XIII

Table 10 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
1.	NOx and O <sub>2</sub> diluent gas	<p>a.) Operate and maintain a NOx-diluent CEMS (consisting of a NOx pollutant concentration monitor and an O<sub>2</sub> diluent gas monitor) with an automated data acquisition and handling system for measuring and recording:</p> <ol style="list-style-type: none"> <li>1.) NOx concentration (in ppm);</li> <li>2.) O<sub>2</sub> concentration (in percent O<sub>2</sub>); and</li> <li>3.) NOx emission rate (in lb/MMBtu).</li> </ol> <p>b.) Account for total NOx emissions, both NO and NO<sub>2</sub>, either by monitoring for both NO and NO<sub>2</sub> or by monitoring for NO only and adjusting the emissions data to account for NO<sub>2</sub>.</p> <p>c.) Calculate hourly, quarterly and annual NOx emission rates (in lb/MMBtu) by combining the NOx concentration (in ppm) and diluent concentration (in percent O<sub>2</sub>) according to the procedures in 40 CFR 75 Appendix F.</p>	Continuously	EU01 and EU02	Env-A 808.02, Env-A 3210, 40 CFR §§75.10(a)(2), 75.12(c) and 75.71
2.	CO	Operate and maintain a CEMS for measuring carbon monoxide. The CO CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 4.	Continuously	EU01 and EU02	PSD Permit # 045-121NH11 and Env-A 808
3.	Ammonia slip	<p>Operate and maintain an ammonia slip CEMS for measuring and recording ammonia slip.</p> <ol style="list-style-type: none"> <li>a.) The ammonia monitoring system shall be challenged with an ammonia calibration gas on a calendar quarter basis in accordance with Env-A 808.07 and 808.08;</li> <li>b.) The gas shall be certified as at least 5% accurate and be within the range of 5 - 15 ppm;</li> <li>c.) The gas shall be sent through the ammonia sampling system three separate times, alternating with a secondary gas (air, zero gas, stack gas, etc.). If the average calibration error exceeds 5%, the response of the ammonia measurement system shall be multiplied by a factor to correct the response to the value of the calibration gas;</li> <li>d.) Prior to applying the correction factor, the NH<sub>3</sub>-to-NO conversion efficiency shall be greater than or equal to 80%. An efficiency less than 80% means the measuring system is out of control as defined in Env-A 808.01(g)(1)c;</li> <li>e.) The annual relative accuracy test audit of the system shall be done using as the Reference Method either USEPA Conditional Test Method CTM-027, the differential NOx method, or a</li> </ol>	Continuously	EU01 and EU02	PSD Permit # 045-121NH11 and Env-A 808

Table 10 - Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>department-approved alternative (if the differential NO<sub>x</sub> method is used, the NH<sub>3</sub>-to-NO converter efficiency of the as the Reference Method sampling system shall be <math>\geq 90\%</math>);</p> <p>f.) Relative accuracy of the ammonia measurement system shall be within 20% of the reference method or +/-4 ppm; and</p> <p>g.) The results of the converter efficiency check shall be submitted to the department quarterly and shall include the NH<sub>3</sub> calibration gas certification sheet.</p>			
4.	Fuel flow	<p><u>Fuel Flowmeter Measurements</u></p> <p>a.) For each hour when the unit is combusting fuel, measure and record the flow rate of fuel combusted by each combustion turbine.</p> <p>b.) Measure the flow rate of the fuel with an in-line fuel flowmeter, and automatically record the data with a data acquisition and handling system.</p> <p>c.) Maintain and operate the fuel flow meter in accordance with 40 CFR 75, Appendix D, Section 2.1.6.</p>	Hourly	EU01 and EU02	40 CFR 75, Appendix D, Section 2.1
5.	SO <sub>2</sub>	<p><u>SO<sub>2</sub> Mass Emission Rate for Gaseous Fuels</u></p> <p>Calculate the hourly SO<sub>2</sub> mass emissions for each hour when gaseous fuels are combusted by each unit using the applicable procedures specified in 40 CFR 75, Appendix D <i>Optional SO<sub>2</sub> Emissions Data Protocol for Gas-fired and Oil-fired Units</i>.</p>	Hourly	EU01 and EU02	40 CFR 75, Appendix D Section 2.3
6.	CO <sub>2</sub>	<p><u>Determination of CO<sub>2</sub> Emissions</u></p> <p>Determine CO<sub>2</sub> emissions (in tons/day) discharged to the atmosphere using the applicable procedures specified in 40 CFR 75, Appendix G <i>Determination of CO<sub>2</sub> Emissions</i>.</p>	Daily	EU01 and EU02	40 CFR 75.10(a)(3) and Appendix G
7.	Heat Input Rate	<p><u>Calculation of Heat input Rate for Gaseous Fuels</u></p> <p>Determine and record the heat input rate (in MMBtu/hr) to each unit for every hour or part of an hour any fuel is combusted following the procedures specified in 40 CFR 75, Appendix D, Section 3.4.</p>	Hourly	EU01 and EU02	40 CFR 75.10(c), Env-A 3210.02 and 40 CFR 75.75(a)
8.	Net Electrical Output	Calculate net electrical output in MW-hr.	Annually	EU01 and EU02	Env-A 3205.03 and 40 CFR 75

Table 10 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
9.	NOx Mass Emissions	<p>Calculate NOx mass emissions as:</p> <p>a.) Hourly (in lb/hr) by multiplying the hourly NOx emission rate (in lb/MMBtu) by the hourly heat input rate (in MMBtu/hr) and the unit or stack operating time; and</p> <p>b.) Quarterly, cumulative year-to-date and cumulative for the ozone season (in tons) by summing the hourly NOx mass emissions according to the procedures in Appendix F, Section 8 of 40 CFR 75.</p>	Hourly, quarterly and cumulative for the ozone season and year-to-date	EU01 and EU02	40 CFR 75.71, 40 CFR 75.72, and Env-A 3210
10.	Ozone Season NOx Emission Rate	Calculate the ozone season NOx emission rate (in lb/MMBtu) by dividing ozone season NOx mass emissions (in lbs) by heat input.	During the ozone season	EU01 and EU02	Env-A 3210.01 and 40 CFR 75.75(b)
11.	NOx Mass Emissions - Annual and Ozone Season Monitoring	Meet the requirements of 40 CFR 75 Subpart H.	During the entire calendar year	EU01 and EU02	40 CFR 75.74(a) and (b)
12.	NOx CEMS Operating Requirements	<p>The NOx CEMS shall:</p> <p>a.) Meet the equipment, installation, and performance specifications in 40 CFR 75 Appendix A;</p> <p>b.) Be maintained according to the quality assurance and quality control procedures in 40 CFR 75 Appendix B;</p> <p>c.) Be in operation and monitoring emissions from each unit at all times that the emission unit combusts any fuel except during periods of:</p> <ol style="list-style-type: none"> <li>1.) Calibration, quality assurance, or preventive maintenance, performed pursuant to 40 CFR 75.21 and Appendix B of 40 CFR 75;</li> <li>2.) Repair;</li> <li>3.) Backups of data from the data acquisition and handling system; or</li> <li>4.) Recertification performed pursuant to 40 CFR 75.20.</li> </ol>	As specified	EU01 and EU02	40 CFR 75.10(b) and 40 CFR 75.10(d)

Table 10 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
13.	NOx CEMS Hourly Operating Requirements and Calculations	<p>a.) The NOx CEMS shall measure and calculate hourly averages in accordance with the following:</p> <ol style="list-style-type: none"> <li>1.) Complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute interval;</li> <li>2.) Except as provided below, compute hourly averages using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour;</li> <li>3.) An hourly average may be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) if data are unavailable as a result of the conditions noted in Table 10, Item 12.c.), above;</li> <li>4.) All valid measurements or data points collected during an hour shall be used to calculate the hourly averages; and</li> <li>5.) All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour.</li> </ol> <p>b.) Failure of a CEMS to acquire the minimum number of data points for calculation of an hourly average shall result in the failure to obtain a valid hour of data and the loss of such component data for the entire hour.</p> <p>c.) For a NOx-diluent monitoring system, an hourly average NOx emission rate in lb/MMBtu is valid only if the minimum number of data points is acquired by both the NOx pollutant concentration monitor and the O<sub>2</sub> diluent monitor.</p> <p>d.) If a valid quality-assured hour of data is not obtained, follow the procedures in 40 CFR 75 Subpart D.</p>	Hourly	EU01 and EU02	40 CFR 75.10(d) and 40 CFR 75.30
14.	NOx CEMS minimum measurement capability	<p>The NOx CEMS shall:</p> <ol style="list-style-type: none"> <li>a.) Be capable of accurately measuring, recording, and reporting data; and</li> <li>b.) Not incur an exceedance of the full scale range, except as provided in 40 CFR 75 Appendix A section 2.1.2.5.</li> </ol>	As specified	EU01 and EU02	40 CFR 75.10(f)

Table 10 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
15.	Minimum Specifications for CEMS	<p>All gaseous CEM systems (i.e., NO<sub>x</sub>, CO, NH<sub>3</sub> and O<sub>2</sub>) shall meet the following minimum specifications:</p> <p>a.) A gaseous CEMS shall average and record the data for each calendar hour.</p> <p>b.) All gaseous CEMS shall:</p> <p>1.) Include a means to display instantaneous values of gaseous emission concentrations; and</p> <p>2.) Complete a minimum of one cycle of operation, which shall include measuring, analyzing, and data recording for each successive one-minute period for systems measuring gaseous emissions, unless a longer time period is approved in accordance with Env-A 809.</p>	Hourly	EU01 and EU02	Env-A 808.03
16.	CEM Data	<p>a.) Data Validation Procedures</p> <p>1.) Full unit operating hour:</p> <p>i. For each hour when no CEM calibration, quality assurance or preventative maintenance is occurring, GRE must collect at least 1-minute's worth of data in each of the 15-minute quadrants in the hour. Four quadrants of valid data constitute a valid hour;</p> <p>ii. For each hour where CEM calibration, quality assurance, or preventative maintenance is occurring, GRE must collect at least 1-minute's worth of data in two of the four 15-minute quadrants to have a valid hour.</p> <p>2.) Partial unit operating hour:</p> <p>For each 15-minute quadrant, as long as one-minute's worth of data was collected, emissions shall be calculated for that period of time that the unit was in operation.</p> <p>b.) Data substitution</p> <p>For all periods of unit operation, when the CEMS is not in operation or not collecting valid data in accordance with Item 16.a. above, GRE shall substitute emission values using the procedures in Table 10, Item 25, for each hour and partial hour of unit operation.</p>	As specified	EU01 and EU02	FP-T-0144

Table 10 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
17.	Out-of-Control Periods for CO CEMS, NH <sub>3</sub> /NO <sub>x</sub> Analyzer and low range NO <sub>x</sub> Analyzer	<p><u>Out of Control Periods for CO CEMS, NH<sub>3</sub>/NO<sub>x</sub> Analyzer and low range NO<sub>x</sub> Analyzer</u></p> <p>Out of control period (OOC) means that any CEM data collected during such a period is considered invalid and cannot be used for emission calculations. The following are OOC periods for CO CEMS, NH<sub>3</sub>/NO<sub>x</sub> analyzer<sup>14</sup> and low range NO<sub>x</sub> analyzer:</p> <p>a.) Failed daily calibrations:</p> <ol style="list-style-type: none"> <li>1.) High range CO CEM (0-2000 ppm) - Any daily calibration where the calibration drift exceeds 200 ppm (two times the 5% drift standard).</li> <li>2.) Low range CO CEM (0-20 ppm) - Any daily calibration where the calibration drift exceeds 2 ppm (two times the 5% drift standard).</li> <li>3.) High range NH<sub>3</sub>/NO<sub>x</sub> Analyzer (0-100 ppm) - Any daily calibration where the drift is greater than 10 ppm.</li> <li>4.) Low range NH<sub>3</sub>/NO<sub>x</sub> and NO<sub>x</sub> Analyzers (0-10 ppm) - Any daily calibration where the calibration drift is greater than 5 ppm. Whenever the calibration drift of the analyzer exceeds 0.4 ppm, some action to reduce the drift shall be taken although such drift is not a criterion for OOC.</li> </ol> <p>b.) The OOC period starts immediately upon completion of the drift failure and ends when the CEM passes the drift limit.</p> <p>c.) The failure of a quarterly Cylinder Gas Audit (CGA) or Relative Accuracy Test Audit (RATA) or the failure to conduct a CGA or RATA constitutes an OOC period until the audit is repeated or performed and passes the criteria specified in 40 CFR 60.</p>	As specified	EU01 and EU02	FP-T-0144 and Env-A 808

<sup>14</sup> NH<sub>3</sub>/NO<sub>x</sub> analyzer measures total NO<sub>x</sub> on the ammonia- converted flue gas stream. NO<sub>x</sub> analyzer measures NO<sub>x</sub> on the unconverted flue gas stream. Ammonia slip is measured as the difference in NO<sub>x</sub> measurements between NH<sub>3</sub>/NO<sub>x</sub> and NO<sub>x</sub> analyzers. High range NO<sub>x</sub> analyzer (0-100 ppm) is subject to 40 CFR 75 QA/QC requirements specified in Table 10, Item 18. As per 40 CFR 75 Appendix A, Section 6.2, if the span value of the monitor range is ≤ 30 ppm, that range is exempt from the linearity check requirements. Therefore, low-range (0-10 ppm) NO<sub>x</sub> analyzer is not subject to Part 75 linearity checks.



Table 10 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
18.	Out-of-Control Periods for NOx high range-diluent CEMS	<p><u>Out of Control Periods for CEMS subject to Part 75 (i.e., NOx high range and O<sub>2</sub> monitors)</u></p> <p>a.) The CEM system is out of control when it fails a quality assurance audit or any other audit. An out-of-control period occurs:</p> <ol style="list-style-type: none"> <li>1.) For daily calibration error tests, when the calibration error of a pollutant or diluent concentration monitor exceeds the applicability specification in Sections 2.1.4 and 2.1.5 of 40 CFR 75 Appendix B.</li> <li>2.) For quarterly linearity checks, when the error in linearity at any of the three gas concentrations (low, mid-range, and high) exceeds the applicable specification in 40 CFR 75 Appendix A.</li> <li>3.) For RATAs, when the relative accuracy exceeds the applicable specifications in 40 CFR 75 Appendix A.</li> </ol> <p>b.) When a monitor or continuous emission monitoring system is out-of-control:</p> <ol style="list-style-type: none"> <li>1.) Any data recorded by the monitor or monitoring system are not quality-assured and shall not be used in calculating monitor data availabilities pursuant to 40 CFR 75.32; and</li> <li>2.) Apply the procedures for missing data substitution to emissions from affected unit(s) using the applicable procedures in 40 CFR 75 Subpart D until the monitor or monitoring system has successfully met the relevant criteria in Appendices A and B of 40 CFR 75 as demonstrated by subsequent tests.</li> </ol>	As specified	EU01 and EU02	40 CFR §75.21(e)(2), §75.24 and Env-A 3210.08
19.	General CEMS Audit Requirements	<p>a.) Conduct CEMS audits in accordance with Env-A 808.07, Env-A 808.08 and 40 CFR 75.</p> <p>b.) Notify the department at least:</p> <ol style="list-style-type: none"> <li>1.) 30 days prior to the performance of a relative accuracy test audit; and</li> <li>2.) At least 2 weeks prior to any other planned audit or test procedure.</li> </ol>	Quarterly	EU01 and EU02	Env-A 808.07 through 808.08 and 40 CFR 75.61(a)(5)

Table 10 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
20.	NOx, O <sub>2</sub> , CO, Ammonia slip	<u>Operating Conditions During a RATA</u> A RATA shall be conducted under one of the following operating conditions: a.) At a minimum of 50% of maximum production rate or rated capacity of the device on which the facility’s CEM system is installed; and b.) At any other condition if necessary to comply with an applicable federal requirement.	For each RATA	EU01 and EU02	Env-A 802.10
21.	Certification Status of NOx CEMS	a.) Pursuant to Env-A 3210.08, whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement pursuant to Env-A 800 or the applicable provisions of 40 CFR 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department shall issue a notice of disapproval of the certification status of such system or component. For the purposes of this section, an audit shall be either a field audit or an audit of any information submitted to the Department or the administrator. b.) The data measured and recorded by the system or component shall not be considered valid quality-assured data from the date of issuance of the notification of the disapproval of certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests in accordance with Env-A 3210.05(s). c.) The Owner or Operator shall follow the initial certification or recertification procedures for each disapproved system.	As specified by regulation	EU01 and EU02	Env-A 3210.08
22.	Recertification of NOx CEMS	Recertify CEMS whenever the Owner or Operator makes a replacement, modification, or change to the systems or to the facility that could significantly affect the ability of the systems to accurately measure and record the requisite data.	As specified	EU01 and EU02	40 CFR 75.20, 40 CFR 75.70(d), Env-A 808.05 and Env-A 3200

Table 10 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
23.	Reference Test Methods for Certification and Recertification of NOx CEMS	Use the reference test methods listed in 40 CFR 75.22 and included in Appendix A to 40 CFR 60 to conduct: a.) Monitoring system tests for certification or recertification of CEMS; and b.) Required quality assurance and quality control tests.	During certification or recertification tests	EU01 and EU02	40 CFR 75.22
24.	NOx CEMS - QA/QC Requirements	Operate and maintain each CEMS according to: a.) The quality assurance and quality control procedures in 40 CFR 75 Appendix B; b.) The procedures specified in Env-A 808. c.) The calibration gas requirements in 40 CFR 72.2; and	Continuously	EU01 and EU02	40 CFR 75.21 and 75.70
		d.) The quality assurance requirements contained in 40 CFR 75.74, as applicable.	Within and prior to the ozone season		40 CFR 75.74
25.	Substitute Emission Data (Annual Emission Report)	Any facility that uses the emissions data collected by a gaseous CEM system to calculate and report its annual emissions in accordance with Env-A 900 shall comply with the following: a.) For any facility operating hour during which the gaseous CEM system has not collected a valid hour of CEM system data, the Owner or Operator shall submit to the department substitute emission data for those hours which has been generated using <b>one</b> of the following methods: 1.) The missing data substitution procedures specified in 40 CFR 75, Subpart D; 2.) If the missing data occurred during a period of steady-state operation, and not during a period of start-up, shutdown, or malfunction: i.) An average of the emissions data for the hours prior to and after the period of missing data during which valid CEM data was collected, or ii.) Representative emissions data for the device at the same heat input rate, electric generating rate, or steam load; 3.) If the missing data occurred during a start-up, shutdown, or malfunction of the device, substitute data collected by the CEM during a similar period of start-up,	N/A	EU01 and EU02	Env-A 808.12

**Table 10 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>shutdown or malfunction, respectively; or</p> <p>4.) An alternative method of data substitution that meets the following criteria:</p> <ul style="list-style-type: none"> <li>i.) The alternative method was included in the monitoring plan submitted pursuant to Env-A 808.04;</li> <li>ii.) The alternative method provides for representative emissions for the conditions of operation of the device during the period of missing data equivalent to the substitution methods described above; and</li> <li>iii.) The alternative method was approved by the department as part of its approval of the monitoring plan pursuant to Env-A 808.04.</li> </ul> <p>b.) For CEM systems and emissions subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall follow those requirements for substituting emissions data in order to calculate emission totals or emission averages as required by 40 CFR 75.</p> <p>c.) For CEM systems and emissions not subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall include substitute emissions data in the calculation of total daily, monthly, quarterly, and annual emissions generated by the permitted device to quantify total actual emissions;</p> <p>d.) Substitute emission data shall not be used in the calculation of emissions totals or averages in order to determine or demonstrate compliance with emissions standards;</p> <p>e.) Substitute data shall not be included in the calculation of data availability.</p>			

**Table 10 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
26.	NOx Mass Emissions Provisions-Prohibitions	<p>The Owner or Operator is prohibited from the following:</p> <ul style="list-style-type: none"> <li>a.) Using alternative monitoring system, reference method, or any other alternative for the required CEMS without approval through petition process in 40 CFR 75.70(h).</li> <li>b.) Discharging or allowing discharge of NOx emissions without accounting for all emissions in accordance with the provisions of Subpart H, except as provided in 40 CFR 75.74.</li> <li>c.) Disrupting the CEMS or any other approved emission monitoring method, and thereby avoid monitoring and recording NOx mass emissions, except for periods of re-certification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the provisions of 40 CFR 75 Subpart H applicable to the monitoring systems under 40 CFR 75.71, except as provided in 40 CFR 75.74.</li> <li>d.) Retiring or permanently discontinuing the use of the CEMS, or any other approved emission monitoring system except under one of the following circumstances:                             <ul style="list-style-type: none"> <li>1.) During a period that the unit is covered by a retired unit exemption that is in effect under the State or federal NOx mass emission reduction program that adopts the requirements of Subpart H;</li> <li>2.) The owner or operator is monitoring NOx emissions from the affected unit with another certified monitoring system approved, in accordance with the provisions of 40 CFR 75.70(d); or</li> <li>3.) The designated representative submits notification of the date of certification testing of a replacement monitoring system in accordance with 40 CFR 75.61.</li> </ul> </li> </ul>	Continuously	EU01 and EU02	40 CFR 75.70(c)

**Table 10 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
27.	Sulfur content of Natural Gas	<p>a.) The Owner or Operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbines if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u) provided the facility uses <b>one</b> of the following sources of information to make the required compliance demonstration:</p> <ol style="list-style-type: none"> <li>1.) 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 grains/100 scf or less; or</li> <li>2.) Representative fuel sampling data which shows 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 of 40 CFR 75 is required.</li> </ol> <p>b.) If a fuel qualifies as pipeline natural gas based on the specifications in a fuel contract or tariff sheet, no additional, on-going sampling of the fuel's total sulfur content is required, provided that the contract or tariff sheet is current, valid and representative of the fuel combusted in the unit. If the fuel qualifies as pipeline natural gas based on fuel sampling and analysis, on-going sampling of the fuel's sulfur content is required annually and whenever the fuel supply source changes. For the purposes of this paragraph (b), sampling "annually" means that at least one sample is taken in each calendar year.</p>	As specified	EU01 and EU02	<p>40 CFR 60.334(h)(3)</p> <hr/> <p>40 CFR 75, Appendix D, Section 2.3</p>
28.	Hours of Operation	The fire pump engine shall be equipped with a non-resettable hour meter.	Continuous	EU04	40 CFR 63.6625, Subpart ZZZZ
29.	Cooling water treatment	The Owner or Operator shall comply with the testing and monitoring conditions specified in Condition VIII.J for the cooling water used in the cooling towers.	As specified	EU03	FP-T-0144
30.	To Be Determined	When conditions warrant, the department may require the Owner or Operator to conduct stack testing in accordance with USEPA or other department approved methods.	Upon request by the department	Facility Wide	RSA 125-C:6, XI

H. Recordkeeping Requirements

The Owner or Operator shall be subject to the recordkeeping requirements identified in Table 11 below:

Table 11 - Recordkeeping Requirements				
Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
1.	<u>Record Retention and Availability</u> Keep the records required by this permit on file. These records shall be available for review by the department upon request.	Retain for a minimum of 5 years <sup>15</sup> unless longer as specified	Facility wide	Env-A 902, Env-A 3211 and 40 CFR 70.6(a)(3)(ii)(B)
2.	<u>CO<sub>2</sub> Budget Source and Unit Records</u> a.) Maintain the following records regarding the CO <sub>2</sub> budget source and each CO <sub>2</sub> budget unit: 1.) The account certificate of representation and all documents that demonstrate the truth of the statements in the account certificate of representation prepared in accordance with Env-A 4604.05; 2.) All emissions monitoring information, in accordance with Env-A 4609 and 40 CFR 75; 3.) Copies of all reports, compliance certifications and other submissions and all records made or required under Env-A 4600; and 4.) Copies of all documents used to complete a CO <sub>2</sub> budget permit application and any other submission under the CO <sub>2</sub> Budget Trading Program or to demonstrate compliance with the requirements of Env-A 4600. b.) Records required in a. shall be retained beyond the 10-year minimum retention period until such documents are superseded because of the submission of a new account certificate of representation changing the CO <sub>2</sub> AAR.	Maintain up-to-date records  Retain for a minimum of 10 years from the date the document is created, or beyond as noted in b.	EU01 and EU02	Env-A 4605.03(a)
3.	<u>Certificate of Representation</u> a.) Complete and retain a certificate of representation for a designated representative or an alternate designated representative including the elements pursuant to 40 CFR 72.24, <i>Certificate of representation</i> . b.) The certificate of representation required in a. shall be retained beyond the 5-year minimum period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.	Maintain at the facility at all times	EU01 and EU02	40 CFR 72.9(f) and 40 CFR 72.24

<sup>15</sup> Note that record retention for five years is more stringent than the three-year record retention required in some sections of 40 CFR 75 and 40 CFR 60.

**Table 11 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
4.	<p><u>General Recordkeeping Requirements for Combustion Devices</u></p> <p>Maintain the following records for each combustion turbine:</p> <ul style="list-style-type: none"> <li>a.) Daily hours of operation, including the hours of operation in LLCO mode;</li> <li>b.) The total daily fuel consumption by device (in cubic feet for natural gas);</li> <li>c.) The total daily amount of aqueous ammonia, in pounds, used in each SCR system;</li> <li>d.) The running totals of b.) and c.) above for the previous thirty-day period.</li> <li>e.) Startup, shutdown and auto unload events.</li> </ul>	Daily	EU01 and EU02	PSD Permit # 045-121NH11 and Env-A 903.03
5.	<p><u>General Recordkeeping Requirements for Combustion Devices</u></p> <p>Maintain the following records for the fire pump of:</p> <ul style="list-style-type: none"> <li>a.) Type and amount of fuel burned;</li> <li>b.) Hours of operation.</li> </ul>	Monthly	EU04	Env-A 903.03
6.	<p><u>Air Pollution Control Device Operational Records</u></p> <p>The Owner or Operator shall maintain records of all malfunctions, routine maintenance, and other downtimes of any air pollution control equipment in whole or part. These records must be available for review by the department/USEPA upon request.</p>	At each occurrence	PCE1, PCE2 and PCE3	Env-A 906.01 and FP-T-0144
7.	<p><u>Liquid Fuel Oil Recordkeeping Requirements</u></p> <p>The Owner or Operator shall maintain fuel delivery tickets that contain the maximum weight percentage of sulfur or obtain a written statement from the fuel supplier that the sulfur content of the fuel as delivered does not exceed state or federal standards for that fuel.</p>	Whenever there is a change in fuel supplier but at least annually	EU04	Env-A 806.05
8.	<p><u>General NOx Recordkeeping</u></p> <p>Maintain records of:</p> <ul style="list-style-type: none"> <li>a.) Identification of each combustion device.</li> <li>b.) Operating schedule during the high ozone season for each combustion device identified in a. above, including:                             <ul style="list-style-type: none"> <li>1.) Typical hours of operation per calendar day;</li> <li>2.) Typical days of operation per calendar month;</li> <li>3.) Type and amount of fuel burned;</li> <li>4.) Design heat input rate in MMBtu/hr.</li> <li>5.) The following NOx emission data:</li> </ul> </li> </ul>	Continuous, annually, and during the high ozone season, as specified	EU01, EU02 and EU04	Env-A 905.02



**Table 11 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	<ul style="list-style-type: none"> <li>i.) Actual NOx emissions per month;</li> <li>ii.) Typical high ozone season day NOx emissions, in pounds per day; and</li> <li>iii.) Emission factors and the origin of the emission factors used to calculate the NOx emissions.</li> </ul>			
9.	<p><u>Add-On NOx Control Equipment</u> Maintain records of the following information:</p> <ul style="list-style-type: none"> <li>a.) Air pollution control device identification number, type, model number, and manufacturer;</li> <li>b.) Installation date;</li> <li>c.) Unit(s) controlled;</li> <li>d.) Type and location of the capture system, capture efficiency percent, and method of determination;</li> <li>e.) Information as to whether the air pollution control device is always in operation when the fuel burning device it is serving is in operation;</li> <li>f.) Destruction or removal efficiency of the air pollution control equipment, including the following information:                             <ul style="list-style-type: none"> <li>1.) Destruction or removal efficiency, in percent;</li> <li>2.) Date tested;</li> <li>3.) Emission test results; and</li> <li>4.) Method of determining destruction or removal efficiency, if not tested.</li> </ul> </li> </ul>	Maintain at the facility at all times	EU01 and EU02	Env-A 905.03
10.	<p><u>SCR Catalyst Management Plan</u> The catalyst management plan shall be maintained at the facility and be available for review by the department/USEPA upon request.</p>	As specified	PCE1 and PCE2	Env-A 906.01

**Table 11 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
11.	<p><u>VOC Emission Statements</u></p> <p>If the actual annual VOC emissions from all permitted devices located at the facility are greater than or equal to 10 tpy, then record the following information:</p> <ul style="list-style-type: none"> <li>a.) Identification of each VOC-emitting process or device;</li> <li>b.) The operating schedule during the high ozone season for each VOC-emitting process or device identified in a. above, including:                             <ul style="list-style-type: none"> <li>1.) Typical hours of operation per day; and</li> <li>2.) Typical days of operation per calendar month; and</li> </ul> </li> <li>c.) The following VOC emission data from all VOC-emitting processes or devices identified in a.) above, including:                             <ul style="list-style-type: none"> <li>1.) Actual monthly VOC emissions, in tons;</li> <li>2.) Typical high ozone season day VOC emissions, in pounds per day; and</li> <li>3.) The emission factors and the origin of the emission factors used to calculate the VOC emissions.</li> </ul> </li> </ul>	<p>Continuous, annually, and during the high ozone season, as specified</p>	<p>EU01, EU02 and EU04</p>	<p>Env-A 904.02</p>
12.	<p><u>Regulated Toxic Air Pollutants</u></p> <p>Maintain records documenting compliance with Env-A 1400. Compliance was demonstrated at the time of permit issuance as described in the Application Review Summary prepared by the department for permit application #20-0115. The source must update the compliance demonstration using one of the methods provided in Env-A 1405 if:</p> <ul style="list-style-type: none"> <li>a.) There is a revision to the list of RTAPs lowering the AAL or <i>de minimis</i> Value for any RTAP emitted at the facility;</li> <li>b.) The amount of any RTAP emitted is greater than the amount that was evaluated in the Permit Application Review;</li> <li>c.) An RTAP that was not evaluated in the Permit Application Review Summary will be emitted; and</li> <li>d.) Stack conditions (e.g. air flow rate) change.</li> </ul>	<p>Update prior to process changes and within 90 days of each revision of Env-A 1400</p>	<p>Facility wide</p>	<p>Env-A 902.01</p>

**Table 11 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
13.	<p><u><i>CEMS Monitoring Plan</i></u></p> <p>a.) Prepare and maintain a monitoring plan for the CEMS which contains:</p> <ol style="list-style-type: none"> <li>1.) Sufficient information to demonstrate that all unit SO<sub>2</sub> emissions, NO<sub>x</sub> emissions and CO<sub>2</sub> emissions are monitored and reported.</li> <li>2.) The information specified in 40 CFR 75.53 and Env-A 808.04.</li> <li>3.) Pursuant to Env-A 3210.11(a), the units subject to acid rain emission limitations shall comply with the requirements of 40 CFR 75.62, except the monitoring plan shall also include all of the information required by 40 CFR 75, Subpart H.</li> <li>4.) Pursuant to Env-A 808.11(d), the monitoring plan must include which of the two percent data availability calculation methods described in 40 CFR 75.32 or Env-A 808.11(c) is used for each gaseous concentration monitor located at the source.</li> </ol> <p>b.) Revise or update the monitoring plan whenever the Owner or Operator makes a replacement, modification or change that could affect the CEMS or other approved monitoring method.</p>	Maintain on a continuous basis and update as necessary	EU01 and EU02	40 CFR 75.53, 40CFR 75.73, Env-A 808.04, Env-A 3210.11 and Env-A 4609
14.	<p><u><i>QA/QC Plan</i></u></p> <p>a.) Prepare and maintain the quality assurance/quality control (QA/QC) plan which shall contain written procedures for implementation of a QA/QC program that meets the criteria specified in 40 CFR 60, Appendix F, Procedure 1, Section 3 and 40 CFR 75, Appendix B, Section 1 for each CEMS, as applicable.</p> <p>b.) Review the QA/QC plan and all data generated by its implementation;</p> <p>c.) Revise or update the QA/QC plan by:</p> <ol style="list-style-type: none"> <li>1.) Documenting the replacement of any damaged or malfunctioning CEM system components in order to maintain the collection of valid CEM data and to maximize data availability.</li> <li>2.) Documenting any changes made to the CEM or changes to any information provided in the monitoring plan required pursuant to Env-A 808.04 and Table 11, Item 13.</li> <li>3.) Including a schedule of, and describing, all maintenance activities that are required by the</li> </ol>	<p>Maintain Continuously</p> <p>At least annually</p> <p>As necessary based upon results of the annual review</p>	EU01 and EU02	Env-A 808.06

**Table 11 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	<p>CEM manufacturer or that might have an effect on the operation of the system.</p> <p>4.) Describing how the audits and testing required by Env-A 808 and this permit will be performed.</p> <p>5.) Including examples of the reports that will be used to document the audits and tests required by Env-A 808 and this permit.</p> <p>d.) The QA/QC plan and any revisions to the QA/QC plan shall be considered updates to the CEM monitoring plan required by Env-A 808.04.</p>			
15.	<p><u>General Acid Rain Recordkeeping Provisions</u></p> <p>For each affected unit maintain records of:</p> <p>a.) Operating parameters (operating time, heat input, and load), diluent monitor data, NO<sub>x</sub> and CO<sub>2</sub> emissions and percent monitoring system data availability; and</p> <p>b.) The causes of any missing data periods and the actions taken to correct such causes.</p>	Maintain on a continuous basis	EU01 and EU02	40 CFR 75.57
16.	<p><u>Certification, Quality Assurance and Quality Control Records</u></p> <p>a.) Maintain records of the information required pursuant to 40 CFR 75.59 and 75.73(b) which includes the certification, quality assurance, and quality control records.</p> <p>b.) These shall include records of all daily and 7-day calibration error tests, daily interference checks, cycle time tests, linearity checks and relative accuracy test audits, as applicable.</p>	Maintain on a continuous basis	EU01 and EU02	40 CFR 75.59, 40 CFR 75.73 and Env-A 3210
17.	<p><u>Retention of NSPS Records</u></p> <p>Maintain records of:</p> <p>a.) Measurements, including CEMS and performance testing measurements.</p> <p>b.) Any periods during which a CEMS or monitoring device is inoperative.</p> <p>c.) CEMS performance evaluations.</p> <p>d.) CEMS calibration checks, adjustments and maintenance; and</p> <p>e.) All other information required by 40 CFR 60 Subpart GG.</p>	All NSPS records to be maintained for 5 years	EU01 and EU02	40 CFR 60.7(b) and (f)

Table 11 - Recordkeeping Requirements				
Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
18.	<p><u>Operation Log for the Emergency RICE</u></p> <p>Maintain records of:</p> <p>a.) Hours of operation;</p> <p>b.) Number of hours spent for emergency operation, including what classified the operation as emergency and maintenance and testing hours;</p> <p>c.) Maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE was operated and according to the maintenance plan; and</p> <p>d.) A current copy of the Operation and Maintenance manual for the engine and its associated control device (if any).</p>	Continuous	EU04	40 CFR 63.6655 NESHAP Subpart ZZZZ
19.	<p><u>Recordkeeping Requirements for Permit Deviations</u></p> <p>Recordkeeping of deviations from Permit requirements shall be conducted in accordance with Section XXVII of this Permit.</p>	Maintain Up-to-date Data	Facility Wide	Env-A 911 (effective 4-21-2007)

**I. Reporting Requirements**

1. Pursuant to Env-C 203.02(b), *Date of Issuance or Filing*, written documents shall be deemed to have been filed with or received by the department on the actual date of receipt by the department, as evidenced by a date stamp placed on the document by the department in the normal course of business<sup>16</sup>.
2. All emissions data submitted to the department shall be available to the public. Claims of confidentiality for any other information required to be submitted to the department pursuant to this permit shall be made at the time of submission in accordance with Env-C 208.04, *Initial Claim of Confidentiality*.
3. The Owner or Operator shall be subject to the reporting requirements identified in Table 12 below:

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<sup>16</sup> Reports that are required to be submitted to the department shall be considered as having been received prior to the deadline specified in the permit, if they are received electronically by the department prior to the close of business on the due date. A written copy of the document signed by the responsible official shall follow the electronic submittal.

Table 12 - Applicable Reporting Requirements				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
1.	Any report submitted to the department and/or USEPA shall include the certification of accuracy statement outlined in Section XXI.B. of this Permit and shall be signed by the responsible official.	With each report	Facility wide	40 CFR 70.6(c)(1)
2.	<p><u>Annual Emissions Report</u> Submit an annual emissions report which shall include the following information:</p> <p>a.) Actual calendar year emissions of NO<sub>x</sub>, CO, SO<sub>2</sub>, total VOCs, HAPs (speciated by CAS number), CO<sub>2</sub>e, filterable and condensable PM, filterable PM<sub>10</sub>, filterable PM<sub>2.5</sub>, ammonia and RTAPs<sup>17</sup> (speciated by CAS number), as applicable from each device.</p> <p>b.) The methods used in calculating such emissions in accordance with Env-A 705.03, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fees</i>.</p> <p>c.) The emission factors and the origin of the emission factors; and</p>	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	EU01 through EU04	Env-A 907.02 effective 7-18-15 (formerly Env-A 907.01)
	d.) Net electrical output for the ozone season, on a monthly basis.		EU01 and EU02	Env-A 3205.03(f)
3.	<p><u>Semi-annual Permit Deviation and Monitoring Report</u> The Owner or Operator shall submit a semi-annual permit deviation and monitoring report, which contains:</p> <p>a.) Summaries of all monitoring and testing requirements contained in this permit; and</p> <p>b.) A summary of all permit deviations that have occurred during the reporting period.</p>	Semi-annually received by the department no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year.	Facility wide	Env-A 911 and 40 CFR 70.6(a)(3)(iii)(A)
4.	<p><u>Annual Emission Fee</u> Pay annual fee in accordance with Condition XXIII.</p>	Annually (received by the department no later than May 15 <sup>th</sup> of the following year)	EU01 through EU04	Env-A 705.04

<sup>17</sup> Devices exempt from Env-A 1400 do not need to report RTAPs.

**Table 12 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
5.	Submit a report containing the information specified in Table 11, Item 4.	Quarterly (received no later than 30 days after the end of each calendar quarter)	EU01 and EU02	FP-T-0144 and Env-A 910
6.	<p><u>VOC Reporting Requirements</u></p> <p>If the actual annual VOC emissions from all permitted devices located at the facility are greater than or equal to 10 tpy, then include the information recorded in Table 11, Item 11 with the annual emission report required in Table 12, Item 2.</p>	Annually (no later than April 15 <sup>th</sup> of the following year)	EU01, EU02 and EU04	Env-A 908
7.	<p><u>NOx Reporting Requirements</u></p> <p>If the actual NOx emissions from all permitted devices located at the Facility are greater than 10 tpy, then Include all the data recorded pursuant to Table 11, Item 8 with the annual emission report.</p>	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	EU01, EU02 and EU04	Env-A 909.03
8.	<p><u>Reporting Permit Deviation Caused by Failure to Comply with Data Availability Requirements</u></p> <p>If the Owner or Operator of the source discovers that it has failed to meet the percent data availability requirement in the previous calendar quarter or in the calendar quarter in which it is currently operating, the owner or operator of the source shall, in addition to the permit deviation reporting required by Condition XXVII:</p> <p>a.) Notify the department by telephone, fax, or e-mail (pdeviations@des.nh.gov) within 10 days of discovery of the permit deviation.</p> <p>b.) Submit a plan to the department, within 30 days of discovery, specifying in detail the steps it plans to take in order to meet the availability requirements for future calendar quarters.</p> <p>c.) Implement the plan to meet the data availability requirements no later than 30 days after the end of the quarter of failure.</p>	As specified	EU01 and EU02	Env-A 808.11(e) and Env-A 911.04(c)

Table 12 - Applicable Reporting Requirements				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
9.	<p><u>NSPS Subpart GG Excess Emission Reports</u></p> <p>Submit excess emissions and monitor downtime reports and/or summary report forms to USEPA and the department, which shall include the following information:</p> <ul style="list-style-type: none"> <li>a.) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.</li> <li>b.) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the facility, the nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.</li> <li>c.) The date and time identifying each period during which the continuous monitoring systems was inoperative except for zero and span checks and the nature of the system repairs or adjustments.</li> <li>d.) When no excess emissions have occurred or the continuous monitoring systems have not been operative, repaired, or adjusted, such information shall be stated in the report.</li> <li>e.) Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction.</li> <li>f.) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO<sub>x</sub> concentration exceeds the applicable emission limit in §60.332(a)<sup>18</sup>. For the purposes of this subpart, a “4-hour rolling average NO<sub>x</sub> concentration” is the arithmetic average of the average NO<sub>x</sub> concentration measured by the CEMS for a given hour (corrected to 15 percent O<sub>2</sub>) and the three unit operating hour average NO<sub>x</sub> concentrations immediately preceding that unit operating hour.</li> <li>g.) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO<sub>x</sub> concentration or diluent (or both).</li> <li>h.) 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. Ambient conditions do not have to be reported if the worst case ISO correction factor as specified in §60.334(b)(3)(ii) are used, or if the ISO correction equation under the provisions of §60.335(b)(1) are not used.</li> </ul>	Semi-annually (received no later than 30 days after the end of each 6-month period)	EU01 and EU02	40 CFR 60.7(c) and 40 CFR 60.334(j)(1)(iii) Subpart GG



Table 12 - Applicable Reporting Requirements				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
10.	<p><u>CO<sub>2</sub> Budget Trading Program Reports</u> Submit quarterly CO<sub>2</sub> budget reports which include:</p> <ul style="list-style-type: none"> <li>a.) The CO<sub>2</sub> mass emissions data for the CO<sub>2</sub> budget unit, in an electronic format prescribed by USEPA unless otherwise prescribed by the regional organization, for each calendar quarter in the manner specified in Subpart H of 40 CFR 75 and 40 CFR 75.64;</li> <li>b.) For each CO<sub>2</sub> budget unit, all of the data and information required in Subpart G of 40 CFR 75, except for opacity, NO<sub>x</sub>, and SO<sub>2</sub> provisions; and</li> <li>c.) A compliance certification with, and in support of, each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:                             <ul style="list-style-type: none"> <li>1.) The monitoring data submitted were recorded in accordance with the applicable requirements of both 40 CFR 75 and Env-A 4600, including the quality assurance procedures and specifications; and</li> <li>2.) The CO<sub>2</sub> concentration values substituted for missing data under Subpart D of 40 CFR 75 do not systematically underestimate CO<sub>2</sub> emissions.</li> </ul> </li> </ul>	Quarterly (no later than 30 days following the end of each quarterly reporting period)	EU01 and EU02	Env-A 4609.16(c)
11.	<p><u>CO<sub>2</sub> Budget Program Compliance Certification</u></p> <ul style="list-style-type: none"> <li>a.) For each control period in which a CO<sub>2</sub> budget source is subject to the requirements of Env-A 4605, submit electronically to the regional organization a compliance certification report;</li> <li>b.) A compliance report shall not be required during an interim control period; and</li> <li>c.) The compliance certification report shall include the information specified in Env-A 4605.09(c).</li> </ul>	By March 1 (following the relevant control period)	EU01 and EU02	Env-A 4605.09
12.	<p><u>Certification by the CO<sub>2</sub> Authorized Account Representative</u> Any submission under the CO<sub>2</sub> budget trading program shall be signed and certified by the CO<sub>2</sub> Authorized Account Representative and shall include the certification statement pursuant to Env-A 4604.02(a).</p>	With each CO <sub>2</sub> Budget Program submittal	EU01 and EU02	Env-A 4604.02
13.	<p><u>NO<sub>x</sub> Budget Program Compliance Certification</u> For each control period, submit an annual compliance certification containing the information listed in Env-A 3213.03.</p>	By November 30 <sup>th</sup> of each year	EU01 and EU02	Env-A 3213

<sup>18</sup> Approximately 87 ppmvd @ 15% O<sub>2</sub>; assuming no NO<sub>x</sub> emission allowance for fuel-bound nitrogen (FBN).

Table 12 - Applicable Reporting Requirements				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
14.	<p><u>Offset Plans for Excess Emissions of SO<sub>2</sub></u> If a unit has excess SO<sub>2</sub> emissions, submit an offset plan which contains the information specified in 40 CFR 77.3(d).</p>	60 days after the end of any calendar year in which the unit has excess SO <sub>2</sub> emissions	EU01 and EU02	40 CFR 77.3
15.	<p><u>Certification by the Designated Representative or the Alternate Designated Representative</u> Any document submitted under the Acid Rain program shall be signed and certified by the designated representative or the alternate designated representative and include the statements pursuant to 40 CFR 72.21(a)(1) and (2).</p>	With each Acid Rain submittal	EU01 and EU02	40 CFR 72.21
16.	<p><u>CEMS Recertification Notifications and Reports</u> a.) Notification of full recertification:                      1.) Submit notifications of full recertification testing under 40 CFR 75.20(b)(2) to the department and USEPA at least 30 days prior to the first scheduled day of recertification testing.                      2.) In emergency situations when full recertification testing is required following an uncontrollable failure of equipment that results in lost data, notice shall be sufficient if provided within 2 business days following the date when testing is scheduled.                      3.) Testing may be performed on a date other than that already provided in a notice as long as notice of the new date is provided either in writing or by telephone or other means at least 7 days prior to the original scheduled test date or the revised test date, whichever is earlier.                      b.) Notification of partial recertification testing:                      1.) Submit notifications for retesting required following a loss of certification under 40 CFR 75.20(a)(5) or for partial recertification testing required under 40 CFR 75.20(b)(2), to the department and USEPA either in writing or by telephone at least 7 days prior to the first scheduled day of testing,                      2.) Except that in emergency situations when testing is required following an uncontrollable failure of equipment that results in lost data, notice shall be sufficient if provided within 2 business days following the date when testing is scheduled.                      3.) Testing may be performed on a date other than that already provided in a notice long as notice of the new date is provided by telephone or other means at least 2 business days prior to the original scheduled test date or the revised test date, whichever is earlier.</p>	As specified	EU01 and EU02	40 CFR 75.61 (a)(1), 75.63, 75.70, 75.73(d), Env-A 808 and Env-A 3210

Table 12 - Applicable Reporting Requirements				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>c.) Within 45 calendar days after completing all recertification tests submit to USEPA and the department, the electronic and hardcopy information contained in 40 CFR 75.63.</p> <p>d.) Pursuant to Env-A 3210.12, submit an application to the department within 45 days after completing all recertification tests including the information required under 40 CFR 75, Subpart H.</p>			
17.	<p><u>Relative Accuracy Test Audit Reports</u></p> <p>a.) Submit a summary of the results of the RATA testing by the earlier of 45 calendar days following the completion of the RATA or the date established in the section of 40 CFR 60 or 40 CFR 75 that requires performance of the RATA.</p> <p>b.) For gaseous CEM audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1 or 40 CFR 75.59(a)(9), as applicable.</p> <p>c.) If requested, submit a hardcopy RATA report to USEPA within 45 days after completing the RATA or within 15 days of receiving the request, whichever is later.</p>	As specified	EU01 and EU02	40 CFR 75.59(a)(9), 40 CFR 75.60(b)(6), 40 CFR 75.73(d), Env-A 3210 and Env-A 808.07(e)
18.	<p><u>Monitoring Plan Submittals</u></p> <p>a.) Electronic copy: Submit a complete, electronic, up-to-date monitoring plan file (except for hardcopy portion) to USEPA as follows:</p> <ol style="list-style-type: none"> <li>1.) At the time of recertification application submission;</li> <li>2.) Prior to or concurrent with the submittal of the electronic quarterly report for a reporting quarter where an update of the electronic monitoring plan information is required under 40 CFR 75.53(b).</li> </ol> <p>b.) Hardcopy: Submit hardcopy information to USEPA only if that portion of the monitoring plan is revised. The Owner or Operator shall submit the required hardcopy information as follows: with any certification or recertification application, if a hardcopy monitoring plan change is associated with the certification or recertification event; and within 30 days of any other event with which a hardcopy monitoring plan change is associated, pursuant to 40 CFR 75.53(b). Electronic submittal of all monitoring plan information, including hardcopy portions, is permissible provided that a paper copy of the hardcopy portions can be furnished upon request.</p>	As specified	EU01 and EU02	40 CFR 75.62 and 40 CFR 75.73(e)

Table 12 - Applicable Reporting Requirements				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
19.	<p><u>CEMS QA/QC Plan Updates</u></p> <p>a.) No later than April 15 of each year, either:</p> <ol style="list-style-type: none"> <li>1.) Submit to the department the revised QA/QC plan and the reasons for each change, and certify in writing that the Owner or Operator is implementing the revised QA/QC plan; or</li> <li>2.) Certify in writing that no changes have been made to the plan and that the Owner or Operator will continue to implement the existing QA/QC plan.</li> </ol> <p>b.) If the department requests a revision to the QA/QC plan, the Owner or Operator shall submit a revised plan within 45 days of the date of the request.</p>	Annually	EU01 and EU02	Env-A 808.06
20.	<p><u>Quarterly Reports required by 40 CFR 75</u></p> <p>a.) Electronically submit to the department and USEPA quarterly reports which include the following:</p> <ol style="list-style-type: none"> <li>1.) The data and information in 40 CFR 75.64(a), (b) and (c) and 75.73(f).</li> <li>2.) Pursuant to Env-A 3211.03, NOx emissions in lb/hr for every hour during the control period and cumulative quarterly and seasonal NOx emission data in pounds.</li> <li>3.) Pursuant to Env-A 3211.02, the Owner or Operator shall also submit emissions and operations information in electronic format as part of the quarterly reports.</li> <li>4.) A certification by the Designated Representative that the component and system identification codes and formulas in the quarterly electronic reports represent current operating conditions.</li> <li>5.) The reports may include explanatory text or comments, so long as the information is provided in a format that is compatible with the other data required to be reported under 40 CFR 75.64.</li> </ol> <p>b.) Electronic format: Each quarterly report shall be submitted in a format to be specified by USEPA, including both electronic submission of data and (unless otherwise approved by USEPA) electronic submission of compliance certifications.</p> <p>c.) Method of submission: All quarterly reports shall be submitted to USEPA by direct computer-to-computer electronic transfer via USEPA-provided software, unless otherwise approved by USEPA.</p>	Quarterly (no later than 30 days following the end of each quarterly reporting period)	EU01 and EU02	40 CFR 75.64, 40 CFR 75.73(f), 40 CFR 75.74, and Env-A 3211

**Table 12 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
21.	<p><u>Quarterly Emission Reports required by Env-A 808</u></p> <p>a.) Submit to the department emission reports containing the following information:</p> <ol style="list-style-type: none"> <li>1.) Excess emission data recorded by the CEM system, including:</li> <li>2.) The date and time of the beginning and ending of each period of excess emission;</li> <li>3.) The actual emissions measured by the CEM system during the excess emission;</li> <li>4.) The total amount of emissions above the emissions limit, or percent above the emissions limit, during the period of excess emissions;</li> <li>5.) The specific cause of the excess emission; and</li> <li>6.) The corrective action taken;</li> </ol> <p>b.) If no excess emissions have occurred, a statement to that effect;</p> <p>c.) For gaseous measuring CEM systems, the daily averages of the measurements made and emission rates calculated;</p> <p>d.) A statement as to whether the CEM system was inoperative, repaired, or adjusted during the reporting period;</p> <p>e.) If the CEM system was inoperative, repaired, or adjusted during the reporting period, the following information:</p> <ol style="list-style-type: none"> <li>1.) The date and time of the beginning and ending of each period when the CEM was inoperative;</li> <li>2.) The reason why the CEM was inoperative;</li> <li>3.) The corrective action taken;</li> </ol> <p>f.) For all "out of control periods" the following information:</p> <ol style="list-style-type: none"> <li>1.) Beginning and ending times of the out of control period;</li> <li>2.) The reason for the out of control period;</li> <li>3.) The corrective action taken.</li> </ol> <p>g.) The date and time of the beginning and ending of each period when the source of emissions which the CEM system is monitoring was not operating;</p> <p>h.) The span value, as defined in Env-A 105.10, and units of measurement for each analyzer in the CEM system;</p> <p>i.) When calibration gas is used, the following information:</p> <ol style="list-style-type: none"> <li>1.) The calibration gas concentration;</li> <li>2.) If a gas bottle was changed during the quarter:               <ol style="list-style-type: none"> <li>i.) The date of the calibration gas bottle change;</li> <li>ii.) The gas bottle concentration before the change;</li> <li>iii.) The gas bottle concentration after the change;</li> </ol> </li> </ol>	<p>Quarterly (received by the department no later than 30 days following the end of each quarterly reporting period)</p>	<p>EU01 and EU02</p>	<p>40 CFR 75.65, Env-A 808.13, Env-A 808.15 and Env-A 808.16</p>

Table 12 - Applicable Reporting Requirements				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	3.) The expiration date for all calibration gas bottles used. j.) The percent data availability calculated in accordance with Env-A 808.11 for each gaseous monitor in the CEM system; k.) All information required above shall be clearly indicated, labeled, and formatted such that compliance with all emissions standards to which the source is subject, can be determined and any periods of excess emissions, substitution of missing or invalid CEM data, CEM calibration, CEM maintenance, or startup, shutdown, or malfunction can be easily identified.			
22.	<u>Annual Compliance Certification</u> Annual compliance certification shall be submitted in accordance with Condition XXI of this Permit.	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	Facility wide	40 CFR 70.6(c)(1)
23.	<u>Update to Air Pollution Dispersion Modeling Impact Analysis</u> If an update to the facility's air pollution dispersion modeling impact analysis is required pursuant to Env-A 606.02, submit the information required pursuant to Env-A 606.04.	As specified	EU01, EU02 and EU03	Env-A 910.01
24	<u>SCR Catalyst Management Plan</u> If the owner or operator determines that the information and procedures documented in the catalyst management plan submitted with Application 20-0115 need to be changed at any time to accurately represent the activities performed to maintain the control equipment, the owner or operator shall submit a revised management plan to the department in writing.	Submit to the department within 30 days of any change to the plan	PCE1 and PCE2	Env-A 810.01(e)

**J. Cooling Water Treatment, Testing and Monitoring Requirements**

1. Cooling water supplied from the effluent from the Manchester Waste Water Treatment Plant (WWTP) shall be treated in the following manner:
  - a. GRE shall monitor total residual chlorine continuously at the terminal point of the cooling water pipeline on the GRE site.
  - b. GRE shall adjust the chlorination at the WWTP to maintain the total chlorine residual  $\geq 1.0$  mg/L at the terminal point of the cooling water pipeline.
  - c. GRE shall continuously monitor turbidity at the inlet to the pretreatment clarifier (Actifloc unit)<sup>19</sup>.
  - d. GRE will chlorinate the WWTP effluent at the inlet to the Actifloc unit if needed to maintain total chlorine residual of  $\geq 1.0$  ppm (based on a 15-minute block average). If the Actifloc inlet chlorination meter is declared inoperable, return the process meter to service within 8 hours, or implement grab sampling and analysis every 4 hours to confirm inlet total chlorine is  $\geq 1.0$  ppm. Maintain grab sampling until the process meter is returned to operability.
  - e. GRE shall monitor the total free halogen residual continuously in the cooling tower basin to maintain a total free halogen residual  $> 0.2$  mg/l in the cooling tower basin. If the cooling tower basin free halogen monitor is declared inoperable, return the process meter to service within 8 hours, or implement grab sampling and analysis every 4 hours to confirm that the cooling tower basin total free halogen is  $\geq 0.2$  mg/l. Maintain grab sampling until the free halogen monitor is returned to operability.
  - f. GRE shall continuously monitor pH of water in the cooling tower basin.
  - g. GRE shall maintain the pH of water in the cooling tower basin within the range of 6.5 to 8.5. If the cooling tower basin pH monitor is declared inoperable, return the process meter to service within 8 hours, or implement grab sampling and analysis every 4 hours to confirm basin pH is  $\geq 6.5$  and  $\leq 8.5$ . Maintain grab sampling until the pH monitor is returned to operability.
  - h. GRE shall continuously monitor turbidity in the effluent from the Actifloc unit. If the turbidity in the effluent from the Actifloc unit exceeds 5.0 NTU (based on a 15-minute block average), backwash of the affected Actifloc train will be initiated, terminating flow to the clearwell. If a process turbidity meter for the Actifloc filter outlet is declared inoperable, return the process meter to service within 8 hours, or implement grab sampling from the affected monitoring point at hourly intervals. Maintain grab sampling until the process meter is returned to operability. The facility will use a portable turbidity meter to verify the turbidity levels of the grab samples. Initiate Actifloc filter backwash for any sample measurement  $> 5.0$  NTU (15-minute block average).
  - i. GRE shall terminate the process flow through the affected Actifloc filter and initiate backwash to the general wastewater sump/POTW, bypassing the cooling tower, if a 15-minute block average turbidity monitored at the Actifloc outlet exceeds 5 NTU.

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<sup>19</sup> The facility's water treatment system includes two trains of Actifloc filters. Each train has a nominal flow rating of 1,400 gallons per minute (gpm) and a maximum flow rating of 1,600 gpm. Each filter consists of five compartments - the coagulation, injection, maturation, settling/clarification and filtration sections.

- j. Alternatively, GRE shall continuously monitor turbidity at the clearwell outlet before any discharge to the treated water storage unit (TWST) and cooling tower basin. The turbidity in the effluent from the clearwell outlet shall not exceed 5.0 NTU (based on a 15-minute block average). If turbidity exceeds 5.0 NTU at the clearwell outlet, the discharge shall be returned to the Actifloc unit.
2. GRE shall maintain records sufficient to determine compliance with Condition VIII.J. above. Such records shall be made available for inspection upon request by DES.

## IX. Requirements Currently Not Applicable

At the time of issuance of this Permit, the Permittee is not subject to the requirements of:

- A. 40 CFR 60 Subpart KKKK Standards of Performance for Stationary Gas Turbines;
- B. 40 CFR 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines;
- C. 40 CFR 63 Subpart Q National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers; and
- D. 40 CFR 63 Subpart YYYY National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines.

## GENERAL TITLE V REQUIREMENTS

### X. Issuance of a Title V Operating Permit

- A. This Permit is issued in accordance with the provisions of Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the five (5) years after issuance of this Permit.
- B. Permit expiration terminates the Owner or Operator's right to operate the emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is received by the Department at least 6 months before the expiration date.

### XI. Title V Operating Permit Renewal Procedures

Pursuant to Env-A 609.07(b), an application for renewal of this Permit shall be considered timely if it is received by the Department at least six months prior to the designated expiration date of the current Title V operating permit.

### XII. Application Shield

Pursuant to Env-A 609.08, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a permit shall not be considered a violation of this part until the department takes final action on the application.

### XIII. Permit Shield

- A. Pursuant to Env-A 609.09(a), a permit shield shall provide that:
  1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and
  2. The Owner or Operator need not comply with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and specifically identified in Section IX of this Title V Operating Permit as not applicable to the stationary source or area source.



- B. The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.09(b). It shall not apply to certain conditions as specified in Env-A 609.09(c) that may be incorporated into this Permit following permit issuance by the department.
- C. If a Title V Operating Permit and amendments thereto issued by the department does not expressly include or exclude an applicable requirement or a state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the owner or operator shall comply with the provisions of said requirement to the extent that it applies to the owner or operator, stationary source, area source or device.
- D. If the department determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant, owner or operator of stationary source, area source or device, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.
- E. Pursuant to Env-A 609.09(f), nothing contained in Section XIII of this Permit shall alter or affect the ability of the department to reopen this Permit for cause in accordance with Env-A 609.19 and Condition XIV or to exercise its summary abatement authority pursuant to RSA 125-C:15, I.
- F. Pursuant to Env-A 609.09(g), nothing contained in this section or in any Title V operating permit issued by the department shall alter or affect the following:
  - 1. The ability of the department to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;
  - 2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;
  - 3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the USEPA Administrator under that section;
  - 4. 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;
  - 5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;
  - 6. The ability of the department or the USEPA Administrator to obtain information about a stationary source, area source, or device from the owner or operator pursuant to section 114 of the CAA; or
  - 7. The ability of the department or the USEPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

#### **XIV. Reopening for Cause**

The department shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.19(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.19(b) through (g).

#### **XV. Administrative Permit Amendments**

- A. Pursuant to Env-A 612.01, the owner or operator may implement the changes addressed in the request for an administrative permit amendment as defined in Env-A 101 immediately upon filing the request with the department.

- B. Pursuant to Env-A 612.01, the department shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

## **XVI. Operational Flexibility**

- A. Pursuant to Env-A 612.02, the owner or operator subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Section XVI. B through E of this permit, as applicable.
1. The change is not a modification under any provision of Title I of the CAA;
  2. The change does not cause emissions to exceed the emissions allowable under the Title V Operating Permit, whether expressed therein as a rate of emissions or in terms of total emissions;
  3. The owner or operator has obtained any temporary permit required by Env-A 600;
  4. The owner or operator has provided written notification to the department and USEPA Administrator of the proposed change and such written notification includes:
    - a. The date on which each proposed change will occur or has occurred;
    - b. A description of each such change;
    - c. Any change in emissions that will result;
    - d. A request that the operational flexibility procedures be used; and
    - e. The signature of the responsible official, consistent with Env-A 605.04(b); and
  5. The owner or operator has attached each written notice required above to its copy of the current Title V Operating Permit.
- B. For changes involving the trading of emissions, the Owner or Operator must also meet the following conditions:
1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions, including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;
  2. The owner or operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes at the permitted facility which qualify under a federally-enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;
  3. The department has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce emissions trades; and
  4. The written notification required in Condition XVIA above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.
- C. For off-permit changes, the owner or operator must also meet the following conditions:

1. Each off-permit change meets all applicable requirements and does not violate any existing permit term or condition;
  2. The owner or operator provides contemporaneous written notification to the department and the USEPA Administrator of each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.04;
  3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;
  4. The owner or operator keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this Permit, and the emissions resulting from those changes; and
  5. The written notification required in Condition XVI.A. above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.
- D. For section 502(b)(10) changes, the Owner or Operator must also meet the following conditions:
1. The written notification required in Condition XVI.A above is made at least 7 days prior to the proposed change; and
  2. The written notification required in Condition XVI.A above includes any permit term or condition that is no longer applicable as a result of the change.
- E. Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) change shall not qualify for the permit shield under Env-A 609.09.

## **XVII. Minor Modifications**

- A. Prior to implementing a minor Title V Operating Permit modification, the owner or operator shall submit a written request to the department in accordance with the requirements of Env-A 612.05(b) through (d).
- B. The request for a minor Permit modification shall include the following:
1. An application form containing all information pertinent to the modification, including, if applicable, the information in Env-A 1709;
  2. The fee(s) specified in Env-A 702 through Env-A 705, as applicable;
  3. A description of the change, the emissions resulting from the change, and any new requirements that will apply if the change occurs;
  4. Where air pollution dispersion modeling is required for a source or device pursuant to Env-A 606.02, the information required pursuant to Env-A 606.03;
  5. The owner or operator's proposed draft Permit conditions;
  6. Certification by a responsible official, consistent with the provisions of Env-A 605.04(b), that the proposed change meets the criteria for the use of the minor Permit modification procedures; and
  7. A request that minor Permit modification procedures be used.
- C. The department shall take final action on the minor Permit modification request in accordance with the provisions of Env-A 612.05(e) through (g).
- D. Pursuant to Env-A 612.05(h), the owner or operator may implement the proposed change immediately upon filing a request for a minor Permit modification with the department.

- E. Pursuant to Env-A 612.05(i), pending final action on the Permit modification by the department, the owner or operator shall comply with both the applicable requirements governing the change and the proposed Permit conditions.
- F. Pursuant to Env-A 612.05(j), the Permit shield specified in Env-A 609.09 shall not apply to minor Permit modifications under Section XVII of this Permit.
- G. Pursuant to Env-A 612.05(a), the owner or operator shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the department of a request for a minor Permit modification.

### **XVIII. Significant Permit Modifications**

- A. Pursuant to Env-A 612.06, a change at the Facility shall qualify as a significant Permit modification if it meets the criteria specified in Env-A 612.06(a)(1) through (5).
- B. Prior to implementing a significant Permit modification, the owner or operator shall file a written request with the department which includes the following:
  - 1. An application form containing all information pertinent to the modification, including, if applicable, the supplemental information specified in Env-A 1709;
  - 2. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  - 3. The owner or operator's suggested draft Permit conditions;
  - 4. Certification by a responsible official, consistent with the provisions of Env-A 605.04(b), that the proposed change meets the criteria for the use of the significant Permit modification procedures;
  - 5. A request that the significant Permit modification procedures be used;
  - 6. Air pollution dispersion modeling impact analysis documentation in accordance with Env-A 606.04, as applicable; and
  - 7. The fee(s) specified in Env-A 702 through Env-A 705, as applicable.
- C. Pursuant to Env-A 612.06(d), the applicant shall forward a copy of the request for a significant Permit modification, including those items listed in Condition XVIIB(1) through (4), to USEPA.
- D. The department shall take final action on the significant Permit modification request in accordance with the provisions of Env-A 612.06 (e) and (f).
- E. Pursuant to Env-A 612.06(g), the owner or operator shall obtain an amended Title V Operating Permit from the department which incorporates the significant Permit modification prior to implementing such modification, except as provided in Env-A 609.07(a)(3).
- F. The owner or operator shall be subject to the provisions of RSA 125-C:15 if a request for a significant Permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Title V Operating Permit.

**XIX. Title V Operating Permit Suspension, Revocation or Nullification**

Pursuant to RSA 125-C:13 and 541-A:30, the Director may terminate, modify, revoke or reissue for cause any Permit or authorization issued to an affected source, prior to expiration of such Permit, consistent with the requirements of the Clean Air Act.

**XX. Inspection and Entry**

USEPA and department personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6,VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

**XXI. Certifications****A. Compliance Certification Report**

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify for the previous calendar year that the facility is in compliance with the requirements of this Permit. The report shall be submitted annually, no later than April 15<sup>th</sup> of the following year. The report shall be submitted to the department and to the U.S. Environmental Protection Agency – Region I. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5) and Env-A 907.03, the report shall include the following information for each and every requirement and condition of the effective Permit:

1. The particular Permit condition or item number that references each requirement, and a brief summary of the requirement;
2. The compliance status of the source with respect to the requirement and whether during the year compliance with the requirement was continuous, intermittent, not achieved, or not applicable;
3. The method(s) used to determine compliance, including a description of the monitoring, recordkeeping, and reporting requirements or test methods;
4. The frequency, either continuous or intermittent, of the method(s) used to determine compliance;
5. If compliance was not continuous, a description of each Permit deviation; and
6. Any additional information required in order for the department to determine the compliance status of the source.

**B. Certification of Accuracy Statement**

All documents (including any application form, report, or compliance certification) submitted pursuant to 40 CFR 70 to the department and USEPA shall contain a certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

“I am authorized to make this submission on behalf of the Facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents 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.”

- C. All reports submitted to the department (except those submitted as emission based fees as outlined in Condition XXIII of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services  
Air Resources Division  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095

ATTN: Section Supervisor, Compliance Bureau

All reports submitted to USEPA shall be submitted to the following address:

US EPA-New England, Region 1  
5 Post Office Square  
Suite 100  
Mail Code 04-2  
Boston, MA 02109-3912  
Attn: Air Compliance Clerk

## XXII. Enforcement

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the department and/or USEPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the owner or operator from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

In accordance with 40 CFR 70.6 (a)(6)(ii), the Owner or Operator shall not claim as a defense 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 this Permit.

## XXIII. Emission-Based Fee Requirements

- A. Env-A 705.02, Annual Emission Fee: The owner or operator shall pay to the department each year an annual emission fee for emissions consisting of an emission-based fee calculated pursuant to Condition XXIII.C and a baseline emission fee stated in Condition XXIII.D. The owner or operator shall submit, to the department, payment of the annual emission fee so that the department receives it on or before May 15th for emissions during the previous calendar year. For example, the fees for calendar year 2019 shall be received on or before May 15, 2020.
- B. Env-A 705.03, *Determination of Actual Emissions for use in Calculating of Emission-based Fees:*

The Owner or Operator shall determine the total actual annual emissions from the emission units listed in Table 1 for each calendar year in accordance with the methods specified in Env-A 705.03.

- C. Env-A 705.04, *Calculation of Emission-based Fees*: The Owner or Operator shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 705.04 and the following equation:

$$\text{FEE} = (\text{E1} * \text{DPT}) + (\text{E2} * 1.1 * \text{DPT})$$

where:

FEE = The annual emission-based fee for each calendar year as specified in Env-A 705;

E1 = Total actual emissions up to and equal to 250 as determined pursuant to Condition XXIII.B;

E2 = Total actual emissions greater than 250 as determined pursuant to Condition XXIII.B; and

DPT = The annual fee, in dollars per ton of emissions, which the department has calculated in accordance with Env-A 705.04<sup>20</sup>.

- D. Env-A 705.06, *Payment of Annual Baseline Emission Fee*: In addition to the annual emission-based fee, the owner or operator shall pay to the department each year an annual baseline emission fee pursuant to the following:
1. Env-A 705.07(d): \$75,000.
  2. Env-A 705.06(c): If the owner or operator is not required to pay an emission-based fee for any calendar year because the Facility had zero emissions, the annual baseline fee shall be \$500 in lieu of the fee stated in Condition XXIII.D.1.

#### **XXIV. Duty To Provide Information**

In accordance with 40 CFR 70.6 (a)(6)(v), the owner or operator shall furnish to the department, within a reasonable time, any information that the department 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 owner or operator shall also furnish to the department copies of records that the owner or operator is required to retain by this Permit. The owner or operator may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Env-C 208.04 at the time such information is submitted to the department. The department shall evaluate such requests in accordance with the provisions of Env-C 208.04.

#### **XXV. Property Rights**

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

#### **XXVI. Severability Clause**

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

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<sup>20</sup> For additional information on emission-based fees, visit the department website at: <http://des.nh.gov/organization/divisions/air/pehb/apps/fees.htm>.

**XXVII. Permit Deviation**

Deviations are instances where any Permit condition is violated. In accordance with Env-A 911, *Recordkeeping and Reporting Requirements for Permit Deviations*, the Owner or Operator shall maintain records and report to the department deviations from Permit requirements as follows:

- A. Recordkeeping Requirement - All Deviations - In accordance with Env-A 911.03, in the event of a permit deviation, the owner or operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels; and record the information per Env-A 911.03(b).
- B. Excess Emissions Reporting Requirement - Excess Emission Deviations Only - In the event the permit deviation causes excess emissions, the owner or operator of the affected device, process, or air pollution control equipment shall:
  - 1. Notify the department of the permit deviation and excess emissions by telephone (603) 271-1370, fax (603) 271-7053, or e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)) within 24 hours of discovery of the permit deviation<sup>21</sup>; and
  - 2. Submit a written report in accordance with Env-A 911.04(a)(2) to the department within 10 days of the discovery of the permit deviation reported in Condition XXVII B.
- C. Reporting Requirements for Permit Deviations Continuing for Greater Than 9 Consecutive Days - In the event the deviation does not cause an excess emission but continues for a period greater than 9 consecutive days, the Owner or Operator of the affected device, process, or air pollution control equipment shall notify the department of the subsequent corrective actions to be taken by telephone (603) 271-1370, fax (603) 271-7053, or e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)) on the tenth day of the permit deviation<sup>20</sup>.
- D. Semi-Annual Summary Report – Pursuant to Env-A 911.05, the owner or operator shall submit a summary of all permit deviations previously reported pursuant to Condition XXVII B. and C. and a list of all permit deviations recorded pursuant to Condition XXVII A. to the department in the Semi-Annual Permit Deviation and Monitoring report due January 31<sup>st</sup> and July 31<sup>st</sup> of each calendar year covering the periods of July 1<sup>st</sup> through December 31<sup>st</sup> and January 1<sup>st</sup> through June 30<sup>th</sup>, respectively, or an alternative time period approved by the department pursuant to Env-A 912.

Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.

---

<sup>21</sup> Unless it is Saturday, Sunday or a state legal holiday, in which event the department shall be notified on the next business day which is not a Saturday, Sunday or a state legal holiday.





# Acid Rain Permit Application

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

This submission is:  new  revised  for ARP permit renewal

## STEP 1

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

<b>Granite Ridge Energy</b> Facility (Source) Name	<b>NH</b> State	<b>55170</b> Plant Code
---	--------------------	----------------------------

## 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(c)(1)
0001	Yes
0002	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

**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).
- (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.

**STEP 3, Cont'd.**

**Excess Emissions Requirements**

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

**Recordkeeping and Reporting Requirements**

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

**Liability**

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

Granite Ridge Energy  
Facility (Source) Name (from STEP 1)

Acid Rain - Page 4

STEP 3, Cont'd.

Effect on Other Authorities

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


- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

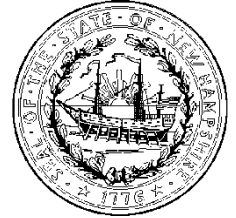
STEP 4

Certification

Read the certification statement, sign, and date.

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

Name <b>Patrick Blanchard, Director EHS</b>	
Signature 	Date <b>04/07/2020</b>



# TITLE V OPERATING PERMIT

Permit No: **TV-0055**  
Date Issued: **July 30, 2020**

This certifies that:

**GSP Merrimack LLC**  
**431 River Road**  
**Bow, NH 03304**

has been granted a Title V Operating Permit for the following facility and location:

**Merrimack Station**  
**431 River Road**  
**Bow, NH 03304**

**Facility ID No: 3301300026**  
**ORISPL: 2364**

<b>Application No(s):</b>	<b>Date Received</b>	<b>Purpose</b>
<b>16-0056</b>	March 31, 2016	Renewal of Title V Operating Permit
<b>N/A</b>	January 2, 2018	Request to incorporate TP-0189 into Title V Permit
<b>15-0450</b>	June 25, 2015	Request to incorporate TP-0008 into Title V Permit
<b>17-0209</b>	November 28, 2017	Request to incorporate TP-0166 into Title V Permit
<b>N/A</b>	January 11, 2018	Transfer of ownership from Public Service of New Hampshire d/b/a Eversource Energy to Granite Shore Power LLC

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V application referenced above, filed with the New Hampshire Department of Environmental Services under the signature of the responsible official certifying to the best of his knowledge that the statements and information therein are true, accurate and complete.

Responsible Official(s): **Elizabeth H. Tillotson (603) 230-7968**  
**James S. Andrews (603) 230-7975**

Technical Contact: **Melissa A. Cole (603) 230-7917**

Designated Representative: **Elizabeth H. Tillotson**

Authorized Account Representative: **Elizabeth H. Tillotson**

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of the Code of Federal Regulations, Title 40, Part 70.

This Permit is effective upon issuance and expires on **June 30, 2025**.

*Craig Wright*  
**COPY**

\_\_\_\_\_  
Director  
Air Resources Division

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**ABBREVIATIONS**

ARD	Air Resources Division
AAL	Ambient Air Limit
acf	actual cubic foot
ASTM	American Society of Testing and Materials
Btu	British thermal units
CAA	Clean Air Act
CAS	Chemical Abstracts Service
CEMS	Continuous Emissions Monitoring System
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
CY	Calendar year
DER	Discrete Emissions Reduction
DES	New Hampshire Department of Environmental Services
EGU	Electric utility steam generating unit
Env-A	New Hampshire Code of Administrative Rules - Air Resources Division
ERC	Emission Reduction Credit
ESP	Electrostatic Precipitator
FGD	Flue gas desulfurization
ft	foot or feet
ft <sup>3</sup>	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
HCl	Hydrogen chloride
Hg	Mercury
hp	horsepower
hr	hour
LEE	Low emitting electric utility steam generating unit
lb	pound
MACT	Maximum Achievable Control Technology
MATS	Mercury and Air Toxics Standards
MM	million
MW	megawatt
NAAQS	National Ambient Air Quality Standard
NATS	NO <sub>x</sub> Allowance Tracking System
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Oxides of Nitrogen
NNSR	Nonattainment New Source Review



NSPS	New Source Performance Standard
PM	Particulate matter
PM <sub>10</sub>	Particulate matter < 10 microns
PM <sub>2.5</sub>	Particulate matter < 2.5 microns
ppm	parts per million
ppmv	parts per million volume
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RICE	Reciprocating Internal Combustion Engine
RSA	Revised Statuses Annotated
RTAP	Regulated Toxic Air Pollutant
scf	standard cubic foot
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
STMMS	Sorbent trap mercury monitoring system
tpy	tons per consecutive 12-month period
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

**FACILITY SPECIFIC TITLE V OPERATING PERMIT CONDITIONS****I. Facility Description of Operations**

Merrimack Station is a fossil fuel-fired electricity generating facility, owned and operated by GSP Merrimack LLC, a wholly owned subsidiary of Granite Shore Power LLC (GSP). The facility is comprised of two bituminous coal-fired utility boilers, two combustion turbines operating as load shaving units, an emergency generator, an emergency boiler, and coal handling systems, including primary and secondary coal crushers, coal piles, coal conveyor systems, and coal unloading from railcars. The facility also operates a limestone processing and handling system.

Utility boilers MK1 and MK2 are each equipped with two electrostatic precipitators (ESPs) operated in series to control the emissions of particulate matter (PM) and selective catalytic reduction (SCR) systems to control nitrogen oxides (NO<sub>x</sub>) emissions. A wet limestone-based flue gas desulfurization (FGD) system controls the emissions of mercury (Hg), sulfur dioxide (SO<sub>2</sub>) and hydrogen chloride (HCl) from MK1 and MK2. An emergency engine is available to power the cooling water pump to provide cooling water to the FGD system during emergency situations such as loss of station power or circulating water system failure.

Both the utility boilers exhaust through a common stack (STMK3). MK1 boiler is also equipped with an emergency stack (STMK2). Venting of emissions from MK1 through stack STMK2 (thereby bypassing the FGD system) is only allowed during unplanned emergency events<sup>1</sup> as necessary to safely vent residual boiler gases and prevent severe damage to equipment or potential injury to personnel. Each boiler duct is equipped with a continuous emissions monitoring system (CEMS) to measure NO<sub>x</sub>, SO<sub>2</sub>, diluent gas carbon dioxide (CO<sub>2</sub>), stack flow and opacity. The common stack is equipped with CEMS to monitor NO<sub>x</sub>, SO<sub>2</sub>, CO<sub>2</sub>, stack flow and a single sorbent trap mercury monitoring system (STMMS).

Merrimack Station is a major source for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, volatile organic compounds and hazardous air pollutants (HAPs) and is therefore required to obtain a Title V Operating Permit.

**II. Permitted Activities**

In accordance with all of the applicable requirements identified in the Permit, the Owner or Operator is authorized to operate the devices and/or processes identified in Sections III, IV, V, and VI within the terms and conditions specified in this Permit.

---

<sup>1</sup> Examples include loss of MK1 booster fan or loss of power supply to the entire FGD system.

### III. Emission Unit Identification

#### A. Significant Activities

The activities identified in Tables 1 & 1A are subject to and regulated by this Title V Operating Permit.

<b>Table 1 - Significant Activities</b>			
<b>Emission Unit ID</b>	<b>Device Identification</b>	<b>Installation Date</b>	<b>Maximum Design Capacity and Permitted Fuel Type(s)<sup>2</sup></b>
MK1	Steam Generating Unit 1 Cyclone Boiler with fly ash reinjection Manufacturer: Babcock & Wilcox Model # RB-337	1960	1,238 million British Thermal Units (MMBtu) per hour Bituminous coal - 48.5 tons/hr No. 2 fuel oil is used to ignite individual fires before establishing the main coal fires.
MK2	Steam Generating Unit 2 Cyclone Boiler with fly ash reinjection Manufacturer: Babcock & Wilcox Model # UP-42	1968	3,473 MMBtu/hr Bituminous coal - 136.2 tons/hr No. 2 fuel oil is used to ignite individual fires before establishing the main coal fires.
MKCT1	Combustion Turbine #1 Manufacturer: Pratt & Whitney Model # FT4A-8LF	1968	319 MMBtu/hr- Kerosene - 2,279 gal/hr
MKCT2	Combustion Turbine #2 Manufacturer: Pratt & Whitney Model # FT4A-8LF	1969	319 MMBtu/hr Kerosene - 2,279 gal/hr
MKPCC	Primary Coal Crusher System consisting of two crushers that operate in parallel; These crushers are located underground beneath the rail car track hopper. Manufacturer: Pennsylvania Crusher Model No. FCC Series Single Roll Crusher 30 X 60" Serial Nos. MKPCC-A: 6496 MKPCC-A1: 7074	May 2006 (MKPCC-A) May 2007 (MKPCC-A1)	600 tons/hr coal for each crusher
MKSCC1	Secondary Coal Crusher System consisting of two systems each employing two crushers (for a total of four crushers) Manufacturer: Steadman Model No. H-54D10-47-A-X	Startup dates - November 29, 2016 for MKSCC1-1A & MKSCC1-1B November 25, 2015 for	150 tons per hour per each crusher <sup>3</sup>

<sup>2</sup> The fuel consumption rates presented in Table 1 are based on the following assumed heating values:

Bituminous coal - 12,750 Btu/lb

Diesel - 137,000 Btu/gal

Kerosene - 140,000 Btu/gal

The maximum fuel consumption of the unit may vary based on the actual heat content of the fuel burned.

<sup>3</sup> The H-54 model crusher capacity is listed as 150 tons/hr of aggregate material in the manufacturer's specification sheet. The capacity of the crusher may vary depending on the feed size, desired product size and the product density.

**Table 1 - Significant Activities**

Emission Unit ID	Device Identification	Installation Date	Maximum Design Capacity and Permitted Fuel Type(s) <sup>2</sup>
	(H series Cage Mills) Serial Nos. Unit 1A: D-3658 Unit 1B - D-3659 Unit 2A: D-3636 Unit 2B: D-3637 These crushers are located in an aboveground building.	MKSCC1-2A & MKSCC1-2B	
MKEB	Temporary Boiler	-	Up to 96 MMBtu/hr Ultra low sulfur diesel (ULSD)/distillate oil
MKEC	Emergency Cooling Pump Engine EPA Tier III Certified Manufacturer: John Deere/Clarke Model # JU6H-UFAD88 Serial # PE6068L101142 237 hp engine output	2011	1.64 MMBtu/hr ULSD - 12 gal/hr
MKEG	Emergency Generator Manufacturer: Caterpillar Model # B406BD1 534 hp engine output	1988	4 MMBtu/hr ULSD - 28.7 gal/hr
MKLC1	Limestone Processing and Handling System	See Table 1A	See Table 1A

## TV-0055

Table 1A - Limestone Processing and Handling System <sup>4</sup>				
Equipment ID	Equipment Description	Year Installed	Design Capacity	Control Device
L-1	Limestone belt conveyor (30") to receiving hopper	2012	200 tons per hour (tph)	Dust suppression enclosure with dust suppression spray (LDS-1)
RS-C	Radial Stacker Conveyor C (48") to Limestone belt conveyor L-2 (via hopper)	Original 1961	1400 tph	Dust suppression enclosure limestone product delivered wet
L-2	Limestone belt conveyor (48") to Limestone Storage Silo	2011	1400 tph	Dust suppression enclosure with dust suppression spray (LDS-2)
L-2A	Limestone belt conveyor (48") to Limestone Storage Silo	2011	1400 tph	Dust suppression enclosure with dust suppression spray (LDS-2)
LSS-1	Limestone Storage Silo # 1	2011	7500 tons	Baghouse (N011)
LSS-2	Limestone Storage Silo # 2	2011	7500 tons	Baghouse (N005)
L-3A	Limestone Storage Silo unloading conveyor, indoors (30")	2011	150 tph	Dust suppression enclosure with dust suppression spray (LDS-2)
L-3B	Limestone Storage Silo unloading conveyor, indoors (30")	2011	150 tph	Dust suppression enclosure with dust suppression spray (LDS-2)
L-3C	Limestone belt conveyor (30") from silo storage to conveyor L-4 at Transfer Tower (TT-1)	2011	150 tph	Dust suppression enclosure and dust suppression spray at Transfer Tower #1 (LDS-2)
RC-1	Limestone Transfer Tower (TT-1) Maintenance Recirculation Chute to Dump Truck	2013	20 tph	Dust suppression enclosure and dust suppression spray at Transfer Tower #1 (LDS-2)
L-4	Limestone belt conveyor (30") from silo storage via TT-1 to Transfer Tower (TT-2)	2011	150 tph	Dust suppression enclosure and dust suppression spray at Transfer Tower #2 (LDS-2)
L-5	Limestone belt conveyor (30") from TT-2 to Day Silos	2011	150 tph	Dust suppression enclosure and dust suppression spray at Transfer Tower #2 (LDS-3)
BF-2	Belt Feeder (30") for emergency limestone silo feed from truck to conveyor L-5	2011	50 tph	Dust suppression enclosure and spray at Transfer Tower #2 (LDS-3)
4000A	Limestone Day Silo A	2011	300 tons	Baghouse (4010A)
4000B	Limestone Day Silo B	2011	300 tons	Baghouse (4010B)
4030A	Limestone Feeder A	2011	18.5 tph	N/A - Water injection
4030B	Limestone Feeder B	2011	18.5 tph	N/A - Water injection
4060A	Ball Mill A	2011	18.5 tph	N/A - Water injection
4060B	Ball Mill B	2011	18.5 tph	N/A - Water injection

<sup>4</sup> Equipment IDs 4000A, 4000B, 4030A, 4030B, 4060A and 4060B are located inside the FGD building. Emissions from baghouses 4010A and 4010B are exhausted into the FGD building.

**B. Stack Criteria**

The following devices at the Facility shall have exhaust stacks that discharge vertically, without obstruction, and meet the criteria in Table 2:

<b>Table 2 - Stack Criteria</b>			
<b>Stack #</b>	<b>Emission Unit</b>	<b>Minimum Height (feet above ground surface)</b>	<b>Maximum Exit Diameter (feet)</b>
STMK2 (emergency stack) <sup>5</sup>	MK1	317	14.5
STMK3	MK1 & MK2	445	21.5
STMKCT1	MKCT1	20	10.5 x 14 (exit area)
STMKCT2	MKCT2	20	10.5 x 14 (exit area)

**IV. Insignificant Activities Identification**

All activities at this facility, which meet the criteria identified in Env-A 609.04, shall be considered insignificant activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this Permit. The device listed below is subject to federal requirements which are included in this permit.

<b>Insignificant Activities</b>				
<b>Emission Unit ID</b>	<b>Device Name</b>	<b>Manufacturer</b>	<b>Year Installed</b>	<b>Maximum Capacity/ Permitted Fuel Type</b>
Smith Boiler <sup>6</sup>	Crusher House Heating System - Steam Boiler	Smith 19 Series	2008	1.082 MMBtu/hr - Propane

**V. Exempt Activities Identification**

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this Permit.

<sup>5</sup> MK1 emissions shall be vented through STMK2 in accordance with Table 5, Item 5.

<sup>6</sup> This boiler is subject to work practice requirements of 40 CFR 63 Subpart DDDDD.

**VI. Pollution Control Equipment Identification**

Air pollution control equipment listed in Table 3 shall be operated at all times<sup>7</sup> that the associated devices are operating in order to meet permit conditions.

<b>Table 3 - Pollution Control Equipment Identification</b>			
<b>Pollution Control Equipment ID</b>	<b>Description</b>	<b>Purpose</b>	<b>Emission Unit Controlled</b>
MK1-PC1	ESP #1 Original ESP consists of 3 transformer rectifiers (T-Rs), 3 fields and 12 sections	To control PM	MK1
MK1-PC2	ESP #2 Supplemental ESP consists of 10 T-Rs, 5 fields and 10 sections		
MK1-PC3	SCR deNO <sub>x</sub> System	To control NO <sub>x</sub>	MK1
MK2-PC4	ESP #1 Original ESP consists of 6 T-Rs, 3 fields and 12 sections.	To control PM	MK2
MK2-PC5	ESP #2 Supplemental ESP consists of 12 T-Rs, 4 fields and 24 sections		
MK2-PC6	SCR deNO <sub>x</sub> System	To control NO <sub>x</sub>	MK2
MK2-PC7	FGD System	To control Hg and acid gases (SO <sub>2</sub> and HCl)	MK1 & MK2

**VII. Alternative Operating Scenarios**

**A. Trial Test Burns with Other Fuels<sup>8</sup> for MK1 and MK2 (Temporary Permits FP-T-0054 & TP-B-0462)**

Prior to the use of any fuel other than bituminous coal, No. 2 fuel oil or other fuels previously reviewed and approved by DES, GSP Merrimack shall submit a proposal to DES, which shall include, but not be limited to the following:

1. Type of fuel;
2. Analysis data of the fuel proposed, which shall include proximate and ultimate analysis, volatile and semi-volatile analyses (i.e., EPA Method 8240, 8250, 8260, or 8270) and metals analysis (i.e., Method 3050 and mercury).
3. Specification of baseline operating conditions for MK1 and/or MK2 including coal feed rate, percent moisture of coal feed, oil firing rate, FGD, ESP and SCR operating conditions, and emissions values of SO<sub>2</sub>, NO<sub>x</sub>, particulate matter (PM/ PM<sub>10</sub>/PM<sub>2.5</sub>), CO, HCl, Hg and opacity;

<sup>7</sup> The SCR systems (MK1-PC3 and MK2-PC6) are engaged after the respective ammonia injection permissive temperatures are reached.

<sup>8</sup> Non-hazardous secondary materials that have been determined not be solid waste pursuant to 40 CFR 241.

4. A comprehensive test plan, which shall present the proposed operating conditions for the trial burn, to include but not be limited to the following:
  - a.) Length of fuel trial;
  - b.) New fuel rate;
  - c.) Means of measuring new fuel feed rate;
  - d.) Description of new fuel feed process;
  - e.) New fuel preparations prior to burning;
  - f.) Percent moisture of new fuel feed;
  - g.) Time table for operation stability;
  - h.) Coal feed rate;
  - i.) Coal percent moisture;
  - j.) ESP, SCR and FGD operating conditions;
  - k.) Expected emission values of opacity, SO<sub>2</sub>, NO<sub>x</sub>, particulate matter (PM/ PM<sub>10</sub>/PM<sub>2.5</sub>), CO and HCl;
  - l.) The test plan shall also address the continuous tracking of operational data prior to the fuel trial, during the fuel trial, and for a short time after the fuel trial. SO<sub>2</sub>, NO<sub>x</sub>, Hg, and opacity can be monitored using the existing CEMs.
  - m.) A compliance stack test protocol for PM and HCl emissions using US EPA Methods 1 through 4, Method 5 (for PM), Method 26A (for HCl), or a DES approved alternative, when requested by DES.
  - n.) Operational parameters to be monitored and recorded, which shall include, but not be limited to steam flows, boiler temperatures, ammonia flow, and diluent gas CO<sub>2</sub>;
  - o.) The effects of the new fuel on flyash characteristics and resulting effect on the ESP, SCR and FGD operations;
  - p.) The effects of the new fuel on bottom ash characteristics;
  - q.) Specification and description of expected operational and combustion conditions when the trial burn has reached stable conditions with the new fuel feed; and
  - r.) A timetable or schedule with approximate dates of the trial test burn.
5. Based on information regarding the proposed trial fuel burn provided by GSP Merrimack, the DES may request additional information specific to the proposed trial burn operations. In addition, metal emission stack testing may be required dependent upon DES review of the new fuel metal analysis.
6. If the new fuel is to be consumed on a regular basis, GSP Merrimack shall apply for a Temporary Permit or apply for an amendment to this Title V Operating Permit, as determined by DES. If the new fuel results in a major modification, NNSR or PSD program requirements may apply, as well as a public notice, and comment period.
7. DES shall respond within 30 days of receipt of a proposal with approval, conditional approval, denial, or request for additional information.
8. DES Waste Management Division may have additional requirements and concerns and shall be contacted by GSP Merrimack prior to the initiation of any trial burn, if applicable.
9. A summary report shall be submitted to DES within 60 days after the end of the trial fuel burn, which should include a summary of operational results and trends, emission values to include CEM and stack test data, and proposed future use of the trial fuel.



## VIII. Applicable Requirements

### A. State-only Enforceable Operational and Emission Limitations

The Owner or Operator shall be subject to the state-only<sup>9</sup> operational and emission limitations identified in Table 4 below:

<b>Table 4 - State-only Enforceable Operational and Emission Limitations</b>			
Item #	Applicable Requirements	Applicable Emission Unit	Regulatory Citation
1.	<p><u>24-hour and Annual Ambient Air Limit</u></p> <p>The emissions of any Regulated Toxic Air Pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual Ambient Air Limit (AAL) as set forth in Env-A 1450.01, <i>Table of all Regulated Toxic Air Pollutants</i>.<sup>10</sup></p>	Facility wide	Env-A 1400
2.	<p><u>Revisions of the List of RTAPs</u></p> <p>In accordance with RSA 125-I:5 IV, if the department revises the list of RTAPs or their respective AALs or classifications under RSA 125-I:4, II and III, and as a result of such revision the owner or operator is required to obtain or modify the permit under the provisions of RSA 125-I or RSA 125-C, the owner or operator shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such permit or permit modification.</p>	Facility wide	RSA 125-I:5 IV
3.	<p><u>RTAP Emission Limitation</u></p> <p>Ammonia slip emissions from the SCR units shall not exceed 10 parts per million dry volume (ppmdv) at 3% oxygen, as measured at the stack outlet.</p>	MK1 & MK2	FP-T-0054 & TP-B-0462
4.	<p><u>Sulfur Limits of Certain Liquid Fuels</u></p> <p>Sulfur content of the No. 2 fuel oil (i.e., distillate fuel oil) shall not exceed 0.0015% by weight.</p>	Facility-wide	Env-A 1603.03
5.	<p><u>Multiple Pollutant Reduction Program – Mercury Emissions</u></p> <p>Total mercury emissions from the affected sources shall be at least 80% less on an annual basis than the baseline mercury input of 268 pounds.</p>	Affected sources as defined in RSA 125-O:12, namely GSP Merrimack Station units MK1 & MK2 and GSP Schiller Station units SR4 & SR6	RSA 125-O:13

<sup>9</sup> The term “state-only requirement” is used to refer to those requirements that are not federally enforceable but are state requirements as defined in Env-A 101.186.

<sup>10</sup> Env-A 1450.01, *Table of all Regulated Toxic Air Pollutants*, is typically updated annually. The updates can be found at <http://des.nh.gov/organization/commissioner/legal/rulemaking/index.htm#aair>

**B. Federally Enforceable Operational and Emission Limitations**

The Owner or Operator shall be subject to the federally enforceable operational and emission limitations identified in Table 5 below:

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Requirement</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1.	<u><i>NOx Reasonably Available Control Technology (RACT) Requirements: Wet-Bottom Utility Boilers Firing Coal</i></u>	MK1	Env-A 1303.06(b) (Effective 8-15-18)
	a.) For cyclone-fired boilers having a maximum nameplate capacity of less than 320 megawatts and equipped with a SCR system, NOx emissions shall be limited as follows: <ol style="list-style-type: none"> <li>1. 0.22 lb. per million Btu (lb/MMBtu), based on a 24-hour calendar day average, except as provided in a.2. below; or</li> <li>2. 4.0 tons per day on any calendar day during which a startup, shutdown or low-load operation occurs.</li> </ol>		
	b.) For cyclone-fired boilers having a maximum nameplate capacity of equal to or greater than 320 megawatts and equipped with a SCR system, NOx emissions shall be limited as follows: <ol style="list-style-type: none"> <li>1. 0.22 lb. per million Btu, based on a 24-hour calendar day average, except as provided in b.2. below; or</li> <li>2. 11.5 tons per day on any calendar day during which a startup, shutdown or low-load operation occurs.</li> </ol>	MK2	Env-A 1303.06(c) & Env-A 2302.01(b)
	c.) For purposes of this part, the following definitions shall apply: <ol style="list-style-type: none"> <li>1. "Startup" means the period beginning when fuel is first fired in a boiler and ending when the ammonia injection permissive temperature is met in the SCR;</li> <li>2. "Shutdown" means the period beginning when the SCR temperature first drops below the ammonia injection permissive temperature and ending when fuel is no longer fired in the boiler; and</li> <li>3. "Low-load operation" means the operation of a boiler at load levels that result in flue gas temperature at the SCR inlet below the SCR functioning temperature.</li> </ol>	MK1 & MK2	Env-A 1303.02
2.	<u><i>Federal Acid Rain NOx Emission Reduction Program</i></u> NOx emissions from MK2 shall be limited to 0.86 lb/MMBtu of heat input based on an annual average.	MK2	40 CFR 76.6(a)(2)
3.	<u><i>NAAQS Attainment Demonstration - SO2 Emission Limitation</i></u> Sulfur dioxide emissions from MK1 and MK2 combined shall not exceed 0.39 lb/MMBtu on a 7-boiler operating day <sup>11</sup> rolling average.	MK1 & MK2	TP-0189

<sup>11</sup> Boiler operating day means a 24-hour period that begins at midnight and ends the following midnight during which any fuel is combusted at any time in the boiler. It is not necessary for the fuel to be combusted the entire 24-hour period.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
4.	<p><u>SO<sub>2</sub> Emission Limitation for Mitigation of Regional Haze</u></p> <p>a.) Except as provided in b.) below, actual SO<sub>2</sub> emissions from MK1 &amp; MK2 combined shall be reduced by at least 94.0% based on a 30-boiler operating day rolling average basis. The SO<sub>2</sub> percent reduction shall be calculated at the end of each boiler operating day in accordance with Table 7, Item 23.</p> <p>b.) If the SO<sub>2</sub> percent reduction of 94.0% (as calculated on a 30-boiler operating day rolling average basis) is not met on a boiler operating day, compliance shall alternatively be achieved if on the same day:</p> <ol style="list-style-type: none"> <li>1. The actual combined SO<sub>2</sub> emissions from MK1 and MK2 are less than or equal to 0.24 lb/MMBtu, as calculated on a 30-boiler operating day rolling average basis; and</li> <li>2. The actual combined SO<sub>2</sub> emissions from MK1 and MK2 are reduced by at least 93.4%, as calculated on a 30-boiler operating day rolling average basis.</li> </ol> <p>c.) The facility is limited to utilizing the alternate compliance option listed in b.) above to no more than 7 boiler operating days during any consecutive 30-boiler operating day period.</p>	MK1 & MK2	TP-0189 & Env-A 2302
5.	<p><u>Emergency Stack Operation</u></p> <p>a.) Emissions from MK1 shall be vented through the emergency stack (STMK2) only during emergency situations as necessary to prevent severe damage to equipment or potential injury to personnel.</p> <p>b.) No fuel shall be supplied to MK1 while emissions are vented through the emergency stack.</p> <p>c.) Emergency stack may also be used for ventilation during maintenance activities when the boiler is offline.</p>	MK1	TP-0189
6.	<p><u>Maximum Sulfur Content Allowable in Coal</u></p> <p>For a coal-burning device placed in operation before April 15, 1970, the sulfur content of coal burned in the device shall not exceed 2.8 pounds per million Btu gross heat content.</p>	MK1 & MK2	Env-A 1604.01(a)
7.	<p><u>Visible Emission Standard for Fuel Burning Devices Installed on or Prior to May 13, 1970</u></p> <p>The average opacity from fuel burning devices installed on or prior to May 13, 1970 shall not exceed 40 percent for any continuous 6-minute period.</p>	MK1 & MK2	Env-A 2002.01
8.	<p><u>Particulate Matter Emission Limits</u></p> <p>a.) <i>PM Emission Limitation for Mitigation of Regional Haze for cyclone firing, wet-bottom boilers</i></p> <p>Filterable PM emissions from each boiler shall be limited to 0.08 lb/MMBtu<sup>12</sup>.</p>	MK1 & MK2	Env-A 2302.01

<sup>12</sup> This limit is more stringent than Env-A 2003.01 *Particulate Emission Standards for Fuel Burning Devices Installed on or before May 13, 1970*.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
	b.) <u>National Emission Standards for Hazardous Air Pollutants (NESHAP): Coal- and Oil-Fired Electric Utility Steam Generating Units (EGUs) - Particulate matter</u> 1.) Filterable PM emissions shall be limited to 0.030 lb/MMBtu. 2.) An EGU may qualify for low-emitting EGU (LEE) status for PM if the performance tests conducted in accordance with §63.10007 for 3 consecutive years demonstrate that the emissions are less than 50 percent of the emission limit specified in Item 8.b.1 above.	MK1 & MK2	40 CFR 63.9991 & 63.10005(h) Subpart UUUUU
9.	<u>NESHAP for Coal-Fired EGUs - Hydrogen Chloride</u> a.) Hydrogen chloride emissions shall be limited to 0.0020 lb/MMBtu. b.) An EGU may qualify for LEE status for HCl if the performance tests conducted in accordance with §63.10007 for 3 consecutive years demonstrate that the emissions are less than 50 percent of the emission limit specified above.	MK1 & MK2	40 CFR 63.9991 & 63.10005(h) Subpart UUUUU
10.	<u>NESHAP for Coal-Fired EGUs – Mercury</u> a.) Mercury emissions shall be limited to 1.2 pounds per trillion British thermal units of heat input (lb/TBtu). b.) An EGU may qualify for LEE status for Hg emissions if the performance test conducted once every 12 calendar months in accordance with §63.10007 demonstrates that, either: 1.) Average emissions less than 10% of the above specified emission limit; or 2.) Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the emission limit specified in Item 10.a above. c.) If a coal-fired EGU does not qualify as a LEE for mercury, compliance with the emission limit must be continuously demonstrated through the use of a Hg CEMS or sorbent trap monitoring system in accordance with Appendix A to Subpart UUUUU. d.) If the Owner or Operator chooses to use one set of sorbent traps to demonstrate compliance with the applicable Hg emission limit, the Owner or Operator must comply with the Hg limit at all times including startup and shutdown periods and report average mercury concentration.	MK1 & MK2	40 CFR §§ 63.9991, 63.10000(c)(1)(vi), 63.100005(a)(iii) & 63.10005(h) Subpart UUUUU
11.	<u>General Compliance Requirements</u> a.) Comply with the emission limits at all times except during periods of startup and shutdown <sup>13</sup> . b.) Comply with the work practice requirements specified in Item 12 during the periods of startup or shutdown. c.) At all times operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.	MK1 & MK2	40 CFR 63.10000(a) & (b) Subpart UUUUU

<sup>13</sup> When a single sorbent trap monitoring system is used to monitor mercury emissions, data collected during startup and shutdown periods must be included in the mercury compliance calculations. GSP is currently using a single sorbent trap monitoring system located on the common stack STMK3 to monitor mercury emissions from MK1 and MK2.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
12.	<p><u>Work Practice Standards for EGUs</u></p> <p>a.) Comply with the work practice requirements during periods of startup or shutdown:</p> <ol style="list-style-type: none"> <li>1.) Operate all required continuous monitoring system (CMS) during startup<sup>14</sup> and shutdown<sup>15</sup>.</li> <li>2.) For startup of a unit, use clean fuels as defined in §63.10042 for ignition.</li> <li>3.) Upon converting to firing coal, engage all of the applicable control technologies except FGD and SCR. The FGD and SCR system(s) must be started appropriately to comply with relevant standards applicable during normal operation.</li> <li>4.) While firing coal during shutdown, vent emissions to the main stack and operate all applicable control devices and continue to operate those control devices after the cessation of coal being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. In any case, controls must be operated when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other than Subpart UUUUU and that require operation of the control devices.</li> <li>5.) Collect monitoring data during startup and shutdown periods, as specified in § 63.10020(a).</li> </ol> <p>b.) Keep records during startup and shutdown periods, as provided in §§ 63.10032 and 63.10021(h).</p> <p>c.) Provide reports concerning startup and shutdown periods, as specified in §§ 63.10011(g), 63.10021(i), and 63.10031.</p>	MK1 & MK2	40 CFR 63 Subpart UUUUU Table 3
13.	<p><u>NESHAP for Coal and Oil-Fired Electric Utility Steam Generating Units - Tune-up Requirements</u></p> <p>Conduct tune-up of each EGU as specified in Table 7, Item 37.</p>	MK1 & MK2	40 CFR §§ 63.10000(c)(2)(iv) & 63.10005(e) Subpart UUUUU
14.	<p><u>Visible Emission Standard for Fuel Burning Devices Installed on or Prior to May 13, 1970</u></p> <p>The average opacity from fuel burning devices installed on or prior to May 13, 1970 shall not exceed 40 percent for any continuous 6-minute period. Compliance with visible emission limitations shall be determined, upon request by the Department, using 40 CFR 60, Appendix A, Method 9 or other Department approved method.</p>	MKCT1 & MKCT2	Env-A 2002 (formerly Env-A 1202 effective 12-27-90)

<sup>14</sup> The Permittee has chosen to comply with the work practice standards, by choosing to use paragraph (1) of the definition of “startup” in §63.10042, defined as follows: Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on-site use). Any fraction of an hour in which startup occurs constitutes a full hour of startup.

<sup>15</sup> Per §63.10042, shutdown means the period in which cessation of operation of an EGU is initiated for any purpose. Shutdown begins when the EGU no longer generates electricity or makes useful thermal energy (such as heat or steam) for industrial, commercial, heating, or cooling purposes or when no coal, liquid oil, syngas, or solid oil-derived fuel is being fired in the EGU, whichever is earlier. Shutdown ends when the EGU no longer generates electricity or makes useful thermal energy (such as steam or heat) for industrial, commercial, heating, or cooling purposes, and no fuel is being fired in the EGU. Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis												
15.	<u>Particulate Emission Standards for Fuel Burning Devices Installed on or Before May 13, 1970</u> Particulate matter emissions from each turbine shall not exceed 0.34 lb/MMBtu.	MKCT1 & MKCT2	Env-A 2003.01												
16.	<u>Sulfur Content Limitations for Liquid Fuels</u> a.) The sulfur content of kerosene-1 oil shall not exceed 0.04% sulfur by weight. b.) The sulfur content of kerosene-2 oil shall not exceed 0.30% sulfur by weight.	MKCT1 & MKCT2	Env-A 1603.01(c) & (d)												
17.	<u>NOx RACT Requirements for Stationary Combustion Turbines Used as Load Shaving Units</u> Stationary combustion turbines used as load shaving units shall not exceed a NOx RACT emission limit of 0.90 lbs per million Btu heat input based on an hourly average.	MKCT1 & MKCT2	Env-A 1306.04												
18.	Temporary boilers that have theoretical potential emissions of less than 50 tons of NOx during any consecutive 12-month period shall be exempt from NOx RACT.	MKEB	Env-A 1301.03												
19.	<u>Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970</u> The average opacity from fuel burning devices installed after May 13, 1970 shall not exceed 20 percent for any continuous 6-minute period. Compliance with visible emission limitations shall be determined, upon request by the department, using 40 CFR 60, Appendix A, Method 9 or other department approved method.	MKEG, MKEB & MKEC	Env-A 2002.02 (formerly Env-A 1202 effective 12-27-90)												
20.	<u>Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985</u> The particulate matter emissions from fuel burning devices installed on or after January 1, 1985 shall not exceed 0.30 lb/MMBtu.	MKEG, MKEB & MKEC	Env-A 2003.03 (formerly Env-A 1202 effective 12-27-90)												
21.	The owner or operator shall limit the maximum fuel consumption rate of MKEB to 2,490,000 gallons of ultra low sulfur fuel oil per consecutive 12-month period such that the the emissions do not exceed the New Source Review (NSR) significance levels contained in the Table below: <table border="1" data-bbox="318 1352 987 1545" style="margin-left: 40px;"> <thead> <tr> <th>Pollutant</th> <th>Tons per consecutive 12-month period</th> </tr> </thead> <tbody> <tr> <td>NO<sub>x</sub></td> <td>25.0</td> </tr> <tr> <td>SO<sub>2</sub></td> <td>40.0</td> </tr> <tr> <td>CO</td> <td>100.0</td> </tr> <tr> <td>PM<sub>10</sub></td> <td>15.0</td> </tr> <tr> <td>VOC</td> <td>25.0</td> </tr> </tbody> </table>	Pollutant	Tons per consecutive 12-month period	NO <sub>x</sub>	25.0	SO <sub>2</sub>	40.0	CO	100.0	PM <sub>10</sub>	15.0	VOC	25.0	MKEB	TP-B-0490
Pollutant	Tons per consecutive 12-month period														
NO <sub>x</sub>	25.0														
SO <sub>2</sub>	40.0														
CO	100.0														
PM <sub>10</sub>	15.0														
VOC	25.0														
22.	<u>Operating Limitations for Emergency Engines</u> Each diesel generator engine shall be limited to 500 hours of total operation during any consecutive 12 month period.	MKEG & MKEC	Env-A 606.02(c)(1)												

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
23.	<p><u>Operating Limitations for Emergency Engines</u></p> <p>a.) Each emergency generator engine shall only operate:</p> <ol style="list-style-type: none"> <li>1. As a mechanical or electrical power source only during an emergency which is defined in Env-A 1302.17 as an unforeseeable condition that is beyond the control of the owner or operator that:                             <ol style="list-style-type: none"> <li>i. Results in an interruption of electrical power from the electricity supplier to the premises;</li> <li>ii. Requires an interruption of electrical power from the electricity supplier to the premises in order to enable the owner or operator to repair damage from fire, flood, or any other catastrophic event, natural or man-made; or</li> <li>iii. Requires operation of an emergency generator to minimize damage from fire, flood, or any other catastrophic event, natural or man-made;</li> </ol> </li> <li>2. During scheduled maintenance checks and readiness testing, as recommended by federal, state or local government, the manufacturer, the vendor or the insurance company associated with the engine, for a maximum of 100 hours per calendar year<sup>16</sup>.</li> </ol> <p>b.) The term emergency generator does not include an engine for which the owner or operator of such engine is party to any other agreement to sell electrical power from such engine to an electricity supplier or otherwise receives any reduction in the cost of electrical power for agreeing to produce power during periods of reduced voltage or reduced power availability.</p>	MKEG & MKEC	Env-A 101.671, Env-A 1302.17 & 40 CFR 63.6640(f) (Subpart ZZZZ) 40 CFR 60.4211(f) (Subpart III)
24.	<p><u>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines - Fuel Requirement</u></p> <p>The sulfur content of diesel fuel burned in MKEC shall not exceed 15 ppm (0.0015 percent sulfur by weight).</p>	MKEC	40 CFR 60.4207 (Subpart III)
25.	<p><u>Emergency Engine Operating Requirements</u></p> <p>The owner or operator of the emergency engine shall:</p> <ol style="list-style-type: none"> <li>a.) Operate and maintain the engine according to the manufacturer’s emission-related written instructions or change only the emission-related settings in a way that is permitted by the manufacturer; and</li> <li>b.) Operate and maintain the engine to meet the emission standards over the entire life of the engine.</li> </ol>	MKEC	40 CFR §§60.4206 & 60.4211 (Subpart III)
26.	<p><u>Standards of Performance for Coal Preparation and Processing Plants</u></p> <p>On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment that commenced construction after October 27, 1974, and before April 28, 2008, must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 20 percent opacity or greater.</p>	MKPCC	40 CFR 60.254(a) Subpart Y

<sup>16</sup> The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency engine beyond 100 hours per calendar year.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
27.	<p><u>Standards of Performance for Coal Preparation and Processing Plants</u></p> <p>On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment constructed, after April 28, 2008, must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.</p>	MKSCC1	40 CFR 60.254(b) Subpart Y
28.	<p><u>Compliance With Standards and Maintenance Requirements</u></p> <p>a.) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.</p> <p>b.) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.</p>	MKPCC, MKSCC1 & MKLC1	40 CFR 60.11(d) & (g) Subpart A
29.	<p><u>NSPS for Nonmetallic Mineral Processing Plants - Standard for Particulate matter</u></p> <p>a.) <u>Fugitive emissions from affected facilities other than crushers that are not enclosed in a building:</u>                      The average opacity from any transfer point on a belt conveyor or from any other affected facility installed after April 22, 2008, shall not exceed 7%.</p> <hr/> <p>b.) <u>Fugitive emissions from affected facilities other than crushers that are enclosed in a building:</u>                      If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limit identified in Item 29.a or the building enclosing the affected facilities must comply with the following emission limits:</p> <ol style="list-style-type: none"> <li>1. Fugitive emissions from the building openings (except for vents<sup>17</sup>) must not exceed 7 percent opacity; and</li> <li>2. Vents in the building must meet the particulate matter emission limit of 0.014 gr/dscf.</li> </ol>	<p>MKLC1                      Transfer points from:                      RS-C to L-2                      L-1 to L-2                      L-2 to L-2A</p> <hr/> <p>MKLC1                      Transfer point from                      L-3C to L-4 located inside the transfer tower TT-1                      Transfer point from                      L-4 to L-5 located inside the transfer tower TT-2  <u>Transfer points located</u></p>	<p>40 CFR 60.672(b) (Subpart OOO)</p> <hr/> <p>40 CFR 60.672(b) &amp; 40 CFR 60.672(e)</p>

<sup>17</sup> Per 40 CFR 60.671, *Vent* means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.



**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
		inside the silo building: Limestone silo LSS-1 to L-3A or L-3B Limestone silo LSS-2 to L-3A or L-3B L-3A to L-3C & L-3B to L-3C Transfer points located inside the FGD building: Day silo A to belt feeder A Day silo B to belt feeder B.	
	c.) <u>Fugitive emissions from crushers that are enclosed in a building:</u> The opacity of fugitive emissions from each crusher shall not exceed 12% or the building enclosing the affected facilities must comply with the emission limits identified in Item 29.b.1. and b.2.	MKLC1 (Ball Mills - 4060A & 4060B)	40 CFR 60.672(b)
	d.) <u>Emissions from a baghouse that controls individual, enclosed storage bins:</u> The opacity of emissions from any baghouse that controls emissions from an individual, enclosed storage bin shall not exceed 7%.	MKLC1 (LSS1 & LSS2)	40 CFR 60.672(f)
	e.) The opacity of emissions from any baghouse that controls emissions from an individual, enclosed storage bin shall not exceed 7% or the building enclosing the affected facilities must comply with the emission limits identified in Item 29.b.1 and b.2.	MKLC1 (4000A & 4000B)	40 CFR 60.672(e) & (f)
30.	Truck dumping of nonmetallic materials into any screening operation, feed hopper, or crusher is exempt from the requirements of Subpart OOO.	MKLC1	40 CFR 60.672(d)
31.	<u>NSPS for Nonmetallic Mineral Processing Plants - Equipment Replacement</u> The Owner or Operator shall be allowed to replace a component of the facility with new equipment of equal or smaller capacity, having the same function as the existing equipment by complying with the reporting requirements of Table 9, Item 25, provided there is no increase in the amount of emissions. The Owner or Operator may implement the equipment replacement immediately upon filing the report.	MKLC1	40 CFR 60.670(d)
32.	<u>Permit Deviations</u> In the event of a permit deviation, the Owner or Operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels.	Facility wide	Env-A 911.03

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
33.	<u>Control of Fugitive Dust</u> The Owner or Operator shall take precautions, such as wetting, covering, shielding or vacuuming, to prevent, abate, and control fugitive dust emissions during any activity, which might create fugitive dust. Such activities include bulk hauling activities, including the transportation and transfer of mineral material over public roads and maintenance activities, including sweeping, vacuuming, or other activity involved with the upkeep of roads or parking lots <sup>18</sup> .	Facility wide	Env-A 1002
34.	<u>Asbestos Management and Control</u> Comply with the asbestos requirements of Env-A 1800 and 40 CFR 61.145 during demolition and/or renovation.	Facility wide	40 CFR 61 Subpart M and Env-A 1800
35.	<u>Accidental Release Program Requirements</u> This facility stores anhydrous ammonia in quantities above the level specified in 40 CFR 68.130. The Owner or Operator shall operate the facility in accordance with the risk management plan.	Facility wide	CAAA 112(r)(1)

<sup>18</sup> To comply with this provision, the facility shall use Best Management Practices to manage and minimize fugitive coal dust. See the Best Management Practice policies established in the Merrimack Station’s Environmental Management System Plan for Fugitive Plant Emissions.

**C. Annual SO<sub>2</sub> Allowance Programs**

1. SO<sub>2</sub> Allowance Allocation

In accordance with 40 CFR Part 73, SO<sub>2</sub> allowances<sup>19</sup> pursuant to the Federal Acid Rain Program for this facility are allocated as indicated in the following table:

<b>Table 6 - Total Annual Phase II SO<sub>2</sub> Allowance Allocation (tons)</b>	
<b>Emission Unit</b>	<b>Years 2010 and beyond</b>
MK1	4,296
MK2	9,257

2. Compliance

- A. Pursuant to 40 CFR 73.35, the Owner or Operator shall comply with the SO<sub>2</sub> emission limitation requirements.
- B. At the end of each calendar year, the Owner or Operator shall hold sufficient SO<sub>2</sub> allowances equivalent to the SO<sub>2</sub> emissions during that calendar year.

3. General Provisions

Pursuant to Env-A 611.07, SO<sub>2</sub> allowances lawfully held or acquired by the Owner or Operator shall be governed by the following:

- A. Emissions from the affected units shall not exceed any SO<sub>2</sub> allowances held by the affected unit;
- B. The number of SO<sub>2</sub> allowances held by the Owner or Operator shall not be limited;
- C. The Owner or Operator shall not use SO<sub>2</sub> allowances to avoid compliance with any other applicable requirement of either state or federal rules or of the provisions of the Clean Air Act; and
- D. Any SO<sub>2</sub> allowances held by the Owner or Operator shall be accounted for according to the procedures established in the applicable provisions of 40 CFR 72 and 40 CFR 73.

4. Excess Emissions

Pursuant to 40 CFR 72.9(e), if the affected source has excess emissions in any calendar year, the Owner or Operator shall:

- A. Submit a proposed offset plan as required under 40 CFR 77;
- B. Pay the required penalty without demand and pay upon demand the interest on that penalty, as required by 40 CFR 77; and
- C. Comply with the terms of an approved offset plan as required by 40 CFR 77.

5. Allowance Transfer

The Owner or Operator shall transfer allowances according to the procedures in 40 CFR 73.50.

<sup>19</sup> Per Env-A 2904.04, GSP Merrimack shall transfer the federal acid rain program SO<sub>2</sub> allowances to the Department. SO<sub>2</sub> allowances for the affected source will be allocated by the Department in accordance with Env-A 2904.05. See Condition VIII. E.

## 6. Acid Rain Permit Application

The attached Acid Rain Permit application, dated March 31, 2016, is hereby incorporated by reference into this Permit. The Owner and Operator shall comply with the requirements set forth in the Acid Rain Permit Application and this Permit.

**D. Ozone Season NOx Budget Trading Program (Env-A 3200)**

## 1. NOx Allowance Allocation

NOx allowances shall be allocated to the Owner/Operator of the NOx budget source<sup>20</sup> as per Env-A 3205.03, *Allowance Allocation Methodology*.

## 2. Ozone Season NOx Emissions Cap (Env-A 3206)

NOx emissions during any control period<sup>21</sup> shall not exceed the amount of NOx allowances held in the budget source's NOx Allowance Tracking System (NATS) compliance account for that control period as of the allowance transfer deadline of November 30.

## 3. Conversion of Allowances to Discrete Emissions Reductions (Env-A 3205.04)

The Owner/Operator of the budget source may convert unused allowances to discrete emissions reductions (DERs) in accordance with procedures for DER generation pursuant to Env-A 3103. Upon conversion, the Owner/Operator shall surrender those converted allowances as if they had been used for actual emissions.

## 4. Allowance Transfer and Use (Env-A 3207)

- a. An allowance shall be a marketable emissions authorization that may be bought, sold, or traded at any time during any year, not just the current year.
- b. The Owner/Operator of the budget source shall comply with the NOx allowance transfer procedures of Env-A 3207.03.

## 5. Allowance Banking (Env-A 3208)

- a. The banking of allowances shall be permitted to allow the retention of unused allowances from one year to a future year in either a compliance account, an overdraft account, or a general account.
- b. Unused allowances as of the end of the allowance transfer deadline shall be retained in the compliance, overdraft, or general account and designated as banked allowances after the NATS administrator has made all deductions for a given control period from the compliance account or overdraft account pursuant to Env-A 3212.
- c. Banked allowances may be used in the current year on a one-for-one basis.
- d. Any allowances banked on or after January 1, 2012 shall be retired at the end of 3 years after their designated year of allocation.

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<sup>20</sup> As per RSA 125-J:1 XIX-b. "NOx budget source" means a fossil fuel fired boiler or indirect heat exchanger with a maximum rated heat input capacity of 250 MMBtu/hr, or more; and all electric generating facilities with a rated output of 15 MW, or more.

<sup>21</sup> Control period means the period beginning May 1 of each year and ending on September 30 of the same year, inclusive.

6. End-of-Season Reconciliation (Env-A 3212)
  - a. Each year prior to November 30, the AAR shall request the NATS administrator to deduct current year allowances from the compliance account or overdraft account equivalent to the number of available allowances to cover the NO<sub>x</sub> emissions during the current control period.
  - b. This request shall be submitted by the AAR to the NATS administrator no later than the allowance transfer deadline, November 30.
  - c. This request shall identify the compliance account or overdraft account from which the deductions should be made.
  - d. This request shall:
    1. Identify the serial numbers of the allowances to be deducted, if desired by the source; or
    2. Not identify serial numbers, in which case allowances usable for that compliance year shall be deducted in the order of their arrival into the unit's account, with allocated allowances being deducted first, followed by the deduction of transferred allowances.
  - e. Should the emissions of the budget source in the current control period exceed the allowances in the budget source's compliance account and overdraft account, the Owner/Operator of the budget source shall obtain additional allowances by the allowance transfer deadline so the total number of allowances in the budget source's compliance account and overdraft account, including allowance transfers properly submitted to the NATS administrator by the allowance transfer deadline, equals or exceeds the control period emissions of NO<sub>x</sub> rounded to the nearest whole ton.
  - f. Failure to obtain and hold in its compliance account and overdraft account for any control period as of the allowance transfer deadline sufficient allowances equal to or exceeding emissions for the control period, shall result in enforcement action and penalties against the budget source pursuant to Env-A 3214.
7. Excess Emissions and Enforcement Provisions (Env-A 3214)
  - a. If emissions from a budget source exceed allowances held in the budget source's compliance account or overdraft account for the control period as of the allowance transfer deadline, the NATS administrator shall automatically deduct allowances from the budget source's compliance account or overdraft account for the next control period at a rate of 3 allowances for every one ton of excess emissions.
  - b. In accordance with RSA 125-J:4-a, for purposes of enforcement of the NO<sub>x</sub> Budget Program, in determining the number of days of violation, any excess emissions for the control period shall presume that each day in the control period of 153 days, constitutes a day in violation unless the Owner/Operator can demonstrate, through use of verifiable emissions data that a lesser number of days should be considered. Each ton of excess emissions shall constitute a separate violation.

- E. **Sulfur dioxide and Nitrogen oxides Annual Budget Trading and Banking Program (Env-A 2900)**<sup>22</sup>
1. Annual Emission Budgets & Allowance Allocation
    - A. The annual SO<sub>2</sub> budget for all affected sources combined shall be no more than 7,289 tons.
    - B. The annual NO<sub>x</sub> budget for all affected sources combined, including the seasonal NO<sub>x</sub> allowances allocated to each affected source pursuant to Env-A 3200, shall be no more than 3,644 tons.
    - C. As per Env-A 2904.04 *Transfer of SO<sub>2</sub> Allowances*, each affected source shall transfer to the Department all annual SO<sub>2</sub> allowance allocations provided under the federal acid rain program.
    - D. Allowance allocations for each affected source for the following calendar year will be calculated by the Department as per Env-A 2904.05 *Allowance Allocation Methodology*.
  2. Legal Attributes of Allowances (Env-A 2903)
    - A. An allowance shall be a marketable emissions authorization that may be bought, sold, or traded at any time during any year, not just the current year.
    - B. An allowance shall not be a property right or create a property right for any person.
    - C. Future allocations shall not be a property right or create a property right for any person.
    - D. No allowance or future allocation shall constitute a security or other form of property.
  3. Holding and Using Allowances (Env-A 2903.02)
    - A. The Owner /Operator of each affected source shall, no later than the allowance transfer deadline<sup>23</sup>, hold in the appropriate account for that affected source:
      - i. A quantity of SO<sub>2</sub> allowances equal to or greater than the total SO<sub>2</sub> emitted from that affected source during the previous year; and
      - ii. A quantity of NO<sub>x</sub> allowances equal to or greater than the total NO<sub>x</sub> emitted from the affected source during the previous year.
    - B. To use an allowance for compliance with Env-A 2900 in a designated compliance year, the allowance shall be:
      - i. Already in a compliance or overdraft account as of the allowance transfer deadline; or
      - ii. Transferred into the compliance account by an allowance transfer submitted by the allowance transfer deadline.

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<sup>22</sup> This rule applies to affected sources as defined in Env-A 2901.02, namely Merrimack Station Units MK1 and MK2, Schiller Station Units SR4 & SR6 and Newington Station Unit NT1.

<sup>23</sup> Per Env-A 2902.10 "Allowance transfer deadline" means the deadline, which is 12:01 a.m. on January 31, for recording allowances in an affected source's compliance or overdraft account for purposes of meeting the requirements of this chapter for the preceding calendar year.

4. Conversion of NO<sub>x</sub> Allowances to DERs (Env-A 2903.03)
  - A. Allowances shall not be considered offsets as defined in RSA 125-J:1, XX, however NO<sub>x</sub> allowances that are not used to satisfy the requirements of Env-A 2900 and that are not banked may be converted to non-ozone season NO<sub>x</sub> DERs in accordance with Env-A 3100.
  - B. Each affected source for which unused NO<sub>x</sub> allowances are converted to NO<sub>x</sub> DERs in accordance with Env-A 3103 shall surrender those converted allowances as if they had been used for actual emissions.
5. Allowance Transfer (Env-A 2905)
  - A. The Owner/Operator shall comply with the allowance transfer provisions of Env-A 2905.01 *Initiating an Allowance Transfer*.
  - B. Pursuant to Env-A 2905.07 *Use of Allowances by Utilities* and RSA 125-J:5, XIII, the use of allowances by a utility, as defined in RSA 362:2, shall be subject to such additional conditions as are ordered by the New Hampshire public utilities commission pursuant to its authority.
  - C. Pursuant to Env-A 2905.06 *Price Disclosure*, subject to a claim of confidentiality in accordance with Env-A 103, each affected source shall make available to any person, all information regarding transaction cost and allowance price.
6. Banking Unused Allowances (Env-A 2905.08)
  - A. Any allowances remaining in an account after the Allowance Tracking System (ATS) administrator has made all deductions for a given year from the compliance account or overdraft account pursuant to Env-A 2908.03 shall be designated as unused allowances.
  - B. Unused allowances may be retained, or banked, for use in a future year in a compliance, overdraft, or general account.
7. Authorized Account Representative (Env-A 2906.04)
  - A. Each holder of a compliance account, overdraft account, or general account shall designate one individual to be the AAR for the account and one individual to be the alternate AAR for the account.
  - B. The alternate AAR shall have the same authority to initiate allowance transfers and file reports as the AAR.
8. Request for Deduction of Allowances (Env-A 2908.02)
  - A. No later than the allowance transfer deadline, the AAR shall request the ATS administrator to deduct allowances available for the previous year from the compliance account or overdraft account, or both, in an amount equivalent to the number of allowances required to cover the emissions during the previous year.
  - B. The above request shall identify:
    - i. The compliance account or overdraft account from which the deductions should be made; and
    - ii. The serial number of each allowance to be deducted.
9. Procurement of Additional Allowances (Env-A 2908.04)

If the emissions of the affected source in the previous year exceed the allowances in

compliance account and overdraft account, the Owner/Operator shall obtain additional allowances by January 30 so the total number of allowances in the affected source's compliance account and overdraft account, including allowance transfers properly submitted to the ATS administrator by allowance transfer deadline, equals or exceeds the previous year annual emissions rounded to the nearest whole ton.

**F. Carbon dioxide Budget Trading Program (Env-A 4600)**

1. CO<sub>2</sub> Allowance Requirements (Env-A 4605.01)
  - A. The Owner or Operator of each CO<sub>2</sub> budget source and each CO<sub>2</sub> budget unit at the source shall hold CO<sub>2</sub> allowances available for compliance deductions under Env-A 4605.04, as of the CO<sub>2</sub> allowance transfer deadline, in the source's compliance account, in an amount not less than the total CO<sub>2</sub> emissions from fossil fuel-fired generation for the control period from all CO<sub>2</sub> budget units at the source, as determined in accordance with Env-A 4605, Env-A 4607, Env-A 4609.18, and VIII.F.1.C, below.
  - B. CO<sub>2</sub> allowances shall be held in, deducted from, or transferred among CO<sub>2</sub> allowance tracking system accounts in accordance with Env-A 4606, Env-A 4607, and Env-A 4608.
  - C. For the purpose of determining compliance with Env-A 4600, total tons of CO<sub>2</sub> emissions for a control period<sup>24</sup> shall be calculated as the sum of all recorded hourly emissions, or the tonnage equivalent of the recorded hourly emissions rates, in accordance with Env-A 4609, with any remaining fraction of a ton equal to or greater than 0.50 ton rounded up to equal one ton and any fraction of a ton less than 0.50 ton rounded down to equal zero tons.
2. CO<sub>2</sub> Allowance Limitations (Env-A 4605.02)
  - A. A CO<sub>2</sub> allowance shall be a limited authorization to emit one ton of CO<sub>2</sub> in accordance with the CO<sub>2</sub> budget trading program.
  - B. A CO<sub>2</sub> allowance shall not be deducted, in order to comply with the requirements of Env-A 4605.01(a), for a control period that ends prior to the year for which the CO<sub>2</sub> allowance was allocated.
  - C. A CO<sub>2</sub> offset allowance shall not be deducted, in order to comply with the requirements of Env-A 4605.01(a), beyond the applicable percent limitations set out in Env-A 4605.04(b).
  - D. Subject to Env-A 4605.02(e) and (f), no provision of the CO<sub>2</sub> budget trading program, the CO<sub>2</sub> budget permit application, or the CO<sub>2</sub> budget permit shall be construed to limit the authority of the Department to terminate or limit such authorization.
  - E. A CO<sub>2</sub> allowance shall not constitute a property right.
3. Allowances Available for Compliance Deduction (Env-A 4605.04)
  - A. CO<sub>2</sub> allowances that meet the following criteria shall be available to be deducted for compliance with the requirements of Env-A 4605 for a control period:

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<sup>24</sup> Control period means compliance period as defined in New Hampshire RSA 125-O:20, IV.



- i. For CO<sub>2</sub> allowances other than CO<sub>2</sub> offset allowances, the allowances are from allocation years that fall within a prior control period or the same control period for which the allowances will be deducted; and
    - ii. The CO<sub>2</sub> allowances are:
      - (a) Held in the CO<sub>2</sub> budget source's compliance account as of the CO<sub>2</sub> allowance transfer deadline for that control period; or
      - (b) Transferred into the compliance account by a CO<sub>2</sub> allowance transfer correctly submitted for recordation under Env-A 4608.01 by the CO<sub>2</sub> allowance transfer deadline for that control period;
    - iii. As provided in RSA 125-O:22, II, a CO<sub>2</sub> budget source may use offset allowances for up to 3.3 percent of its compliance obligation.
  - B. CO<sub>2</sub> allowances shall not be available for current compliance if the allowances were deducted for excess CO<sub>2</sub> emissions for a prior control period under Env-A 4605.08.
  - C. Allowances deducted for the purpose of compliance shall not be available for any other purpose.
4. Excess CO<sub>2</sub> Emissions Requirements (Env-A 4605.07)

The Owner or Operator of a CO<sub>2</sub> budget source that has excess CO<sub>2</sub> emissions in any control period shall:

  - A. Forfeit the CO<sub>2</sub> allowances required for deduction under Env-A 4605.08, provided CO<sub>2</sub> offset allowances shall not be used to cover any part of such excess CO<sub>2</sub> emissions; and
  - B. Pay any fine, penalty, or assessment or comply with any other remedy imposed under RSA 125-O:7 or RSA 125-O:22, V.
5. Deductions for Excess CO<sub>2</sub> Emissions (Env-A 4605.08)
  - A. As provided by RSA 125-O:22, V, the deduction of CO<sub>2</sub> allowances for excess CO<sub>2</sub> emissions shall equal to 3 times the number of the source's excess CO<sub>2</sub> emissions.
  - B. Within 14 calendar days of receipt of notice by from the regional organization<sup>25</sup> that a shortage exists, the source shall transfer sufficient allowances into its compliance account to cover the shortage.
  - C. No CO<sub>2</sub> offset allowances shall be deducted to account for the source's excess CO<sub>2</sub> emissions.
  - D. Any CO<sub>2</sub> allowance deduction required under 5.A, above, shall not affect the liability of the owner(s) and operator(s) of the CO<sub>2</sub> budget source or the CO<sub>2</sub> units at the source for any fine, penalty, or assessment, and shall not affect the obligation of the owner(s) and operator(s) to comply with any other remedy, for the same violation, as ordered under applicable state law.
6. Determination of Violations and Deduction of Allowances (Env-A 4605.11)

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<sup>25</sup> Regional organization as defined in NH RSA 125-O:20, XIII

- A. For purposes of determining the number of days of violation, if a CO<sub>2</sub> budget source has excess CO<sub>2</sub> emissions for a control period, each day in the control period shall constitute a day of violation unless the owner(s) and operator(s) of the unit demonstrate that a lesser number of days should be considered; and
  - B. Each ton of excess CO<sub>2</sub> emissions shall constitute a separate violation.
7. Submission of CO<sub>2</sub> Allowance Transfers (Env-A 4608.01)
- Any CO<sub>2</sub> AAR seeking recordation of a CO<sub>2</sub> allowance transfer shall submit the transfer request to the regional organization in accordance with Env-A 4608.01(b).

**G. Monitoring and Testing Requirements**

The Owner or Operator is subject to the monitoring and testing requirements as identified in Table 7 below:

<b>Table 7 - Monitoring/Testing Requirements</b>					
<b>Item #</b>	<b>Parameter</b>	<b>Method of Compliance</b>	<b>Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1.	NOx and diluent gas	a.) Operate and maintain a NO <sub>x</sub> -diluent CEMS (consisting of a NO <sub>x</sub> pollutant concentration monitor and a CO <sub>2</sub> diluent gas monitor) with an automated data acquisition and handling system for measuring and recording: <ol style="list-style-type: none"> <li>1. NO<sub>x</sub> concentration (in ppm);</li> <li>2. CO<sub>2</sub> concentration (in % CO<sub>2</sub>); and</li> <li>3. NO<sub>x</sub> emission rate (in lb/MMBtu).</li> </ol>	Continuously	MK1 & MK2	Env-A 808.02, Env-A 3210, Env-A 2907, 40 CFR §§75.10(a)(2), 75.12(c) & 75.71
		b.) Account for total NO <sub>x</sub> emissions, both NO and NO <sub>2</sub> , either by monitoring for both NO and NO <sub>2</sub> or by monitoring for NO only and adjusting the emissions data to account for NO <sub>2</sub> .			
		c.) Calculate hourly, quarterly and annual NO <sub>x</sub> emission rates (in lb/MMBtu) by combining the NO <sub>x</sub> concentration (in ppm), diluent concentration (in percent CO <sub>2</sub> ), and percent moisture (if applicable) according to the procedures in 40 CFR 75 Appendix F.			
		d.) Except as provided in Item 1.e. below, calculate 24-hr calendar day average NO <sub>x</sub> emission rate in lb/MMBtu to demonstrate compliance with the rate-based emission limits in Table 5, Item 1.	Daily		Env-A 1314 & Env-A 808.14
		e.) Calculate NO <sub>x</sub> emissions in tons per day by summing all valid, quality-assured hourly CEM data to demonstrate compliance with the mass-based emission limits in Table 5, Item 1.	For any calendar day on which startup, shutdown or low-load operation occurs		Env-A 1314

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
2.	NOx Mass Emissions	Calculate NOx mass emissions as: a.) Hourly (in lb/hr) by multiplying the hourly NOx emission rate (in lb/MMBtu) by the hourly heat input rate (in MMBtu/hr) and the unit or stack operating time; and b.) Quarterly, cumulative year-to-date and cumulative for the ozone season (in tons) by summing the hourly NOx mass emissions according to the procedures in App. F, Section 8 of 40 CFR 75.	Hourly, quarterly and cumulative for the ozone season and year-to-date	MK1 & MK2	40 CFR 75.71, 40 CFR 75.72, Env-A 2910 & Env-A 3212
3.	Ozone Season NOx Emission Rate	Calculate the ozone season NOx emission rate (in lb/MMBtu) by dividing ozone season NOx mass emissions by heat input.	During the ozone season	MK1, MK2, MKCT1 & MKCT2	Env-A 3212.01 & 40 CFR 75.75(b)
4.	NOx Mass Emissions Alternative Monitoring System for peaking units	a.) Calculate NOx mass emissions using 40 CFR 75 Appendix E. b.) If the unit exceeds the thresholds defining a “peaking unit”, the Owner of Operator shall meet the requirements of 40 CFR 75.71(c) no later than December 31 of the following calendar year. c.) Whenever the monitoring method is to be changed, apply and obtain approval from DES prior to changing the monitoring method.	Cumulative ozone season	MKCT1 & MKCT2	40 CFR §§ 75.74(c)(11), 75.71(d), 40 CFR 75, Appendix E & Env-A 3210
5.	NOx Mass Emissions - Annual and Ozone Season Monitoring	Meet the requirements of 40 CFR 75 Subpart H.	During the entire calendar year	MK1 & MK2	40 CFR 75.74(a) & (b)
			During the ozone season	MKCT1 & MKCT2	
6.	Heat Input Rate	Determine the heat input rate (in MMBtu/hr) to each unit for every hour or part of an hour any fuel is combusted following the procedures in 40 CFR 75 Appendix F.	Hourly	MK1 & MK2	40 CFR §§ 75.10(c), 75.75(a), Env-A 2907.02 & Env-A 3212.02
7.	Net Electrical Output	Monitor net electrical output in MW-hr in accordance with 40 CFR 75.	Annually	MK1, MK2, MKCT1 & MKCT2	Env-A 2907.02 & Env-A 3207.04
8.	SO <sub>2</sub>	Operate and maintain a SO <sub>2</sub> continuous emission monitoring system with an automated data acquisition and handling system for measuring and recording SO <sub>2</sub> concentration (in ppm), volumetric gas flow (in scfh) and SO <sub>2</sub> mass emissions (in lb/hr) discharged to the atmosphere.	Continuously	MK1 & MK2	Env-A 808.02(a)(1), Env-A 2907, 40 CFR §§75.10(a)(1) & 75.11

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
9.	Stack volumetric flow rate	Operate and maintain a flow monitoring system to measure and record stack volumetric gas flow and meet the following requirements: a.) All differential pressure flow monitors shall have an automatic blow-back purge system installed and in wet conditions, shall have the capability for drainage of the sensing lines; and b.) The stack flow monitoring system shall have the capability for manual calibration of the transducer while the system is on-line and for a zero check.	Continuously	MK1 & MK2	40 CFR 75, Env-A 2907 & Env-A 808.03
10.	CO <sub>2</sub>	Operate and maintain a CEMS for measuring and recording CO <sub>2</sub> concentration (in ppm or percent) and CO <sub>2</sub> mass emissions (in tons/hr) discharged to the atmosphere.	Continuously	MK1 & MK2	40 CFR §§75.10(a)(3) & 75.13
11.	Opacity	Operate and maintain a continuous opacity monitoring system with an automated data acquisition and handling system for measuring and recording the opacity of emissions (in percent opacity) discharged to the atmosphere.	Continuous	MK1 & MK2	40 CFR §§75.10(a)(4) & 75.14
12.	CEMS Operating Requirements	Each CEMS shall: a.) Meet the equipment, installation, and performance specifications in 40 CFR 75 Appendix A; b.) Be maintained according to the quality assurance and quality control procedures in 40 CFR 75 Appendix B; c.) Be in operation and monitoring emissions from the boiler at all times that the emission unit combusts any fuel except during periods of: 1. Calibration, quality assurance, or preventive maintenance, performed pursuant to §75.21 and Appendix B of 40 CFR 75; 2. Repair; 3. Backups of data from the data acquisition and handling system; or 4. Recertification performed pursuant to §75.20; f.) Measure and calculate hourly averages in accordance with the following: 1. Complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute interval; 2. Compute hourly averages using at least one data point in each fifteen minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly average may be computed from at least two	Hourly	MK1 & MK2	40 CFR 75.10

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) if data are unavailable as a result of the performance calibration, quality assurance, or preventive maintenance activities pursuant to §75.21 and Appendix B;</p> <ol style="list-style-type: none"> <li>3. All valid measurements or data points collected during an hour shall be used to calculate the hourly averages;</li> <li>4. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour.</li> <li>5. Failure of an SO<sub>2</sub>, CO<sub>2</sub> emissions concentration monitor, flow monitor, or NO<sub>x</sub>-diluent CEMS, to acquire the minimum number of data points for calculation of an hourly average shall result in the failure to obtain a valid hour of data and the loss of such component data for the entire hour.</li> <li>6. For a NO<sub>x</sub>-diluent monitoring system, an hourly average NO<sub>x</sub> emission rate in lb/MMBtu is valid only if the minimum number of data points is acquired by both the NO<sub>x</sub> pollutant concentration monitor and the diluent monitor (CO<sub>2</sub>).</li> <li>7. If a valid quality-assured hour of data is not obtained, follow the procedures in 40 CFR 75 Subpart D.</li> </ol> <p>g.) Each CEMS must be capable of accurately measuring, recording, and reporting data and not incur an exceedance of the full scale range, except as provided in 40 CFR 75 Appendix A sections 2.1.1.5, 2.1.2.5, and 2.1.4.3.</p>			
13.	COMS Operating Requirements	<ol style="list-style-type: none"> <li>a.) The COMS shall be capable of completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.</li> <li>b.) All opacity data shall be reduced to 6-minute averages calculated in accordance with the provisions of 40 CFR 51 Appendix M.</li> <li>c.) The COMS shall include a means to display instantaneous values of percent opacity.</li> </ol>	As specified	MK1 & MK2	40 CFR 75.10(d) & Env-A 808.03

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
14.	Minimum Specifications for CEMS	All gaseous CEMS shall meet the following minimum specifications, as applicable: a.) A gaseous CEMS shall average and record the data for each calendar hour. b.) A “valid hour” of data means a minimum of 42 minutes of gaseous or opacity CEM system readings taken in any calendar hour, during which time the CEM is not in an out of control period as defined in Env-A 808.01(g), and the facility on which the CEM is installed is in operation. c.) All gaseous CEMS shall: 1. Include a means to display instantaneous values of gaseous emission concentrations; and 2. Complete a minimum of one cycle of operation, which shall include measuring, analyzing, and data recording for each successive one-minute period for systems measuring gaseous emissions, unless a longer time period is approved in accordance with Env-A 809.	Hourly	MK1 & MK2	Env-A 808.03
15.	General CEMS & COMS Audit Requirements	The Owner or Operator shall: a.) Conduct CEMS audits in accordance with Env-A 808.07 through 808.10 & 40 CFR 75 (as applicable). b.) Notify the Division at least: 1. 30 days prior to the performance of a relative accuracy test audit (RATA); and 2. 2 weeks prior to any other planned audit or test procedure.	Quarterly	MK1 & MK2	Env-A 808.07 through 808.10 & 40 CFR 75.61(a)(5)
16.	Out-of-Control Periods for CEMS	a.) If an out-of-control period occurs to a monitor or CEMS, take corrective action and repeat the tests applicable to the out of control parameter as described in 40 CFR 75 Appendix B. b.) Out of control periods for CEMS include: 1. For daily calibration error tests, when the calibration error of a pollutant concentration monitor exceeds the applicable specification in Section 2.1.4 of App. B to 40 CFR 75. 2. For quarterly linearity checks, when the error in linearity at any of the three gas concentrations (low, mid-range, and high) exceeds the applicable specification in 40 CFR 75 Appendix A. 3. For RATAs, when the relative accuracy exceeds the applicable specifications in Appendix A of 40 CFR 75.	As specified by regulation	MK1 & MK2	40 CFR §§75.21(e)(2), 75.24, Env-A 3210.08 & Env-A 2907.06

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>c.) When a monitor or continuous emission monitoring system is out-of-control:</p> <ol style="list-style-type: none"> <li>1. Any data recorded by the monitor or monitoring system are not quality-assured and shall not be used in calculating monitor data availabilities pursuant to 40 CFR 75.32;</li> <li>2. The Owner or Operator shall take actions as per §75.24(c) until the monitor or monitoring system has successfully met the relevant criteria in Appendices A and B of 40 CFR 75 as demonstrated by subsequent tests.</li> </ol> <p>d.) Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement pursuant to Env-A 800 or the applicable provisions of Part 75 both at the time of the initial certification or recertification application submission and at the time of the audit, the Department shall issue a notice of disapproval of the certification status of such system or component. For the purposes of this section, an audit shall be either a field audit or an audit of any information submitted to the Department or the Administrator.</p> <p>e.) The data measured and recorded by the system or component shall not be considered valid quality-assured data from the date of issuance of the notification of the disapproval of certification status until the date and time that the Owner or Operator completes subsequently approved initial certification or recertification tests in accordance with Env-A 3210.05(s).</p> <p>f.) The Owner or Operator shall follow the initial certification or recertification procedures for each disapproved system.</p>			
17.	Out of Control Periods for COMS	<p>The out of control periods for COMS are defined as follows:</p> <ol style="list-style-type: none"> <li>a.) The time period beginning with the completion of the daily calibration drift check where the calibration drift (CD), as calculated pursuant to 40 CFR 60.13(d)(1), exceeds 2% opacity for 5 consecutive days, and ending with the CD check after corrective action has occurred that results in the performance specification drift limits being met;</li> <li>b.) The time period beginning with the completion of a daily CD check preceding the daily CD check that results in the CD being greater than 5%</li> </ol>	N/A	MK1 & MK2	Env-A 808.01(g)(2)

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		opacity and ending with the CD check after corrective action has occurred that results in the performance specification drift limits being met; c.) The time period beginning with the completion of a quarterly opacity audit where the CEM system fails any of the audits required by Env-A 808.10 and ending with successful completion of the same audit after corrective action has occurred; or d.) The time period beginning with the completion of the zero alignment check required by 40 CFR 60, Appendix F, Procedure 3, section 10.3 where the zero alignment error exceeds 2 percent opacity and ending after corrective action is taken that results in a successful zero alignment check.			
18.	Recertification of CEMS and COMS	a.) Recertify CEMS and COMS whenever the Owner or Operator makes a replacement, modification, or change to the systems or to the facility that could significantly affect the ability of the systems to accurately measure and record the requisite data. b.) Use the reference test methods listed in 40 CFR 75.22 and included in Appendix A to 40 CFR 60 to conduct: <ol style="list-style-type: none"> <li>1. Monitoring system tests for certification or recertification of CEMS and excepted monitoring systems under 40 CFR 75 Appendix E; and</li> <li>2. Quality assurance and quality control tests.</li> </ol>	As specified	MK1 & MK2	40 CFR §§75.20, 75.70(d), 75.22 Env-A 808.05, Env-A 3210 & Env-A 2907.04
19.	QA/QC Requirements	The Owner or Operator shall: <ol style="list-style-type: none"> <li>a.) Operate, calibrate and maintain each CEMS used to report emissions under the federal acid rain program according to the quality assurance and quality control procedures in 40 CFR 75 App. B;</li> <li>b.) Operate, calibrate and maintain the COMS according to procedures specified in Env-A 808.</li> <li>c.) Ensure that all calibration gases used to quality assure the operation of the CEM instrumentation shall meet the definition in 40 CFR 72.2.</li> </ol>	Continuously	MK1 & MK2	40 CFR §§75.21 & 75.70
20.	Substitute Emission Data	<u>Requirement for Substitute Emission Data</u> Any facility that uses the emissions data collected by a gaseous CEM system to calculate and report its annual emissions in accordance with Env-A 900 shall comply with the following: <ol style="list-style-type: none"> <li>a.) For any facility operating hour during which the gaseous CEM system has not collected a valid hour of CEM system data, the Owner or Operator shall submit to the Division substitute emission data for those hours which has been generated using one of the following methods:                             <ol style="list-style-type: none"> <li>1. The missing data substitution procedures specified in 40 CFR 75, Subpart D;</li> </ol> </li> </ol>	N/A	MK1 & MK2	Env-A 808.12



**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		2. If the missing data occurred during a period of steady-state operation, and not during a period of start-up, shutdown, or malfunction: <ul style="list-style-type: none"> <li>i. An average of the emissions data for the hours prior to and after the period of missing data during which valid CEM data was collected, or</li> <li>ii. Representative emissions data for the device at the same heat input rate, electric generating rate, or steam load;</li> </ul> 3. If the missing data occurred during a start-up, shutdown, or malfunction of the device, substitute data collected by the CEM during a similar period of start-up, shutdown or malfunction, respectively; or                     4. An alternative method of data substitution that meets the following criteria: <ul style="list-style-type: none"> <li>i. The alternative method was included in the monitoring plan submitted pursuant to Env-A 808.04;</li> <li>ii. The alternative method provides for representative emissions for the conditions of operation of the device during the period of missing data equivalent to the substitution methods described above; and</li> <li>iii. The alternative method was approved by DES as part of its approval of the monitoring plan pursuant to Env-A 808.04.</li> </ul> b.) For CEM systems and emissions subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall follow those requirements for substituting emissions data in order to calculate emission totals or emission averages as required by 40 CFR 75.                     c.) For CEM systems and emissions not subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall include substitute emissions data in the calculation of total daily, monthly, quarterly, and annual emissions generated by the permitted device to quantify total actual emissions.                     d.) Substitute emission data shall not be used in the calculation of emissions totals or averages in order to determine or demonstrate compliance with emissions standards.                     e.) Substitute data shall not be included in the calculation of data availability.			
21.	NOx Mass Emissions	The Owner or Operator is prohibited from the following:	Not applicable	MK1 & MK2	40 CFR 75.70(c)

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
	Provisions - Prohibitions	a.) Using alternative monitoring system, reference method, or any other alternative for the required CEMS without approval through petition process in 40 CFR 75.70(h). b.) Discharging or allowing discharge of NOx emissions without accounting for all emissions in accordance with the provisions of Subpart H, except as provided in 40 CFR 75.74. c.) Disrupting the CEMS or any other approved emission monitoring method, and thereby avoid monitoring and recording NOx mass emissions, except for periods of re-certification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the provisions of 40 CFR 75 Subpart H applicable to the monitoring systems under 40 CFR 75.71, except as provided in 40 CFR 75.74. d.) Retiring or permanently discontinuing the use of the CEMS, or any other approved emission monitoring system except under one of the following circumstances: <ol style="list-style-type: none"> <li>1. During a period that the unit is covered by a retired unit exemption that is in effect under the State or federal NOx mass emission reduction program that adopts the requirements of Subpart H;</li> <li>2. The Owner or Operator is monitoring NOx emissions from the affected unit with another certified monitoring system approved, in accordance with the provisions of 40 CFR 75.70(d); or</li> <li>3. The designated representative submits notification of the date of certification testing of a replacement monitoring system in accordance with 40 CFR 75.61.</li> </ol>			

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
22.	SO <sub>2</sub>	<p><u>Determination of Compliance with SO<sub>2</sub> Emission Limitations</u></p> <p>a.) Compliance with the SO<sub>2</sub> lb/MMBtu emission limitations in Table 5, Items 3 and/or 4 shall be determined as the sum of <b>all</b> SO<sub>2</sub> emissions from MK1 and MK2, i.e., emissions from MK1 and MK2 as measured by the CEMS located at the FGD outlet and any emissions from MK1 venting through the emergency stack (STMK2).</p> <p>b.) Demonstrate compliance by using all valid, quality-assured hourly data recorded by the CEMS and any emergency stack emissions to calculate the average emissions rate in lb/MMBtu on a 7- (or 30-) boiler operating day rolling average basis, updated at the end of each new boiler operating day.</p> <hr/> <p>c.) For each boiler operating hour<sup>26</sup>, calculate the hourly SO<sub>2</sub> emission rate (lb/MMBtu) as follows:</p> $Her = \frac{FGD\ Outlet\ SO_2 + Emergency\ Stack\ SO_2}{MK1HI + MK2HI} \quad - (Eq. 1a)$ <p>Where,                      FGD Outlet SO<sub>2</sub> = Controlled SO<sub>2</sub> emission rate<sup>27</sup> (lb/hr) from FGD stack (STMK3) monitor                      Emergency Stack SO<sub>2</sub> = Uncontrolled MK1 SO<sub>2</sub> emissions rate in lb/hr from the emergency stack (STMK2), calculated as per Table 8, Item 16.c                      MK1HI = MK1 boiler hourly heat input rate (MMBtu/hr)<sup>28</sup>                      MK2HI = MK2 boiler hourly heat input rate (MMBtu/hr)</p> <hr/> <p>d.) At the end of each boiler operating day, calculate the 7-(or 30-) boiler operating day rolling averages using Eq. 1b.</p> $Average\ SO_2\ emission\ rate = \frac{\sum_{i=1}^n Her_i}{n} \quad - (Eq. 1b)$ <p>Where: Her<sub>i</sub> is the hourly emission rate in lb/MMBtu for hour i and n is the number of hourly emissions rate values collected over the averaging period.</p>	Each boiler operating day	MK1 & MK2	TP-0189

<sup>26</sup> Boiler operating hour means a clock hour during which a boiler combusts any fuel, either for part of the hour or for the entire hour.

<sup>27</sup> Hourly SO<sub>2</sub> mass emission rates MK1SO<sub>2</sub>, MK2SO<sub>2</sub> and FGD Outlet SO<sub>2</sub> shall be calculated using 40 CFR 75, Appendix F, Eq. F-1.

<sup>28</sup> Hourly heat input rates shall be calculated using 40 CFR 75, Appendix F, Eq. F-15

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
23.	SO <sub>2</sub>	<p><u>Determination of Compliance with SO<sub>2</sub> Percent Reduction</u></p> <p>a.) Compliance with the percent reduction requirement in Table 5, Item 4 shall be determined by comparing the sum of uncontrolled SO<sub>2</sub> emission rates for MK1 and MK2 (as measured by CEMS located in the respective boiler duct) <b>and</b> the sum of controlled SO<sub>2</sub> emission rate (as measured by CEMS located at the FGD outlet) and any MK1 SO<sub>2</sub> emissions venting through the emergency stack.</p> <p>b.) For each boiler operating hour, calculate the average emission rate in lb/hr for each measurement location by using all valid, quality-assured hourly data recorded by each CEMS.</p> <hr/> <p>c.) Hourly percent reduction (Hpr) shall be calculated as follows:</p> $Hpr = \frac{(MK1SO_2 + MK2SO_2) - (FGD Outlet SO_2 + Emergency Stack SO_2)}{(MK1SO_2 + MK2SO_2)} \times 100$ <p style="text-align: center;">- (Eq. 2)</p> <p>Where,                      MK1SO<sub>2</sub> = Uncontrolled SO<sub>2</sub> emission rate in lb/hr for MK1 boiler                      MK2SO<sub>2</sub> = Uncontrolled SO<sub>2</sub> emission rate in lb/hr for MK2 boiler                      FGD Outlet SO<sub>2</sub> = Controlled SO<sub>2</sub> emission rate in lb/hr from FGD stack (STMK3) monitor                      Emergency Stack SO<sub>2</sub> = Uncontrolled MK1 SO<sub>2</sub> emissions rate in lb/hr vented through emergency stack (STMK2)</p> <hr/> <p>d.) At the end of each boiler operating day, calculate the 30- boiler operating day rolling average percent reduction using Equation 3:</p> $\text{Average percent reduction} = \frac{\sum_{i=1}^n Hpr_i}{n} - (\text{Eq. 3})$ <p>Where:                      Hpr<sub>i</sub> is the hourly percent reduction for hour i and n is the number of hourly percent reduction values collected over 30-boiler operating days.</p>	Each boiler operating day	MK1 & MK2	TP-0189
24.	FGD Operating Parameters	The Owner or Operator shall continuously monitor: a.) Scrubber liquor pH; and b.) FGD absorber exit gas temperature.	Continuously	MK2-PC7	TP-0008 & 40 CFR 70.6(a)(3)
25.	FGD Operation & Maintenance	a.) The FGD shall be operated as per manufacturer's recommended procedures. b.) Service and maintenance calibration activities shall be performed as per manufacturer's recommended schedule. c.) These activities must be recorded and be made available for review at Department's request.	As specified	MK2-PC7	40 CFR 70.6(a)(3)

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
26.	Flue gas temperature	The Owner or Operator shall continuously monitor the flue gas temperature at the outlet of each ESP to ensure that the ESP does not exceed the manufacturer recommended temperature.	Continuously	MK1-PC1 MK1-PC2 & MK2-PC4 MK2-PC5	40 CFR 70.6(a)(3)
27.	Inspection of ESPs	a.) The Owner or Operator shall conduct maintenance and inspection of each ESP as per manufacturer’s recommendations. b.) The operation and maintenance shall include normal rounds by a qualified operator for checking and cleaning of the hoppers and transport lines. c.) All critical maintenance activities performed and corrective actions taken on the ESP systems shall be recorded and be made available for review at Department’s request.	As per I/M Plan	MK1-PC1 MK1-PC2 & MK2-PC4 MK2-PC5	40 CFR 70.6(a)(3)
28.	SCR operating parameters	a.) The Owner or Operator shall continuously monitor the flue gas temperature at the SCR inlet to ensure that the ammonia injection is initiated upon reaching SCR permissive temperatures (> 638°F for MK1-PC3 and > 610°F for MK2-PC6). b.) Ammonia flow shall be continuously monitored and recorded, and shall be maintained until such time the SCR temperature drops below the permissive temperature during the shutdown process.	Continuous	MK1-PC3 & MK2-PC6	40 CFR 70.6(a)(3)
29.	Inspection & Maintenance of SCR(s)	a.) Inspection and maintenance of each SCR shall be conducted as per manufacturer’s recommended schedule. b.) SCR catalyst degradation shall be monitored through periodic sampling and analysis of the catalyst bed. c.) All critical maintenance activities and catalyst replacements performed shall be recorded and be made available for review at Department’s request.	As specified	MK1-PC3 & MK2-PC6	40 CFR 70.6(a)(3)

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
30.	Mercury	The Owner or Operator: a.) Must certify, operate, maintain and quality-assure the data from the Hg monitoring system in accordance with Appendix A to Subpart UUUUU. b.) Must calculate and record a 30- boiler operating day rolling average Hg emission rate, in units of the standard (i.e., lb/TBtu), updated for each new boiler operating day. Each 30- boiler operating day rolling average emission rate, calculated according to section 6.2 of Appendix A to Subpart UUUUU, is the average of all of the valid hourly Hg emission rates in the preceding 30- boiler operating days.	Continuous	MK1 & MK2	40 CFR 63.10010(a)(2) & (g)
31.	Mercury	<u>Mercury - Continuous Compliance Requirements</u> a.) The Owner or Operator must monitor and collect Hg emission data according to §63.10020 and the site-specific monitoring plan required by §63.10000(d). b.) The Owner or Operator must operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for periods of monitoring system malfunctions or out-of-control periods (see §63.8(c)(7)), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments. c.) The Owner or Operator is required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. d.) The Owner or Operator may not use data recorded during EGU startup or shutdown in calculations used to report emissions, except as otherwise provided in §63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. e.) The Owner or Operator must use all of the quality-assured data collected during all other periods in assessing the operation of the control device and associated control system. f.) Except for periods of monitoring system malfunctions or monitoring system out-of-control	Continuous	MK1 & MK2	40 CFR 63.10007 & 63.10020

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments), failure to collect required data is a deviation from the monitoring requirements.			
32.	PM & HCl	<u>LEE Testing Provisions for PM and HCl</u> a.) For affected units meeting the LEE requirements of §63.10005(h) <sup>29</sup> , the performance test must be conducted every three years in accordance with Table 5 of Subpart UUUUU and 40 CFR 63.10007. b.) LEE status for a pollutant is lost if a performance test on a PM or HCl LEE unit shows emissions in excess of 50 percent of the respective emission limit. In order to reapply for LEE status, conduct quarterly performance tests (except as otherwise provided in §63.10021(d)) for that pollutant, until all performance tests over a consecutive 3-year period show compliance with the LEE criteria.	As specified	MK1 & MK2	40 CFR §§ 63.10000(c)(iii), 63.10005(h), 63.10006, 63.10007 & Env-A 2304.01
33.	Ammonia slip	Conduct stack testing using DES-approved method to determine the ammonia slip <sup>30</sup> .	Every 5 years	MK1 & MK2	Env-A 802
34.	NOx	<u>NOx RACT Testing for Load Shaving Units</u> Conduct stack testing for NOx using the test methods specified in Env-A 803.04 <sup>31</sup> .	Every 3 years (within 12 calendar quarters)	MKCT1 & MKCT2	Env-A 803.03 & Env-A 803.04
35.	Stack Testing Scheduling & Protocol	Compliance testing shall be planned and carried out in accordance with the following schedule: a.) A pre-test protocol shall be submitted to the department at least 30 days prior to the commencement of testing in accordance with Env-A 802.04; b.) The Owner or Operator and any contractor retained by the owner or operator to conduct the test shall meet with a department representative in person or by telephone at least 15 days prior to the test date to finalize the details of the testing; c.) A pre-test meeting may be held less than 15 days prior to the test date so long as implementation of any testing or operation changes resulting from the meeting can be carried out prior to the scheduled test date and the scheduled test integrity is not jeopardized.	Each stack test	MK1, MK2, MKCT1 & MKCT2	Env-A 802

<sup>29</sup> Based on stack tests conducted during 2015-2017, MK1 and MK2 qualified as LEE for PM and HCl.

<sup>30</sup> Most recent ammonia slip test was conducted on February 20, 2019.

<sup>31</sup> Most recent NOx RACT testing for the combustion turbines was conducted on May 16, 2019.

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
36.	Stack Testing - Operating Conditions	Compliance stack testing shall be conducted under one of the following operating conditions: a.) Between 90 and 100 percent, inclusive, of maximum production rate or rated capacity; b.) A production rate at which maximum emissions occur; or c.) At such operating conditions agreed upon during a pre-test meeting conducted pursuant to Env-A 802.05.	Each stack test	MK1, MK2, MKCT1 & MKCT2	Env-A 802.10
37.	EGU Tune-up	Conduct a tune-up of each EGU <sup>32</sup> , as specified below: a.) As applicable, inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows: 1. Burner or combustion control component parts needing replacement that affect the ability to optimize NOx and CO must be installed within three calendar months after the burner inspection; 2. Burner or combustion control component parts that do not affect the ability to optimize NOx and CO may be installed on a schedule determined by the operator; b.) As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type; c.) As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors; d.) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O <sub>2</sub> probes and/or sensors, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems	Every 36 calendar months after the previous tune-up <sup>33</sup>	MK1 & MK2	40 CFR §§ 63.10006(i)(1) & 63.10021(e) Subpart UUUUU

<sup>32</sup> Initial tune-ups of MK1 and MK2 boilers were completed on September 10, 2015. Most recent tune-ups were conducted on February 14, 2017.

<sup>33</sup> If the EGU is offline when a deadline to perform the tune-up passes, the tune-up must be performed within 30 days of the re-start of the affected unit.



**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary;</p> <p>e.) Optimize combustion to minimize generation of CO and NOx. This optimization should be consistent with the manufacturer’s specifications, if available, or best combustion engineering practice for the applicable burner type. NOx optimization includes burners, overfire air controls, concentric firing system improvements, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls; CO optimization includes burners, overfire air controls, concentric firing system improvements, control systems calibrations, and adjusting combustion zone temperature profiles;</p> <p>f.) While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NOx in ppm, by volume, and oxygen in volume percent, before and after the tune-up adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Portable CO, NOx and O<sub>2</sub> monitors may be used for this measurement.</p>			
38.	Hours of Operation	Each emergency engine shall be equipped with a non-resettable hour meter (either mechanically geared or electronic sensor device).	Continuous	MKEG & MKEC	Env-A 609.05 & 40 CFR 60.4209 Subpart III
39.	Opacity	<p><u>Standards of Performance for Coal Preparation and Processing Plants - Performance Tests and Compliance Requirements</u></p> <p>a.) An owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008, must conduct performance tests using the methods identified in §60.257 to demonstrate compliance with the opacity standard in Table 5, Item 27.</p> <p>b.) For each affected facility subject to an opacity standard, upon completing the initial performance test, a new performance test must be conducted according to the following requirements:</p> <p>i. If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the</p>	As specified	MKSCC1	40 CFR 60.8 & 40 CFR 60.255 Subpart Y

Table 7 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>previous performance test was required to be completed.</p> <p>ii. If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.</p> <p>c.) If any affected coal processing and conveying equipment (e.g., crushers) are enclosed in a building, and emissions from the building do not exceed the 10% opacity standard, then the facility shall be deemed to be in compliance with such standards.</p> <p>d.) As an alternative to meeting the requirements in b and c above, the Owner or Operator may elect to monitor visible emissions from each affected facility as per §60.255(f).</p>			
40.	Opacity	<p><u>Standards of Performance for Coal Preparation and Processing Plants - Test methods and procedures</u></p> <p>The Owner or Operator must determine compliance with the applicable opacity standard as specified below:</p> <p>a.) USEPA Method 9 and the procedures in §60.11 must be used to determine opacity, with the following exceptions.</p> <ol style="list-style-type: none"> <li>1. The duration of the Method 9 performance test shall be 1 hour (ten 6-minute averages).</li> <li>2. If, during the initial 30 minutes of the observation of a Method 9 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.</li> </ol>	For each test	MKSCC1	Env-A 802 & 40 CFR 60.257
41.	Visible emissions testing	<p><u>Standards of Performance for Nonmetallic Mineral Processing Plants - Test Methods and Procedures</u></p> <p>The Owner or Operator shall conduct periodic emissions testing to evaluate compliance with the visible emission limitations in Table 5, Item 29.a. Testing shall be conducted in accordance with §60.675(c).</p>	Within 5 years from the previous performance test <sup>34</sup>	MKLC1 Transfer points from: RS-C to L-2 L-1 to L-2 L-2 to L-2A	40 CFR 60.675 & Table 3 Subpart OOO

<sup>34</sup> Initial compliance test required under Subpart OOO was completed on May 7, 2015.

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
42.	Visible emissions	<p><u>Standards of Performance for Nonmetallic Mineral Processing Plants - Monitoring of Operations</u></p> <p>a.) The Owner or Operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22.</p> <p>b.) The Method 22 test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed.</p> <p>c.) If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The Owner or Operator must record each Method 22 test, including the date and any corrective actions taken, in the logbook required under Table 8, Item 10.</p>	Quarterly (if the affected facility is operated during the calendar quarter)	MKLC1 (4000A, 4000B, LSS1 & LSS2)	40 CFR 60.674(c)
43.	CEMS Data Availability Requirements	<p>a.) The Owner or Operator of a source with a CEM shall operate the CEM at all times during operation of the source, except for periods of CEM breakdown, repairs, calibration checks, preventive maintenance, and zero/span adjustments.</p> <p>b.) The percent CEM data availability shall be maintained at a minimum of 90% on a calendar quarter basis for all opacity monitors, gaseous concentration monitors, and stack volumetric flow monitors, or any substitute monitoring methods approved as part of the CEM monitoring plan required by Env-A 808.04.</p> <p>c.) The percent CEM data availability shall be calculated as specified in Env-A 808.11(c) or (d).</p>	N/A	MK1 & MK2	Env-A 808.11
44.	Sulfur Content of Liquid Fuels	Conduct testing in accordance with appropriate ASTM test methods or retain documentation in accordance with Table 8, Item 6 in order to demonstrate compliance with the sulfur content limitation provisions specified in this permit for liquid fuels.	For each delivery of fuel oil/diesel to the facility	Facility Wide	Env-A 806.02 & Env-A 806.05
45.	Sulfur & mercury content of coal	<p><u>Test Methods for Coal</u></p> <p>Maintain documentation from the fuel supplier or conduct testing in accordance with appropriate ASTM test methods to determine the sulfur content of coal in pounds of sulfur per million Btu gross heat content and the mercury content of the coal in parts per million by weight on a dry basis.</p>	Each delivery of coal	MK1 & MK2	Env-A 806.04

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
46.	Coal Feed Rate - Periodic Monitoring	E Belt scales for MK1 and MK2 shall be verified or calibrated once per year.	Annually	MK1 & MK2	40 CFR 70.6 (a)(3)(i)(B)
47.	Inspection of coal crushers	a.) The coal crusher systems shall be inspected and maintained regularly. If any visible emissions from the coal crusher enclosure or breaks in the structure of the enclosure are observed, repairs shall be made immediately.  b.) A log of the repairs made shall be maintained. The repair log shall include the date the problem was observed, the date of the repair and a description of the problem and corrective actions taken.	As specified	MKPCC & MKSCC1	40 CFR 70.6 (a)(3)(i)(B)
48.	Boiler Tune-up	<u><i>NESHAP for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters - Boiler Tune-up Requirement</i></u>  The Owner or Operator shall conduct a performance tune-up of the boiler as per 40 CFR 63.7540 <sup>35</sup> .	Every five years	Smith boiler	40 CFR 63.7500 Subpart DDDDD
49.	To Be Determined	When conditions warrant, the Division may require the Owner or Operator to conduct stack testing in accordance with USEPA or other Division approved methods.	Upon request by the Division	Facility Wide	RSA 125-C:6, XI

<sup>35</sup> Initial tune-up of the Smith boiler was conducted on February 20, 2014. One-time energy assessment for the boiler was conducted on April 12, 2017. Notice of Compliance Status was submitted to DES and EPA on April 14, 2017.

**H. Compliance Assurance Monitoring (40 CFR 64)**

1. MK1 and MK2 are subject to compliance assurance monitoring (CAM) for particulate matter.
2. The ESPs and FGD and shall be properly maintained and operated to control particulate matter emissions from MK1 and MK2.
3. The Owner or Operator shall comply with the monitoring requirements included in the following Table 7A:

<b>Table 7A - Compliance Assurance Monitoring</b>		
	<b>ESPs MK1-PC1 &amp; MK1-PC2 MK2-PC4 &amp; MK2-PC5</b>	<b>FGD (MK2-PC7)</b>
I. Indicator	ESP sections out of service.	Number of FGD recycle pumps running and pump amperage.
Measurement Approach	Number of sections out of service is manually recorded by the operator.	Recycle pump start/stop times are manually logged by the operator.
II. Indicator range [§64.3(a)(3)]	<ol style="list-style-type: none"> <li>1. All available ESP sections shall be in service upon firing coal in the boiler.</li> <li>2. For MK1 boiler, an excursion occurs when a total of 7 or more sections in the two ESP units (MK1-PC1 &amp; MK1-PC2) combined are out of service.</li> <li>3. For MK2 boiler, an excursion occurs when a total of 8 or more sections in the two ESP units (MK2-PC4 &amp; MK2-PC5) combined are out of service.</li> <li>4. Excursions trigger an inspection, corrective action, and a reporting requirement.</li> </ol>	<ol style="list-style-type: none"> <li>1. When one unit (either MK1 or MK2) operates alone, two limestone slurry recycle pumps shall be in operation. When MK1 and MK2 are both operating, three recycle pumps shall be in operation.</li> <li>2. The required number of pumps shall be online prior to the combustion of coal in the boiler(s).</li> <li>3. An excursion occurs when the required number of recycle pumps are not running for three-consecutive hours.</li> </ol>
III. Performance Criteria [§64.3(b)]	The threshold number for the sections out of service serves as an indicator that the operator must make efforts to promptly return ESP sections to service to ensure most efficient operation of the ESPs.	The number of recycle pumps running is an indicator of FGD performance.
A. Data Representativeness		
B. Verification of Operational Status	Not applicable. Monitoring approach uses existing equipment.	Not applicable. Monitoring approach uses existing equipment.
C. QA/QC Practices and Criteria	Alarms are the primary indicator of when a section is out of service. Operators also perform routine rounds which include observation of the ESP local control panels. This practice provides secondary assurance that sections out of service are identified and recorded even if an alarm fails to engage.	Operator receives alarm if a recycle pump trips and the dedicated backup pump is immediately utilized.
D. Monitoring Frequency	Daily	Pump amperage is continuously monitored and recorded.

<b>Table 7A - Compliance Assurance Monitoring</b>		
	<b>ESPs MK1-PC1 &amp; MK1-PC2 MK2-PC4 &amp; MK2-PC5</b>	<b>FGD (MK2-PC7)</b>
E. Data Collection Procedures	The operator's daily log shall include the following information related to sections out of service: 1. Sections out of service for each ESP unit; 2. The time section stopped operating; 3. The reason for the section being out of service; 4. The time the section was returned to service; and 5. Corrective actions taken to return the section to service.	Recycle pump start/stop times are manually logged by the operator and are quality assured/confirmed via automated records of pump amperage.
F. Averaging Period	None	None

4. Proper maintenance (40 CFR 64.7(b))

At all times, the Owner or Operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

5. Continued operation (40 CFR 64.7(c))

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Owner or Operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of these CAM requirements, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Owner or Operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

6. Response to excursions or exceedances (40 CFR 64.7(d))

- i. Upon detecting an excursion or exceedance, the Owner or Operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-

up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

- ii. Determination of whether the Owner or Operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
- iii. If the Owner or Operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Owner or Operator shall promptly notify the Department and, if necessary, submit a significant modification to the Title V operating permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

7. Quality Improvement Plan (QIP) Requirements (40 CFR 64.8)

- i. If the indicator range specified in Table 7A for the control devices accumulate excursions over 5% of the rolling 12-month operating time for each boiler, the Owner or Operator shall develop and implement a Quality Improvement Plan.
- ii. The QIP shall include procedures for evaluating the control performance problems. Based on the evaluation, modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
  - a. Improve preventive maintenance practices.
  - b. Operational changes.
  - c. Appropriate improvements to control methods.
  - d. Other steps to improve control performance.
  - e. More frequent or improved monitoring.
- iii. If a QIP is required, the Owner or Operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

**I. Recordkeeping Requirements**

The Owner or Operator shall be subject to the recordkeeping requirements identified in Table 8 below:

<b>Table 8 - Recordkeeping Requirements</b>				
<b>Item #</b>	<b>Recordkeeping Requirement</b>	<b>Records Retention/ Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1.	<u>Record Retention and Availability</u> Keep the records required by this permit on file. These records shall be available for review by the Division upon request.	Retain for a minimum of 5 years unless longer as specified	Facility wide	Env-A 902, Env-A 3211 & 40 CFR 70.6(a)(3)(ii)(B)
2.	<u>CO<sub>2</sub> Budget Source and Unit Records</u> a.) Maintain the following records regarding the CO <sub>2</sub> budget source and each CO <sub>2</sub> budget unit: 1. The account certificate of representation and all documents that demonstrate the truth of the statements in the account certificate of representation prepared in accordance with Env-A 4604.05; 2. All emissions monitoring information, in accordance with Env-A 4609 and 40 CFR 75; 3. Copies of all reports, compliance certifications and other submissions and all records made or required under Env-A 4600; 4. Copies of all documents used to complete a CO <sub>2</sub> budget permit application and any other submission under the CO <sub>2</sub> Budget Trading Program or to demonstrate compliance with the requirements of Env-A 4600. b.) Records required in a. shall be retained beyond the 10-year minimum retention period until such documents are superseded because of the submission of a new account certificate of representation changing the CO <sub>2</sub> AAR.	Maintain up-to-date records	MK1 & MK2	Env-A 4605.03
3.	<u>Certificate of Representation</u> a.) Complete and retain a certificate of representation for a designated representative or an alternate designated representative including the elements pursuant to 40 CFR 72.24, <i>Certificate of Representation</i> . b.) The certificate of representation required in a. shall be retained beyond the 5-year minimum period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.	Maintain at the facility at all times	MK1 & MK2	40 CFR 72.9(f) & 40 CFR 72.24
4.	<u>General Recordkeeping Requirements for Combustion Devices</u> Maintain the records of the type (e.g., oil, coal etc.) and amount of fuel burned in each device.	Monthly	MK1, MK2, MKCT1, MKCT2, MKEB, MKEC & MKEG	Env-A 903.03



**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
5.	<p><u>Solid Fuel Recordkeeping Requirements</u>                      Maintain the following records for coal:</p> <ul style="list-style-type: none"> <li>a.) Ash content;</li> <li>b.) Btu content of fuel; and</li> <li>c.) Weight percent of sulfur.</li> </ul>	Monthly	MK1 & MK2	Env-A 903.03
6.	<p><u>Liquid Fuel Oil Recordkeeping Requirements</u>                      In lieu of sulfur testing pursuant to Table 7, Item 44, the Owner or Operator may maintain a written statement from the fuel supplier that the sulfur content of the fuel as delivered does not exceed state or federal standards for that fuel.</p>	Whenever there is a change in fuel supplier but at least annually	Facility wide	Env-A 806.05 & Env-A 903.03
7.	<p><u>General Recordkeeping Requirements for Process Operations</u>                      The Owner shall keep records of the quantity of:</p> <ul style="list-style-type: none"> <li>a.) Coal processed for each of the crusher systems;</li> <li>b.) Limestone used.</li> </ul>	Monthly	MKPCC, MKSCC1 & MKLC1	Env-A 903.02
8.	<p><u>General NOx Recordkeeping Requirements</u>                      Maintain records of:</p> <ul style="list-style-type: none"> <li>a.) Identification of each fuel burning device.</li> <li>b.) Operating schedule during the high ozone season (June 1 through August 31) for each fuel burning device identified in a. above, including:                             <ul style="list-style-type: none"> <li>1. Typical hours of operation per calendar day;</li> <li>2. Typical days of operation per calendar month;</li> <li>3. Design heat input rate input rate in MMBtu/hr.</li> </ul> </li> <li>c.) The following NOx emissions data for each combustion device identified above:                             <ul style="list-style-type: none"> <li>1. Actual NOx emissions per month;</li> <li>2. Typical high ozone day NOx emissions, in pounds per day; and</li> <li>3. The emission factors and the origin of the emission factors used to calculate the NOx emissions.</li> </ul> </li> </ul>	Maintain Data for Annual Report	MK1, MK2, MKCT1, MKCT2, MKEB, MKEC & MKEG	Env-A 905.02
9.	<p><u>Recordkeeping for Sources or Devices with Add-on NOx Air Pollution Control Equipment</u>                      Maintain records of the following information:</p> <ul style="list-style-type: none"> <li>a.) The air pollution control device identification number, type, model number, and manufacturer;</li> <li>b.) Installation date;</li> <li>c.) Unit(s) controlled;</li> <li>d.) Type and location of the capture system, capture efficiency percent, and method of determination;</li> </ul>	Maintain at the facility at all times	MK1-PC3 & MK2-PC6	Env-A 905.03

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	e.) Information as to whether or not the air pollution control device is always in operation when the fuel burning device or incinerator it is serving is in operation; and f.) The destruction or removal efficiency of the add-on air pollution control equipment, including the following information: 1. Destruction or removal efficiency, in percent; 2. Date tested; 3. The emission test results, if tested, including: i. The inlet NO <sub>x</sub> concentration in ppm; ii. The outlet NO <sub>x</sub> concentration in ppm; and iii. The method of determination of the concentrations in a. and b. above; and 4. The method of determining destruction or removal efficiency, if not tested.			
10.	The Owner or Operator must record each periodic inspection required under Table 7, Item 42, including dates and any corrective actions taken, in a logbook (in written or electronic format). The Owner or Operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to DES/EPA upon request.	Maintain on a continuous basis	MKLC1	40 CFR 60.676(b) Subpart OOO
11.	<u>VOC Emission Statements Recordkeeping Requirements</u> If the actual annual VOC emissions from all permitted devices located at the Facility are greater than or equal to 10 tpy, then record the following information: a.) Identification of each VOC-emitting process or device; b.) The operating schedule during the high ozone season (June 1 through August 31) for each VOC-emitting process or device identified in a. above, including: 1. Typical hours of operation per day; and 2. Typical days of operation per calendar month. c.) The following VOC emission data from all VOC-emitting processes or devices above, including: 1. Actual VOC emissions for: i. The calendar year, in tons; and ii. A typical high ozone season day during that calendar year, in pounds per day; and 2. The emission factors and the origin of the emission factors used to calculate the VOC emissions.	Maintain Data for Annual Report	Facility wide	Env-A 904

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
12.	<p><u>CEM Monitoring Plan</u></p> <p>a.) Prepare and maintain a CEM monitoring plan which contains:</p> <ol style="list-style-type: none"> <li>1. Sufficient information to demonstrate that all unit SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub> emissions and opacity are monitored and reported.</li> <li>2. The information specified in 40 CFR 75.53, Env-A 808.04.</li> </ol> <p>b.) Revise or update the monitoring plan whenever the Owner or Operator makes a replacement, modification or change that could affect the CEMS or COMS or other approved monitoring method.</p>	Maintain on a continuous basis and update as necessary	MK1 & MK2	40 CFR 75.53, 40 CFR 75.73, Env-A 808.04, Env-A 2907.09, Env-A 3210.11 & Env-A 4609
13.	<p><u>Quality Assurance/Quality Control (QA/QC) Plan for Opacity or Gaseous CEMS</u></p> <p>a.) Prepare and maintain the QA/QC plan which shall contain written procedures for implementation of a QA/QC program that meets the criteria specified in 40 CFR 60, Appendix F, Procedure 1, Section 3 for for each gaseous CEM system and 40 CFR 60, Appendix F, Procedure 3 for each opacity CEM system, and shall include the following:</p> <ol style="list-style-type: none"> <li>1. A schedule of, and description of, all maintenance activities that are required by the CEM manufacturer or that might have an effect on the operation of the system, including a summary of the results of any performance specification testing that was performed in accordance with Env-A 808.05(e) or (f);</li> <li>2. A description of how the audits and testing required by this part will be performed; and</li> <li>3. Examples of the reports that will be used to document the audits and tests required by Env-A 800.</li> </ol> <p>b.) Review the QA/QC plan at least once a year and all data generated by its implementation;</p> <p>c.) Revise or update the QA/QC plan, as necessary, based on the results of the annual review. Make the revised plan available for on-site review by the Department at any time.</p>	Maintain on site	MK1 & MK2	Env-A 808.06
14.	<p><u>General Acid Rain Recordkeeping Provisions</u></p> <p>Maintain records of:</p> <p>a.) Opacity, operating parameters (operating time, heat input, volumetric flow rate &amp; load), diluent monitor data, SO<sub>2</sub>, NO<sub>x</sub> &amp; CO<sub>2</sub> emissions and percent monitor availability; and</p> <p>b.) The causes of any missing data periods and the</p>	Maintain on a continuous basis	MK1 & MK2	40 CFR 75.57

<b>Table 8 - Recordkeeping Requirements</b>				
<b>Item #</b>	<b>Recordkeeping Requirement</b>	<b>Records Retention/ Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
	actions taken to correct such causes.			
15.	<p><u>Certification, Quality Assurance and Quality Control Records</u></p> <p>a.) Maintain records of the information required pursuant to 40 CFR 75.59 and 75.73(b) which includes the certification, quality assurance, and quality control records.</p> <p>b.) These shall include records of all daily &amp; 7-day calibration error tests, daily interference checks, cycle time tests, linearity checks and relative accuracy test audits, as applicable.</p>	Maintain on a continuous basis	MK1 & MK2	40 CFR §75.59, §75.73 & Env-A 3212
16.	<p><u>Emergency Stack Operation</u></p> <p>Maintain records of emergency stack (STMK2) operation including:</p> <p>a.) Date(s) and time(s) during which MK1 emissions were discharged through the emergency stack;</p> <p>b.) Description of the reason for emergency stack operation, corrective action taken (if applicable), and estimates of emissions released during the emergency stack venting operation.</p> <p>c.) MK1 boiler’s uncontrolled SO<sub>2</sub> emissions vented through the emergency stack as per Table 5, Item 5 must be quantified using the following methodology:</p> <ol style="list-style-type: none"> <li>1. Use MK1 CEM<sup>36</sup> data during the venting period, if it is available.</li> <li>2. If CEM data during emergency stack venting is not available, use CEM data from the last valid hour prior to the emergency stack venting to estimate the emissions. The emission rate may be prorated for the length of time that the emergency venting actually occurred.</li> <li>3. If current emission data from MK1 CEMS is not available, then estimate the emissions by using historic CEM data, compliance stack tests or AP-42 emission factors, whichever yields the highest emissions.</li> </ol>	For each use	MK1	TP-0189
17.	<p><u>SO<sub>2</sub> Emission Rate Limitation Monitoring Records</u></p> <p>Maintain monitoring records specified in Table 7, Items 22 and 23 including the following information:</p> <p>a.) Operating status (operating/not operating) for MK1 and MK2 for each calendar hour.</p>	Hourly and daily, as specified	MK1 & MK2	TP-0189

<sup>36</sup> MK1 CEM located in the boiler duct measures uncontrolled SO<sub>2</sub> emissions.

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	b.) The following emissions data for each boiler operating hour: <ol style="list-style-type: none"> <li>1. Uncontrolled SO<sub>2</sub> emission rate in lb/hr for MK1;</li> <li>2. SO<sub>2</sub> emission rate in lb/hr for MK1 emergency stack venting (if applicable);</li> <li>3. Uncontrolled SO<sub>2</sub> emission rate in lb/hr for MK2; and</li> <li>4. Controlled SO<sub>2</sub> emission rate in lb/hr &amp; lb/MMBtu at the FGD outlet;</li> </ol> c.) The following SO <sub>2</sub> emission rates and percent reduction rates, for each boiler operating day: <ol style="list-style-type: none"> <li>1. 7-boiler operating day rolling average SO<sub>2</sub> emission rate in lb/MMBtu;</li> <li>2. 30-boiler operating day rolling average SO<sub>2</sub> emission rate in lb/MMBtu; and</li> <li>3. 30-boiler operating day rolling average SO<sub>2</sub> percent reduction.</li> </ol>			
18.	<u>Monitoring Records</u> Maintain records of data required to be monitored pursuant to Table 7 including: <ol style="list-style-type: none"> <li>a.) Records of monitoring data for the pollution control devices, corrective action actions taken, any written QIP required pursuant to Condition VIII.H. of this permit and any activities undertaken to implement the QIP.</li> <li>b.) Maintenance and inspection conducted on the ESPs, SCRs and FGD.</li> <li>c.) Sections out of service in ESPs;</li> <li>d.) Net electrical output (MWh) for MK1 and MK2.</li> </ol>	Maintain on a continuous basis	MK1 & MK2	40 CFR 70.6(a)(3)(ii) & 40 CFR 64.9
19.	<u>Records for Coal-fired EGUs</u> Maintain the following records: <ol style="list-style-type: none"> <li>a.) A copy of each notification and report that was submitted to comply with Subpart UUUUU, including all documentation supporting any initial notification or notification of compliance status or semiannual compliance report as per §63.10(b)(2)(xiv).</li> <li>b.) Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in §63.10(b)(2)(viii);</li> <li>c.) For an EGU that qualifies as a low emitting EGU under §63.10005(h), keep annual records that document that EGU emissions in the previous stack test(s) continue to qualify the unit for LEE status for</li> </ol>	On a continuous basis	MK1 & MK2	40 CFR §§ 63.10032 & 63.10033 Subpart UUUUU

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	<p>an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year.</p> <p>d.) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period;</p> <p>e.) Records of the occurrence and duration of each startup or shutdown;</p> <p>f.) Records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment (as applicable);</p> <p>g.) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p> <p>h.) Records of the type(s) and amount(s) of fuel used during each startup or shutdown of the EGU.</p> <p>i.) If non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1) are combusted in an EGU, keep records as per §63.10032(d)(2).</p>			
20.	<p><u><i>Standards of Performance for Coal Preparation and Processing Plants - Recordkeeping Requirements</i></u></p> <p>The Owner or Operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:</p> <p>a.) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.</p> <p>b.) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.</p> <p>c.) Monthly amount and type of coal processed.</p>	Maintain on a continuous basis	MKSCC1	40 CFR 60.258 Subpart Y
21.	Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the	For each occurrence	MKSCC1	40 CFR 60.7(b)

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	affected facility.			
22.	<p><u>Recordkeeping Requirements for Oil-fired Emergency Generators Manufactured after April 1, 2006</u></p> <p>a.) Maintain documentation from the manufacturer certifying that the engine complies with the applicable emission standards stated in 40 CFR 60, subpart IIII;</p> <p>b.) Maintain the generator manufacturer’s instructions at the Facility so that they are available for review; and</p> <p>c.) Record the time of operation of the engine and the reason the engine was in operation during that time.</p>	Keep a running log	MKEC	40 CFR 60.4214 Subpart IIII
23.	<p>The Owner or Operator shall keep records of:</p> <p>a.) The hours of operation of the engine that is recorded through the non-resettable hour meter,</p> <p>b.) The number of hours spent for emergency operation, including what classified the operation as emergency.</p>	Keep a running log	MKEG	Env-A 906
24.	<p><u>Boiler Tune-up Records</u></p> <p>Maintain on-site and submit if requested by Department and EPA, a report containing the details of tune-ups conducted in accordance with Table 7, Item 48, including:</p> <p>a.) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;</p> <p>b.) A description of any corrective actions taken as a part of the tune-up; and</p> <p>c.) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.</p>	Each boiler tune-up	Smith Boiler	40 CFR 63.7540(a)(10)(vi) Subpart DDDDD
25.	<p><u>Regulated Toxic Air Pollutants</u></p> <p>Compliance was demonstrated at the time of permit issuance as described in the department’s Application Review Summary for application #16-0056. The source must update the compliance demonstration using one of the methods provided in Env-A 1405 if:</p> <p>a.) There is a revision to the list of RTAPs lowering the AAL or de minimis value for any RTAP emitted from the Facility;</p> <p>b.) The amount of any RTAP emitted is greater than the amount that was previously evaluated;</p>	Update prior to process changes and within 90 days of each revision of Env-A 1400	Facility Wide	Env-A 902.01 State-only Requirement

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	c.) An RTAP that was not evaluated in the Application Review Summary will be emitted; or d.) Stack conditions (e.g. air flow rate) change.			
26.	<u>Alternative Operating Scenario Records</u> Maintain records of operation under alternative operating scenario including: a.) The date that operation in the alternative operating scenario began; and b.) The date that operation in the alternative operating scenario ceased.	Whenever operation method changes from normal operation to a specific alternative operating scenario	MK1 & MK2	40 CFR 70.6(a)(9)



**J. Reporting Requirements**

1. Pursuant to Env-C 203.02(b), *Date of Issuance or Filing*, written documents shall be deemed to have been filed with or received by the Division on the actual date of receipt by the Division, as evidenced by a date stamp placed on the document by the Division in the normal course of business.
2. All emissions data submitted to the Division shall be available to the public. Claims of confidentiality for any other information required to be submitted to the Division pursuant to this permit shall be made at the time of submission in accordance with Env-A 103, Claims of Confidentiality.
3. The Owner or Operator shall be subject to the reporting requirements identified in Table 9 below:

<b>Table 9 - Applicable Reporting Requirements</b>				
<b>Item #</b>	<b>Reporting Requirements</b>	<b>Frequency of Reporting</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Citation</b>
1.	Any report submitted to the DES and/or EPA shall include the certification of accuracy statement outlined in Section XXI.B. of this Permit and shall be signed by the responsible official.	With each report	Facility wide	40 CFR 70.6(c)(1)
2.	<p><u><i>Semi-annual Permit Deviation and Monitoring Report</i></u>                      The Owner or Operator shall submit a semi-annual permit deviation and monitoring report, which contains:</p> <p>a.) Summaries of all monitoring and testing requirements contained in this permit;</p> <p>b.) A summary of all permit deviations and excursions that have occurred during the reporting period; and</p> <p>c.) Records maintained as per Table 8, Item 16 for emergency stack (STMK2) operation.</p>	Semi-annually received by DES no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year.	Facility wide	Env-A 911, 40 CFR 70.6(a)(3)(iii)(A) & 40 CFR 63.10031
3.	<p><u><i>Annual Emissions Report</i></u>                      Submit an annual emissions report which shall include the following information:</p> <p>a.) Actual calendar year emissions from each device of NO<sub>x</sub>, CO, SO<sub>2</sub>, VOCs, HAPs (speciated by individual HAP or CAS number), CO<sub>2e</sub>, filterable PM/PM<sub>10</sub>/PM<sub>2.5</sub>, condensable PM, ammonia, and lead.</p> <p>b.) The methods used in calculating such emissions in accordance with Env-A 705.02, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fees</i>.</p> <p>c.) The information recorded in accordance with Table 8, Item 4.</p>	Annually (received by DES no later than April 15 <sup>th</sup> of the following year)	Significant activities identified in Table 1	Env-A 907.02
4.	<p><u><i>Payment of Annual Emission Fee</i></u>                      Payment of the annual emission fee shall be conducted in accordance with Section XXIII of this Permit.</p>	Annually (received by DES no later than May 15 <sup>th</sup> of the following year)	Significant activities identified in Table 1	Env-A 705.04(b)

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
5.	<p><u>NOx Reporting Requirements</u>                      Include the following information in the annual emissions report required in Table 9, Item 3:                      a.) A breakdown of NOx emissions by month; and                      b.) All data recorded pursuant to Table 8, Item 8.</p>	<p>Annually (received by DES no later than April 15<sup>th</sup> of the following year)</p>	<p>MK1, MK2, MKCT1, MKCT2, MKEB, MKEC &amp; MKEG</p>	<p>Env-A 909.03</p>
6.	<p><u>Net Electrical Output</u>                      Report monthly net electrical output information to DES<sup>37</sup>.</p>	<p>Annually (no later than April 15<sup>th</sup> of the following year)</p>	<p>MK1, MK2, MKCT1 &amp; MKCT2</p>	<p>Env-A 2904.05(f) &amp; Env-A 3205.03(f)</p>
7.	<p><u>Data Availability Restoration Plan</u>                      If the Owner or Operator of the source discovers that it has failed to meet the percent data availability requirement in the previous calendar quarter or in the calendar quarter in which it is currently operating:                      a.) Notify DES by telephone, fax, or e-mail (<a href="mailto:pdeviations@des.nh.gov">pdeviations@des.nh.gov</a>) within 10 days of discovery of the permit deviation.                      b.) Submit a plan to the Division, within 30 days of discovery, specifying in detail the steps it plans to take in order to meet the availability requirements for future calendar quarters.                      c.) Implement the plan to meet the data availability requirements no later than 30 days after the end of the quarter of failure.</p>	<p>As specified</p>	<p>MK1 &amp; MK2</p>	<p>Env-A 808.11 &amp; Env-A 911.04</p>
8.	<p><u>CO<sub>2</sub> Budget Trading Program Reports</u>                      Submit quarterly CO<sub>2</sub> budget reports which include:                      a.) The CO<sub>2</sub> mass emissions data for the CO<sub>2</sub> budget unit, in an electronic format prescribed by EPA unless otherwise prescribed by the regional organization, for each calendar quarter in the manner specified in Subpart H of 40 CFR 75 and 40 CFR 75.64;                      b.) For each CO<sub>2</sub> budget unit, all of the data and information required in Subpart G of 40 CFR 75, except for opacity, NOx, and SO<sub>2</sub> provisions; and                      c.) A compliance certification with, and in support of, each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:                      1. The monitoring data submitted were recorded in accordance with the applicable requirements of both 40 CFR 75 and Env-A 4600, including the quality assurance procedures and specifications; and</p>	<p>Quarterly (no later than 30 days following the end of each quarterly reporting period)</p>	<p>MK1 &amp; MK2</p>	<p>Env-A 4609.16(c)</p>

<sup>37</sup> Copies of the Forms EIA-906 and EIA-920 as submitted to United States Energy Information Administration (EIA), are sufficient.

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	2. The CO <sub>2</sub> concentration values substituted for missing data under Subpart D of 40 CFR 75 do not systematically underestimate CO <sub>2</sub> emissions.			
9.	<u><i>CO<sub>2</sub> Budget Program Compliance Certification</i></u> For each control period in which a CO <sub>2</sub> budget source is subject to the requirements of Env-A 4605, submit a compliance certification report which includes the information specified in Env-A 4605.09(b).	By March 1 (following the relevant control period)	MK1 & MK2	Env-A 4605.09
10.	<u><i>Certification by the CO<sub>2</sub> Authorized Account Representative</i></u> Any submission under the CO <sub>2</sub> budget trading program shall be signed and certified by the CO <sub>2</sub> Authorized Account Representative and shall include the certification statement pursuant to Env-A 4604.02(a).	With each CO <sub>2</sub> Budget Program submittal	MK1 & MK2	Env-A 4604.02
11.	<u><i>NO<sub>x</sub> Budget Program Compliance Certification</i></u> For each control period, submit an annual compliance certification containing the information listed in Env-A 3213.03.	By November 30 <sup>th</sup> of each year	MK1, MK2, MKCT1 & MKCT2	Env-A 3213
12.	<u><i>SO<sub>2</sub> &amp; NO<sub>x</sub> Annual Budget Trading and Banking Program Annual Compliance Certification</i></u> Submit an annual compliance certification for the prior year containing the information specified in Env-A 2909.02.	By January 30 <sup>th</sup> of each year	MK1 & MK2	Env-A 2909
13.	<u><i>Offset Plans for Excess Emissions of SO<sub>2</sub></i></u> If a unit has excess SO <sub>2</sub> emissions, submit an offset plan which contains the information specified in 40 CFR 77.3(d).	60 days after the end of any calendar year in which the unit has excess SO <sub>2</sub> emissions	MK1 & MK2	40 CFR 77.3
14.	<u><i>Certification by the Designated Representative or the Alternate Designated Representative</i></u> Any document submitted under the Acid Rain program shall be signed and certified by the designated representative or the alternate designated representative and include the statements pursuant to 40 CFR 72.21(a)(1) and (2).	With each Acid Rain submittal	MK1 & MK2	40 CFR 72.21

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
15.	<p><u><i>CEMS Recertification Notifications and Reports</i></u></p> <p>a.) Notification of full recertification:</p> <ol style="list-style-type: none"> <li>1. Submit notifications of full recertification testing under 40 CFR 75.20(b)(2) to DES and EPA at least 30 days prior to the first scheduled day of recertification testing.</li> <li>2. In emergency situations when full recertification testing is required following an uncontrollable failure of equipment that results in lost data, notice shall be sufficient if provided within 2 business days following the date when testing is scheduled.</li> <li>3. Testing may be performed on a date other than that already provided in a notice as long as notice of the new date is provided either in writing or by telephone or other means at least 7 days prior to the original scheduled test date or the revised test date, whichever is earlier.</li> </ol> <p>b.) Notification of partial recertification testing:</p> <ol style="list-style-type: none"> <li>1. Submit notifications for retesting required following a loss of certification under 40 CFR 75.20(a)(5) or for partial recertification testing required under 40 CFR 75.20(b)(2), to DES and EPA either in writing or by telephone at least 7 days prior to the first scheduled day of testing,</li> <li>2. Except that in emergency situations when testing is required following an uncontrollable failure of equipment that results in lost data, notice shall be sufficient if provided within 2 business days following the date when testing is scheduled.</li> <li>3. Testing may be performed on a date other than that already provided in a notice long as notice of the new date is provided by telephone or other means at least 2 business days prior to the original scheduled test date or the revised test date, whichever is earlier.</li> </ol> <p>c.) Within 45 calendar days after completing all recertification tests submit to EPA and DES, the electronic and hardcopy information contained in 40 CFR 75.63.</p> <p>d.) Submit an application to DES within 45 days after completing all recertification tests including the information required under 40 CFR 75, Subpart H.</p>	As specified	MK1 & MK2	40 CFR 75.61 (a)(1), 75.63, 75.70, 75.73(d), Env-A 808, Env-A 2907.10 & Env-A 3210

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
16.	<p><u>Relative Accuracy Test Audit Reports</u></p> <p>a.) Submit a summary of the results of the RATA testing by the earlier of 45 calendar days following the completion of the RATA or the date established in the section of 40 CFR 60 or 40 CFR 75 that requires performance of the RATA.</p> <ol style="list-style-type: none"> <li>1. For gaseous CEM audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1 or §75.59(a)(9), as applicable; and</li> <li>2. For opacity CEM audits, the report format shall conform to that presented in EPA-600/8-87-025, April 1992, "Technical Assistance Document: Performance Audit Procedures for Opacity Monitors".</li> </ol> <p>b.) If requested, submit a hardcopy RATA report to EPA within 45 days after completing the RATA or within 15 days of receiving the request, whichever is later.</p> <p>c.) Within 60 days after the date of completing Hg sorbent trap monitoring system performance evaluation test, the Owner or Operator must submit the relative accuracy test audit required by Subpart UUUUU to EPA.</p>	As specified	MK1 & MK2	<p>40 CFR 75.59(a)(9), 75.60(b)(6), 40 CFR 75.73(d), Env-A 3210 &amp; Env-A 808.07(e)</p> <p>40 CFR 63.10031(f)</p>
17.	<p><u>Monitoring Plan Submittals</u></p> <p>a.) Electronic copy: Submit a complete, electronic, up-to-date monitoring plan file (except for hardcopy portion) to EPA as follows:</p> <ol style="list-style-type: none"> <li>1. At the time of recertification application submission;</li> <li>2. Prior to or concurrent with the submittal of the electronic quarterly report for a reporting quarter where an update of the electronic monitoring plan information is required under 40 CFR 75.53(b).</li> </ol> <p>b.) Hardcopy: Submit hardcopy information to EPA only if that portion of the monitoring plan is revised. The Owner or Operator shall submit the required hardcopy information as follows: with any certification or recertification application, if a hardcopy monitoring plan change is associated with the certification or recertification event; and within 30 days of any other event with which a hardcopy monitoring plan change is associated, pursuant to 40 CFR 75.53(b). Electronic submittal of all monitoring plan information, including hardcopy portions, is permissible provided that a paper copy of the hardcopy portions can be furnished upon request.</p>	As specified	MK1 & MK2	40 CFR 75.62 & 40 CFR 75.73(e)

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
18.	<p><u>CEMS &amp; COMS data QA/QC Plan Updates</u></p> <p>a.) No later than April 15<sup>th</sup> of each year, either:</p> <ol style="list-style-type: none"> <li>1. Submit to DES the revised QA/QC plan and the reasons for each change, and certify in writing that the Owner or Operator is implementing the revised QA/QC plan; or</li> <li>2. Certify in writing that no changes have been made to the plan and that the Owner or Operator will continue to implement the existing QA/QC plan.</li> </ol> <p>b.) If DES requests a revision to the QA/QC plan, the Owner or Operator shall submit a revised plan within 45 days of the date of the request.</p>	Annually	MK1 & MK2	Env-A 808.06
19.	<p><u>Acid Rain Program - Quarterly Reports</u></p> <p>a.) Submit to EPA quarterly reports which contain:</p> <ol style="list-style-type: none"> <li>1. The data and information in 40 CFR 75.64(a), (b) &amp; (c) and 75.73(f).</li> <li>2. NO<sub>x</sub> emissions in lb/hr for every hour during the control period and cumulative quarterly and seasonal NO<sub>x</sub> emission data in pounds.</li> <li>3. SO<sub>2</sub> and NO<sub>x</sub> emissions in lb/hr for every hour during the year and cumulative quarterly and annual SO<sub>2</sub> and NO<sub>x</sub> emissions data in pounds.</li> <li>4. A certification by the Designated Representative that the component and system identification codes and formulas in the quarterly electronic reports represent current operating conditions</li> <li>5. Explanatory text or comments, so long as the information is provided in a format that is compatible with the other data required to be reported under 40 CFR 75.64.</li> </ol> <p>b.) Reports shall be submitted in electronic format using EPA's electronic reporting (EDR) convention.</p>	Quarterly (no later than 30 days following the end of each quarterly reporting period)	MK1 & MK2	40 CFR 75.64, 40 CFR 75.73(f), 40 CFR 75.74, Env-A 2907 & Env-A 3210
20.	<p><u>Quarterly Emission Reports</u></p> <p>Submit to DES emission reports containing the following information:</p> <p>a.) As applicable, the information required to be submitted by 40 CFR 60, 40 CFR 63, or 40 CFR 75, relative to installation, calibration, operation and maintenance of a certified gaseous or opacity CEM system;</p> <p>b.) All information included in the emission report shall be clearly indicated, labeled, and formatted such that compliance with all emissions standards to which the source is subject, can be determined and any periods of excess emissions, substitution of missing or invalid CEM data, CEM calibration, CEM maintenance, or startup, shutdown, or malfunction can be easily identified;</p>	Quarterly (received by DES no later than 30 days following the end of each quarterly reporting period)	MK1 & MK2	Env-A 808.13 & TP-0189

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>c.) The daily averages of gaseous and opacity CEM measurements and calculated emission rates in the units of the emission standards;</p> <p>d.) For those sources subject to any emission standard that is a rolling average of more than one operating day, the rolling average emission rate reported for each day during the reporting period;</p> <p>e.) Excess emission data recorded by the CEM system, including:</p> <ol style="list-style-type: none"> <li>1. The date and time of the beginning and ending of each period of excess emission;</li> <li>2. The actual emissions measured by the CEM system during the excess emission;</li> <li>3. The total amount of emissions above the emissions limit, or percent above the emissions limit, during the period of excess emissions;</li> <li>4. The specific cause of the excess emission; and</li> <li>5. The corrective action taken;</li> </ol> <p>f.) If no excess emissions have occurred, a statement to that effect;</p> <p>g.) A statement as to whether the CEM system was inoperative, repaired, or adjusted during the reporting period;</p> <p>h.) If the CEM system was inoperative, repaired, or adjusted during the reporting period, the following information:</p> <ol style="list-style-type: none"> <li>1. The date and time of the beginning and ending of each period when the CEM was inoperative;</li> <li>2. The reason why the CEM was inoperative;</li> <li>3. The corrective action taken;</li> </ol> <p>i.) For all “out of control periods” the following information:</p> <ol style="list-style-type: none"> <li>1. Beginning and ending times of the out of control period;</li> <li>2. The reason for the out of control period;</li> <li>3. The corrective action taken.</li> </ol> <p>j.) The date and time of the beginning and ending of each period when the source of emissions which the CEM system is monitoring was not operating;</p> <p>k.) The span value, as defined in Env-A 101.178, and units of measurement for each analyzer in the CEM system;</p> <p>l.) When calibration gas is used, the following information:</p> <ol style="list-style-type: none"> <li>1. The calibration gas concentration;</li> <li>2. If a gas bottle was changed during the quarter:                     <ol style="list-style-type: none"> <li>i. The date of the calibration gas bottle change;</li> <li>ii. The gas bottle concentration before the change;</li> <li>iii. The gas bottle concentration after the change;</li> <li>iv. The expiration date for all calibration gas bottles used.</li> </ol> </li> </ol>			

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	m.) The percent data availability calculated in accordance with Env-A 808.11 for each gaseous, opacity, and flow rate monitor in the CEM system; n.) Average SO <sub>2</sub> emission rates and percent reduction rates recorded in accordance with Table 8, Item 17 for each boiler operating day.			
21.	<p><u>Semi-annual MATS Compliance Report</u></p> a.) A compliance report containing the following information shall be submitted to EPA and DES: <ol style="list-style-type: none"> <li>1. The information required by the summary report located in 40 CFR 63.10(e)(3)(vi).</li> <li>2. The total fuel use by each affected source subject to an emission limit, for each calendar month within the semi-annual reporting period, including a description of the fuel, whether the fuel has received a non-waste determination by EPA or basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.</li> <li>3. Indicate whether new types of fuel were burned during the reporting period. If a new type of fuel was burned, include the date of performance test where that fuel was in use.</li> <li>4. Include the date of the most recent tune-up for each unit.</li> <li>5. If stack tests are conducted once every 3 years to maintain LEE status consistent with §63.10006(b), the date of each stack test conducted during the previous three years, a comparison of the emission level achieved in each stack test conducted during the previous 3 years to the 50 percent emission limit threshold required in § 63.10005(h)(1)(i) and a statement as to whether there have been any operational changes since the last stack test that could increase emissions.</li> <li>6. Emergency bypass information;</li> <li>7. A certification;</li> </ol> b.) If there are no deviations from any applicable emission limitation and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, and operating parameter monitoring systems, were out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period;	Semi-annually received no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year	MK1 & MK2	40 CFR 63.10031 & Table 8 to Subpart UUUUU



**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	c.) If a deviation from any emission limitation (emission limit and operating limit) or work practice standard occurred during the reporting period, the report must contain the information in § 63.10031(d). If there were periods during which the CMSs, including continuous emissions monitoring systems and continuous parameter monitoring systems, were out-of-control, as specified in §63.8(c)(7), the report must contain this information. d.) For each excess emission occurring at an affected source where a CMS is used to comply with that emission limit, include the information required in § 63.10(e)(3)(v) in the compliance report specified in (a) above. e.) If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.			
22.	<u>EGU Tune-up Report</u> Maintain on-site and submit, if requested by DES or EPA, a report containing the details of tune-ups conducted in accordance with Table 7, Item 37, including: a.) The concentrations of CO and NOx in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems; b.) A description of any corrective actions taken as a part of the combustion adjustment; and c.) The type(s) and amount(s) of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period.	Maintain on site	MK1 & MK2	40 CFR 63.10021(e)(8)
23.	<u>Semi-annual Excess Emission Reports</u> The owner operator shall report semiannually periods of excess emissions of all 6-minute average opacities that exceed the standard specified in Table 5, Item 27.	Semi-annually	MKSCC1	40 CFR 60.7(c) & 40 CFR 60.258(b)
24.	<u>Performance Test Reports</u> a.) Within 60 days after the date of completing each performance test, the Owner or Operator must submit a report to the Department that contains the information specified in Env-A 802.11(b); b.) Performance test reports required by Subpart UUUUU must be submitted to USEPA as specified in §63.10031(f). c.) Within 60 days after the date of completing each performance test conducted to demonstrate compliance	As specified	MK1, MK2, MKSCC1, MKCT1 & MKCT2 MK1 & MK2 MKSCC1	Env-A 802.11 40 CFR 63.10031(f) 40 CFR 60.8 &

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>with Subpart Y, the Owner or Operator must mail a summary copy to DES and USEPA. The address for USEPA is:</p> <p style="padding-left: 40px;">United States Environmental Protection Agency                      Energy Strategies Group                      109 TW Alexander Dr. Mail code: D243-01                      RTP, NC 27711</p> <p>The Owner or Operator who elects to comply with the reduced performance testing provisions of §60.255(c) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing.</p>			40 CFR 60.258(d)
25.	<p><u>NSPS for Nonmetallic Mineral Processing Plants - Equipment Replacement Reporting Requirements</u></p> <p>Each Owner or Operator seeking to comply with Table 5, Item 31 shall submit to DES the following information about the existing facility component being replaced and the replacement piece of equipment.</p> <p>a.) For a conveyor belt:</p> <ol style="list-style-type: none"> <li>1. The width of the existing belt being replaced; and</li> <li>2. The width of the replacement conveyor belt.</li> </ol> <p>b.) For a storage bin:</p> <ol style="list-style-type: none"> <li>1. The rated capacity in tons of the existing storage bin being replaced; and</li> <li>2. The rated capacity in tons of the replacement storage bin.</li> </ol> <p>c.) For a grinding mill or bucket elevator:</p> <ol style="list-style-type: none"> <li>1. The rated capacity in tons per hour of the existing facility being replaced; and</li> <li>2. The rated capacity in tons per hour of the replacement equipment.</li> </ol>	As necessary	MKLC1	40 CFR 60.676(a)
26.	<p><u>Annual Compliance Certification</u></p> <p>Annual compliance certification shall be submitted in accordance with Section XXI of this Permit.</p>	Annually (received by DES no later than April 15 <sup>th</sup> of the following year)	Facility wide	40 CFR 70.6(c)(1)
27.	<p><u>Annual Emissions Compliance Report for Mercury</u></p> <p>The Owner shall submit to DES a report of annual mercury emissions from the affected sources to demonstrate compliance with Table 4, Item 5. This report shall include all references and methodologies used to calculate the total mercury emissions from the affected sources.</p>	Annually (received by DES no later than April 15 <sup>th</sup> of the following year)	Affected Sources as defined in RSA 125-O:12	TP-0008

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
28.	<p><u>VOC Reporting Requirements</u>                      If the actual annual VOC emissions from all permitted devices located at the Facility are greater than or equal to 10 tpy, then include the information recorded in Table 8, Item 11 with the annual emissions report.</p>	Annually (received by DES no later than April 15 <sup>th</sup> of the following year)	MK1, MK2, MKCT1, MKCT2, MKEB, MKEC & MKEG	Env-A 908
29.	<p><u>Air Pollution Control Equipment Monitoring Plan</u>                      If the owner or operator determines that the information and procedures documented in the air pollution control equipment monitoring plan submitted with Application 16-0056 need to be changed at any time to accurately represent the activities performed to maintain the control equipment, the owner or operator shall submit a revised monitoring plan, as applicable, to the department in writing.</p>	Submit to the department within 30 days of any change to the plan	MK1-PC3 & MK2-PC6	Env-A 810.01(e)
30.	<p><u>Update to Air Pollution Dispersion Modeling Impact Analysis</u>                      If an update to the facility's air pollution dispersion modeling impact analysis is required pursuant to Env-A 606.02, submit the information required pursuant to Env-A 606.04:                      a.) With the permit application submitted for the change which triggered the analysis; or                      b.) Within 15-days of completion of the change which triggered the analysis, if a permit application is not required.</p>	As specified	MK1, MK2, MKCT1, MKCT2 & MKEB	Env-A 910.01
31.	<p><u>Monitoring Parameter Excursion</u>                      In the event of an excursion of the any monitored parameter specified in Table 7A, lasting more than 48 hours in duration:                      a.) Notify the department of the permit deviation and excess emissions by telephone (603-271-1370), fax (603-271-7053) or e-mail (pdeviations@des.nh.gov), within 24 hours of discovery of the permit deviation, unless it is a Saturday, Sunday, or state legal holiday, in which event, the department shall be notified on the next day which is not a Saturday, Sunday, or state legal holiday;                      b.) Submit a written report of the deviation on paper or by electronic means to the department within 10 days of discovery of the permit deviation reported above. The report shall include all of the following information:                      1. Facility name;                      2. Facility address;                      3. Name of the responsible official;                      4. Facility telephone number;                      5. A description of the permit deviation, including the applicable permit number and permit condition(s);                      6. The probable cause of the permit deviation;                      7. The date and time of the discovery of the permit deviation;                      8. The actual date(s) and time(s) of the permit deviation;</p>	As specified	MK1 & MK2	Env-A 911.04 State-only enforceable

Table 9 - Applicable Reporting Requirements				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	9. The duration of the permit deviation, including the date and time that the device, process or air pollution control equipment returned to operation in compliance with an enforceable emission limitation or operating condition; 10. The specific device, process or air pollution control equipment that contributed to the permit deviation; 11. Any corrective measures taken to address the permit deviation; 12. Preventative measures taken to prevent future permit deviations; 13. The type and amount of any excess emissions that occurred as a result of the permit deviation, if applicable; and 14. If applicable, the calculation or estimation used to quantify the excess emissions.			
32.	<u>Boiler MACT Compliance Report</u> Submit to DES and EPA a compliance report containing the following information: a.) Company and Facility name and address. b.) Process unit information, emissions limitations, and operating parameter limitations, as applicable. c.) Date of report and beginning and ending dates of the reporting period. d.) Include the date of the most recent tune-up for the unit and the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. e.) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.	Every 5 years (received by January 31 <sup>st</sup> following the 5-yr reporting period)	Smith Boiler	40 CFR 63.7550(c)(1)

**IX. Requirements Currently Not Applicable**

The following requirements are not currently applicable to the facility:

40 CFR 60 Subpart Dc *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units for Which Construction, Modification, or Reconstruction is Commenced After June 9, 1989* - Not applicable to temporary boiler MKEB.

**GENERAL TITLE V REQUIREMENTS****X. Issuance of a Title V Operating Permit**

- A. This Permit is issued in accordance with the provisions of Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the five (5) years after issuance of this Permit.
- B. Permit expiration terminates the Owner or Operator's right to operate the emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is received by the Department at least 6 months before the expiration date.

**XI. Title V Operating Permit Renewal Procedures**

Pursuant to Env-A 609.07(b), an application for renewal of this Permit shall be considered timely if it is **received by the Department** at least six months prior to the designated expiration date of the current Title V operating permit.

**XII. Application Shield**

Pursuant to Env-A 609.08, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part until the Director takes final action on the application.

**XIII. Permit Shield**

- A. Pursuant to Env-A 609.09(a), a permit shield shall provide that:
  - 1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and
  - 2. The Owner or Operator need not comply with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and specifically identified in Section IX of this Title V Operating Permit as not applicable to the stationary source or area source.
- B. The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.09(b). It shall not apply to certain conditions as specified in Env-A 609.09(c) that may be incorporated into this Permit following permit issuance by DES.
- C. If a Title V Operating Permit and amendments thereto issued by the DES does not expressly include or exclude an applicable requirement or a state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the Owner or Operator shall comply with the provisions of said requirement to the extent that it applies to the Owner or Operator, or device.
- D. If DES determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.

- E. Pursuant to Env-A 609.09(f), nothing contained in Section XIII of this Permit shall alter or affect the ability of the DES to reopen this Permit for cause in accordance with Env-A 609.19 or to exercise its summary abatement authority.
- F. Pursuant to Env-A 609.09(g), nothing contained in this section or in any Title V operating permit issued by the DES shall alter or affect the following:
  - 1. The ability of the DES to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;
  - 2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;
  - 3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the EPA Administrator under that section;
  - 4. 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;
  - 5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;
  - 6. The ability of the DES or the EPA Administrator to obtain information about a stationary source, area source, or device from the Owner or Operator pursuant to section 114 of the CAA; or
  - 7. The ability of the DES or the EPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

#### **XIV. Reopening for Cause**

The Director shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.19(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.19(b) through (g).

#### **XV. Administrative Permit Amendments**

- A. Pursuant to Env-A 612.01, the Owner or Operator may implement the changes addressed in the request for an administrative permit amendment as defined in Env-A 101 immediately upon filing the request with the DES.
- B. Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

#### **XVI. Operational Flexibility**

- A. Pursuant to Env-A 612.02, the Owner or Operator subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Section XVI. B through E of this permit, as applicable.
  - 1. The change is not a modification under any provision of Title I of the CAA;

2. The change does not cause emissions to exceed the emissions allowable under the Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;
  3. The Owner or Operator has obtained any temporary permit required by Env-A 600;
  4. The Owner or Operator has provided written notification to the director and administrator of the proposed change and such written notification includes:
    - a. The date on which each proposed change will occur;
    - b. A description of each such change;
    - c. Any change in emissions that will result;
    - d. A request that the operational flexibility procedures be used; and
    - e. The signature of the responsible official, consistent with Env-A 605.04(b);
  5. The change does not exceed any emissions limitations established under any of the following:
    - a. The New Hampshire Code of Administrative Rules, Env-A 100-3800;
    - b. The CAA; or
    - c. This Title V Operating Permit; and
  6. The Owner or Operator, DES, and EPA have attached each written notice required above to their copy of this Title V Operating Permit.
- B. For changes involving the trading of emissions, the Owner or Operator must also meet the following conditions:
1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;
  2. The Owner or Operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes to the Title V Operating Permit which qualify under a federally- enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;
  3. The Director has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce emissions trades; and
  4. The written notification required above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.
- C. For off-permit changes, the Owner or Operator must also meet the following conditions:
1. Each off-permit change meets all applicable requirements and does not violate any

- existing permit term or condition;
2. The written notification required above is made contemporaneously with each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.04;
  3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;
  4. The Owner or Operator keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this Permit, and the emissions resulting from those changes; and
  5. The written notification required above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.
- D. For section 502(b)(10) changes, the Owner or Operator must also meet the following conditions:
1. The written notification required above is made at least 7 days prior to the proposed change; and
  2. The written notification required above includes any permit term or condition that is no longer applicable as a result of the change.
- E. Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) change shall not qualify for the permit shield under Env-A 609.09.

#### **XVII. Minor Modifications**

- A. Prior to implementing a minor permit modification, the Owner or Operator shall submit a written request to the Director in accordance with the requirements of Env-A 612.05(b).
- B. The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.05(c) through (g).
- C. Pursuant to Env-A 612.05(j), the permit shield specified in Env-A 609.09 shall not apply to minor permit amendments under Section XVII. of this Permit.
- D. Pursuant to Env-A 612.05(a), the Owner or Operator shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the Director of a request for a minor permit amendment.

#### **XVIII. Significant Permit Modifications**

- A. Pursuant to Env-A 612.06, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.06(a)(1) through (5).
- B. Prior to implementing the significant permit amendment, the Owner or Operator shall file a written request to the Director which includes all the information as referenced in Env-A 612.06(c) and (d) and shall be issued an amended Title V Operating Permit from the DES. The Owner or Operator shall be subject to the provisions of RSA 125-C:15 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Title V Operating Permit.
- C. The Director shall take final action on the significant permit amendment in accordance with the Procedures specified in Env-A 612.06(e) and (f).



- D. The owner or operator shall obtain an amended title V operating permit incorporating the significant permit modification prior to implementing such modification, except as provided in Env-A 609.07(a)(3).

#### **XIX. Title V Operating Permit Suspension, Revocation or Nullification**

- A. Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:
1. The Owner or Operator has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order or permit condition in force and applicable to it; or
  2. The emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.
- B. The Director shall nullify any Permit if, following a hearing in accordance with RSA 541-A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

#### **XX. Inspection and Entry**

EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6, VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

#### **XXI. Certifications**

##### **A. Compliance Certification Report**

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify for the previous calendar year that the facility is in compliance with the requirements of this permit. The report shall be submitted annually, no later than April 15<sup>th</sup> of the following year. The report shall be submitted to the DES and to the U.S. Environmental Protection Agency – Region I. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5), the report shall describe:

1. The terms and conditions of the Permit that are the basis of the certification;
2. The current compliance status of the source with respect to the terms and conditions of this Permit, and whether compliance was continuous or intermittent during the reporting period;
3. The methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
4. Any additional information required by the DES to determine the compliance status of the source.

##### **B. Certification of Accuracy Statement**

All documents submitted to the DES shall contain a certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

"I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents 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."

- C. All reports submitted to DES (except those submitted as emission based fees as outlined in Section XXIII of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services  
Air Resources Division  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095  
ATTN: Section Supervisor, Compliance Bureau

All reports submitted to EPA shall be submitted to the following address:

EPA-New England, Region 1  
5 Post Office Sq. Suite 100  
Mail Code OES04-2  
Boston, MA 02109-3912

## XXII. Enforcement

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the DES and/or EPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the Owner or Operator from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit. In accordance with 40 CFR 70.6 (a)(6)(ii), the Owner or Operator shall not claim as a defense 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 this Permit.

## XXIII. Annual Emission Fee Requirements

- A. Env-A 705.02, *Annual Emission Fee*<sup>38</sup>: The owner or operator shall pay to the department an annual emission fee that includes a baseline emission fee as specified in Condition XXIII.E and an emission-based fee calculated each calendar year as per Condition XXIII.D.

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<sup>38</sup> For additional information on annual emission fee, visit the Department's website at: <https://www.des.nh.gov/organization/divisions/air/cb/cmdps/eis/index.htm>.

- B. Env-A 705.05, *Payment of Annual Emission Fee*: The owner or operator shall pay to the department the annual emission fee no later than May 15 for the previous calendar year's emissions. For example, the annual emission fee for the calendar year 2019 shall be received on or before May 15, 2020.
- C. Env-A 705.03, *Determination of Actual Emissions for use in Calculating of Emission-based Fee*: The owner or operator shall determine the total actual annual emissions from all the emission units listed in Table 1 for each calendar year in accordance with the methods specified in Env-A 705.03.
- D. Env-A 705.04, *Calculation of Emission-based Fee*: The owner or operator shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 705.04 and the following equation:

$$FEE = E * DPT$$

where:

FEE = The annual emission-based fee for each calendar year as specified in Env-A 705.

E = Total actual emissions as determined pursuant to Condition XXIII.C;

If the facility's actual annual emissions as determined by Condition XXIII.C are greater than 250 tons, the total emissions shall be adjusted by multiplying those emissions over 250 tons by a factor of 1.1 as shown below:

Adjusted E = {250 + [(actual annual emissions – 250) x 1.1]}

DPT = Dollar per ton rate, calculated by the department as per Env-A 705.04(b).

- E. Env-A 705.06, *Payment of Annual Baseline Emission Fee*: Pursuant to Env-A 705.07(d), the annual baseline fee for this facility is \$75,000.
- F. Pursuant to Env-A 705.06(c), if the owner or operator is not required to pay an emission-based fee for any calendar year because the Facility had zero emissions and zero hours of operation, the annual baseline fee shall be \$500 in lieu of the fee stated in Condition XXIII.E.

#### **XXIV. Duty To Provide Information**

In accordance with 40 CFR 70.6 (a)(6)(v), upon the DES's written request, the Owner or Operator shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Owner or Operator shall furnish to the DES copies of records that the Owner or Operator is required to retain by this Permit. The Owner or Operator may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Env-A 103 at the time such information is submitted to DES. DES shall evaluate such requests in accordance with the provisions of Env-A 103.

#### **XXV. Property Rights**

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

#### **XXVI. Severability Clause**

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held

invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

## XXVII. Permit Deviation

Deviations are instances where any Permit condition is violated. In accordance with Env-A 911, *Recordkeeping and Reporting Requirements for Permit Deviations*, the Owner or Operator shall maintain records and report to the DES deviations from Permit requirements as follows:

- A. Recordkeeping Requirement - All Deviations - In accordance with Env-A 911.03, in the event of a permit deviation, the Owner or Operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels; and record the information per Env-A 911.03(b).
- B. Excess Emissions Reporting Requirement - Excess Emission Deviations Only - In the event the permit deviation causes excess emissions, the Owner or Operator of the affected device, process, or air pollution control equipment shall:
  1. Notify DES by telephone, fax, or e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)) within 24 hours of discovery of the permit deviation<sup>39</sup>; and
  2. Submit a written report in accordance with Env-A 911.04(d) within 10 days of the discovery of the permit deviation reported in Section XXVII B.
- C. Reporting Requirements for Permit Deviations Continuing for Greater Than 9 Consecutive Days - In the event the deviation does not cause an excess emission but continues for a period greater than 9 consecutive days, the Owner or Operator of the affected device, process, or air pollution control equipment shall notify the department of the information required by Env-A 911.04(a)(2) by e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)) on the tenth day of the permit deviation<sup>39</sup>.
- D. Semi-Annual Summary Report - Pursuant to Env-A 911.05, the Owner or Operator shall submit a summary of all permit deviations previously reported pursuant to Section XXVII B. and C. and a list of all permit deviations recorded pursuant to Section XXVII A. to DES in the Semi-Annual Permit Deviation and Monitoring report due January 31<sup>st</sup> and July 31<sup>st</sup> of each calendar year covering the periods of July 1<sup>st</sup> through December 31<sup>st</sup> and January 1<sup>st</sup> through June 30<sup>th</sup>, respectively, or an alternative time period approved by DES pursuant to Env-A 912.
- E. Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.

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<sup>39</sup>

Unless it is Saturday, Sunday or a state legal holiday, in which event DES shall be notified on the next business day.



**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).

### **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

Merrimack Station  
Facility (Source) Name (from STEP 1)

Page 4

of a new certificate of representation changing the designated representative;

**STEP 3, Cont'd. Recordkeeping and Reporting Requirements, 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



Merrimack Station
Facility (Source) Name (from STEP 1)

any other provision of the Act, including the provisions of title I of the Act relating

**STEP 3, Cont'd.****Effect on Other Authorities, 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.

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

**Certification**

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

Name	William H. Smagula, P.E.	
Signature	<i>William H. Smagula</i>	Date 3-31-16



# Acid Rain NO<sub>x</sub> Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

Page 1

This submission is:  New  Revised

Page  of

**STEP 1**

Indicate plant name, State, and Plant code from the current Certificate of Representation covering the facility.

Merrimack Station		NH	2364
Plant Name		State	Plant Code

**STEP 2**

Identify each affected Group 1 and Group 2 boiler using the unit IDs from the current Certificate of Representation covering the facility. Also indicate the boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom, and select the compliance option for each unit by making an 'X' in the appropriate row and column.

	1	2				
	ID#	ID#	ID#	ID#	ID#	ID#
	CY WB	CY WB	Type	Type	Type	Type
	Type	Type	Type	Type	Type	Type
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)						
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)						
(c) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)						
(d) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)						
(e) Standard annual average emission limitation of 0.66 lb/mmBtu (for cell burner boilers)						
(f) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)		X				
(g) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)						
(h) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)						

STEP 2, cont'd

Merrimack Station
Plant Name (From Step 1)

	1	2	ID#	ID#	ID#	ID#
	ID#	ID#				
	CY WB	CY WB	Type	Type	Type	Type
	Type	Type	Type	Type	Type	Type
(i) NO <sub>x</sub> Averaging Plan (include NO <sub>x</sub> Averaging form)						
(j) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)						
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging Form )						
(l) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(ii)(B), or (b)(2)						

STEP 3: Identify the first calendar year in which this plan will apply.

January 1, 2016
-----------------

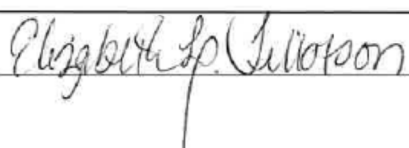
STEP 4: Read the special provisions and certification, enter the name of the designated representative, sign and date.

**Special Provisions**

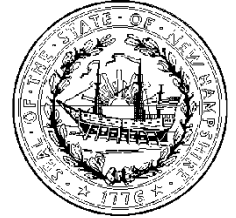
General. This source is subject to the standard requirements in 40 CFR 72.9. These requirements are listed in this source's Acid Rain Permit.

**Certification**

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

Name Elizabeth Tillotson, Executive Director of Administration & Regulatory Affairs	
Signature 	Date 4/16/2019

State of New Hampshire  
Department of Environmental Services  
Air Resources Division



# TITLE V OPERATING PERMIT

Permit No: **TV-0054**  
Date Issued: **May 16, 2018**  
**Minor Modification: August 27, 2018; January 30, 2020**

This certifies that:

**GSP Newington LLC**  
**165 Gosling Road**  
**Newington, NH 03801**

has been granted a Title V Operating Permit for the following facility and location:

**Newington Station**  
**165 Gosling Road**  
**Newington, NH 03801**

**Facility ID No: 3301500054**  
**ORISPL: 8002**

<b>Application No(s):</b>	<b>Date Received</b>	<b>Purpose</b>
<b>11-0136</b>	September 30, 2011	Renewal of Title V Operating Permit, with additional information received on July 29, 2014, December 29, 2017 and January 11, 2018
<b>14-0159</b>	March 28, 2014	Request to incorporate TP-0120 into Title V Permit
<b>17-0036</b>	March 14, 2017	Request to incorporate TP-0176 into Title V Permit
<b>18-0165</b>	August 8, 2018	Request for a minor modification
<b>19-0225</b>	November 8, 2019	Request for a minor modification

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V application referenced above, filed with the New Hampshire Department of Environmental Services under the signature of the responsible official certifying to the best of his knowledge that the statements and information therein are true, accurate and complete.

Responsible Official(s): **Elizabeth H. Tillotson (603) 230-7968**  
**James S. Andrews (603) 230-7975**

Technical Contact: **Tara Olson (603) 430-4806**

Designated Representative: **Elizabeth H. Tillotson**

Authorized Account Representative: **Elizabeth H. Tillotson**

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of the Code of Federal Regulations, Title 40, Part 70.

This Permit is effective upon issuance and expires on **April 30, 2023**.

*Craig [Signature]*  
**COPY**

\_\_\_\_\_  
Director  
Air Resources Division

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**ABBREVIATIONS**

ARD	Air Resources Division
AAL	Ambient Air Limit
acf	actual cubic foot
ACI	Activated carbon injection
ASTM	American Society of Testing and Materials
Btu	British thermal units
CAA	Clean Air Act
CAS	Chemical Abstracts Service
CEMS	Continuous Emissions Monitoring System
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon monoxide
CY	Calendar year
DER	Discrete Emissions Reduction
DES	New Hampshire Department of Environmental Services
DSI	Dry sorbent injection
EGU	Electric utility steam generating unit
Env-A	New Hampshire Code of Administrative Rules - Air Resources Division
ERC	Emission Reduction Credit
ESP	Electrostatic Precipitator
ft	foot or feet
ft <sup>3</sup>	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
HCl	Hydrogen chloride
Hg	Mercury
hp	horsepower
hr	hour
LEE	Low emitting electric utility steam generating unit
lb	pound
LPG	Liquefied Petroleum Gas
LNB	Low NO <sub>x</sub> burners
MACT	Maximum Achievable Control Technology
MATS	Mercury and Air Toxics Standards
MM	million
MW	megawatt
NAAQS	National Ambient Air Quality Standard
NATS	NO <sub>x</sub> Allowance Tracking System
NESHAP	National Emissions Standards for Hazardous Air Pollutants

NO <sub>x</sub>	Oxides of Nitrogen
NSPS	New Source Performance Standard
OFA	Over-fire Air
PM <sub>10</sub>	Particulate Matter < 10 microns
ppm	parts per million
ppmvd	parts per million dry volume
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RICE	Reciprocating Internal Combustion Engine
RSA	Revised Statuses Annotated
RTAP	Regulated Toxic Air Pollutant
scf	standard cubic foot
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
STMS	Sorbent trap monitoring system
TSM	Total selected metals
TSP	Total Suspended Particulates
tpy	tons per consecutive 12-month period
USEPA	United States Environmental Protection Agency
VER	Voluntary Emission Reduction
VOCs	Volatile Organic Compounds



## FACILITY SPECIFIC TITLE V OPERATING PERMIT CONDITIONS

### I. Facility Description of Operations

Newington Station is a fossil fuel-fired electricity generating facility, owned and operated by GSP Newington LLC, a wholly owned subsidiary of Granite Shore Power LLC (GSP). The facility is comprised of one electric utility steam generating unit (EGU) designated as NT1, two auxiliary boilers (NTAB1 and NTAB2), one emergency generator (NTEG1), two bulk oil storage tanks, and one bulk oil storage day tank. NTAB1 and NTAB2 operate singularly or in combination during the startup or shutdown of NT1 or to provide auxiliary steam or house heat to the facility whenever NT1 is not operating. Newington Station is also permitted to install and operate a temporary natural gas fired boiler to be used for building heat and startup of the utility boiler during the heating season. The facility exceeds the Title V major source threshold for particulate matter less than 10 microns (PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO) and hazardous air pollutants (HAPs) and is therefore required to obtain a Title V Operating Permit.

The utility boiler NT1 is equipped with an electrostatic precipitator (ESP) to control the emissions of particulate matter (PM), and low-NO<sub>x</sub> burners, water injection system and over-fire air to control NO<sub>x</sub> emissions. GSP operates the water injection system on NT1 as necessary to maintain compliance with NO<sub>x</sub> emission limits. Newington Station is also authorized to operate the fly ash reinjection system on NT1. NT1 boiler stack is equipped with continuous emissions monitoring systems (CEMS) to monitor SO<sub>2</sub>, NO<sub>x</sub>, CO, carbon dioxide (CO<sub>2</sub> - diluent gas), and stack gas flowrate and a continuous opacity monitoring system (COMS) to monitor opacity.

NT1 is subject to 40 Code of Federal Regulations (CFR) Part 63 Subpart UUUUU *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coal and Oil-Fired Electric Utility Steam Generating Units* (also known as Mercury and Air Toxics Standards or MATS). NT1 is considered an existing EGU as it was installed prior to May 3, 2011. The compliance date for existing EGUs was April 16, 2015. Based on historical operating data, NT1 qualifies as a “limited-use liquid oil-fired EGU<sup>1</sup>”. Limited-use units are subject to tune-up requirements<sup>2</sup> only. Newington Station completed the initial EGU tune-up requirements on July 13, 2015.

In the event that the annual capacity factor when burning oil exceeds 8% as averaged on a 24-month block period, NT1 would no longer qualify as a limited-use EGU, and instead be considered a “continental liquid oil-fired EGU<sup>3</sup>”. Continental liquid oil-fired EGUs are subject to emission limits in Table 2 of Subpart UUUUU. MATS provides multiple monitoring options (e.g., stack testing, continuous emissions/parametric monitoring, fuel analysis etc.) to demonstrate compliance with applicable emission limits. This Permit includes all applicable requirements for limited-use and continental liquid oil-fired EGUs, specifically monitoring options selected by the facility.

Auxiliary Boilers NTAB1 and NTAB2 are subject to 40 CFR Part 63, Subpart DDDDD *National*

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<sup>1</sup> *Limited-use liquid oil-fired subcategory* means an oil-fired electric utility steam generating unit with an annual capacity factor when burning oil of less than 8 percent of its maximum or nameplate heat input, whichever is greater, averaged over a 24-month block contiguous period commencing on the first of the month following the compliance date specified in §63.9984 (i.e., April 16, 2015 compliance date for existing EGUs).

<sup>2</sup> As per §63.10000(c)(2)(iv), limited-use liquid oil-fired EGUs are not subject to the emission limits, but must comply with the performance tune-up work practice requirements.

<sup>3</sup> Continental liquid oil-fired means any oil-fired EGU that burns liquid oil and is located in the continental United States.

*Emission Standards for Hazardous Air Pollutant: Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler MACT).* Both the boilers are considered “existing” boilers under the Boiler MACT as they were installed prior to June 4, 2010.

Minor Modification (App. # 19-0225)

GSP Newington requested the addition of a natural gas burner to the existing auxiliary boiler (NTAB1) while retaining the ability to combust fuel oil.

**II. Permitted Activities**

In accordance with all of the applicable requirements identified in the Permit, the Owner or Operator is authorized to operate the devices and/or processes identified in Sections III, IV, V, and VI within the terms and conditions specified in this Permit.

**III. Emission Unit Identification**

**A. Significant Activities**

The activities identified in Table 1 are subject to and regulated by this Title V Operating Permit.

<b>Table 1 - Significant Activities</b>			
<b>Emission Unit ID</b>	<b>Device Identification</b>	<b>Installation Date</b>	<b>Maximum Design Capacity and Permitted Fuel Type(s)<sup>4</sup></b>
NT1	Steam Generating Unit 1 Combustion Engineering Boiler Serial No. 8269 Tangential Firing Low-NOx burners	1969	4,350 MMBtu/hr Crude oil, No. 6 fuel oil, No. 2 fuel oil and natural gas No.6 oil - 29,000 gal/hr Natural gas - 4.26 mmcf/hr
NTAB1	Auxiliary Steam Boiler No. 1A Equipped with oxygen (O <sub>2</sub> ) trim system Manufacturer: Erie City Energy Division Model No. 15M Keystone Serial No. 98627 Propane gas ignitor	1969/2019 (modified to add a natural gas burner)	99.4 MMBtu/hr No. 2 fuel oil - 710 gal/hr Diesel - 725 gal/hr 80 MMBtu/hr Natural gas - 0.080 mmcf/hr
NTAB2	Auxiliary Steam Boiler No. 1B Equipped with O <sub>2</sub> trim system Manufacturer: Erie City Energy Division Model No. 15M Keystone Serial No. 98628 Propane gas ignitor	1969	99.4 MMBtu/hr No. 2 fuel oil - 710 gal/hr Diesel - 725 gal/hr
NTEG1	Emergency Generator 250 kW engine output	December 2007	2.7 MMBtu/hr Ultra low sulfur diesel - equivalent to 19.7

<sup>4</sup> The fuel consumption rates presented in Table 1 are based on the following assumed heating values:  
 No. 6 fuel oil - 150,000 Btu/gal;  
 No. 2 Oil (Distillate Oil) - 140,000 Btu/gal  
 Natural Gas - 1,020 Btu/ft<sup>3</sup>; and  
 Diesel - 137,000 BTU/gallon  
 The maximum fuel consumption of the unit may vary based on the actual heat content of the fuel burned.

Table 1 - Significant Activities			
Emission Unit ID	Device Identification	Installation Date	Maximum Design Capacity and Permitted Fuel Type(s) <sup>4</sup>
	Caterpillar Model # C9 Serial # - S9L01463		gal/hr
NTTB1	Temporary Steam Boiler	-	99.4 MMBtu/hr Natural gas - 0.098 mmcf/hr

**B. Stack Criteria**

The following devices at the Facility shall have exhaust stacks that discharge vertically, without obstruction, and meet the criteria in Table 2:

Table 2 - Stack Criteria			
Stack #	Emission Unit #	Minimum Height (feet above ground surface)	Maximum Exit Diameter (feet)
STNT1	NT1	410	20.75
STNTAB1	NTAB1 or NTTB1	195	3.5
STNTAB2	NTAB2	195	3.5

**IV. Insignificant Activities Identification**

All activities at this facility, which meet the criteria identified in Env-A 609.04, shall be considered insignificant activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this Permit.

**V. Exempt Activities Identification**

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this Permit.

**VI. Pollution Control Equipment Identification**

Air pollution control equipment listed in Table 3 shall be operated at all times that the associated devices are operating in order to meet permit conditions.

Table 3 - Pollution Control Equipment Identification			
Pollution Control Equipment ID	Description	Purpose	Emission Unit Controlled
NT1-PC1	Electrostatic Precipitator	To control particulate matter	NT1

**VII. Alternative Operating Scenarios**

The Owner or Operator is authorized to operate under the alternative operating scenarios listed in this condition. While operating under an alternative operating scenario, the Owner or Operator

shall comply with all conditions for the scenario, and all other requirements specified in this permit.

**A. Fly Ash Reinjection in NT1 (Permit to Operate PO-B-1030)**

1. To capture unburned carbon in the fly ash and to reduce the amount of ash shipped off-site as solid waste, the Owner or Operator is authorized to maintain and operate the fly ash injection system.
2. The fly ash injection system is comprised of a system of blowers and piping that allow fly ash from the precipitator hoppers to be reinjected into the burners of the boilers.
3. To minimize PM emissions during fly ash reinjection, the Owner or Operator shall ensure that the ESP is energized before start-up of the fly ash reinjection system.
4. As per 40 CFR 70.9(a)(9) and Table 8, Items 12 and 13, the Owner or Operator shall maintain a record of hours of operation for fly ash reinjection in NT1.

**B. Auxiliary Boilers (Temporary Permit TP-0176)**

1. Auxiliary boilers NTAB1 and NTAB2 may be operated in one of the following Boiler MACT subcategories:
  - i. Limited-use boilers - Primary operating scenario;
  - ii. Unlimited-use boilers - Alternative operating scenario.
2. The Owner or Operator shall notify the Department of the mode of operation (i.e., Boiler MACT subcategory) for a particular calendar year at least 30 days prior to the start of that calendar year and keep a record of operating mode for each boiler. The boilers will be required to operate under the declared scenario for the entire calendar year.
3. When the auxiliary boilers are operated as limited-use boilers, the Owner or Operator shall comply with the following requirements:
  - i. Table 4B (Operating Limitations);
  - ii. Table 8A (Recordkeeping Requirements); and
  - iii. Table 9A (Reporting Requirements)
4. When the auxiliary boilers are operated as unlimited-use boilers, the Owner or Operator shall comply with the following requirements:
  - i. Table 4C (Operating and Emission Limitations);
  - ii. Table 6A (Testing and Monitoring Requirements);
  - iii. Table 8B (Recordkeeping Requirements); and
  - iv. Table 9B (Reporting requirements)
5. The Owner or Operator is required to conduct the periodic performance tune-up on each auxiliary boiler as specified in Table 6, Item 35, irrespective of boiler operating scenario.
6. As per 40 CFR 70.9(a)(9) and Table 8, Item 13, the Owner or Operator shall maintain a record of which boiler operating scenario is in use for a specific calendar year.

**VIII. Applicable Requirements**

**A. Federally Enforceable Operational and Emission Limitations**

1. The Owner or Operator shall be subject to the federally enforceable operational and emission limitations identified in Table 4 below:

<b>Table 4 - Federally Enforceable Operational and Emission Limitations</b>			
Item #	Requirement	Applicable Unit	Regulatory Basis
1.	<p><u>NOx Reasonably Available Control Technology (RACT) Requirements: Utility Boilers Firing Oil, Gas and/or Wood</u></p> <p>a.) When firing oil, NOx emissions shall be limited to 0.35 pounds per million British thermal units (lb/MMBtu), based on a 24-hour calendar day average.</p> <p>b.) When firing gas or any combination of oil and gas, NOx emissions shall be limited to 0.25 lb NOx/MMBtu heat input, based on a 24-hour calendar day average.</p> <p>c.) If both a combination of gas and oil and exclusively oil are burned for separate periods within the same 24-hour calendar day, the applicable emission limit shall be a prorated value using the emission limits specified in 1.a and 1.b above and the actual hour that each fuel type is burned as indicated in the following equation:</p> $AEL = \frac{(t_{og} * 0.25lb / MMBtu) + (t_o * 0.35lb / MMBtu)}{t_{og} + t_o}$ <p>Where:                      AEL= allowable NOx emission limit (in lb/MMBtu)                      t<sub>og</sub>= Number of hours within 24-hour calendar day when burning any combination of gas and oil                      t<sub>o</sub>= Number of hours within 24-hour calendar day when burning exclusively oil</p> <p>d.) Compliance with the NOx limit shall be demonstrated through CEMS.</p>	NT1	Env-A 1303.07
2.	<p><u>Mitigation of Regional Haze - Emission Standards Applicable to Tangential-Firing, Dry-Bottom Boilers</u></p> <p>a.) SO<sub>2</sub> emissions shall not exceed 0.50 lb/MMBtu on a 30-day rolling average basis as recorded by CEMS.</p> <p>b.) Total suspended particulate matter emissions shall not exceed 0.04 lb/MMBtu<sup>5</sup>. This limitation is independent of fuel type and applies at all times, including during fly ash reinjection. Compliance shall be demonstrated through stack testing.</p>	NT1	Env-A 2302.02
3.	<p><u>Utility Boiler Startup</u></p> <p>a.) Natural gas or No. 2 fuel oil shall be used to startup the boiler.</p> <p>b.) Follow standard operating procedures for cold boiler startup and boiler repair practices to ensure compliance with opacity standards.</p>	NT1	PO-B-1030
4.	<p><u>Maximum Sulfur Content Allowable in Liquid Fuels</u></p> <p>a.) The sulfur content of No. 6 fuel oil and crude oil as combusted in the</p>	NT1	TP-0197

<sup>5</sup> This limit is more stringent than the 0.22 lb/MMBtu PM emission limit contained in Env-A 2003.01 *Particulate Emission Standards for Fuel Burning Devices Installed on or before May 13, 1970*.

**Table 4 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
	utility boiler shall not exceed 1.0% by weight. ----- b.) The sulfur content of No. 2 fuel oil shall not exceed 0.20% by weight.	NT1, NTAB1 & NTAB2	
5.	<u>Sulfur Limits of Certain Liquid Fuels</u> a.) Effective July 1, 2018, sulfur content of the residual oil <sup>6</sup> shall not exceed 0.5% by weight <sup>7</sup> . ----- b.) Effective July 1, 2018, sulfur content of the distillate oil shall not exceed 0.0015% by weight.	NT1   NT1, NTAB1 & NTAB2	RSA 125-C:10-d
6.	<u>Carbon monoxide Emission Limitations</u> Carbon monoxide emissions shall not exceed: a.) 0.231 lb/MMBtu for any 24-hour calendar day average as monitored and calculated by the CEMS. This limitation is independent of fuel type and applies at all times. b.) 2,915 tons per consecutive 12-month period (tpy) based upon 0.231 lb/MMBtu and the annual operating rate of 25,235,000 MMBtu/year. As long as the daily and annual CO emission rates are not exceeded, the maximum annual operating rate is not a permit limitation.	NT1	PO-B-1030 <sup>8</sup>
7.	<u>Visible Emission Standard for Fuel Burning Devices Installed on or Prior to May 13, 1970</u> a.) The average opacity from fuel burning devices installed on or prior to May 13, 1970 shall not exceed 40 percent for any continuous 6-minute period. b.) During the building of a new fire, cleaning of fires or soot blowing, the average opacity may exceed 40 percent for a period or periods aggregating no more than 6 minutes in any 60 minutes. Those devices equipped with automatic soot blowers shall be permitted to be in excess of 40 percent opacity, for a period not to exceed 60 minutes in any 8-hour period. c.) Compliance with the opacity limit shall be determined through continuous opacity monitoring system.	NT1	Env-A 2002.01 (formerly Env-A 1202 effective 12-27-90)

<sup>6</sup> No. 6 fuel oil and crude oil meet the definition of residual oil.

<sup>7</sup> Beginning July 1, 2018, the Owner or Operator is not allowed to purchase or burn residual oil with a sulfur content greater than 0.5% by weight. However, the Owner or Operator is permitted to use the remainder of previously purchased residual oil with sulfur content greater than 0.5% weight by blending it with lower sulfur fuel oil such that the sulfur content of residual oil as combusted in the utility boiler does not exceed 0.5% by weight. Fuel blending procedure is specified in Table 7, Item 28.

<sup>8</sup> Addition of natural gas firing capability (1994-1995).

**Table 4 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis										
8.	<p><u>NESHAP for Coal and Oil-Fired Electric Utility Steam Generating Units - Tune-up Requirements</u>                      Conduct tune-up of the utility boiler as specified in Table 6, Item 33.</p>	NT1	40 CFR §§ 63.10000(c)(2)(iv) & 63.10005(e) Subpart UUUUU										
9.	<p><u>40 CFR 63 Subpart UUUUU – Subcategory Switch</u>                      a.) Upon switching from the limited-use oil-fired EGU subcategory to the continental liquid oil-fired EGU subcategory, NT1 is subject to the following emission limits:</p> <table border="1" data-bbox="298 678 1024 926"> <thead> <tr> <th colspan="2" data-bbox="298 678 1024 751"><b>Table 4A - Emission Limits for Existing Continental Liquid oil-fired EGUs (Table 2 to Subpart UUUUU)</b></th> </tr> <tr> <th data-bbox="298 751 678 800">Pollutant</th> <th data-bbox="678 751 1024 800">Emission Limit</th> </tr> </thead> <tbody> <tr> <td data-bbox="298 800 678 842">Filterable particulate matter</td> <td data-bbox="678 800 1024 842">0.030 lb/MMBtu</td> </tr> <tr> <td data-bbox="298 842 678 884">Hydrogen chloride (HCl)</td> <td data-bbox="678 842 1024 884">0.0020 lb/MMBtu</td> </tr> <tr> <td data-bbox="298 884 678 926">Hydrogen fluoride (HF)</td> <td data-bbox="678 884 1024 926">0.00040 lb/MMBtu</td> </tr> </tbody> </table> <p>b.) These limits apply at all times except during periods of startup and shutdown. Work practice requirements in Items 3 and 4, in Table 3 to Subpart UUUUU are applicable during the periods of startup or shutdown.                      c.) The EGU must complete all initial compliance demonstrations with the emission limits specified in Table 4A within 180 days from the first day the EGU met the definition of continental liquid oil-fired EGU.                      d.) At all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p>	<b>Table 4A - Emission Limits for Existing Continental Liquid oil-fired EGUs (Table 2 to Subpart UUUUU)</b>		Pollutant	Emission Limit	Filterable particulate matter	0.030 lb/MMBtu	Hydrogen chloride (HCl)	0.0020 lb/MMBtu	Hydrogen fluoride (HF)	0.00040 lb/MMBtu	NT1	40 CFR §§ 63.9981 & 63.10000
<b>Table 4A - Emission Limits for Existing Continental Liquid oil-fired EGUs (Table 2 to Subpart UUUUU)</b>													
Pollutant	Emission Limit												
Filterable particulate matter	0.030 lb/MMBtu												
Hydrogen chloride (HCl)	0.0020 lb/MMBtu												
Hydrogen fluoride (HF)	0.00040 lb/MMBtu												
10.	<p><u>Visible Emission Standard for Fuel Burning Devices Installed on or Prior to May 13, 1970</u>                      a.) The average opacity from fuel burning devices installed on or prior to May 13, 1970 shall not exceed 40 percent for any continuous 6-minute period.<sup>9</sup>                      b.) During the building of a new fire, cleaning of fires or soot blowing, the average opacity may exceed 40 percent for a period or periods aggregating no more than 6 minutes in any 60 minutes.</p>	NTAB1 & NTAB2	Env-A 2002 (formerly Env-A 1202 effective 12-27-90)										

<sup>9</sup> Compliance with visible emission limitation shall be determined, upon request by the Department, using 40 CFR 60, Appendix A, Method 9 or other Department approved method.

**Table 4 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
11.	<p><u>Particulate Emission Standards for Fuel Burning Devices Installed on or Before May 13, 1970</u>                      The particulate matter emissions from each auxiliary boiler shall not exceed 0.41 lb/MMBtu.</p>	NTAB1 & NTAB2	Env-A 2003.01
12.	<p><u>NOx RACT Requirements for Auxiliary Boilers</u>                      a.) An auxiliary boiler with a heat input rate of at least 50 MMBtu/hr, shall not exceed a NOx RACT emission limit of 0.20 lb/MMBtu based on a 24-hour calendar day average, regardless of the type of fuel burned.                      b.) The emissions from all auxiliary boilers shall be included in the calculation of both the actual and theoretical potential emissions from the stationary source.</p>	NTAB1 & NTAB2	Env-A 1312
13.	<p><u>NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters -Tune-up Requirements</u>                      Conduct tune-up of each boiler as specified in Table 6, Item 35.</p>	NTAB1 & NTAB2	40 CFR §§63.7500(c) & 63.7510(e) Subpart DDDDD
14.	<p><u>Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970</u>                      The average opacity shall not exceed 20 percent for any continuous 6-minute period. The average opacity may exceed 20 percent for one period of 6 continuous minutes in any 60 minute period during startup, shutdown and malfunction.</p>	NTTB1 & NTEG1	Env-A 2002.02
15.	<p><u>Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985</u>                      The particulate matter emissions from fuel burning devices installed on or after January 1, 1985 shall not exceed 0.30 lb/MMBtu.</p>	NTTB1 & NTEG1	Env-A 2002.03
16.	<p><u>Fuel Usage Limitation</u>                      The amount of natural gas combusted in the temporary boiler shall be limited to 487.3 million cubic feet per year.</p>	NTTB1	TP-0120
17.	<p>The temporary boiler shall not be operated at any time that Auxiliary Boiler No. 1A is in operation.</p>	NTTB1	TP-0120
18.	<p><u>NOx RACT Requirements for Industrial Boilers Firing Gas Exclusively</u>                      For boilers only capable of firing gas, the NOx RACT requirements shall be as follows:                      a.) An emission limit of 0.10 lb. per million Btu, based on an hourly average; or                      b.) Operate and maintain low-NOx burners.</p>	NTTB1	Env-A 1305.08
19.	<p><u>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines</u>                      The Owner or Operator of the emergency engine shall:                      a.) Operate and maintain the engine according to the manufacturer's</p>	NTEG1	40 CFR 60.4206, 40 CFR 60.4211(a) & 40 CFR 60.4211(c)



**Table 4 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
	emission-related written instructions or change only the emission-related settings in a way that is permitted by the manufacturer; and b.) Operate and maintain the engine to meet the emission standards over the entire life of the engine.		(Subpart III)
20.	<u>Operating Limitations for Emergency Engine</u> a.) The emergency engine shall be limited to 500 hours of total operation during any consecutive 12-month period and only under the following operating scenarios. ----- b.) The emergency engine shall only operate: 1. As a mechanical or electrical power source only when the primary power source for a facility is not available during an emergency; or 2. During the normal maintenance and testing; or 3. No emergency engine shall operate as a load-shaving or peaking power production unit. ----- c.) In addition to the operating hours limitation in a., the Owner or Operator shall operate the emergency engine for any combination of the purposes listed below for a maximum of 100 hours per calendar year <sup>10</sup> : 1. Emergency engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine.	NTEG1	Env-A 604.02 & Env-A 606.02(c)(1) ----- Env-A 101.671 ----- 40 CFR 60.4211(f) (Subpart III)
21.	<u>Ultra Low Sulfur Diesel Fuel Requirement</u> The sulfur content of diesel fuel burned in the 40 CFR Part 60, Subpart III emergency engine shall not exceed 15 ppm (0.0015 percent sulfur by weight).	NTEG1	40 CFR 60.4207 (Subpart III)
22.	<u>Permit Deviations</u> In the event of a permit deviation, the Owner or Operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels.	Facility wide	Env-A 911.03

<sup>10</sup> The Owner or Operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency engine beyond 100 hours per calendar year.

**Table 4 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
23.	<p><u>Control of Fugitive Dust</u>                      The Owner or Operator shall take precautions, such as wetting, covering, shielding or vacuuming, to prevent, abate, and control fugitive dust emissions during any activity, which might create fugitive dust. Such activities include bulk hauling activities, including the transportation and transfer of mineral material over public roads and maintenance activities, including sweeping, vacuuming, or other activity involved with the upkeep of roads or parking lots.</p>	Facility wide	Env-A 1002
24.	<p><u>Asbestos Management and Control</u>                      Comply with the asbestos requirements of Env-A 1800 and 40 CFR 61.145 during demolition and/or renovation.</p>	Facility wide	40 CFR 61 Subpart M and Env-A 1800
25.	<p><u>Accidental Release Program Requirements</u>                      The quantities of regulated chemicals stored at the facility are less than the applicable threshold quantities established in 40 CFR 68.130. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities:</p> <ul style="list-style-type: none"> <li>a.) Identify potential hazards which result from such releases using appropriate hazard assessment techniques;</li> <li>b.) Design and maintain a safe facility;</li> <li>c.) Take steps necessary to prevent releases; and</li> <li>d.) Minimize the consequences of accidental releases that do occur.</li> </ul>	Facility wide	CAAA 112(r)(1)

2. The Owner or Operator shall be subject to the following federally enforceable operational and emission limitations in Tables 4B or 4C for auxiliary boilers (depending on the operating scenario):

Table 4B - Operating Limitations for Auxiliary Boilers Primary Operating Scenario - Limited-use			
Item #	Requirement	Applicable Emission Unit	Regulatory Basis
1.	<u>Limited-use Boilers</u> The annual capacity factor (ACF) of each auxiliary boiler shall not exceed 10%, which equates to a maximum annual heat input of no more than 87,074 MMBtu for each boiler. Compliance with this limit is determined on a calendar year basis.	NTAB1 & NTAB2	TP-0176, 40 CFR 63.7555(a)(3) & 40 CFR 63.7575
2.	<u>General Compliance Requirements</u> a.) At all times operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. b.) Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department and United States Environmental Protection Agency (EPA) which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.	NTAB1 & NTAB2	40 CFR 63.7500(a)(3)

Table 4C - Operating and Emission Limitations for Auxiliary Boilers Alternative Operating Scenario - Unlimited-use													
Item #	Requirement	Applicable Emission Unit	Regulatory Basis										
1.	<p><u>Boiler MACT Emission Limits for Particulate matter, Hydrogen chloride and Mercury</u></p> <table border="1"> <thead> <tr> <th colspan="2">Table 4D - Emission Limits for Units Designed to Burn Light Liquid Fuel</th> </tr> <tr> <th>Pollutant</th> <th>Emission Limit</th> </tr> </thead> <tbody> <tr> <td>Total selected metals (TSM)</td> <td>6.2 E-05 lb/MMBtu</td> </tr> <tr> <td>HCl</td> <td>1.1 E-03 lb/MMBtu</td> </tr> <tr> <td>Mercury (Hg)</td> <td>2.0 E-06 lb/MMBtu</td> </tr> </tbody> </table>	Table 4D - Emission Limits for Units Designed to Burn Light Liquid Fuel		Pollutant	Emission Limit	Total selected metals (TSM)	6.2 E-05 lb/MMBtu	HCl	1.1 E-03 lb/MMBtu	Mercury (Hg)	2.0 E-06 lb/MMBtu	NTAB1 & NTAB2	Table 2 to Subpart DDDDD, 40 CFR §§63.7500 & 63.7510
Table 4D - Emission Limits for Units Designed to Burn Light Liquid Fuel													
Pollutant	Emission Limit												
Total selected metals (TSM)	6.2 E-05 lb/MMBtu												
HCl	1.1 E-03 lb/MMBtu												
Mercury (Hg)	2.0 E-06 lb/MMBtu												
	<p>To determine compliance with the emission limits for TSM, HCl and Hg:</p> <ol style="list-style-type: none"> <li>Conduct fuel analysis in accordance with Table 6A, Item 2;</li> <li>Reduce the data to 12-month rolling averages; and</li> </ol>		Table 8 to Subpart DDDDD										

Table 4C - Operating and Emission Limitations for Auxiliary Boilers Alternative Operating Scenario - Unlimited-use			
Item #	Requirement	Applicable Emission Unit	Regulatory Basis
	3. Maintain the 12-month rolling average at or below the emission limits for TSM, HCl or Hg.		
2.	<p><u>Boiler MACT Emission Limit for Carbon monoxide</u> - Units Designed to Burn Light Liquid Fuel</p> <p>a.) Carbon monoxide emissions shall be limited to 130 parts per million by volume on a dry basis (ppmvd) at 3% oxygen.</p> <hr/> <p>b.) Compliance with the CO emission limitation shall be determined through performance stack testing conducted in accordance with Table 6A, Item 4.</p> <hr/> <p>c.) To demonstrate continuous compliance with the CO emission limit, operate the oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen determined as per Table 6A, Item 5.</p>	NTAB1 & NTAB2	<p>Table 2 to Subpart DDDDD &amp; 40 CFR 63.7500</p> <hr/> <p>40 CFR 63.7510</p> <hr/> <p>40 CFR 63.7525(a)(7)</p>
3.	<p><u>General Compliance Requirements</u></p> <p>a.) Comply with the applicable emission limits and operating limits at all times the affected unit is operating, except during periods of startup and shutdown (as defined in 40 CFR 63.7575).</p> <p>b.) During startup and shutdown, comply with only Items 5 and 6 of Table 3 to Subpart DDDDD.</p> <p>c.) At all times operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.</p> <p>d.) Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department and EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p>	NTAB1 & NTAB2	40 CFR §§63.7500 & 63.7505
4.	<p><u>Work Practice Standards</u></p> <p>Conduct a one-time energy assessment as specified in Table 6A, Item 1.</p>	NTAB1 & NTAB2	40 CFR 63.7510

**B. Annual SO<sub>2</sub> Allowance Programs**

1. SO<sub>2</sub> Allowance Allocation

In accordance with 40 CFR Part 73, SO<sub>2</sub> allowances pursuant to the Federal Acid Rain Program for this facility are allocated as indicated in the following table:

<b>Table 5 - Total Annual Phase II SO<sub>2</sub> Allowance Allocation (tons)</b>	
	<b>Years 2010 and beyond</b>
NT1	10,613

2. Compliance

- a. Pursuant to 40 CFR 73.35, the Owner or Operator shall comply with the SO<sub>2</sub> emission limitation requirements.
- b. At the end of each calendar year, the Owner or Operator shall hold sufficient SO<sub>2</sub> allowances equivalent to the SO<sub>2</sub> emissions during that calendar year.

3. General Provisions

Pursuant to Env-A 611.07, SO<sub>2</sub> allowances lawfully held or acquired by the Owner or Operator shall be governed by the following:

- a. Emissions from the affected units shall not exceed any SO<sub>2</sub> allowances held by the affected unit;
- b. The number of SO<sub>2</sub> allowances held by the Owner or Operator shall not be limited;
- c. The Owner or Operator shall not use SO<sub>2</sub> allowances to avoid compliance with any other applicable requirement of either state or federal rules or of the provisions of the Clean Air Act; and
- d. Any SO<sub>2</sub> allowances held by the Owner or Operator shall be accounted for according to the procedures established in the applicable provisions of 40 CFR 72 and 40 CFR 73.

4. Excess Emissions

Pursuant to 40 CFR 72.9(e), if the affected source has excess emissions in any calendar year, the Owner or Operator shall:

- a. Submit a proposed offset plan as required under 40 CFR 77;
- b. Pay the required penalty without demand and pay upon demand the interest on that penalty, as required by 40 CFR 77; and
- c. Comply with the terms of an approved offset plan as required by 40 CFR 77.

5. Allowance Transfer

The Owner or Operator shall transfer allowances according to the procedures in 40 CFR 73.50.

6. Acid Rain Permit Application

The attached Acid Rain Permit application, dated September 29, 2011, is hereby incorporated by reference into this Permit. The Owner and Operator shall comply with the requirements set forth in the Acid Rain Permit Application and this Permit.

**C. Ozone Season NOx Budget Trading Program (Env-A 3200)**

## 1. NOx Allowance Allocation

NOx allowances shall be allocated to the Owner/Operator of the NOx budget source<sup>11</sup> as per Env-A 3205.03, *Allowance Allocation Methodology*.

## 2. Ozone Season NOx Emissions Cap (Env-A 3206)

NOx emissions during any control period<sup>12</sup> shall not exceed the amount of NOx allowances held in the budget source's NOx Allowance Tracking System (NATS) compliance account for that control period as of the allowance transfer deadline of November 30.

## 3. Conversion of Allowances to Discret Emissions Reductions (Env-A 3205.04)

The Owner/Operator of the budget source may convert unused allowances to discret emissions reductions (DERs) in accordance with procedures for DER generation pursuant to Env-A 3103. Upon conversion, the Owner/Operator shall surrender those converted allowances as if they had been used for actual emissions.

## 4. Allowance Transfer and Use (Env-A 3207)

- a. An allowance shall be a marketable emissions authorization that may be bought, sold, or traded at any time during any year, not just the current year.
- b. The Owner/Operator of the budget source shall comply with the NOx allowance transfer procedures of Env-A 3207.03.

## 5. Allowance Banking (Env-A 3208)

- a. The banking of allowances shall be permitted to allow the retention of unused allowances from one year to a future year in either a compliance account, an overdraft account, or a general account.
- b. Unless otherwise permitted under Env-A 3208.04, unused allowances as of the end of the allowance transfer deadline shall be retained in the compliance, overdraft, or general account and designated as banked allowances after the NATS administrator has made all deductions for a given control period from the compliance account or overdraft account pursuant to Env-A 3212.
- c. Banked allowances may be used in the current year on a one-for-one basis.

## 6. End-of-Season Reconciliation (Env-A 3212)

- a. Each year prior to November 30, the AAR shall request the NATS administrator to deduct current year allowances from the compliance account or overdraft account equivalent to the number of available allowances to cover the NOx emissions during the current control period.
- b. This request shall be submitted by the AAR to the NATS administrator no later than the allowance transfer deadline, November 30.

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<sup>11</sup> As per RSA 125-J:1 XIX-b. "NOx budget source" means a fossil fuel fired boiler or indirect heat exchanger with a maximum rated heat input capacity of 250 MMBtu/hr, or more; and all electric generating facilities with a rated output of 15 MW, or more. Utility boiler NT1 is a NOx budget source.

<sup>12</sup> Control period means the period beginning May 1 of each year and ending on September 30 of the same year, inclusive.

- c. This request shall identify the compliance account or overdraft account from which the deductions should be made.
  - d. This request shall:
    - 1. Identify the serial numbers of the allowances to be deducted, if desired by the source; or
    - 2. Not identify serial numbers, in which case allowances usable for that compliance year shall be deducted in the order of their arrival into the unit's account, with allocated allowances being deducted first, followed by the deduction of transferred allowances.
  - e. Should the emissions of the budget source in the current control period exceed the allowances in the budget source's compliance account and overdraft account, the Owner/Operator of the budget source shall obtain additional allowances by the allowance transfer deadline so the total number of allowances in the budget source's compliance account and overdraft account, including allowance transfers properly submitted to the NATS administrator by the allowance transfer deadline, equals or exceeds the control period emissions of NO<sub>x</sub> rounded to the nearest whole ton.
  - f. Failure to obtain and hold in its compliance account and overdraft account for any control period as of the allowance transfer deadline sufficient allowances equal to or exceeding emissions for the control period, shall result in enforcement action and penalties against the budget source pursuant to Env-A 3214.
7. Excess Emissions and Enforcement Provisions (Env-A 3214)
- a. If emissions from a budget source exceed allowances held in the budget source's compliance account or overdraft account for the control period as of the allowance transfer deadline, the NATS administrator shall automatically deduct allowances from the budget source's compliance account or overdraft account for the next control period at a rate of 3 allowances for every one ton of excess emissions.
  - b. In accordance with RSA 125-J:4-a, for purposes of enforcement of the NO<sub>x</sub> Budget Program, in determining the number of days of violation, any excess emissions for the control period shall presume that each day in the control period of 153 days, constitutes a day in violation unless the Owner/Operator can demonstrate, through use of verifiable emissions data that a lesser number of days should be considered. Each ton of excess emissions shall constitute a separate violation.

**D. Non-Ozone Season NO<sub>x</sub> DER Program (NO<sub>x</sub> RACT Order No. ARD-98-001)**

Pursuant to NO<sub>x</sub> RACT Order No. ARD-98-001, the Owner/Operator shall comply with the non-ozone season cap of 8,208 tons<sup>13</sup> for the combined NO<sub>x</sub> emissions from Merrimack (Units MK1 & MK2), Schiller (Units SR4, SR5 & SR6) and Newington (Unit NT1) Stations. Ozone season DERs and non-ozone season DERs may be used to comply with this non-ozone season limit. Previously generated (1995 through 1998) DERs may be used to comply with this emissions cap. DERs may be generated from Newington and Schiller Stations in accordance with the protocol given in Section E., below.

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<sup>13</sup> In addition to this requirement, the annual NO<sub>x</sub> budget requirement of 3,644 allowances given in Section VIII.F.1.b., below, shall also be required.

**E. Discrete Emission Reduction Trading Program (Env-A 3100)**

In accordance with Env-A 3100 *Discrete Emission Reduction Trading Program*, NOx RACT Orders Nos. ARD-97-001 and ARD-98-001, and the Notices of Simultaneous Generation and Use of DERs originally submitted on April 10, 1998, and annually thereafter upon entry of the DERs into the registry by DES, the Owner/Operator shall be allowed to bank DERs for future use.

**F. Sulfur dioxide and Nitrogen oxides Annual Budget Trading and Banking Program (Env-A 2900)<sup>14</sup>****1. Annual Emission Budgets & Allowance Allocation**

- a. The annual SO<sub>2</sub> budget for all affected sources combined shall be no more than 7,289 tons.
- b. The annual NOx budget for all affected sources combined, including the seasonal NOx allowances allocated to each affected source pursuant to Env-A 3200, shall be no more than 3,644 tons.
- c. As per Env-A 2904.04 *Transfer of SO<sub>2</sub> Allowances*, each affected source shall transfer to the Department all annual SO<sub>2</sub> allowance allocations provided under the federal acid rain program.
- d. Allowance allocations for each affected source for the following calendar year will be calculated by the Department as per Env-A 2904.05 *Allowance Allocation Methodology*.

**2. Legal Attributes of Allowances (Env-A 2903)**

- a. An allowance shall be a marketable emissions authorization that may be bought, sold, or traded at any time during any year, not just the current year.
- b. An allowance shall not be a property right or create a property right for any person.
- c. Future allocations shall not be a property right or create a property right for any person.
- d. No allowance or future allocation shall constitute a security or other form of property.

**3. Holding and Using Allowances (Env-A 2903.02)**

- a. The Owner /Operator of each affected source shall, no later than the allowance transfer deadline<sup>15</sup>, hold in the appropriate account for that affected source:
  - i. A quantity of SO<sub>2</sub> allowances equal to or greater than the total SO<sub>2</sub> emitted from that affected source during the previous year; and
  - ii. A quantity of NOx allowances equal to or greater than the total NOx emitted from the affected source during the previous year.
- b. To use an allowance for compliance with Env-A 2900 in a designated compliance year, the allowance shall be:

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<sup>14</sup> This rule applies to affected sources as defined in Env-A 2901.02, namely Merrimack Units MK1 and MK2, Schiller Units SR4 & SR6 and Newington Unit NT1.

<sup>15</sup> Per Env-A 2902.10 "Allowance transfer deadline" means the deadline, which is 12:01 a.m. on January 31, for recording allowances in an affected source's compliance or overdraft account for purposes of meeting the requirements of this chapter for the preceding calendar year.



- i. Already in a compliance or overdraft account as of the allowance transfer deadline; or
    - ii. Transferred into the compliance account by an allowance transfer submitted by the allowance transfer deadline.
4. Conversion of NO<sub>x</sub> Allowances to DERs (Env-A 2903.03)
  - a. Allowances shall not be considered offsets as defined in RSA 125-J:1, XII, however NO<sub>x</sub> allowances that are not used to satisfy the requirements of Env-A 2900 and that are not banked may be converted to non-ozone season NO<sub>x</sub> DERs in accordance with Env-A 3100.
  - b. Each affected source for which unused NO<sub>x</sub> allowances are converted to NO<sub>x</sub> DERs in accordance with Env-A 3103 shall surrender those converted allowances as if they had been used for actual emissions.
5. Allowance Transfer (Env-A 2905)
  - a. The Owner/Operator shall comply with the allowance transfer provisions of Env-A 2905.01 *Initiating an Allowance Transfer*.
  - b. Pursuant to Env-A 2905.07 *Use of Allowances by Utilities* and RSA 125-J:5, X, the use of allowances by a utility, as defined in RSA 362:2, shall be subject to such additional conditions as are ordered by the New Hampshire public utilities commission pursuant to its authority.
  - c. Pursuant to Env-A 2905.06 *Price Disclosure*, subject to a claim of confidentiality in accordance with Env-A 103, each affected source shall make available to any person, all information regarding transaction cost and allowance price.
6. Banking Unused Allowances (Env-A 2905.08)
  - a. Any allowances remaining in an account after the Allowance Tracking System (ATS) administrator has made all deductions for a given year from the compliance account or overdraft account pursuant to Env-A 2908.03 shall be designated as unused allowances.
  - b. Unused allowances may be retained, or banked, for use in a future year in a compliance, overdraft, or general account.
7. Authorized Account Representative (Env-A 2906.04)
  - a. Each holder of a compliance account, overdraft account, or general account shall designate one individual to be the AAR for the account and one individual to be the alternate AAR for the account.
  - b. The alternate AAR shall have the same authority to initiate allowance transfers and file reports as the AAR.
8. Request for Deduction of Allowances (Env-A 2908.02)
  - a. No later than the allowance transfer deadline, the AAR shall request the ATS administrator to deduct allowances available for the previous year from the compliance account or overdraft account, or both, in an amount equivalent to the number of allowances required to cover the emissions during the previous year.
  - b. The above request shall identify:
    - i. The compliance account or overdraft account from which the deductions should be made; and

ii. The serial number of each allowance to be deducted.

9. Procurement of Additional Allowances (Env-A 2908.04)

If the emissions from NT1 in the previous year exceed the allowances in compliance account and overdraft account, the Owner/Operator shall obtain additional allowances by January 30 so the total number of allowances in the affected source's compliance account and overdraft account, including allowance transfers properly submitted to the ATS administrator by allowance transfer deadline, equals or exceeds the previous year annual emissions rounded to the nearest whole ton.

**G. Carbon dioxide Budget Trading Program (Env-A 4600)**

1. CO<sub>2</sub> Allowance Requirements (Env-A 4605.01)

- a. The Owner or Operator of each CO<sub>2</sub> budget source and each CO<sub>2</sub> budget unit at the source shall hold CO<sub>2</sub> allowances available for compliance deductions under Env-A 4605.04, as of the CO<sub>2</sub> allowance transfer deadline, in the source's compliance account, in an amount not less than the total CO<sub>2</sub> emissions from fossil fuel-fired generation for the control period from all CO<sub>2</sub> budget units at the source, as determined in accordance with Env-A 4605, Env-A 4607, Env-A 4609.18, and VIII.G.1.c, below.
- b. CO<sub>2</sub> allowances shall be held in, deducted from, or transferred among CO<sub>2</sub> allowance tracking system accounts in accordance with Env-A 4606, Env-A 4607, Env-A 4608, and Env-A 4700.
- c. For the purpose of determining compliance with Env-A 4600, total tons of CO<sub>2</sub> emissions for a control period<sup>16</sup> shall be calculated as the sum of all recorded hourly emissions, or the tonnage equivalent of the recorded hourly emissions rates, in accordance with Env-A 4609, with any remaining fraction of a ton equal to or greater than 0.50 ton rounded up to equal one ton and any fraction of a ton less than 0.50 ton rounded down to equal zero tons.

2. CO<sub>2</sub> Allowance Limitations (Env-A 4605.02)

- a. A CO<sub>2</sub> allowance shall be a limited authorization to emit one ton of CO<sub>2</sub> in accordance with the CO<sub>2</sub> budget trading program.
- b. A CO<sub>2</sub> allowance shall not be deducted, in order to comply with the requirements of Env-A 4605.01(a), for a control period that ends prior to the year for which the CO<sub>2</sub> allowance was allocated.
- c. A CO<sub>2</sub> offset allowance shall not be deducted, in order to comply with the requirements of Env-A 4605.01(a), beyond the applicable percent limitations set out in Env-A 4605.04(b).
- d. Subject to Env-A 4605.02(e) and (f), no provision of the CO<sub>2</sub> budget trading program, the CO<sub>2</sub> budget permit application, or the CO<sub>2</sub> budget permit shall be construed to limit the authority of the Department to terminate or limit such authorization.
- e. A CO<sub>2</sub> allowance shall not constitute a property right.

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<sup>16</sup> Control period means compliance period as defined in New Hampshire RSA 125-O:20, IV.

3. Allowances Available for Compliance Deduction (Env-A 4605.04)
  - a. CO<sub>2</sub> allowances that meet the following criteria shall be available to be deducted for compliance with the requirements of Env-A 4605 for a control period:
    - i. For CO<sub>2</sub> allowances other than CO<sub>2</sub> offset allowances, the allowances are from allocation years that fall within a prior control period or the same control period for which the allowances will be deducted; and
    - ii. The CO<sub>2</sub> allowances are:
      - (a) Held in the CO<sub>2</sub> budget source's compliance account as of the CO<sub>2</sub> allowance transfer deadline for that control period; or
      - (b) Transferred into the compliance account by a CO<sub>2</sub> allowance transfer correctly submitted for recordation under Env-A 4608.01 by the CO<sub>2</sub> allowance transfer deadline for that control period;
    - iii. As provided in RSA 125-O:22, II, a CO<sub>2</sub> budget source may use offset allowances for up to 3.3 percent of its compliance obligation.
  - b. CO<sub>2</sub> allowances shall not be available for current compliance if the allowances were deducted for excess CO<sub>2</sub> emissions for a prior control period under Env-A 4605.08.
  - c. Allowances deducted for the purpose of compliance shall not be available for any other purpose.
4. Excess CO<sub>2</sub> Emissions Requirements (Env-A 4605.07)

The Owner or Operator of a CO<sub>2</sub> budget source that has excess CO<sub>2</sub> emissions in any control period shall:

  - a. Forfeit the CO<sub>2</sub> allowances required for deduction under Env-A 4605.08, provided CO<sub>2</sub> offset allowances shall not be used to cover any part of such excess CO<sub>2</sub> emissions; and
  - b. Pay any fine, penalty, or assessment or comply with any other remedy imposed under RSA 125-O:22, V.
5. Deductions for Excess CO<sub>2</sub> Emissions (Env-A 4605.08)
  - a. As provided by RSA 125-O:22, V, the deduction of CO<sub>2</sub> allowances for excess CO<sub>2</sub> emissions shall equal to 3 times the number of the source's excess CO<sub>2</sub> emissions.
  - b. Within 14 calendar days of receipt of notice by from the regional organization<sup>17</sup> that a shortage exists, the source shall transfer sufficient allowances into its compliance account to cover the shortage.
  - c. No CO<sub>2</sub> offset allowances shall be deducted to account for the source's excess CO<sub>2</sub> emissions.
  - d. Any CO<sub>2</sub> allowance deduction required under 5.a, above, shall not affect the liability of the owner(s) and operator(s) of the CO<sub>2</sub> budget source or the CO<sub>2</sub> units at the source for any fine, penalty, or assessment, and shall not affect the obligation of the owner(s) and operator(s) to comply with any other remedy, for the same violation, as ordered under applicable state law.
6. Determination of Violations and Deduction of Allowances (Env-A 4605.11)

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<sup>17</sup> Regional organization as defined in NH RSA 125-O:20, XIII

- a. For purposes of determining the number of days of violation, if a CO<sub>2</sub> budget source has excess CO<sub>2</sub> emissions for a control period, each day in the control period shall constitute a day of violation unless the owner(s) and operator(s) of the unit demonstrate that a lesser number of days should be considered; and
  - b. Each ton of excess CO<sub>2</sub> emissions shall constitute a separate violation.
7. Submission of CO<sub>2</sub> Allowance Transfers (Env-A 4608.01)
- Any CO<sub>2</sub> AAR seeking recordation of a CO<sub>2</sub> allowance transfer shall submit the transfer request to the regional organization in accordance with Env-A 4608.01(b).

**H. Monitoring and Testing Requirements**

- 1. The Owner or Operator is subject to the monitoring and testing requirements as identified in Table 6 below:

<b>Table 6 - Monitoring/Testing Requirements</b>					
<b>Item #</b>	<b>Parameter</b>	<b>Method of Compliance</b>	<b>Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1.	NOx and diluent gas	a.) Operate and maintain a NOx-diluent CEMS (consisting of a NOx pollutant concentration monitor and a CO <sub>2</sub> diluent gas monitor) with an automated data acquisition and handling system for measuring and recording: <ul style="list-style-type: none"> <li>1. NOx concentration (in ppm);</li> <li>2. CO<sub>2</sub> concentration (in % CO<sub>2</sub>); and</li> <li>3. NOx emission rate (in lb/MMBtu).</li> </ul> b.) Account for total NOx emissions, both NO and NO <sub>2</sub> , either by monitoring for both NO and NO <sub>2</sub> or by monitoring for NO only and adjusting the emissions data to account for NO <sub>2</sub> .	Continuously	NT1	Env-A 808.02, Env-A 3210, Env-A 2907, 40 CFR §§75.10(a)(2), 75.12(c) & 75.71
		c.) Follow the procedures of 40 CFR 75.12(b) if a correction for the stack gas moisture content is needed to properly calculate the NOx emission rate in lb/MMBtu.			
		d.) Calculate hourly, quarterly and annual NOx emission rates (in lb/MMBtu) by combining the NOx concentration (in ppm), diluent concentration (in percent CO <sub>2</sub> ), and percent moisture (if applicable) according to the procedures in 40 CFR 75 Appendix F.			

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
2.	SO <sub>2</sub>	Operate and maintain a SO <sub>2</sub> continuous emission monitoring system with an automated data acquisition and handling system for measuring and recording SO <sub>2</sub> concentration (in ppm), volumetric gas flow (in scfh) and SO <sub>2</sub> mass emissions (in lb/hr) discharged to the atmosphere.	Continuously	NT1	Env-A 808.02(a)(1), Env-A 2907, 40 CFR §§75.10(a)(1) & 75.11
3.	CO	Operate and maintain a CEMS for measuring carbon monoxide <sup>18</sup> . The CO CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 4.	Continuously	NT1	40 CFR 70.6(a)(3)(i)B & Env-A 808.02(a)(2)
4.	Stack volumetric flow rate	Operate and maintain a flow monitoring system to measure and record stack volumetric gas flow and meet the following requirements: a.) All differential pressure flow monitors shall have an automatic blow-back purge system installed and in wet conditions, shall have the capability for drainage of the sensing lines; and b.) The stack flow monitoring system shall have the capability for manual calibration of the transducer while the system is on-line and for a zero check.	Continuously	NT1	40 CFR 75, Env-A 2907 & Env-A 808.03
5.	CO <sub>2</sub>	a.) Operate and maintain a CEMS for measuring and recording CO <sub>2</sub> : 1. Concentration (in ppm or percent); and 2. CO <sub>2</sub> mass emissions (in tons/hr) discharged to the atmosphere. b.) Comply with the specific provisions of 40 CFR 75.13 for the CO <sub>2</sub> CEMS.	Continuously	NT1	40 CFR §§75.10(a)(3) & 75.13
6.	Heat Input Rate	Determine the heat input rate (in MMBtu/hr) for every hour or part of an hour any fuel is combusted following the procedures in 40 CFR 75 Appendix F.	Hourly	NT1	Env-A 2907.02, Env-A 3210.02, 40 CFR §§ 75.10(c) & 75.75(a)

<sup>18</sup> Newington Station was required to install and operate CO CEMS pursuant to State Permit to Operate PO-B-1030 (as amended on April 13, 1994) for the addition of natural gas firing capability to NT1.

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
7.	NOx Mass Emissions & Ozone Season NOx Emission Rate	Calculate NOx emissions as: a.) Hourly (in lb/hr) by multiplying the hourly NOx emission rate (in lb/MMBtu) by the hourly heat input rate (in MMBtu/hr) and the unit operating time; b.) Quarterly, cumulative year-to-date and cumulative for the ozone season (in tons) by summing the hourly NOx mass emissions according to the procedures in Appendix F, Section 8 of 40 CFR 75; and c.) Ozone season NOx emission rate (in lb/MMBtu) by dividing ozone season NOx mass emissions by heat input.	Hourly, quarterly and cumulative for the ozone season and year-to-date	NT1	Env-A 2907, Env-A 3210, 40 CFR §§75.71, 75.72, 75.74 & 75.75(b)
8.	Net Electrical Output	Monitor net electrical output in MW-hr in accordance with 40 CFR 75.	Annually	NT1	Env-A 2907.02 & Env-A 3207.04
9.	Opacity	Operate and maintain a continuous opacity monitoring system with an automated data acquisition and handling system for measuring and recording the opacity of emissions (in percent opacity) discharged to the atmosphere.	Continuous	NT1	40 CFR §§75.10(a)(4) & 75.14
10.	CEMS Operating Requirements	Each CEMS required by 40 CFR 75 shall: a.) Meet the equipment, installation, and performance specifications in 40 CFR 75 Appendix A; b.) Be maintained according to the quality assurance and quality control procedures in 40 CFR 75 Appendix B; c.) Be in operation and monitoring emissions from the boiler at all times that the emission unit combusts any fuel except during periods of: <ol style="list-style-type: none"> <li>1. Calibration, quality assurance, or preventive maintenance, performed pursuant to 40 CFR 75.21 and Appendix B of 40 CFR 75;</li> <li>2. Repair;</li> <li>3. Backups of data from the data acquisition and handling system; or</li> <li>4. Recertification performed pursuant</li> </ol>	Hourly	NT1	40 CFR 75.10

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>to 40 CFR 75.20;</p> <p>d.) Measure and calculate hourly averages in accordance with the following:</p> <ol style="list-style-type: none"> <li>1. Complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute interval;</li> <li>2. Except as provided in c below, compute hourly averages using at least one data point in each fifteen minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly average may be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) if data are unavailable as a result of the conditions noted in Item 10.c, above;</li> <li>3. All valid measurements or data points collected during an hour shall be used to calculate the hourly averages; and</li> <li>4. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour.</li> <li>5. Failure of a CEMS, flow monitor, to acquire the minimum number of data points for calculation of an hourly average shall result in the failure to obtain a valid hour of data and the loss of such component data for the entire hour.</li> <li>6. For a NO<sub>x</sub>-diluent monitoring system, an hourly average NO<sub>x</sub> emission rate in lb/MMBtu is valid only if the minimum number of data points is acquired by both the NO<sub>x</sub> pollutant concentration monitor and the diluent monitor (CO<sub>2</sub>).</li> <li>7. If a valid quality-assured hour of data is not obtained, follow the</li> </ol>			

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>procedures in 40 CFR 75 Subpart D.</p> <p>e.) Be capable of accurately measuring, recording, and reporting data and not incur an exceedance of the full scale range, except as provided in 40 CFR 75 Appendix A sections 2.1.1.5, 2.1.2.5, and 2.1.4.3.</p>			
11.	COMS Hourly Operating Requirements	<p>a.) The COMS, subject to the exceptions noted in Item 10.c. above, shall be in operation and monitoring opacity during the time following combustion when fans are still operating.</p> <p>b.) The COMS shall be capable of completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.</p> <p>c.) All opacity data shall be reduced to consecutive, non-overlapping 6-minute averages calculated in accordance with the provisions of 40 CFR 51 Appendix M.</p> <p>d.) The COMS shall include a means to display instantaneous values of percent opacity.</p>	As specified	NT1	40 CFR 75.10(d) & Env-A 808.03
12.	Minimum Specifications for CEMS & COMS	<p>All gaseous CEMS and COMS shall meet the following minimum specifications, as applicable:</p> <p>a.) A gaseous CEMS shall average and record the data for each calendar hour.</p> <p>b.) A “valid hour” of data means a minimum of 42 minutes of gaseous or opacity CEM system readings taken in any calendar hour, during which time the CEM is not in an out of control period as defined in Env-A 808.01(g), and the facility on which the CEM is installed is in operation.</p> <p>c.) All gaseous CEMS shall:</p> <ol style="list-style-type: none"> <li>1. Include a means to display instantaneous values of gaseous emission concentrations; and</li> <li>2. Complete a minimum of one cycle</li> </ol>	Hourly	NT1	Env-A 808.03



**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		of operation, which shall include measuring, analyzing, and data recording for each successive 5-minute period for systems measuring gaseous emissions, unless a longer time period is approved in accordance with Env-A 809.			
13.	General CEMS Audit Requirements	a.) Conduct CEMS audits in accordance with Env-A 808.07 through 808.11 & 40 CFR 75 (as applicable). b.) Notify the Division at least: <ol style="list-style-type: none"> <li>1. 30 days prior to the performance of a relative accuracy test audit (RATA); and</li> <li>2. At least 2 weeks prior to any other planned audit or test procedure.</li> </ol>	Quarterly	NT1	Env-A 808.07 through 808.11 & 40 CFR 75.61(a)(5)
14.	Out-of-Control Periods for SO <sub>2</sub> & NO <sub>x</sub> CEMS	a.) If an out-of-control period occurs to a CEMS that is subject to Part 75, take corrective action and repeat the tests applicable to the out of control parameter as described in 40 CFR 75 Appendix B. b.) Out of control periods for CEMS include: <ol style="list-style-type: none"> <li>1. For daily calibration error tests,                             <ol style="list-style-type: none"> <li>i. When the calibration error of a pollutant concentration monitor exceeds 5.0% based upon the span value;</li> <li>ii. The calibration error of a diluent gas monitor exceeds 1.0% O<sub>2</sub> or CO<sub>2</sub>; or</li> <li>iii. The calibration error of a flow monitor exceeds 6.0% based upon the span value, which is twice the applicable specification in 40 CFR 75 Appendix A.</li> </ol> </li> <li>2. For quarterly linearity checks, when the error in linearity at any of the three gas concentrations (low, mid-range, and high) exceeds the applicable specification in 40 CFR 75 Appendix A.</li> </ol>	As specified by regulation	NT1	40 CFR §§75.21(e)(2), 75.24, Env-A 3210.08 & Env-A 2907.06

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		3. For RATAs, when the relative accuracy exceeds the applicable specifications in Appendix A of 40 CFR 75. c.) When a monitor or continuous emission monitoring system is out-of-control: <ol style="list-style-type: none"> <li>1. Any data recorded by the monitor or monitoring system are not quality-assured and shall not be used in calculating monitor data availabilities pursuant to 40 CFR 75.32; and</li> <li>2. Apply the procedures for missing data substitution to emissions from affected unit(s) using the applicable procedures in 40 CFR 75, Subpart D, Appendix D or E until the monitor or monitoring system has successfully met the relevant criteria in Appendices A and B of 40 CFR 75 as demonstrated by subsequent tests.</li> </ol>			
15.	Out of Control Periods for CO CEMS	The out of control periods for CO CEMS are defined as follows: <ol style="list-style-type: none"> <li>a.) The time period beginning with the completion of the daily calibration drift check:                             <ol style="list-style-type: none"> <li>1. Where the CD has exceeded twice the allowable limit for five consecutive days; or</li> <li>2. Preceding the daily CD check that results in the CD being greater than 4 times the allowable limit; and</li> <li>3. Ending with the CD check following corrective action that results in the CD being within the allowable CD limit; or</li> </ol> </li> <li>b.) The time period beginning with the completion of a RATA, cylinder gas audit (CGA, or relative accuracy audit (RAA) as defined in 40 CFR 60, Appendix F, where the CEMS fails the accuracy criteria established for the respective audit and ending with successful completion of the same audit where the CEMS meets the accuracy criteria established after corrective action has occurred.</li> </ol>	N/A	NT1	Env-A 808.01(g)(1)

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
16.	Out of Control Periods for opacity monitor	The out of control periods for COMS are defined as follows: a.) The time period beginning with the completion of the daily CD check: 1. Where the CD exceeds 2% opacity for 5 consecutive days; or 2. Preceding the daily CD check that results in the CD being greater than 5% opacity; and 3. Ending with the CD check after corrective action has occurred that results in the performance specification drift limits being met; or b.) The time period beginning with the completion of a quarterly opacity audit where the COMS fails the calibration error test as specified in 40 CFR 60, Appendix B, Specification 1 and ending with successful completion of the same audit where the COMS passes the calibration error test established after corrective action has occurred.	N/A	NT1	Env-A 808.01(g)(2)
17.	Certification Status	a.) Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement pursuant to Env-A 800 or the applicable provisions of 40 CFR 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department shall issue a notice of disapproval of the certification status of such system or component. For the purposes of this section, an audit shall be either a field audit or an audit of any information submitted to the Department or the Administrator. b.) The data measured and recorded by the system or component shall not be considered valid quality-assured data	As specified by regulation	NT1	Env-A 3210.08 & Env-A 2907.06

<b>Table 6 - Monitoring/Testing Requirements</b>					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>from the date of issuance of the notification of the disapproval of certification status until the date and time that the Owner or Operator completes subsequently approved initial certification or recertification tests in accordance with Env-A 3212.07(t).</p> <p>c.) The Owner or Operator shall follow the initial certification or recertification procedures for each disapproved system.</p>			
18.	Recertification of CEMS and COMS	Recertify CEMS and COMS whenever the Owner or Operator makes a replacement, modification, or change to the systems or to the facility that could significantly affect the ability of the systems to accurately measure and record the requisite data.	As specified	NT1	40 CFR 75.20, 40 CFR 75.70(d), Env-A 808.05, Env-A 3210 & Env-A 2907.04
19.	Reference Test Methods for Certification and Recertification of CEMS or COMS	<p>Use the reference test methods listed in 40 CFR 75.22 and included in Appendix A to 40 CFR 60 to conduct:</p> <p>a.) Monitoring system tests for certification or recertification of CEMS and excepted monitoring systems under 40 CFR 75 Appendix E; and</p> <p>b.) Quality assurance and quality control tests.</p>	During certification or recertification tests	NT1	40 CFR 75.22
20.	QA/QC Requirements	<p>The Owner or Operator shall:</p> <p>a.) Operate, calibrate and maintain each CEMS used to report emissions under the federal acid rain program according to the quality assurance and quality control procedures in 40 CFR 75 Appendix B;</p> <p>b.) Operate, calibrate and maintain the COMS according to procedures specified in Env-A 808.</p> <p>c.) Ensure that all calibration gases used to quality assure the operation of the CEM instrumentation shall meet the definition in 40 CFR 72.2.</p>	Continuously	NT1	40 CFR 75.21 & 75.70
21.	Substitute Emission Data	<p><u>Requirement for Substitute Emission Data</u></p> <p>Any facility that uses the emissions data collected by a gaseous CEM system to calculate and report its annual emissions in</p>	N/A	NT1	Env-A 808.13

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>accordance with Env-A 900 shall comply with the following:</p> <p>a.) For any facility operating hour during which the gaseous CEM system has not collected a valid hour of CEM system data, the Owner or Operator shall submit to the Division substitute emission data for those hours which has been generated using one of the following methods:</p> <ol style="list-style-type: none"> <li>1. The missing data substitution procedures specified in 40 CFR 75, Subpart D;</li> <li>2. If the missing data occurred during a period of steady-state operation, and not during a period of start-up, shutdown, or malfunction:                             <ol style="list-style-type: none"> <li>i. An average of the emissions data for the hours prior to and after the period of missing data during which valid CEM data was collected, or</li> <li>ii. Representative emissions data for the device at the same heat input rate, electric generating rate, or steam load;</li> </ol> </li> <li>3. If the missing data occurred during a start-up, shutdown, or malfunction of the device, substitute data collected by the CEM during a similar period of start-up, shutdown or malfunction, respectively; or</li> <li>4. An alternative method of data substitution that meets the following criteria:                             <ol style="list-style-type: none"> <li>i. The alternative method was included in the monitoring plan submitted pursuant to Env-A 808.04;</li> <li>ii. The alternative method provides for representative emissions for the conditions of operation of the device during the period of missing data equivalent to the substitution methods described above; and</li> </ol> </li> </ol>			

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		iii. The alternative method was approved by DES as part of its approval of the monitoring plan pursuant to Env-A 808.04. b.) For CEM systems and emissions subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall follow those requirements for substituting emissions data in order to calculate emission totals or emission averages as required by 40 CFR 75. c.) For CEM systems and emissions not subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall include substitute emissions data in the calculation of total daily, monthly, quarterly, and annual emissions generated by the permitted device to quantify total actual emissions; d.) Substitute emission data shall not be used in the calculation of emissions totals or averages in order to determine or demonstrate compliance with emissions standards; e.) Substitute data shall not be included in the calculation of data availability.			
22.	NOx Mass Emissions Provisions-Prohibitions	The Owner or Operator is prohibited from the following: a.) Using alternative monitoring system, reference method, or any other alternative for the required CEMS without approval through petition process in 40 CFR 75.70(h). b.) Discharging or allowing discharge of NOx emissions without accounting for all emissions in accordance with the provisions of Subpart H, except as provided in 40 CFR 75.74. c.) Disrupting the CEMS or any other approved emission monitoring method, and thereby avoid monitoring and recording NOx mass emissions, except for periods of re-certification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the provisions of 40	Continuously	NT1	40 CFR 75.70(c)

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>CFR 75 Subpart H applicable to the monitoring systems under 40 CFR 75.71, except as provided in 40 CFR 75.74.</p> <p>d.) Retiring or permanently discontinuing the use of the CEMS, or any other approved emission monitoring system except under one of the following circumstances:</p> <ol style="list-style-type: none"> <li>1. During a period that the unit is covered by a retired unit exemption that is in effect under the State or federal NOx mass emission reduction program that adopts the requirements of Subpart H;</li> <li>2. The owner or operator is monitoring NOx emissions from the affected unit with another certified monitoring system approved, in accordance with the provisions of 40 CFR 75.70(d);or</li> <li>3. The designated representative submits notification of the date of certification testing of a replacement monitoring system in accordance with 40 CFR 75.61.</li> </ol>			
23.	NOx	<p><u>NOx RACT Testing for Auxiliary Boilers</u>                      Conduct stack testing for NOx using the test methods specified in Env-A 803.04.</p>	Every 3 years (within 12 calendar quarters)	NTAB1 & NTAB2	Env-A 803.03 & Env-A 803.04
24.	PM	To demonstrate compliance the PM emission limit in Table 4, Item 2.b., conduct stack testing using EPA methods 1-5 or other DES approved methods.	Every 5 years (within 20 calendar quarters) and upon request by DES and/or EPA	NT1	40 CFR 70.6 (a)(3)(i)(B)
25.	Stack Testing Scheduling & Protocol	<p>Compliance stack testing shall be planned and carried out in accordance with the following:</p> <p>a.) Submit a pre-test protocol to the Division which contains the information specified in Env-A 802.04.</p>	<p>As noted, for each stack test</p> <p>At least 30 days prior to commencement of testing</p>	NT1, NTAB1 & NTAB2	Env-A 802

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		b.) In the event that the Owner or Operator is unable to conduct the performance test on the date specified in the notification provided pursuant to a. above, notify DES as soon as practicable and obtain prior approval from DES of any new date for the compliance test.  c.) The Owner or Operator and any contractor retained by the Owner or Operator to conduct the test shall meet with a Division representative in person or over the telephone.	As noted  At least 15 days prior to the test date		
26.	Stack Testing - Operating Conditions	Compliance stack testing shall be conducted under one of the following operating conditions: a.) Between 90 and 100 percent, inclusive, of maximum production rate or rated capacity; b.) A production rate at which maximum emissions occur; or c.) At such operating conditions agreed upon during a pre-test meeting conducted pursuant to Env-A 802.05.	Each stack test	NT1, NTAB1 & NTAB2	Env-A 802
27.	Fuel Flow Meters- Periodic Monitoring	Operate and maintain a fuel flow monitoring system to measure and record fuel flow, in gallons or cubic feet on a continuous basis.	In accordance with manufacturers specifications	NT1	40 CFR 70.6 (a)(3)(i)(B)
28.	Sulfur Content of Liquid Fuels	a.) Conduct testing in accordance with appropriate ASTM test methods or retain documentation in accordance with Table 8, Item 5 (residual oil) or Item 6 (distillate oil) in order to demonstrate compliance with the sulfur content limitation provisions specified in this permit for liquid fuels.  b.) Fuel blending procedures 1. Fuel oil with higher sulfur content shall be mixed with lower sulfur fuel oil in a tank in which the “sparging system” is in full operation to assure complete mixing of the oil blend. 2. After mixing for an appropriate amount of time to assure complete	For each delivery of fuel oil to the facility  Fuel oil blending	NT1, NTAB1 & NTAB2  NT1	Env-A 806.02 & Env-A 806.05  Env-A 806.02(b)



<b>Table 6 - Monitoring/Testing Requirements</b>					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>blending, samples from the top, middle, and bottom of the tank shall be collected and analyzed in accordance with method ASTM D4294-10. The sample results shall be averaged to create a composite figure.</p> <p>3. After sampling is complete and the test results indicate that the sulfur content of the blended oil meets the limits specified in Table 4, Item 4.a (until June 30, 2018) or Item 5.a,(on or after July 1, 2018), the oil may then be transferred to the day tank to be used in the utility boiler.</p>			
29.	Current	Measure and record the ESP current and power (in mAmps and kW).	Daily when NT1 is in operation	NT1-PC1	40 CFR 70.6 (a)(3)(i)(B)
30.	Spark rate per minute	Measure and record the ESP spark rate per minute	Daily when NT1 is in operation	NT1-PC1	40 CFR 70.6 (a)(3)(i)(B)
31.	ESP fields out of service	Monitor and record the ESP fields out of service.	Daily when NT1 is in operation	NT1-PC1	40 CFR 70.6 (a)(3)(i)(B)
32.	Hours that Fly Ash Reinjection System Blowers are in Operation	Maintain a log of the hours that the fly ash reinjection system is operated.	Daily when fly ash reinjection is in operation	NT1	40 CFR 70.6 (a)(3)(i)(B)
33.	EGU Tune-up	<p>Conduct a tune-up of the utility boiler<sup>19</sup>, which shall consist of the following:</p> <p>a.) As applicable, inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required</p>	Every 36 calendar months <sup>20</sup> after the previous tune-up	NT1	40 CFR §§ 63.10006(i)(1) & 63.10021(e) Subpart UUUUU

<sup>19</sup> Initial tune-up of NT1 boiler was completed on July 13, 2015. Newington Station submitted a Notice of Compliance Status to EPA and DES on September 8, 2015.

<sup>20</sup> If the EGU is offline when a deadline to perform the tune-up passes, the tune-up must be performed within 30 days of the re-start of the affected unit.

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows:</p> <ol style="list-style-type: none"> <li>1. Burner or combustion control component parts needing replacement that affect the ability to optimize NOx and CO must be installed within three calendar months after the burner inspection;</li> <li>2. Burner or combustion control component parts that do not affect the ability to optimize NOx and CO may be installed on a schedule determined by the operator;</li> </ol> <p>b.) As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer’s specifications, if available, or in accordance with best combustion engineering practice for that burner type;</p> <p>c.) As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors;</p> <p>d.) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O<sub>2</sub> probes and/or sensors, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary;</p> <p>e.) Optimize combustion to minimize generation of CO and NOx. This optimization should be consistent with</p>			

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>the manufacturer’s specifications, if available, or best combustion engineering practice for the applicable burner type. NOx optimization includes burners, overfire air controls, concentric firing system improvements, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls; CO optimization includes burners, overfire air controls, concentric firing system improvements, control systems calibrations, and adjusting combustion zone temperature profiles;</p> <p>f.) While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NOx in ppm, by volume, and oxygen in volume percent, before and after the tune-up adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Portable CO, NOx and O<sub>2</sub> monitors may be used for this measurement.</p>			
34.	PM, HCl & HF	<p><u>Testing and Monitoring Requirements for liquid fuel oil-fired EGUs</u></p> <p>Upon switching from limited-use oil-fired EGU subcategory to continental liquid oil-fired EGU subcategory, NT1 is subject to the following testing/monitoring requirements:</p> <p>a.) To demonstrate compliance with the filterable PM emission limit specified in Table 4A, conduct initial and periodic stack testing as per §63.10005 and Table 5 to Subpart UUUUU.</p> <p>b.) To demonstrate compliance with the HCl and HF emission limits specified in Table 4A, measure or obtain, and keep records of, fuel moisture content. As long as fuel moisture does not exceed 1.0 percent by weight, the Owner or Operator is not required to conduct other HCl or HF monitoring or testing.</p>	Initially within 180 days from the first day NT1 met the definition of continental liquid oil-fired EGU Subsequently as specified in Subpart UUUUU	NT1	40 CFR §§ 63.10000(c)(2), 63.10005, 63.10006, 63.10007 & 63.10021

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
35.	Boiler tune-up	Conduct a tune-up of each auxiliary boiler, which shall consist of the following: a.) As applicable, inspect the burner <sup>21</sup> , and clean or replace any components of the burner as necessary. b.) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer’s specifications, if available. c.) As applicable, inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. This inspection may be delayed until the next scheduled unit shutdown. d.) Optimize total emissions of CO. This optimization should be consistent with the manufacturer’s specifications, if available, and with any NOx requirement to which the unit is subject. e.) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made <sup>22</sup> . Measurements may be taken using a portable CO analyzer. f.) Set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.	Every 5 years <sup>23</sup>	NTAB1 & NTAB2	40 CFR §§ 63.7515(d) & 63.7540(a)(12)
36.	Hours of Operation	The emergency engine shall be equipped with a non-resettable hour meter.	Continuous	NTEG1	40 CFR 60.4209(a)

<sup>21</sup> The burner inspection may be performed any time prior to the tune up or delayed until the next scheduled unit shutdown. The burner must be inspected at least once every 72 months.

<sup>22</sup> Measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made.

<sup>23</sup> Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. In addition, if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. Initial tune-ups on both auxiliary boilers were completed on January 19, 2016.

<b>Table 6 - Monitoring/Testing Requirements</b>					
<b>Item #</b>	<b>Parameter</b>	<b>Method of Compliance</b>	<b>Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
37.	To Be Determined	When conditions warrant, the Division may require the Owner or Operator to conduct stack testing in accordance with USEPA or other Division approved methods.	Upon request by the Division	Facility Wide	RSA 125-C:6, XI

2. The Owner or Operator is subject to the following monitoring and testing requirements in Table 6A for auxiliary boilers when they are operated in the unlimited-use scenario:

<b>Table 6A - Monitoring and Testing Requirements for Auxiliary Boilers Alternate Operating Scenario - Unlimited-use</b>					
<b>Item #</b>	<b>Parameter</b>	<b>Method of Compliance</b>	<b>Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1.	Energy Assessment	<p>Have a one-time energy assessment performed by a qualified energy assessor, as defined in 40 CFR 63.7575. The energy assessment shall include the items a. to e., with extent of the evaluation appropriate for the on-site technical hours listed in 40 CFR 63.7575 under the definition for "Energy Assessment":</p> <ul style="list-style-type: none"> <li>a.) A visual inspection of the boiler system.</li> <li>b.) An evaluation of operating characteristics of the boiler, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.</li> <li>c.) An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.</li> <li>d.) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.</li> <li>e.) A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified.</li> <li>f.) A list of cost-effective energy conservation measures that are within the facility's control.</li> <li>g.) A list of the energy savings potential</li> </ul>	By March 1 <sup>st</sup> of the first CY in which the boiler(s) would be operated in the unlimited-use subcategory	NTAB1 & NTAB2	40 CFR 63.7510(e)

**Table 6A - Monitoring and Testing Requirements for Auxiliary Boilers  
 Alternate Operating Scenario - Unlimited-use**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>of the energy conservation measures identified.</p> <p>h.) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.</p>			
2.	Fuel Analysis	<p><u>Fuel Analysis Requirements for TSM, Hg and HCl</u></p> <p>a.) To demonstrate compliance with the emission limits specified in Table 4D for TSM, HCl and Hg, conduct monthly fuel analysis in accordance with 40 CFR 63.7521 and Table 6 to Subpart DDDDD.</p> <p>b.) Initial fuel analysis must be completed by January 30<sup>th</sup> of the calendar year in which the boiler(s) will be operated as unlimited-use.</p> <p>c.) Monthly requirement may be complied by completing the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. If sampling is conducted on one day per month, samples should be no less than 14 days apart, but if multiple samples are taken per month, the 14-day restriction does not apply.</p> <p>d.) If each of 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the compliance level, the fuel analysis frequency may be decreased to quarterly for that fuel. If any quarterly sample exceeds 75 percent of the compliance level or prior to burning a new type of fuel, conduct monthly monitoring for that fuel, until 12 months of fuel analyses are again less than 75 percent of the compliance level.</p> <p>e.) Also conduct a fuel analysis before burning a new type of fuel in the boiler(s).</p>	Monthly	NTAB1 & NTAB1	40 CFR §§ 63.7515(e) & 63.7521

**Table 6A - Monitoring and Testing Requirements for Auxiliary Boilers  
 Alternate Operating Scenario - Unlimited-use**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
3.	Fuel monitoring plan	<p><u>Site-specific Fuel Monitoring Plan</u>                      Develop a site-specific fuel monitoring plan according to the procedures and requirements in paragraphs (b)(1) and (b)(2) of 40 CFR 63.7521.</p>	For each fuel type combusted in the boilers	NTAB1 & NTAB1	40 CFR 63.7521(b)
4.	CO	<p><u>Compliance Stack Testing for CO</u></p> <p>a.) To demonstrate compliance with the CO emission limit specified in Table 4C, Item 2, conduct stack testing in accordance with Table 5 of Subpart DDDDD and 40 CFR §63.7520.</p> <p>b.) Initial compliance test for CO must be completed by March 1<sup>st</sup> of the calendar year in which the boiler(s) will be operated as unlimited-use.</p> <p>c.) Subsequent annual performance tests must be completed no more than 13 months after the previous performance test, except as specified in d. below.</p> <p>d.) If the performance tests for at least 2 consecutive years show that CO emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the individual boiler that could increase emissions, the Owner or Operator may choose to conduct performance tests every third year. Each such performance test must be conducted no more than 37 months after the previous performance test.</p> <p>e.) If a performance test shows emissions exceeded 75 percent of the CO emission limit, the Owner or Operator must conduct annual performance tests for CO until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit).</p>	Annually	NTAB1 & NTAB2	40 CFR §§63.7510, 63.7515, 63.7520 & Env-A 802

**Table 6A - Monitoring and Testing Requirements for Auxiliary Boilers  
 Alternate Operating Scenario - Unlimited-use**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
5.	Minimum O <sub>2</sub> level	<p><u>Establishing Operating Limits</u>                      To establish the unit-specific limit for minimum oxygen level during CO performance tests:</p> <p>a.) Collect oxygen data every 15 minutes during the entire period of the performance tests.</p> <p>b.) Determine the hourly average oxygen concentration by computing the hourly averages using all of the 15-minute readings taken during each performance test.</p> <p>c.) Determine the lowest hourly average established during the performance test as the minimum operating limit.</p>	During each performance test for CO	NTAB1 & NTAB2	Table 7 to Subpart DDDDD

**I. Compliance Assurance Monitoring (40 CFR 64)**

1. NT1 is subject to compliance assurance monitoring (CAM) for particulate matter.
2. The electrostatic precipitator shall be properly operated and maintained to control particulate matter emissions from NT1.
3. The Owner or Operator shall comply with the monitoring approach as included in the following Table:

**Table 7 - Compliance Assurance Monitoring for NT1-PC1**

Indicators	<p>Secondary voltage of the transformer rectifier (TR) sets<sup>24</sup>                      An excursion is defined as a secondary voltage level below 7.5 kV on at least 8 TR sets.                      Excursions<sup>25</sup> trigger an inspection, corrective action, and a reporting requirement.</p>	<p>Inspection and Maintenance (I/M)                      An excursion is defined as a failure to conduct an inspection as per the I/M plan.                      Equipment failures identified during an inspection trigger an immediate corrective action.</p>
Performance Criteria	<p>a.) Secondary voltage is measured electronically and displayed on the precipitator optimization system (POS) monitor.</p> <p>b.) The secondary voltage shall be measured and recorded continuously.</p> <p>c.) Data shall be averaged on an hourly basis.</p> <p>d.) Confirm that POS computer panel displays zero when the unit is not operating.</p>	<p>a.) Inspections shall be conducted by qualified personnel according to ESP I/M Plan.</p> <p>b.) Maintenance shall be performed as needed.</p> <p>c.) Records of the inspections and maintenance shall be stored in the Plant Maintenance Management System.</p>

<sup>24</sup> Newington Station’s ESP has a total of 16 TR sets.

<sup>25</sup> Excursion shall mean a departure from an indicator range established for monitoring under 40 CFR 64, consistent with any averaging period specified for averaging the results of the monitoring.



4. Proper maintenance (40 CFR 64.7(b))

At all times, the Owner or Operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
5. Continued operation (40 CFR 64.7(c))

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Owner or Operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of these CAM requirements, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Owner or Operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
6. Response to excursions or exceedances (40 CFR 64.7(d))
  - i. Upon detecting an excursion or exceedance, the Owner or Operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
  - ii. Determination of whether the Owner or Operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
  - iii. If the Owner or Operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Owner or Operator shall promptly notify the Department and, if necessary, submit a significant modification to the Title V operating permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

7. Quality Improvement Plan (QIP) Requirements (40 CFR 64.8)
  - i. If the indicator range specified in Table 8 accumulate excursions over 5% of the rolling 12-month total operating time for NT1-PC1, the Owner or Operator shall develop and implement a Quality Improvement Plan.
  - ii. The QIP shall include procedures for evaluating the control performance problems. Based on the evaluation, modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
    - a. Improve preventive maintenance practices.
    - b. Operational changes.
    - c. Appropriate improvements to control methods.
    - d. Other steps to improve control performance.
    - e. More frequent or improved monitoring.
  - iii. If a QIP is required, the Owner or Operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

**J. Recordkeeping Requirements**

1. The Owner or Operator shall be subject to the recordkeeping requirements identified in Table 8 below:

<b>Table 8 - Recordkeeping Requirements</b>				
<b>Item #</b>	<b>Recordkeeping Requirement</b>	<b>Records Retention/ Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1.	<u>Record Retention and Availability</u> Keep the records required by this permit on file. These records shall be available for review by the Division upon request.	Retain for a minimum of 5 years unless longer as specified	Facility wide	Env-A 902, Env-A 3211 & 40 CFR 70.6(a)(3)(ii)(B)
2.	<u>CO<sub>2</sub> Budget Source and Unit Records</u> a.) Maintain the following records regarding the CO <sub>2</sub> budget source and each CO <sub>2</sub> budget unit: <ol style="list-style-type: none"> <li>1. The account certificate of representation and all documents that demonstrate the truth of the statements in the account certificate of representation prepared in accordance with Env-A 4604.05;</li> <li>2. All emissions monitoring information, in accordance with Env-A 4609 and 40 CFR 75;</li> <li>3. Copies of all reports, compliance certifications and other submissions and all records made or required under Env-A 4600; and</li> <li>4. Copies of all documents used to complete</li> </ol>	Maintain up-to-date records  Retain for a minimum of 10 years from the date the document is created, or beyond as noted in b.	NT1	Env-A 4605.03(a)

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	<p>a CO<sub>2</sub> budget permit application and any other submission under the CO<sub>2</sub> Budget Trading Program or to demonstrate compliance with the requirements of Env-A 4600.</p> <p>b.) Records required in a. shall be retained beyond the 10-year minimum retention period until such documents are superseded because of the submission of a new account certificate of representation changing the CO<sub>2</sub> AAR.</p>			
3.	<p><u>Certificate of Representation</u></p> <p>a.) Complete and retain a certificate of representation for a designated representative or an alternate designated representative including the elements pursuant to 40 CFR 72.24, <i>Certificate of Representation</i>.</p> <p>b.) The certificate of representation required in a. shall be retained beyond the 5-year minimum period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.</p>	Maintain at the facility at all times	NT1	40 CFR 72.9(f) & 40 CFR 72.24
4.	<p><u>General Recordkeeping Requirements for Combustion Devices</u></p> <p>Maintain the records of the type (e.g., oil, natural gas etc.) and amount of fuel burned in each device.</p>	Monthly	NT1, NTAB1, NTAB2, NTTB & NTEG1	Env-A 903.03
5.	<p><u>Liquid Fuel Oil Recordkeeping Requirements - Residual Fuel oil</u></p> <p>a.) Records showing the maximum weight percentage sulfur and quantity of each fuel delivery received; and</p> <p>b.) Records showing either:</p> <ol style="list-style-type: none"> <li>1. The analytical method used and the specific fuel analysis results of the shipment or consignment from which the delivery came; or</li> <li>2. Delivery records sufficient to allow for traceability of the analytical results corresponding to each delivery received by the stationary source, showing:                             <ol style="list-style-type: none"> <li>i. The date of delivery;</li> <li>ii. The quantity of delivery;</li> </ol> </li> </ol>	For each delivery of fuel oil to the facility	NT1	Env-A 806.05 & Env-A 903.03(c)(2)

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	iii. The type of fuel; iv. The maximum weight percentage sulfur; and v. The name, address, and telephone number of the company making the delivery. ----- c.) Records of analysis conducted as per Table 6, Item 28.b showing the sulfur content of the blended oil.	----- For each fuel blending		
6.	<u>Liquid Fuel Oil Recordkeeping Requirements - Distillate fuel oil</u> In lieu of sulfur testing pursuant to Table 6, Item 28.a, the Owner or Operator may maintain a written statement from the fuel supplier that the sulfur content of the fuel as delivered does not exceed state or federal standards for that fuel.	Whenever there is a change in fuel supplier but at least annually	NTAB1 & NTAB2	Env-A 806.05
7.	<u>General NOx Recordkeeping</u> Maintain records of: a.) Identification of each fuel burning device. b.) Operating schedule during the high ozone season for each fuel burning device identified in a. above, including: 1. Typical hours of operation per calendar day; 2. Typical days of operation per calendar month; 3. Number of weeks of operation; 4. Heat input rate in MMBtu/hr. c.) Actual NOx emissions from each combustion device identified in a. above for: 1. Each calendar year, in tons; and 2. A typical high ozone season day, in pounds per day.	As specified	NT1, NTAB1, NTAB2, NTTB & NTEG1	Env-A 905.02

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
8.	<p><u>CEM Monitoring Plan</u></p> <p>a.) Prepare and maintain a CEM monitoring plan which contains:</p> <ol style="list-style-type: none"> <li>1. Sufficient information to demonstrate that all unit SO<sub>2</sub> emissions, NO<sub>x</sub> emissions, CO emissions, CO<sub>2</sub> emissions and opacity are monitored and reported.</li> <li>2. The information specified in 40 CFR 75.53, Env-A 808.04. and Env-A 808.12(d).</li> </ol> <p>b.) Revise or update the monitoring plan whenever the Owner or Operator makes a replacement, modification or change that could affect the CEMS or COMS or other approved monitoring method.</p>	<p>Maintain on a continuous basis and update as necessary</p>	<p>NT1</p>	<p>40 CFR 75.53, 40 CFR 75.73, Env-A 808.04, Env-A 2907.09, Env-A 3210.11 &amp; Env-A 4609</p>
9.	<p><u>Quality Assurance/Quality Control (QA/QC) Plan for Opacity or Gaseous CEMS</u></p> <p>a.) Prepare and maintain the QA/QC plan which shall contain written procedures for implementation of a QA/QC program that meets the criteria specified in 40 CFR 60, Appendix F, Procedure 1, Section 3 for each CEMS.</p> <p>b.) Review the QA/QC plan and all data generated by its implementation;</p> <p>c.) Revise or update the QA/QC plan by:</p> <ol style="list-style-type: none"> <li>1. Documenting the replacement of any damaged or malfunctioning CEM system components in order to maintain the collection of valid CEM data and to maximize data availability.</li> <li>2. Documenting any changes made to the CEM or changes to any information provided in the monitoring plan.</li> <li>3. Including a schedule of, and describing, all maintenance activities that are required by the CEM manufacturer or that might have an effect on the operation of the system.</li> <li>4. Describing how the audits and testing required by Env-A 808 and this permit will be performed.</li> <li>5. Including examples of the reports that will be used to document the audits and tests</li> </ol>	<p>Maintain Continuously</p> <p>At least annually</p> <p>As necessary based upon results of the annual review</p>	<p>NT1</p>	<p>Env-A 808.06</p>

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	required by Env-A 808. d.) The QA/QC plan and any revisions to the plan shall be considered updates to the CEM monitoring plan required by Env-A 808.04.			
10.	<u>General Acid Rain Recordkeeping Provisions</u> Maintain records of: a.) Opacity, operating parameters (operating time, heat input, volumetric flow rate & load), diluent monitor data, SO <sub>2</sub> , NO <sub>x</sub> & CO <sub>2</sub> emissions and percent monitor availability; and b.) The causes of any missing data periods and the actions taken to correct such causes.	Maintain on a continuous basis	NT1	40 CFR 75.57
11.	<u>Certification, Quality Assurance and Quality Control Records</u> a.) Maintain records of the information required pursuant to 40 CFR 75.59 and 75.73(b) which includes the certification, quality assurance, and quality control records. b.) These shall include records of all daily & 7-day calibration error tests, daily interference checks, cycle time tests, linearity checks and relative accuracy test audits, as applicable.	Maintain on a continuous basis	NT1	40 CFR 75.59, 40 CFR 75.73 & Env-A 3212
12.	<u>Monitoring Records</u> Maintain records of data required to be monitored pursuant to Tables 6 & 7 including: a.) Records of monitoring data, monitor performance data, corrective action actions taken, any written QIP required pursuant to Condition VIII.I. of this permit and any activities undertaken to implement the QIP. b.) Maintenance and inspection conducted on the ESP. c.) Current, spark rate and fields out of service in ESP for NT1-PC1; d.) Hours of operation of the fly ash reinjection system for NT1; e.) Net electrical output (MWh) for NT1; f.) Flow metering calibrations for NT1.	Maintain on a continuous basis	NT1 & NT1-PC1	40 CFR 70.6(a)(3)(ii) & 40 CFR 64.9

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
13.	<p><u>Alternative Operating Scenario Records</u> Maintain records of operation under alternative operating scenarios including:</p> <p>a.) The date and hour that operation in the alternative operating scenario began;</p> <p>b.) The date hour that operation in the alternative operating scenario ceased; and</p> <p>c.) Which alternative operating scenario is in use.</p>	Whenever operation method changes from normal operation to a specific alternative operating scenario	NT1, NTAB1 & NTAB2	40 CFR 70.6(a)(9)
14.	<p><u>Recordkeeping Requirements for Internal Combustion Engines</u> Maintain documentation from the engine manufacturer certifying that the engine complies with the applicable emissions standards stated in 40 CFR 60 Subpart III.</p>	As specified	NTEG1	40 CFR 60.4211
15.	<p><u>Records for Limited-use liquid-oil-fired EGU</u> Keep records of the type(s) and amount(s) of fuel used in the EGU to document that the capacity factor limitation for that subcategory is met.</p>	Each calendar quarter	NT1	40 CFR 63.10032(j)
16.	<p><u>EGU Tune-up Report</u> Maintain on-site and submit, if requested by DES or EPA, an annual report containing the details of tune-ups conducted in accordance with Table 6, Item 33, including:</p> <p>a.) The concentrations of CO and NO<sub>x</sub> in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems;</p> <p>b.) A description of any corrective actions taken as a part of the combustion adjustment; and</p> <p>c.) The type(s) and amount(s) of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period.</p>	Maintain on site	NT1	40 CFR 63.10021(e)(8)

**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
17.	<p><u>Boiler Tune-up Records</u>                      Maintain on-site and submit if requested by Department and EPA, a report containing the details of tune-ups conducted in accordance with Table 7, Item 35, including:</p> <ul style="list-style-type: none"> <li>a.) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;</li> <li>b.) A description of any corrective actions taken as a part of the tune-up; and</li> <li>c.) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.</li> </ul>	Each boiler tune-up	NTAB1 & NTAB2	40 CFR 63.7540(a)(10)(vi)
18.	<p><u>Records for Liquid oil-fired EGU</u>                      Upon switching from limited-use oil-fired EGU subcategory to continental liquid oil-fired EGU subcategory, the Owner or Operator shall maintain the following records:</p> <ul style="list-style-type: none"> <li>a.) A copy of each notification and report that was submitted to comply with Subpart UUUUU, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report as per §63.10(b)(2)(xiv).</li> <li>b.) Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in §63.10(b)(2)(viii);</li> <li>c.) For an EGU that qualifies as an low emitting EGU (LEE) under §63.10005(h), keep annual records that document that EGU emissions in the previous stack test(s) continue to qualify the unit for LEE status for an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year.</li> <li>d.) Records of the date and time that each</li> </ul>	On a continuous basis	NT1	40 CFR §§ 63.10032 & 63.10033



**Table 8 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period; e.) Records of the occurrence and duration of each startup or shutdown; f.) Records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment (as applicable); g.) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. h.) Records of the type(s) and amount(s) of fuel used during each startup or shutdown of the EGU.			
19.	<u>Recordkeeping Requirements for Permit Deviations</u> Recordkeeping of deviations from Permit requirements shall be conducted in accordance with Section XXVII of this Permit.	Maintain Up-to-date Data	Facility Wide	Env-A 911

2. The Owner or Operator is subject to the following recordkeeping requirements in Tables 8A or 8B for auxiliary boilers (depending on the operating scenario):

Table 8A - Recordkeeping Requirements for NTAB1 & NTAB2 Primary Operating Scenario (Limited-use)				
Item #	Requirement	Duration/Frequency	Applicable Unit	Regulatory Basis
1.	A copy of each notification and report that was submitted to comply with 40 CFR 63 Subpart DDDDD, including all supporting documentation.	Maintain on a continuous basis	NTAB1 & NTAB2	40 CFR 63.7555(a)(1)
2.	<p><u>Limited-use subcategory Records</u>                      Maintain following records for each boiler:</p> <p>a.) A copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent;</p> <p>b.) Fuel use records for the days the boiler was operating;</p> <p>c.) Annual capacity factor calculations; and</p> <p>d.) Annual capacity factor for each boiler shall be calculated as follows:</p> $ACF = \left[ \frac{\text{Actual heat input to the boiler during a CY} \left( \frac{\text{MMBtu}}{\text{yr}} \right)}{\left( 99.4 \frac{\text{MMBtu}}{\text{hr}} \times 8,760 \frac{\text{hrs}}{\text{yr}} \right)} \right] \times 100$	As specified	NTAB1 & NTAB2	40 CFR §§63.7525(k) & 63.7555(a)(3)

Table 8B - Recordkeeping Requirements for NTAB1 & NTAB2 Alternate Operating Scenario (Unlimited-use)				
Item #	Requirement	Duration/Frequency	Applicable Unit	Regulatory Basis
1.	<p>Maintain:</p> <p>a.) A copy of each notification and report that was submitted to comply with 40 CFR 63 Subpart DDDDD, including all supporting documentation.</p> <p>b.) Records of performance tests, fuel analyses, or other compliance demonstrations.</p>	On a continuous basis	NTAB1 & NTAB2	40 CFR 63.7555

Table 8B - Recordkeeping Requirements for NTAB1 & NTAB2 Alternate Operating Scenario (Unlimited-use)				
Item #	Requirement	Duration/ Frequency	Applicable Unit	Regulatory Basis
2.	Maintain the following records, as applicable: a.) Records of fuel use by each boiler, including the type(s) of fuel and amount(s) used. b.) Records of types and amounts of fuels used during each startup and shutdown; c.) Maintain monthly records of the calendar date, time, occurrence and duration of each startup and shutdown. d.) Supporting calculations and supporting documentation for TSM, HCl & Hg: i. Maintain a copy of all calculations and supporting documentation of TSM, Hg & HCl emission rates, using the equations specified in §63.7530, that were done to demonstrate compliance with the respective emission limits. ii. Supporting documentation should include results of any fuel analyses and basis for the estimates of emission rates. iii. Results from one fuel analysis may be used for multiple boilers provided they are all burning the same fuel type. However, TSM, Hg or HCl emission rates must be calculated for each boiler. e.) Records of the occurrence and duration of each malfunction of the boiler. f.) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation.	A specified	NTAB1 & NTAB2	40 CFR 63.7555

**K. Reporting Requirements**

1. Pursuant to Env-C 203.02(b), *Date of Issuance or Filing*, written documents shall be deemed to have been filed with or received by the Division on the actual date of receipt by the Division, as evidenced by a date stamp placed on the document by the Division in the normal course of business.
2. All emissions data submitted to the Division shall be available to the public. Claims of confidentiality for any other information required to be submitted to the Division pursuant to this permit shall be made at the time of submission in accordance with Env-A 103, Claims of Confidentiality.
3. The Owner or Operator shall be subject to the reporting requirements identified in Table 9 below:

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
1.	Any report submitted to the DES and/or EPA shall include the certification of accuracy statement outlined in Section XXI.B. of this Permit and shall be signed by the responsible official.	With each report	Facility wide	40 CFR 70.6(c)(1)
2.	<p><u>Semi-annual Permit Deviation and Monitoring Report</u>                      The Owner or Operator shall submit a semi-annual permit deviation and monitoring report, which contains:</p> <p>a.) Summaries of all monitoring and testing requirements contained in this permit; and</p> <p>b.) A summary of all permit deviations and excursions that have occurred during the reporting period.</p>	Semi-annually received by DES no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year.	Facility wide	Env-A 911 & 40 CFR 70.6(a)(3)(iii)(A)
3.	<p><u>Annual Emissions Report</u>                      Submit an annual emissions report which shall include the following information:</p> <p>a.) Actual calendar year emissions from each device of NO<sub>x</sub>, CO, SO<sub>2</sub>, VOCs, HAPs (speciated by individual HAP or CAS number), CO<sub>2e</sub>, filterable PM/PM<sub>10</sub>/PM<sub>2.5</sub>, condensable PM, and lead.</p> <p>b.) The methods used in calculating such emissions in accordance with Env-A 705.02, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fees</i>.</p> <p>c.) The information recorded in accordance with Table 8, Item 4.</p>	Annually (received by DES no later than April 15 <sup>th</sup> of the following year)	NT1, NTAB1, NTAB2, NTTB & NTEG1	Env-A 907.02
4.	<p><u>Payment of Annual Emission Fee</u>                      Payment of the annual emission fee shall be conducted in accordance with Section XXIII of this Permit.</p>	Annually (received by DES no later than May 15 <sup>th</sup> of the following year)	NT1, NTAB1, NTAB2, NTTB & NTEG1	Env-A 705.04(b)
5.	<p><u>NO<sub>x</sub> Reporting Requirements</u>                      Include the following information in the annual emissions report required in Table 9, Item 3:</p> <p>a.) A breakdown of NO<sub>x</sub> emissions by month; and</p> <p>b.) All data recorded pursuant to Table 8, Item 7.</p>	Annually (received by DES no later than April 15 <sup>th</sup> of the following year)	NT1, NTAB1, NTAB2, NTTB & NTEG1	Env-A 909.03

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
6.	<p><u>Fuel Data Reports</u>                      Submit fuel data reports containing fuel usage information summarized on a monthly basis and for the previous three quarters, including fuel type and sulfur content.</p>	<p>Quarterly (no later than 30 days following the end of each quarterly reporting period)</p>	<p>NT1</p>	<p>Env-A 910</p>
7.	<p><u>Net Electrical Output</u>                      Report monthly net electrical output information to DES<sup>26</sup>.</p>	<p>Annually (no later than April 15<sup>th</sup> of the following year)</p>	<p>NT1</p>	<p>Env-A 2904.05(f) &amp; Env-A 3205.03(f)</p>
8.	<p><u>Data Availability Restoration Plan</u>                      If the Owner or Operator of the source discovers that it has failed to meet the percent data availability requirement in the previous calendar quarter or in the calendar quarter in which it is currently operating:</p> <ul style="list-style-type: none"> <li>a.) Notify DES by telephone, fax, or e-mail (pdeviations@des.nh.gov) within 10 days of discovery of the permit deviation.</li> <li>b.) Submit a plan to the Division, within 30 days of discovery, specifying in detail the steps it plans to take in order to meet the availability requirements for future calendar quarters.</li> <li>c.) Implement the plan to meet the data availability requirements no later than 30 days after the end of the quarter of failure.</li> </ul>	<p>As specified</p>	<p>NT1</p>	<p>Env-A 808.12 &amp; Env-A 911.04</p>
9.	<p><u>CO<sub>2</sub> Budget Trading Program Reports</u>                      Submit quarterly CO<sub>2</sub> Budget reports which include:</p> <ul style="list-style-type: none"> <li>a.) The CO<sub>2</sub> mass emissions data for the CO<sub>2</sub> budget unit, in an electronic format prescribed by EPA unless otherwise prescribed by the regional organization, for each calendar quarter in the manner specified in Subpart H of 40 CFR 75 and 40 CFR 75.64;</li> <li>b.) For each CO<sub>2</sub> budget unit, all of the data and information required in Subpart G of 40 CFR 75, except for opacity, NO<sub>x</sub>, and SO<sub>2</sub> provisions; and</li> <li>c.) A compliance certification with, and in support of,</li> </ul>	<p>Quarterly (no later than 30 days following the end of each quarterly reporting period)</p>	<p>NT1</p>	<p>Env-A 4609.16(c)</p>

<sup>26</sup> Copies of the Forms EIA-906 and EIA-920 as submitted to United States Energy Information Administration (EIA), are sufficient.

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:</p> <ol style="list-style-type: none"> <li>1. The monitoring data submitted were recorded in accordance with the applicable requirements of both 40 CFR 75 and Env-A 4600, including the quality assurance procedures and specifications; and</li> <li>2. The CO<sub>2</sub> concentration values substituted for missing data under Subpart D of 40 CFR 75 do not systematically underestimate CO<sub>2</sub> emissions.</li> </ol>			
10.	<p><u>CO<sub>2</sub> Budget Program Compliance Certification</u> For each control period in which a CO<sub>2</sub> budget source is subject to the requirements of Env-A 4605, submit a compliance certification report which includes the information specified in Env-A 4605.09(b).</p>	By March 1 (following the relevant control period)	NT1	Env-A 4605.09
11.	<p><u>Certification by the CO<sub>2</sub> Authorized Account Representative</u> Any submission under the CO<sub>2</sub> budget trading program shall be signed and certified by the CO<sub>2</sub> Authorized Account Representative and shall include the certification statement pursuant to Env-A 4604.02(a).</p>	With each CO <sub>2</sub> Budget Program submittal	NT1	Env-A 4604.02
12.	<p><u>NO<sub>x</sub> Budget Program Compliance Certification</u> For each control period, submit an annual compliance certification containing the information listed in Env-A 3213.03.</p>	By November 30 <sup>th</sup> of each year	NT1	Env-A 3213
13.	<p><u>SO<sub>2</sub> &amp; NO<sub>x</sub> Annual Budget Trading and Banking Program Annual Compliance Certification</u> Submit an annual compliance certification for the prior year containing the information specified in Env-A 2909.02.</p>	By January 30 <sup>th</sup> of each year	NT1	Env-A 2909
14.	<p><u>Offset Plans for Excess Emissions of SO<sub>2</sub></u> If a unit has excess SO<sub>2</sub> emissions, submit an offset plan which contains the information specified in 40 CFR 77.3(d).</p>	60 days after the end of any calendar year in which the unit has excess SO <sub>2</sub> emissions	NT1	40 CFR 77.3

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
15.	<p><u>Certification by the Designated Representative or the Alternate Designated Representative</u></p> <p>Any document submitted under the Acid Rain program shall be signed and certified by the designated representative or the alternate designated representative and include the statements pursuant to 40 CFR 72.21(a)(1) and (2).</p>	With each Acid Rain submittal	NT1	40 CFR 72.21
16.	<p><u>CEMS Recertification Notifications and Reports</u></p> <p>a.) Notification of full recertification:</p> <ol style="list-style-type: none"> <li>1. Submit notifications of full recertification testing under 40 CFR 75.20(b)(2) to DES and EPA at least 30 days prior to the first scheduled day of recertification testing.</li> <li>2. In emergency situations when full recertification testing is required following an uncontrollable failure of equipment that results in lost data, notice shall be sufficient if provided within 2 business days following the date when testing is scheduled.</li> <li>3. Testing may be performed on a date other than that already provided in a notice as long as notice of the new date is provided either in writing or by telephone or other means at least 7 days prior to the original scheduled test date or the revised test date, whichever is earlier.</li> </ol> <p>b.) Notification of partial recertification testing:</p> <ol style="list-style-type: none"> <li>1. Submit notifications for retesting required following a loss of certification under 40 CFR 75.20(a)(5) or for partial recertification testing required under 40 CFR 75.20(b)(2), to DES and EPA either in writing or by telephone at least 7 days prior to the first scheduled day of testing,</li> <li>2. Except that in emergency situations when testing is required following an uncontrollable failure of equipment that results in lost data, notice shall be sufficient if provided within 2 business days following the date when testing is scheduled.</li> <li>3. Testing may be performed on a date other than that already provided in a notice long as notice of the new date is provided by telephone or other means at least 2 business days prior to the original scheduled test date or the revised test date, whichever is earlier.</li> </ol> <p>c.) Within 45 calendar days after completing all</p>	As specified	NT1	40 CFR 75.61 (a)(1), 75.63, 75.70, 75.73(d), Env-A 808, Env-A 2907.10 & Env-A 3210

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	recertification tests submit to EPA and DES, the electronic and hardcopy information contained in 40 CFR 75.63. d.) Submit an application to DES within 45 days after completing all recertification tests including the information required under 40 CFR 75, Subpart H.			
17.	<u>Relative Accuracy Test Audit Reports</u> a.) Submit a summary of the results of the RATA testing by the earlier of 45 calendar days following the completion of the RATA or the date established in the section of 40 CFR 60 or 40 CFR 75 that requires performance of the RATA. 1. For gaseous CEM audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1 or §75.59(a)(9), as applicable; and 2. For opacity CEM audits, the report format shall conform to that presented in EPA-600/8-87-025, April 1992, “Technical Assistance Document: Performance Audit Procedures for Opacity Monitors”. b.) If requested, submit a hardcopy RATA report to EPA within 45 days after completing the RATA or within 15 days of receiving the request, whichever is later.	As specified	NT1	40 CFR 75.59(a)(9), 75.60(b)(6), 40 CFR 75.73(d), Env-A 3210 & Env-A 808.07(e)
18.	<u>Monitoring Plan Submittals</u> a.) Electronic copy: Submit a complete, electronic, up-to-date monitoring plan file (except for hardcopy portion) to EPA as follows: 1. At the time of recertification application submission; 2. Prior to or concurrent with the submittal of the electronic quarterly report for a reporting quarter where an update of the electronic monitoring plan information is required under 40 CFR 75.53(b). b.) Hardcopy: Submit hardcopy information to EPA only if that portion of the monitoring plan is revised. The Owner or Operator shall submit the required hardcopy information as follows: with any certification or recertification application, if a hardcopy monitoring plan change is associated with the certification or recertification event; and within 30 days of any other event with which a hardcopy	As specified	NT1	40 CFR 75.62 & 40 CFR 75.73(e)



**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>monitoring plan change is associated, pursuant to 40 CFR 75.53(b). Electronic submittal of all monitoring plan information, including hardcopy portions, is permissible provided that a paper copy of the hardcopy portions can be furnished upon request.</p>			
<p>19.</p>	<p><u>CEMS &amp; COMS QA/QC Plan Updates</u>                      a.) No later than April 15<sup>th</sup> of each year, either:                      1. Submit to DES the revised QA/QC plan and the reasons for each change, and certify in writing that the Owner or Operator is implementing the revised QA/QC plan; or                      2. Certify in writing that no changes have been made to the plan and that the Owner or Operator will continue to implement the existing QA/QC plan.                      b.) If DES requests a revision to the QA/QC plan, the Owner or Operator shall submit a revised plan within 45 days of the date of the request.</p>	<p>Annually</p>	<p>NT1</p>	<p>Env-A 808.06</p>
<p>20.</p>	<p><u>Acid Rain Program - Quarterly Reports</u>                      a.) Submit to DES &amp; EPA quarterly reports which contain:                      1. The data and information in 40 CFR 75.64(a), (b) &amp; (c) and 75.73(f).                      2. NOx emissions in lb/hr for every hour during the control period and cumulative quarterly and seasonal NOx emission data in pounds.                      3. SO<sub>2</sub> and NOx emissions in lb/hr for every hour during the year and cumulative quarterly and annual SO<sub>2</sub> and NOx emissions data in pounds.                      4. A certification by the Designated Representative that the component and system identification codes and formulas in the quarterly electronic reports represent current operating conditions                      5. Explanatory text or comments, so long as the information is provided in a format that is compatible with the other data required to be reported under 40 CFR 75.64.                      b.) Reports shall be submitted in electronic format using EPA's electronic reporting (EDR) convention.</p>	<p>Quarterly (no later than 30 days following the end of each quarterly reporting period)</p>	<p>NT1</p>	<p>40 CFR 75.64, 40 CFR 75.73(f), 40 CFR 75.74, Env-A 2907 &amp; Env-A 3210</p>
<p>21.</p>	<p><u>Quarterly Emission Reports</u>                      a.) Submit to DES emission reports containing the following information:</p>	<p>Quarterly (received by DES no later</p>	<p>NT1</p>	<p>Env-A 808.14 &amp; Env-A 808.16</p>

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<ol style="list-style-type: none"> <li>1. Excess emission data recorded by the CEM system, including:                             <ol style="list-style-type: none"> <li>2. The date and time of the beginning and ending of each period of excess emission;</li> <li>3. The actual emissions measured by the CEM system during the excess emission;</li> <li>4. The total amount of emissions above the emissions limit, or percent above the emissions limit, during the period of excess emissions;</li> <li>5. The specific cause of the excess emission; and</li> <li>6. The corrective action taken;</li> </ol> </li> <li>b.) Exceedances of opacity standard as recorded by the COMS;</li> <li>c.) If no excess emissions have occurred, a statement to that effect;</li> <li>d.) For gaseous measuring CEM systems, the daily averages of the measurements made and emission rates calculated;</li> <li>e.) A statement as to whether the CEM system was inoperative, repaired, or adjusted during the reporting period;</li> <li>f.) If the CEM system was inoperative, repaired, or adjusted during the reporting period, the following information:                             <ol style="list-style-type: none"> <li>1. The date and time of the beginning and ending of each period when the CEM was inoperative;</li> <li>2. The reason why the CEM was inoperative;</li> <li>3. The corrective action taken;</li> </ol> </li> <li>g.) For all “out of control periods” the following information:                             <ol style="list-style-type: none"> <li>1. Beginning and ending times of the out of control period;</li> <li>2. The reason for the out of control period;</li> <li>3. The corrective action taken.</li> </ol> </li> <li>h.) The date and time of the beginning and ending of each period when the source of emissions which the CEM system is monitoring was not operating;</li> <li>i.) The span value, as defined in Env-A 101.176, and units of measurement for each analyzer in the CEM system;</li> <li>j.) When calibration gas is used, the following information:</li> </ol>	<p>than 30 days following the end of each quarterly reporting period)</p>		

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	1. The calibration gas concentration; 2. If a gas bottle was changed during the quarter: i. The date of the calibration gas bottle change; ii. The gas bottle concentration before the change; iii. The gas bottle concentration after the change; iv. The expiration date for all calibration gas bottles used. k.) The percent data availability calculated in accordance with Env-A 808.12 for each gaseous and opacity monitor in the CEM system; l.) All information required above shall be clearly indicated, labeled, and formatted such that compliance with all emissions standards to which the source is subject, can be determined and any periods of excess emissions, substitution of missing or invalid CEM data, CEM calibration, CEM maintenance, or startup, shutdown, or malfunction can be easily identified.			
22.	<u>Semi-annual MATS Compliance Reports</u> Submit semi-annual compliance reports to DES and EPA containing the information specified in 40 CFR 63.10031(c), as applicable.	Semi-annually received no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year	NT1	40 CFR §§ 63.10021(e)(9) & 63.10031
23.	<u>Notification of MATS Subcategory Switch</u> a.) Notify DES and EPA in writing within 30 days of switching from limited-use oil-fired EGU subcategory to continental liquid oil-fired EGU subcategory. b.) Conduct a NOx RACT analysis pursuant to Env-A 1315 <sup>27</sup> and submit to DES within six months of submitting the notification required in (a) above.	Within 30 days of switching subcategories  As specified	NT1	Env-A 910
24.	<u>Notification for Liquid oil-fired EGU</u> Upon switching from limited-use oil-fired EGU subcategory to continental liquid oil-fired EGU subcategory, the Owner or Operator shall submit a Notice of Compliance Status as per 40 CFR §§	Within 60 days of completion of all performance tests and/or	NT1	40 CFR 63.10030

<sup>27</sup> Rule effective August 15, 2018

**Table 9 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	63.9(h)(2)(ii) and 63.10030(e).	initial compliance demonstrations for the liquid oil-fired EGU subcategory		
25.	<u>Notification of Boiler Characterization</u> Notify DES in writing of each boiler characterization in the upcoming calendar year (i.e., limited-use or unlimited-use) <sup>28</sup> .	At least 30 days prior to the beginning of the new calendar year	NTAB1 & NTAB2	TP-0176
26.	<u>Annual Compliance Certification</u> Annual compliance certification shall be submitted in accordance with Section XXI of this Permit.	Annually (received by DES no later than April 15th of the following year)	Facility wide	40 CFR 70.6(c)(1)

<sup>28</sup> For example, auxiliary boiler NTAB1 characterization in CY 2019 must be notified in writing by December 1, 2018.

4. The Owner or Operator is subject to the following recordkeeping requirements in Tables 9A or 9B for auxiliary boilers (depending on the operating scenario):

<b>Table 9A - Reporting Requirements for NTAB1 &amp; NTAB2                      Primary Operating Scenario (Limited-use)</b>				
Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
1.	<p><u>MACT Applicability Changes</u></p> <p>If the Owner or Operator has switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory or a different subpart to 40 CFR 63, submit to EPA and DES notice of fuel switch or physical change, which shall identify:</p> <p>a.) The name of the Owner or Operator of the affected source, as defined in §63.7490, the location of the source, the boiler(s) that have switched fuels or were physically changed, and the date of the notice;</p> <p>b.) The currently applicable subcategory under 40 CFR 63 Subpart DDDDD; and</p> <p>c.) The date upon which the fuel switch or physical change occurred.</p>	<p>Within 30 days of the fuel switch or physical change</p>	<p>NTAB1 &amp; NTAB2</p>	<p>40 CFR 63.7545(h)</p>
2.	<p><u>MACT Compliance Report</u></p> <p>a.) Submit to DES and EPA a 5-year compliance report containing the following information:</p> <ol style="list-style-type: none"> <li>1. Company and Facility name and address;</li> <li>2. Process unit information, emissions limitations, and operating parameter limitations;</li> <li>3. Date of report and beginning and ending dates of the reporting period.</li> <li>4. The total operating time during the reporting period;</li> <li>5. Date of the most recent tune-up for each unit subject to only the requirement to conduct a 5-year tune-up according to 40 CFR 63.7540(a)(12); and</li> <li>6. Date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.</li> </ol> <p>b.) This report must be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX)</p>	<p>First compliance report is due by January 31, 2021;                      Subsequent reports due by January 31<sup>st</sup> following every 5 year compliance period from January 1 to December 31</p>	<p>NTAB1 &amp; NTAB2</p>	<p>40 CFR §§63.7550(c) &amp; 63.7550(h)(3)</p>

Table 9A - Reporting Requirements for NTAB1 & NTAB2 Primary Operating Scenario (Limited-use)				
Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
	( <a href="http://www.epa.gov/cdx">www.epa.gov/cdx</a> ). However, if the reporting form specific to subpart DDDDD is not available in CEDRI at the time that the report is due, a written report must be submitted to EPA, Region 1.			

Table 9B - Reporting Requirements for NTAB1 & NTAB2 Alternate Operating Scenario (Unlimited-use)				
Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
1.	<p><u>Notice of Compliance Status</u></p> <p>a.) Submit to DES and EPA a Notification of Compliance Status according to §63.9(h)(2)(ii).</p> <p>b.) For the initial compliance demonstration for each boiler submit the Notification of Compliance Status, including all performance test results and fuel analyses. The Notification of Compliance Status report must contain all the information specified below, as applicable.</p> <ol style="list-style-type: none"> <li>1. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the facility or the EPA through a petition process to be a non-waste under §241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of §241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.</li> <li>2. Summary of the results of all performance tests and fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits,</li> </ol>	<p>Within 60 days of completion of all performance test and/or initial compliance demonstrations for the boiler according to 40 CFR 63.10(d)(2)</p>	<p>NTAB1 &amp; NTAB2</p>	<p>40 CFR §§63.9(h)(2)(ii) &amp; 63.7545(e)</p>

**Table 9B - Reporting Requirements for NTAB1 & NTAB2  
 Alternate Operating Scenario (Unlimited-use)**

Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
	<p>and including identification of whether the Owner or Operator is complying with the:</p> <ul style="list-style-type: none"> <li>i. Particulate matter emission limit or the alternative TSM emission limit.</li> <li>ii. Output-based emission limits or the heat input-based emission limits.</li> </ul> <p>3. A summary of the maximum CO emission levels recorded during the performance test to show that the emission standard in Table 6, Item 2 was met.</p> <p>4. Identification of compliance demonstration method for each applicable emission limit (i.e., performance testing, continuous emissions monitoring system, or fuel analysis).</p> <p>5. A signed certification that the Owner or Operator has met all applicable emission limits and work practice standards.</p> <p>6. If there was a deviation from any emission limit, work practice standard, or operating limit, the Owner or Operator must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.</p> <p>7. In addition to the information required in §63.9(h)(2), the notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:</p> <ul style="list-style-type: none"> <li>i. “This facility complies with the required initial tune-up according to the procedures in §63.7540(a)(10)(i) through (vi).”</li> <li>ii. “This facility has had an energy assessment performed according to §63.7530(e).”</li> <li>iii. Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: “No secondary</li> </ul>			

**Table 9B - Reporting Requirements for NTAB1 & NTAB2  
 Alternate Operating Scenario (Unlimited-use)**

Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
	materials that are solid waste were combusted in any affected unit.”			
2.	<p><u>Notification of Intent to Conduct a Performance Test</u>                      Submit a notification of intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.</p>	As specified	NTAB1 & NTAB2	40 CFR 63.7545(d) & Env-A 803.03
3.	<p><u>Performance Test Reports</u>                      a.) Report to DES and EPA the results of performance tests and the associated fuel analyses (if any). This report must also verify that the operating limits for each boiler have not changed or provide documentation of revised operating limits established according to §63.7530 and Table 7 to subpart DDDDD, as applicable. The reports for all subsequent performance tests must include all applicable information required in §63.7550.                      b.) Submit the report to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (<a href="http://www.epa.gov/cdx">http://www.epa.gov/cdx</a>). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see <a href="http://www3.epa.gov/ttn/chief/ert/ert_info.html">http://www3.epa.gov/ttn/chief/ert/ert_info.html</a>).</p>	Within 60 days after the completion of the performance tests	NTAB1 & NTAB2	40 CFR §§63.7515(f), 63.7550(h) & Env-A 802.11
4.	<p><u>Semi-annual MACT Compliance Reports</u>                      Submit a semi-annual compliance report to DES and EPA containing the following information, as applicable:                      a.) Company and Facility name and address.                          1. Process unit information, emissions limitations, and operating parameter limitations.                          2. Date of report and beginning and ending dates of the reporting period.                          3. The total operating time during the reporting period.                      b.) The total fuel use by the boiler within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has</p>	July 31 <sup>st</sup> (for the semi-annual period January 1- June 30) and January 31 <sup>st</sup> (for the semi-annual period July 1- December 31)	NTAB1 & NTAB2	40 CFR 63.7550



**Table 9B - Reporting Requirements for NTAB1 & NTAB2  
 Alternate Operating Scenario (Unlimited-use)**

Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
	<p>received a non-waste determination by the EPA or the Owner or Operator’s basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.</p> <p>c.) If conducting performance tests once every 3 years consistent with §63.7515(b), the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions.</p> <p>d.) A statement indicating that no new types of fuel subject to an emission limit were burned in the boiler.</p> <p>e.) A summary of any monthly fuel analyses conducted to demonstrate compliance according to §§63.7521 and 63.7530 for individual boilers subject to emission limits.</p> <p>f.) If there are no deviations from any applicable emission limits or operating limits in subpart DDDDD, a statement that there were no deviations from the emission limits or operating limits during the reporting period.</p> <p>g.) If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the Owner or Operator during a malfunction of the boiler to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction.</p> <p>h.) Include the date of the most recent tune-up conducted according to §63.7540(a)(12). Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.</p> <p>i.) For each deviation from an emission limit or operating limit, the compliance report must additionally contain the following information:</p> <p>1. A description of the deviation and which</p>			

Table 9B - Reporting Requirements for NTAB1 & NTAB2 Alternate Operating Scenario (Unlimited-use)				
Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
	<p>emission limit or operating limit from which the facility deviated.</p> <p>2. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.</p> <p>3. If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.</p> <p>j.) Submit the report to EPA using CEDRI that is accessed through EPA's Central Data Exchange (CDX) (<a href="http://www.epa.gov/cdx">www.epa.gov/cdx</a>). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to EPA, Region 1.</p>			
5.	<p><u>MACT Applicability Changes</u></p> <p>If the Owner or Operator has switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory or a different subpart to 40 CFR 63, submit notice of fuel switch or physical change, which shall identify:</p> <p>a.) The name of the Owner or Operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) that have switched fuels or were physically changed, and the date of the notice.</p> <p>b.) The currently applicable subcategory under 40 CFR 63 Subpart DDDDD.</p> <p>c.) The date upon which the fuel switch or physical change occurred.</p>	Within 30 days of the fuel switch or physical change	NTAB1 & NTAB2	40 CFR 63.7545(h)

**IX. Requirements Currently Not Applicable**

Requirements not currently applicable to the facility were not identified by the Owner or Operator.

**GENERAL TITLE V REQUIREMENTS****X. Issuance of a Title V Operating Permit**

- A. This Permit is issued in accordance with the provisions of Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the five (5) years after issuance of this Permit.
- B. Permit expiration terminates the Owner or Operator's right to operate the emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is received by the Department at least 6 months before the expiration date.

**XI. Title V Operating Permit Renewal Procedures**

Pursuant to Env-A 609.07(b), an application for renewal of this Permit shall be considered timely if it is **received by the Department** at least six months prior to the designated expiration date of the current Title V operating permit.

**XII. Application Shield**

Pursuant to Env-A 609.08, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part until the Director takes final action on the application.

**XIII. Permit Shield**

- A. Pursuant to Env-A 609.09(a), a permit shield shall provide that:
  - 1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and
  - 2. The Owner or Operator need not comply with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and specifically identified in Section IX of this Title V Operating Permit as not applicable to the stationary source or area source.
- B. The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.09(b). It shall not apply to certain conditions as specified in Env-A 609.09(c) that may be incorporated into this Permit following permit issuance by DES.
- C. If a Title V Operating Permit and amendments thereto issued by the DES does not expressly include or exclude an applicable requirement or a state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the Owner or Operator shall comply with the provisions of said requirement to the extent that it applies to the Owner or Operator, or device.
- D. If DES determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.
- E. Pursuant to Env-A 609.09(f), nothing contained in Section XIII of this Permit shall alter or

affect the ability of the DES to reopen this Permit for cause in accordance with Env-A 609.19 or to exercise its summary abatement authority.

- F. Pursuant to Env-A 609.09(g), nothing contained in this section or in any Title V operating permit issued by the DES shall alter or affect the following:
1. The ability of the DES to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;
  2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;
  3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the EPA Administrator under that section;
  4. 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;
  5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;
  6. The ability of the DES or the EPA Administrator to obtain information about a stationary source, area source, or device from the Owner or Operator pursuant to section 114 of the CAA; or
  7. The ability of the DES or the EPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

#### **XIV. Reopening for Cause**

The Director shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.19(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.19(b) through (g).

#### **XV. Administrative Permit Amendments**

- A. Pursuant to Env-A 612.01, the Owner or Operator may implement the changes addressed in the request for an administrative permit amendment as defined in Env-A 101 immediately upon filing the request with the DES.
- B. Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

#### **XVI. Operational Flexibility**

- A. Pursuant to Env-A 612.02, the Owner or Operator subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Section XVI. B through E of this permit, as applicable.
  1. The change is not a modification under any provision of Title I of the CAA;
  2. The change does not cause emissions to exceed the emissions allowable under the

Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;

3. The Owner or Operator has obtained any temporary permit required by Env-A 600;
  4. The Owner or Operator has provided written notification to the director and administrator of the proposed change and such written notification includes:
    - a. The date on which each proposed change will occur;
    - b. A description of each such change;
    - c. Any change in emissions that will result;
    - d. A request that the operational flexibility procedures be used; and
    - e. The signature of the responsible official, consistent with Env-A 605.04(b);
  5. The change does not exceed any emissions limitations established under any of the following:
    - a. The New Hampshire Code of Administrative Rules, Env-A 100-3800;
    - b. The CAA; or
    - c. This Title V Operating Permit; and
  6. The Owner or Operator, DES, and EPA have attached each written notice required above to their copy of this Title V Operating Permit.
- B. For changes involving the trading of emissions, the Owner or Operator must also meet the following conditions:
1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;
  2. The Owner or Operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes to the Title V Operating Permit which qualify under a federally- enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;
  3. The Director has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce emissions trades; and
  4. The written notification required above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.
- C. For off-permit changes, the Owner or Operator must also meet the following conditions:

1. Each off-permit change meets all applicable requirements and does not violate any existing permit term or condition;
  2. The written notification required above is made contemporaneously with each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.04;
  3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;
  4. The Owner or Operator keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this Permit, and the emissions resulting from those changes; and
  5. The written notification required above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.
- D. For section 502(b)(10) changes, the Owner or Operator must also meet the following conditions:
1. The written notification required above is made at least 7 days prior to the proposed change; and
  2. The written notification required above includes any permit term or condition that is no longer applicable as a result of the change.
- E. Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) change shall not qualify for the permit shield under Env-A 609.09.

**XVII. Minor Modifications**

- A. Prior to implementing a minor permit modification, the Owner or Operator shall submit a written request to the Director in accordance with the requirements of Env-A 612.05(b).
- B. The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.05(c) through (g).
- C. Pursuant to Env-A 612.05(j), the permit shield specified in Env-A 609.09 shall not apply to minor permit amendments under Section XVII. of this Permit.
- D. Pursuant to Env-A 612.05(a), the Owner or Operator shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the Director of a request for a minor permit amendment.

**XVIII. Significant Permit Modifications**

- A. Pursuant to Env-A 612.06, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.06(a)(1) through (5).
- B. Prior to implementing the significant permit amendment, the Owner or Operator shall file a written request to the Director which includes all the information as referenced in Env-A 612.06(c) and (d) and shall be issued an amended Title V Operating Permit from the DES. The Owner or Operator shall be subject to the provisions of RSA 125-C:15 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Title V Operating Permit.
- C. The Director shall take final action on the significant permit amendment in accordance

with the Procedures specified in Env-A 612.06(e) and (f).

- D. The owner or operator shall obtain an amended title V operating permit incorporating the significant permit modification prior to implementing such modification, except as provided in Env-A 609.07(a)(3).

#### **XIX. Title V Operating Permit Suspension, Revocation or Nullification**

- A. Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:
1. The Owner or Operator has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order or permit condition in force and applicable to it; or
  2. The emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.
- B. The Director shall nullify any Permit if, following a hearing in accordance with RSA 541-A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

#### **XX. Inspection and Entry**

EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6, VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

#### **XXI. Certifications**

- A. Compliance Certification Report

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify for the previous calendar year that the facility is in compliance with the requirements of this permit. The report shall be submitted annually, no later than April 15<sup>th</sup> of the following year. The report shall be submitted to the DES and to the U.S. Environmental Protection Agency – Region I. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5), the report shall describe:

1. The terms and conditions of the Permit that are the basis of the certification;
  2. The current compliance status of the source with respect to the terms and conditions of this Permit, and whether compliance was continuous or intermittent during the reporting period;
  3. The methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
  4. Any additional information required by the DES to determine the compliance status of the source.
- B. Certification of Accuracy Statement

All documents submitted to the DES shall contain a certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the

requirements of 40 CFR 70.5(d) and contain the following language:

"I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents 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."

- C. All reports submitted to DES (except those submitted as emission based fees as outlined in Section XXIII of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services  
Air Resources Division  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095  
ATTN: Section Supervisor, Compliance Bureau

All reports submitted to EPA shall be submitted to the following address:

EPA-New England, Region 1  
5 Post Office Sq. Suite 100  
Mail Code OES04-2  
Boston, MA 02109-3912

## **XXII. Enforcement**

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the DES and/or EPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the Owner or Operator from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit. In accordance with 40 CFR 70.6 (a)(6)(ii), the Owner or Operator shall not claim as a defense 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 this Permit.

## **XXIII. Annual Emission Fee Requirements**



- A.** Env-A 705.02, *Annual Emission Fee*<sup>29</sup>: The owner or operator shall pay to the department an annual emission fee that includes a baseline emission fee as specified in Condition XXIII.E and an emission-based fee calculated each calendar year as per Condition XXIII.D.
- B.** Env-A 705.05, *Payment of Annual Emission Fee*: The owner or operator shall pay to the department the annual emission fee no later than May 15 for the previous calendar year's emissions. For example, the annual emission fee for the calendar year 2019 shall be received on or before May 15, 2020.
- C.** Env-A 705.03, *Determination of Actual Emissions for use in Calculating of Emission-based Fee*: The owner or operator shall determine the total actual annual emissions from all the emission units listed in Table 1 for each calendar year in accordance with the methods specified in Env-A 705.03.
- D.** Env-A 705.04, *Calculation of Emission-based Fee*: The owner or operator shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 705.04 and the following equation:

$$FEE = E * DPT$$

where:

FEE = The annual emission-based fee for each calendar year as specified in Env-A 705.

E = Total actual emissions as determined pursuant to Condition XXIII.C;

If the facility's actual annual emissions as determined by Condition XXIII.C are greater than 250 tons, the total emissions shall be adjusted by multiplying those emissions over 250 tons by a factor of 1.1 as shown below:

Adjusted E = {250 + [(actual annual emissions – 250) x 1.1]}

DPT = Dollar per ton rate, calculated by the department as per Env-A 705.04(b).

- E.** Env-A 705.06, *Payment of Annual Baseline Emission Fee*: Pursuant to Env-A 705.07(d), the annual baseline fee for this facility is \$75,000.
- F.** Pursuant to Env-A 705.06(c), if the owner or operator is not required to pay an emission-based fee for any calendar year because the Facility had zero emissions and zero hours of operation, the annual baseline fee shall be \$500 in lieu of the fee stated in Condition XXIII.E.

#### **XXIV. Duty To Provide Information**

In accordance with 40 CFR 70.6(a)(6)(v), upon the DES's written request, the Owner or Operator shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Owner or Operator shall furnish to the DES copies of records that the Owner or Operator is required to retain by this Permit. The Owner or Operator may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Env-A 103 at the time such information is submitted to DES. DES shall evaluate such requests in accordance with the provisions of Env-A 103.

#### **XXV. Property Rights**

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort,

<sup>29</sup> For additional information on annual emission fee, visit the Department's website at: <https://www.des.nh.gov/organization/divisions/air/cb/cmdps/eis/index.htm>.

or any exclusive privilege.

#### **XXVI. Severability Clause**

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

#### **XXVII. Permit Deviation**

Deviations are instances where any Permit condition is violated. In accordance with Env-A 911, *Recordkeeping and Reporting Requirements for Permit Deviations*, the Owner or Operator shall maintain records and report to the DES deviations from Permit requirements as follows:

- A. Recordkeeping Requirement - All Deviations - In accordance with Env-A 911.03, in the event of a permit deviation, the Owner or Operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels; and record the information per Env-A 911.03(b).
- B. Excess Emissions Reporting Requirement - Excess Emission Deviations Only - In the event the permit deviation causes excess emissions, the Owner or Operator of the affected device, process, or air pollution control equipment shall:
  1. Notify DES by telephone, fax, or e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)) within 24 hours of discovery of the permit deviation<sup>30</sup>; and
  2. Submit a written report in accordance with Env-A 911.04(d) within 10 days of the discovery of the permit deviation reported in Section XXVII B.
- C. Reporting Requirements for Permit Deviations Continuing for Greater Than 9 Consecutive Days - In the event the deviation does not cause an excess emission but continues for a period greater than 9 consecutive days, the Owner or Operator of the affected device, process, or air pollution control equipment shall notify DES of the information required by Env-A 911.04(a)(2) by e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)) on the tenth day of the permit deviation<sup>30</sup>.
- D. Semi-Annual Summary Report - Pursuant to Env-A 911.05, the Owner or Operator shall submit a summary of all permit deviations previously reported pursuant to Section XXVII B. and C. and a list of all permit deviations recorded pursuant to Section XXVII A. to DES in the Semi-Annual Permit Deviation and Monitoring report due January 31<sup>st</sup> and July 31<sup>st</sup> of each calendar year covering the periods of July 1<sup>st</sup> through December 31<sup>st</sup> and January 1<sup>st</sup> through June 30<sup>th</sup>, respectively, or an alternative time period approved by DES pursuant to Env-A 912.
- E. Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.

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<sup>30</sup>

Unless it is Saturday, Sunday or a state legal holiday, in which event DES shall be notified on the next business day.



Facility (Source) Name (from STEP 1)
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Acid Rain - Page 2

### **Permit Requirements**

#### **STEP 3**

Read the standard requirements.

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

### **Monitoring Requirements**

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

### **Sulfur Dioxide Requirements**

- (1) The owners and operators of each source and each affected unit at the source shall:
- (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
- (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Facility (Source) Name (from STEP 1)

### **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)

### **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)
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**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 John. M. MacDonald	
Signature <i>John M. MacDonald</i>	Date <i>Sept. 29, 2011</i>



# Phase II NO<sub>x</sub> Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9  
This submission is:  New  Revised

**STEP 1**  
Indicate plant name, State, and ORIS code from NADB, if applicable

Plant Name Newington Station	State NH	ORIS Code: 8002
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**STEP 2**

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

	ID# NT1	ID#	ID#	ID#	ID#	ID#
	Type T	Type	Type	Type	Type	Type
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase I tangentially fired boilers)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Standard annual average emission limitation of 0.66 lb/mmBtu (for cell burner boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Standard annual average emission limitation of 0.66 lb/mmBtu (for cyclone boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) NO <sub>x</sub> Averaging Plan (include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Plant Name (from Step 1) Newington Station
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**STEP 2, cont'd.**

	ID#	D#	ID#	ID#	ID#	ID#
	Type	Type	Type	Type	Type	Type
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(I)(C), (a)(2)(II)(B), or (b)(2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(p) Repowering extension plan approved or under review	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**STEP 3**  
**Read the standard requirements and certification, enter the name of the designated representative, sign &**

**Standard Requirements**

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

**Special Provisions for Early Election Units**

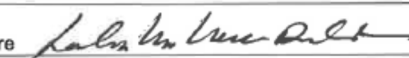
Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).

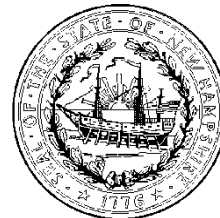
Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

**Certification**

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

Name John M. MacDonald	
Signature 	Date Sept 29, 2011



# TITLE V OPERATING PERMIT

Permit No: **TV-0053**  
Date Issued: **June 6, 2014**  
Date Reissued: **June 15, 2017**  
Administrative Amendment: **March 28, 2018**

This certifies that:

**GSP Schiller LLC**  
**431 River Road**  
**Bow, NH 03304**

has been granted a Title V Operating Permit for the following facility and location:

**Schiller Station**  
**400 Gosling Road**  
**Portsmouth, NH 03801**

**Facility ID No:** 3301500012  
**ORISPL:** 2367  
**Application No:** 11-0134 received September 30, 2011 - Renewal of Title V Operating Permit, with additional information received on May 7, 2013  
16-0117 - Response to United States Environmental Protection Agency Order for Title V Petition Number VI-2014-04  
16-0128 received August 2, 2016 - Minor Modification  
18-0008 received January 11, 2018 - Administrative Amendment

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V application referenced above, filed with the New Hampshire Department of Environmental Services under the signature of the responsible official certifying to the best of his knowledge that the statements and information therein are true, accurate and complete.

**Responsible Official(s):** James Andrews (603) 759-3874  
Elizabeth H. Tillotson (603) 634-2440

**Technical Contact(s):** Melissa A. Cole (603) 634-2335  
Tara E. Olson (603) 431-4234 ext. 555-7206

**Designated Representative:** Elizabeth H. Tillotson

**Alternate Designated Representative:** Melissa A. Cole

**Authorized Account Representative:** Elizabeth H. Tillotson

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of the Code of Federal Regulations, Title 40, Part 70.

This Permit is effective upon issuance and expires on **June 30, 2019**.



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Director, Air Resources Division

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**ABBREVIATIONS**

ARD	Air Resources Division
AAL	Ambient Air Limit
acf	actual cubic foot
ACI	Activated carbon injection
ASTM	American Society of Testing and Materials
Btu	British thermal units
CAA	Clean Air Act
CAS	Chemical Abstracts Service
CEMS	Continuous Emissions Monitoring System
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon monoxide
DER	Discrete Emission Reduction
DES	New Hampshire Department of Environmental Services
DSI	Dry sorbent injection
EGU	Electric utility steam generating unit
Env-A	New Hampshire Code of Administrative Rules - Air Resources Division
ERC	Emission Reduction Credit
ESP	Electrostatic Precipitator
ft	foot or feet
ft <sup>3</sup>	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
HCl	Hydrogen chloride
Hg	Mercury
hp	horsepower
hr	hour
LEE	Low emitting electric utility steam generating unit
lb	pound
LPG	Liquefied Petroleum Gas
LNB	Low NO <sub>x</sub> burners
MM	million
MW	megawatt
NAAQS	National Ambient Air Quality Standard
NATS	NO <sub>x</sub> Allowance Tracking System
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Oxides of Nitrogen
NSPS	New Source Performance Standard
OFA	Over-fire Air

PM <sub>10</sub>	Particulate Matter < 10 microns
ppm	parts per million
ppmv	parts per million volume
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RICE	Reciprocating Internal Combustion Engine
RSA	Revised Statues Annotated
RTAP	Regulated Toxic Air Pollutant
scf	standard cubic foot
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
STMS	Sorbent trap monitoring system
TSP	Total Suspended Particulates
tpy	tons per consecutive 12-month period
USEPA	United States Environmental Protection Agency
VER	Voluntary Emission Reduction
VOCs	Volatile Organic Compounds

## FACILITY SPECIFIC TITLE V OPERATING PERMIT CONDITIONS

### I. Facility Description of Operations

Schiller Station is a wood and fossil fuel-fired electricity generating facility, owned and operated by GSP Schiller LLC, a wholly owned subsidiary of Granite Shore Power LLC (GSP). The facility includes three utility boilers: one wood and fossil fuel-fired boiler (designated as emission unit SR5) and two fossil fuel-fired boilers (designated as emission units SR4 and SR6). All three boilers are equipped with oxygen trim systems. The facility also includes one combustion turbine (designated as emission unit SRCT). In addition to these electricity-generating units, the facility also includes an emergency generator, primary and secondary coal crushers, coal and wood handling systems and various insignificant and exempt activities. The facility exceeds the Title V major source threshold for particulate matter less than 10 microns ( $PM_{10}$ ), particulate matter less than 2.5 microns ( $PM_{2.5}$ ), sulfur dioxide ( $SO_2$ ), nitrogen oxides ( $NO_x$ ), carbon monoxide (CO), greenhouse gases and hazardous air pollutants and is therefore required to obtain a Title V operating permit.

Emission units SR4 and SR6 are equipped with electrostatic precipitators to control the emissions of particulate matter (PM), and selective non-catalytic reduction (SNCR) systems and overfire air (OFA) to control  $NO_x$  emissions. GSP operates SNCR on units SR4 and SR6 as necessary to maintain compliance with  $NO_x$  emission limits. GSP is authorized to also operate fly ash reinjection systems on SR4 & SR6. In 2016, the facility installed dry sorbent injection (DSI) and activated carbon injection (ACI) systems on SR4 and SR6 for the purpose of complying with 40 Code of Federal Regulations (CFR), Part 63, Subpart UUUUU *National Emission Standards for Hazardous Air Pollutants (NESHAP): Coal- and Oil-Fired Electric Utility Steam Generating Units* (also known as Mercury and Air Toxics Standards, or MATS). The DSI system is used to control the emissions of acid gases such as hydrogen chloride (HCl) and  $SO_2$ . Sorbents may include trona (sodium sesquicarbonate) and sodium bicarbonate. Activated carbon is used to control mercury (Hg) emissions.

Emission unit SR5 is equipped with a baghouse to control the emissions of particulate matter and a SNCR system to control  $NO_x$  emissions. SR5 is also equipped with a limestone injection system for the control of acid gases while burning coal.

Each boiler stack is equipped with a continuous emissions monitoring system (CEMS) and a continuous opacity monitoring system (COMS). SR4 and SR6 boiler stacks are each equipped with a sorbent trap monitoring system (STMS) to monitor mercury emissions.

### II. Permitted Activities

In accordance with all of the applicable requirements identified in the Permit, the Owner or Operator is authorized to operate the devices and/or processes identified in Sections III, IV, V, and VI within the terms and conditions specified in this permit.



**III. Emission Unit Identification**

**A. Significant Activities**

The activities identified in Table 1 are subject to and regulated by this Title V Operating Permit.

<b>Table 1 - Significant Activities</b>			
Emission Unit ID	Device Identification	Installation Date	Maximum Design Capacity and Permitted Fuel Type(s) <sup>1</sup>
SR4	Steam Generating Unit No. 4 with low NOx Burners (LNB) and overfire air Dry bottom wall-fired boiler Manufacturer: Foster Wheeler Model # FW Serial # 90-1628	1952	574 MMBtu/hr Bituminous coal or Bituminous coal/biomass mixture - 22.6 tons/hr 575 MMBtu/hr No. 6 fuel oil - 3,833 gal/hr
SR5	NWPP Boiler - Fluidized Bed Boiler with Overbed Feed Manufacturer: Alstom Power, Inc. Model # National Board 24237 Serial # 66008504	Commenced Construction - October 2004  Startup - July 2006	720 MMBtu/hr Wood <sup>2</sup> - 84.2 tons/hr; 635 MMBtu/hr Bituminous coal - 25 tons/hr Start-up Burner System - 115 MMBtu/hr Natural Gas - 115,000 cf/hr
SR6	Steam Generating Unit No. 6 with LNB and overfire air Dry bottom wall-fired boiler Manufacturer: Foster Wheeler Model # FW Serial # 36-3413	1957	574 MMBtu/hr Bituminous coal or Bituminous coal/biomass mixture - 22.6 tons/hr 575 MMBtu/hr No. 6 fuel oil - 3,833 gal/hr
SRCT	Combustion Turbine (Diffusion flame type) Manufacturer: Pratt & Whitney Model #FT4A-9DF	1970	290 MMBtu/hr Distillate fuel oil (e.g. #2 fuel oil, JP-4 fuel oil, kerosene-1) - 2,070 gal/hr or Natural gas - 290,000 cf/hr

<sup>1</sup> The fuel consumption rates presented in Table 4 are based on the following assumed heating values:

- Bituminous coal - 12,700 Btu/lb;
- No. 6 fuel oil - 150,000 Btu/gal;
- Distillate Oil - 140,000 Btu/gal
- Wood - 4,275 Btu/lb;
- Natural Gas - 1,000 Btu/ft<sup>3</sup>; and
- Propane - 94,000 Btu/gal.

The maximum fuel consumption of the unit may vary based on the actual heat content of the fuel burned.

<sup>2</sup> For the purposes of this permit, “wood” is defined as whole tree chips, stump grindings, ground pallets, untreated byproducts or residue from forest products manufacturing operations or from construction. Wood does not include pressure treated wood products, wood from demolitions, or wood products containing glues or binders (including but not limited to plywood, particle board, oriented strand board, or similar products).

Table 1 - Significant Activities			
Emission Unit ID	Device Identification	Installation Date	Maximum Design Capacity and Permitted Fuel Type(s) <sup>1</sup>
SRCC	Primary Coal Crusher Manufacturer: Pennsylvania Crusher Model # TK-7-32 Serial # 2496	1952	350 tons/hr of coal
SRCC2	Secondary Coal Crusher Manufacturer: Pennsylvania Crusher Model # BC-150044 FB Coalpactor Serial # 6914	2006	350 tons/hr of coal
SREG	235 hp Emergency Generator Manufacturer - Onan Model # H884V Serial # NA	1968	1.5 MMBtu/hr Natural gas - 1500 cf/hr Propane - 16 gal/hr
SRSB	White Building Heating System Steam Boiler Manufacturer: Weil-McLain	2002	0.175 MMBtu/hr No. 2 Fuel oil

**B. Stack Criteria**

The following devices at the Facility shall have exhaust stacks that discharge vertically, without obstruction, and meet the criteria in Table 2:

Table 2 - Stack Criteria			
Stack #	Emission Unit #	Minimum Height (feet above ground surface)	Maximum Exit Diameter (feet)
STSR4	SR4	226	8
STSR5	SR5	231	8
STSR6	SR6	226	8
STSRCT	SRCT	20	10.5 x 14

**IV. Insignificant Activities Identification**

All activities at this facility, which meet the criteria identified in Env-A 609.04, shall be considered insignificant activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this permit.

**V. Exempt Activities Identification**

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this permit.

**VI. Pollution Control Equipment Identification**

With the exception of SR4-PC2 and SR6-PC2, air pollution control equipment or techniques listed in Table 3 shall be operated at all times that the associated devices are operating in order to meet permit conditions. The facility may operate SR4-PC2 and SR6-PC2 as necessary to maintain compliance with the NO<sub>x</sub> emission limits.

<b>Table 3 - Pollution Control Equipment Identification</b>			
Pollution Control Equipment ID	Description	Purpose	Emission Unit Controlled
SR4 -PC1	Electrostatic Precipitator (ESP)	For control of particulate matter	SR4
SR4-PC2	Selective Non-Catalytic Reduction (SNCR) System	For control of NO <sub>x</sub>	SR4
SR4-PC3	Dry Sorbent Injection (DSI) System	For control of acid gases	SR4
SR5-PC1	SNCR System	For control of NO <sub>x</sub>	SR5
SR5-PC2	Limestone Injection System (for coal combustion) <sup>3</sup>	For control of sulfur dioxide & hydrogen chloride (acid gases)	SR5
SR5-PC3	Baghouse (fabric filter)	For control of particulate matter	SR5
SR6-PC1	ESP	For control of particulate matter	SR6
SR6-PC2	SNCR System	For control of NO <sub>x</sub>	SR6
SR6-PC3	Dry Sorbent Injection System	For control of acid gases	SR6
SR4 & SR6-PC4	Activated Carbon Injection System <sup>4</sup>	For control of mercury	SR4 & SR6

<sup>3</sup> Throughout this permit, “(for coal combustion)” indicates that the requirement only applies when coal is being combusted in boiler SR5. For example, limestone injection is only required when coal is combusted in SR5.

<sup>4</sup> A single activated carbon injection system serves both units SR4 & SR6.

**VII. Alternative Operating Scenarios**

The Owner or Operator is authorized to operate under the alternative operating scenarios listed in this condition. While operating under an alternative operating scenario, the Owner or Operator shall comply with all conditions for the scenario, and all other requirements specified in this permit.

**A. Trial Test Burns with Other Fuels in SR4 & SR6 (Permits to Operate Nos. PO-B-1629 and PO-B-1631)**

Prior to the use of any fuel other than fuels previously reviewed and approved by the DES, the Owner or Operator shall submit a proposal to the DES, which shall include, but not be limited to the following:

1. Type of fuel;
2. Analysis data of the fuel proposed, which shall include proximate and ultimate analysis, volatile and semi-volatile analyses (i.e., EPA Method 8240, 8260, 8250, or 8270) and metals analysis (i.e., Method 3050 and mercury).
3. Specification of baseline operating conditions for the emission unit including:
  - a. Coal feed rate;
  - b. Percent moisture of coal feed;
  - c. ESP operating conditions;
  - d. Opacity;
  - e. Emission values of SO<sub>2</sub>, NO<sub>x</sub>, TSP, PM<sub>10</sub>, PM<sub>2.5</sub> (both filterable and condensable for PM<sub>10</sub> and PM<sub>2.5</sub>), CO; and
  - f. Emission values of any other regulated air pollutant which could be effected by the new fuel.
4. A comprehensive test plan, which shall present the proposed operating conditions for the trial burn, to include but not be limited to the following:
  - a. Length of fuel trial;
  - b. New fuel rate;
  - c. Means of measuring new fuel feed;
  - d. Description of new fuel feed process;
  - e. New fuel preparations;
  - f. Percent moisture of new fuel feed;
  - g. Time table for operation stability;
  - h. Coal feed rate;
  - i. Coal percent moisture;
  - j. ESP operating conditions;
  - k. Expected emission values of opacity, SO<sub>2</sub>, NO<sub>x</sub>, TSP, PM<sub>10</sub>, PM<sub>2.5</sub> (both filterable and condensable for PM<sub>10</sub> and PM<sub>2.5</sub>), CO, ammonia slip (if applicable) and any regulated air pollutant or regulated toxic air pollutant (if applicable) which could be effected by the new fuel;

- l. The methods, frequency, and schedule of pollutant emission monitoring/testing and recording that will be conducted prior to, during, and for a short time after the fuel trial. CEMS data is preferred where available. Stack testing may be requested by DES, if warranted;
  - m. The methods, frequency, and schedule of operational parameters monitoring and recording, which shall include, but not be limited to steam flows, boiler temperatures, oxygen, and ammonia flow;
  - n. A compliance stack test protocol for any pollutants for which stack testing will be used to measure emissions, if applicable;
  - o. The effects of the new fuel on fly ash characteristics and resulting effect on the ESP operation;
  - p. The effects of the new fuel on bottom ash characteristics;
  - q. Specification and description of expected operational and combustion conditions when the trial burn has reached stabilization with the new fuel feed; and
  - r. A timetable or schedule with approximate dates of the trial test burn.
5. Based on information regarding the proposed trial fuel burn provided by the Owner or Operator, DES may request additional specific information on the proposed trial burn operations. In addition, DES may request additional monitoring and/or stack testing, depending upon DES' review of the proposal.
6. The Owner or Operator will not commence the trial burn prior to receiving written approval from the Department. The Department will attempt to respond within 30 days of receipt of a proposal with approval, conditional approval, denial, or request for additional information.
7. Department approval under this section does not supersede any other federal, state or municipal approvals that may be necessary for the trial burn. The Owner or Operator is responsible for obtaining any other necessary approvals.
8. A summary report shall be submitted to DES within 60 days after the end of the trial fuel burn, which shall include a summary of operational results and trends, emission values to include CEM and stack test data, and proposed future use of fuel.

**B. Fuel Blending Requirements for SR4 & SR6 (Permits to Operate Nos. PO-B-1629 and PO-B-1631) - State Enforceable Only**

DES grants the Owner or Operator a waiver from Env-A 1604 to purchase oil containing sulfur greater than 2.0% by weight - provided that it is blended with other fuel such that no fuel with a sulfur content exceeding the limit of 2.0 percent by weight as specified in Condition VIII, Table 5, Item 2 is combusted at the facility. This oil shall be used for blending purposes only. The Owner or Operator shall comply with the requirements listed below when purchasing oil greater than 2.0% sulfur:

1. Prior to accepting any shipment of oil containing greater than 2.0% sulfur by weight, the Owner or Operator shall contact DES by fax or telephone.
2. Delivery of greater than 2.0% sulfur oil shall be to segregated storage tanks which do not directly supply fuel to any combustion devices.
3. Greater than 2.0% sulfur oil shall be mixed with less than 2.0% sulfur oil in a tank in which the "sparging system" shall be in full operation to assure complete mixing of the blended oil.
4. After mixing for an appropriate amount of time to assure complete blending, samples from the top, middle, and bottom of the tank shall be collected and analyzed in accordance with method ASTM D 4294. The sample results shall be averaged to create a composite figure in accordance with the Owner or Operator procedures.
5. After sampling is complete and the test results indicate that the tank of blended oil is less than 2.0% sulfur by weight, the oil may be transferred to tanks used to supply fuel for combustion devices (e.g., the Schiller day tank).
6. The Owner or Operator shall provide DES with all analytical data from samples collected from all blending operations that utilize greater than 2.0% sulfur by weight oil. This data shall provide DES with specific sulfur analysis information on the oil feeding the boilers and confirm that each blend is less than or equal to 2.0% sulfur by weight.

**C. Fly Ash Reinjection in SR4 & SR6 (Permits to Operate Nos. PO-B-1629 and PO-B-1631)**

1. The Owner or Operator is authorized to maintain and operate fly ash injection systems for emission units SR4 and SR6.
2. The fly ash injection system is comprised of a system of blowers and piping that allow fly ash from the precipitator hoppers and silo storage area to be reinjected into the burners of the boilers.
3. SR4-PC1 or SR6-PC1 shall be energized prior to start-up of the fly ash reinjection system for SR4 or SR6, respectively.

**VIII. Applicable Requirements**

**A. State-only Enforceable Operational and Emission Limitations**

The Owner or Operator shall be subject to the state-only<sup>5</sup> operational and emission limitations identified in Table 4 below:

<b>Table 4 - State-only Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Requirement</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1.	<u>24-hour and Annual Ambient Air Limit<sup>6</sup></u> The emissions of any Regulated Toxic Air Pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual Ambient Air Limit (AAL) as set forth in Env-A 1450.01, <i>Table Containing the List Naming All Regulated Toxic Air Pollutants</i> .	Facility Wide	Env-A 1400
2.	<u>Revisions of the List of RTAPs</u> In accordance with RSA 125-I:5 IV, if the Division revises the list of RTAPs or their respective AALs or classifications under RSA 125-I:4, II and III, and as a result of such revision the Owner or Operator is required to obtain or modify the permit under the provisions of RSA 125-I or RSA 125-C, the Owner or Operator shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such permit or permit modification.	Facility Wide	RSA 125-I:5 IV
3.	<u>Activities Exempt from Visible Emission Standards</u> For those devices installed on or prior to May 13, 1970, having a gross heat input equal to or greater than 500 MMBtu/hr and equipped with automatic soot blowers, the average opacity shall be allowed to be in excess of 40% percent for a non-overlapping set or sets of time up to 60 minutes in any 8-hour period during startup, shutdown, malfunction, soot blowing, grate cleaning, and cleaning of fires.	SR4 & SR6	Env-A 2002.04(b) (effective 4-23-2005)
4.	<u>Activities Exempt from Visible Emission Standards</u> For those steam generating units subject to 40 CFR 60, no more than one of the following two exemptions shall be taken: a.) During periods of startup, shutdown and malfunction, average opacity shall be allowed to be in excess of 20% for one period of 6 continuous minutes in any 60-minute period; or b.) During periods of normal operation, soot blowing, grate cleaning, and cleaning of fires, average opacity shall be allowed to be in excess of 20% but not more than 27% for one period of 6 continuous minutes in any 60-minute period.	SR5	Env-A 2002.04(a) (effective 4-23-2005)
5.	<u>Activities Exempt from Visible Emission Standards</u> The average opacity shall be allowed to be in excess of those standards specified in Env-A 2002.02 for one period of 6 continuous minutes in any 60 minute period during startup, shutdown or malfunction.	SRCT	Env-A 2002.04(c) (effective 4-23-2005)
6.	<u>Activities Exempt from Visible Emission Standards</u> Exceedances of the opacity standard in Env-A 2002 shall not be considered violations	SR4, SR5 & SR6	Env-A 2002.04(d), (e), and (f)

<sup>5</sup> The term “state-only requirement” is used to refer to those requirements that are not federally enforceable but are state requirements as defined in Env-A 101.186.

<sup>6</sup> Env-A 1400, *Regulated Toxic Air Pollutants* is typically updated annually. Updates can be found at: <http://www.des.state.nh.us/organization/commissioner/legal/rules/index.htm#air>

**Table 4 - State-only Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
	if the Owner or Operator demonstrates to DES that such exceedances: a.) Were the result of the adherence to good boiler operating practices which, in the long term, result in the most efficient or safe operation of the boiler; b.) Occurred during periods of cold startup of a boiler over a continuous period of time resulting in efficient heat-up and stabilization of its operation and the expeditious achievement of normal operation of the unit; c.) Occurred during periods of continuous soot blowing of the entire boiler tube section over regular time intervals as determined by the operator and in conformance with good boiler operating practice; or d.) Were the result of the occurrence of an unplanned incident in which the opacity exceedance was beyond the control of the operator and in response to such incident, the operator took appropriate steps in conformance with good boiler operating practice to eliminate the excess opacity as quickly as possible.		(effective 4-23-05)
7.	<u>Sulfur Content Limitations for Gaseous Fuels</u> Gaseous fuels shall contain no more than 15 grains of sulfur per 100 cubic feet of gas at standard temperature and pressure.	Facility wide	Env-A 1605.01 (effective 4-23-05)
8.	<u>Precautions to Prevent, Abate, and Control Fugitive Dust</u> a.) Prevent, abate, and control fugitive dust emissions, including fugitive coal dust. b.) During coal handling <sup>7</sup> , operate in accordance with best management practices, which may include the use of covers on the exposed, nonworking areas of the coal piles and the use of dust suppressants, especially during coal unloading.	Facility wide	Env-A 1002 (effective 5-1-11) & Env-A 1400
9.	<u>Mercury Emissions - Compliance</u> Total mercury emissions from the affected sources as defined in RSA 125-O:12 shall be at least 80 percent less on an annual basis than the baseline mercury input, as defined in RSA 125-O:12, III.	Units MK1 & MK2 at Merrimack Station and Units SR4 & SR6 at Schiller Station	RSA 125-O:13, II

<sup>7</sup> To comply with this provision, GSP shall manage and minimize fugitive coal dust in accordance with Best Management Practice policies established by GSP in their standard operating procedures for:

- Coal Unloading BMPs (No. Z-1)
- Unloading coal from the dock (No. C-5)
- Bunkering during cold weather (No. C-20)
- Dust suppression system operation (No. C-1)
- Schiller Dock Personnel (No. C-6)



**B. Federally Enforceable Operational and Emission Limitations**

The Owner or Operator shall be subject to the federally enforceable operational and emission limitations identified in Table 5 below:

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Requirement</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1.	<u>NOx Reasonably Available Control Technology Requirements for Dry Bottom Utility Boilers Firing Coal and/or Oil</u> NOx emissions from each face-fired boiler shall be limited to 0.50 lb/MMBtu of heat input based on 24-hr calendar day average.	SR4 & SR6	Env-A 1303.06(b) (formerly Env-A 1211.03(c)(2)(b))
	<u>Federal Acid Rain NO<sub>x</sub> Emission Reduction Program</u> NOx emissions from each dry bottom wall-fired boiler shall be limited to 0.46 lb/MMBtu of heat input based on an annual average.		
2.	<u>Maximum Sulfur Content Allowable in Liquid Fuels</u> The sulfur content of No. 6 fuel oil (as combusted) shall not exceed 2.00 percent sulfur by weight.	SR4 & SR6	Env-A 1604.01(c)(2)
3.	<u>Maximum Sulfur Content Allowable in Coal</u> The sulfur content of coal (as combusted) shall be limited to 1.3 lb/MMBtu gross heat content based on a 3-month rolling average.	SR4 & SR6	PO-B-1629 & PO-B-1631 <i>More stringent than Env-A 1606.01(a)</i>
4.	<u>Coal/Biomass Fuel Mixture Limitations</u> Bituminous coal/biomass mixture shall be limited to no more than 10 percent by weight of biomass, which is a non-exempt fuel under Env-A 624.	SR4 & SR6	Env-A 624.01(b)(3)
5.	<u>Oil Fire Light-off Limitation</u> Natural gas or propane shall be used to light-off oil fires.	SR4 & SR6	PO-B-1629 & PO-B-1631
6.	<u>Sulfur dioxide Emission Standard</u> SO <sub>2</sub> emissions from each unit shall be limited to 0.83 lb/MMBtu of heat input based on a boiler operating day <sup>8</sup> average. This limit applies at all times, including startup and shutdown.	SR4 & SR6	Env-A 616.01 & 40 CFR 51.1204
7.	<u>NESHAP for Coal-Fired Electric Utility Steam Generating Units (EGUs) - Particulate matter</u> a.) Filterable particulate matter emissions <sup>9</sup> shall be limited to 0.030 lb/MMBtu. b.) The averaging time for emission limitation is determined by the test methods provided in Table 5 to Subpart UUUUU or on a 30-boiler operating day rolling average if CMS is used. c.) An EGU may qualify for low emitting EGU (LEE) status for PM if the performance tests conducted in accordance with §63.10007 for 3 consecutive years demonstrate that the emissions are less than 50 percent of the emission limit specified above.	SR4 & SR6	40 CFR §§63.9991 & 63.10005(h)

<sup>8</sup> Boiler operating day means a 24-hour period that begins at midnight and ends the following midnight during which any fuel is combusted at any time in the boiler. It is not necessary for the fuel to be combusted the entire 24-hour period.

<sup>9</sup> The 0.030 lb/MMBtu MATS emission limit for particulate matter is streamlined with the 0.10 lb/MMBtu PM emission limit contained in the State Permits to Operate: PO-B-1629 and PO-B-1631.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
8.	<p><u>NESHAP for Coal and Oil-Fired Electric Utility Steam Generating Units<sup>10</sup></u>                      Comply with the applicable requirements of 40 CFR 63 Subpart UUUUU <i>National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units</i>:</p> <p>a.) By completing the installation of all required pollution control equipment by April 16, 2016; and</p> <p>b.) Demonstrating compliance by conducting the required initial performance tests and tune-up by October 13, 2016.</p>	SR4 & SR6	TP-0157, 40 CFR 63.9984 & 40 CFR 63.6
9.	<p><u>Emission Standards for TSP and PM<sub>10</sub></u>                      TSP and PM<sub>10</sub> emissions shall be limited to:</p> <p>a.) 0.025 lb/MMBtu of heat input on an hourly basis<sup>11</sup>;</p> <p>b.) 0.01 lb/MMBtu of heat input based on a 24-hr calendar day average;</p> <p>c.) 7.2 lb/hr based on a 24-hr calendar day average; and</p> <p>d.) 31.5 tpy.</p>	SR5	TP-B-0501, 40 CFR 63 Subpart B (Case-by-Case MACT) <sup>12</sup> <i>More stringent than Env-A 2002.08</i>
10.	<p><u>New Source Performance Standards (NSPS) Emission Standards for TSP</u>                      a.) TSP emissions shall be limited to 0.03 lb/MMBtu of heat input based on a 30-day rolling average.                      b.) Pursuant to 40 CFR 60.48Da(a), the TSP emission standard apply at all times except during periods of startup, shutdown, or malfunction.</p>	SR5	40 CFR 60.42Da(a) & 40 CFR 60.48Da(a) NSPS Subpart Da
11.	<p><u>Emission Standards for SO<sub>2</sub></u>                      SO<sub>2</sub> emissions shall be limited to:</p> <p>a.) 0.12 lb/MMBtu of heat input while firing coal based on a 24-hr calendar day average;</p> <p>b.) 0.02 lb/MMBtu of heat input while firing wood based on a 24-hr calendar day average;</p> <p>c.) 76.2 lb/hr based on a 24-hr calendar day average; and</p> <p>d.) 333.8 tpy.</p>	SR5	TP-B-0501 & Env-A 604.02(a)(1) Potential to Emit <sup>13</sup>

<sup>10</sup> SR5 is a dual fuel unit and is permitted to combust bituminous coal and wood. Currently SR5 combusts 100% wood and therefore not an “affected source” under 40 CFR 63 Subpart UUUUU. If SR5 combusts coal for more than 10.0 percent of the average annual heat input during any 3 consecutive calendar years or for more than 15.0 percent of the annual heat input during any one calendar year, SR5 will be subject to 40 CFR 63, Subpart UUUUU.

<sup>11</sup> The 0.025 lb/MMBtu TSP emission limit is streamlined with the 0.1 lb/MMBtu TSP emission limit contained in Env-A 2002.08 *Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985*.

<sup>12</sup> Particulate matter emission limit established via case-by-case MACT review is more stringent than 40 CFR 63 Subpart DDDDD limit of 0.11 lb/MMBtu.

<sup>13</sup> This condition was established in TP-B-0501 to ensure that the facility operates in the manner presented in the application for that permit upon which regulatory review was based.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
12.	<p><u>NSPS Emission Standards for SO<sub>2</sub></u><sup>14</sup> SO<sub>2</sub> emissions shall be limited to:</p> <p>a.) During any calendar quarter in which 25% or more of the heat input is from fossil fuel:</p> <ol style="list-style-type: none"> <li>1.) 1.20 lb/MMBtu of heat input and 10 percent of the potential combustion concentration (90 percent reduction) based on a 30-day rolling average;</li> <li>2.) 30 percent of the potential combustion concentration (70 percent reduction), based on a 30-day rolling average, when emissions are less than 0.60 lb/MMBtu heat input;</li> <li>3.) 1.4 lb/MWh gross energy output; or</li> <li>4.) 0.15 lb/MMBtu heat input.</li> </ol> <p>b.) During any calendar quarter in which less than 25% of the heat input is from fossil fuel:</p> <ol style="list-style-type: none"> <li>1.) 1.20 lb/MMBtu of heat input based on a 30-day rolling average basis.</li> </ol> <p>c.) Pursuant to 40 CFR 60.48Da(a), the NSPS SO<sub>2</sub> emission standards apply at all times except during periods of startup, shutdown, or malfunction.</p>	SR5	40 CFR 60.43Da(a), (d)(2) & (g) and 40 CFR 60.48Da(a) NSPS Subpart Da
13.	<p><u>Emission Standards for NO<sub>x</sub></u> Except as provided in Table 5, Item 15, NO<sub>x</sub> emissions shall be limited to:</p> <ol style="list-style-type: none"> <li>a.) 0.075 lb/MMBtu of heat input based on a 24-hr calendar day average;</li> <li>b.) 54.0 lb/hr based on a 24-hr calendar day average; and</li> <li>c.) 236.5 tpy.</li> </ol>	SR5	TP-B-0501, NO <sub>x</sub> RACT Order ARD-06-001 & Potential to Emit <sup>15</sup> Env-A 604.02(a)(1)
14.	<p><u>NSPS Emission Standards for NO<sub>x</sub></u><sup>13</sup> NO<sub>x</sub> emissions shall be limited to:</p> <ol style="list-style-type: none"> <li>a.) 1.6 lb/MWh gross energy output based on a 30-day rolling average.</li> <li>b.) Pursuant to 40 CFR 60.48Da(a), the NSPS NO<sub>x</sub> emission standard applies at all times except during periods of startup, shutdown, or malfunction.</li> </ol>	SR5	40 CFR 60.44Da (d)(1) & 40 CFR 60.48Da(a) NSPS Subpart Da
15.	<p><u>Startup/Shutdown Emission Standards for NO<sub>x</sub></u></p> <ol style="list-style-type: none"> <li>a.) During periods of startup or shutdown, NO<sub>x</sub> emissions shall be limited to 0.15 lb/MMBtu based on a 24-hr calendar day average.</li> <li>b.) This limit shall apply only during the calendar days on which the startup or shutdown is occurring, not to exceed two calendar days per startup or shutdown.</li> <li>c.) Startup is defined as the period from when fuel is first fired in the boiler to when the unit begins generating electricity at 50% capacity (25 MW).</li> <li>d.) Shutdowns related to malfunctions are not eligible for the startup/shutdown emission limit.</li> </ol>	SR5	TP-0085 & Potential to Emit <sup>16</sup> Env-A 604.02(a)(1)

<sup>14</sup> Per DES letter dated June 16, 2006, the Owner or Operator is authorized to document compliance with the 30-day rolling NSPS standards for SO<sub>2</sub> and NO<sub>x</sub> on a 24-hour daily averaging period ( i.e., calendar day basis).

<sup>15</sup> This condition was established in TP-B-0501 to ensure that the facility operates in the manner presented in the application for that permit upon which regulatory review was based.

<sup>16</sup> This condition was established in TP-0085 to ensure that the facility operates in the manner presented in the application for that permit. upon which regulatory review was based.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
16.	<p><u>Best Available Control Technology (BACT) Emission Standards for CO</u></p> <p>a.) CO emissions shall be limited to:</p> <ol style="list-style-type: none"> <li>1.) 0.10 lb/MMBtu of heat input when operating at 50% load or greater, based on a 24-hr calendar day average;</li> <li>2.) 72.0 lb/hr when operating at 50% load or greater, based on a 24-hr calendar day average; and</li> <li>3.) 315.4 tpy.</li> </ol> <p>b.) To minimize CO emissions, follow good combustion practices.</p>	SR5	TP-B-0501 & Env-A 619 BACT
17.	<p><u>Maximum Achievable Control Technology (MACT) Emission Standard for CO</u></p> <p>a.) Prior to January 31, 2016, CO emissions shall be limited to 400 parts per million volume (ppmv) on a dry basis corrected to 7% oxygen based on a 30-day rolling average.</p> <p>-----</p> <p>b.) On or after January 31, 2016, CO emissions shall be limited to 310 ppmv on a dry basis corrected to 3% oxygen based on a 30-day rolling average.</p>	SR5	40 CFR 63 Subpart B (Case-by-Case MACT)
		SR5	40 CFR 63 NESHAP Subpart DDDDD
18.	<p><u>Emission Standards for VOCs</u></p> <p>VOC emissions shall be limited to:</p> <ol style="list-style-type: none"> <li>a.) 0.005 lb/MMBtu of heat input based on a 24-hr calendar day average;</li> <li>b.) 3.6 lb/hr based on a 24-hr calendar day average; and</li> <li>c.) 15.8 tpy.</li> </ol>	SR5	TP-0085 & Potential to Emit <sup>17</sup> Env-A 604.02(a)(1)
19.	<p><u>MACT Emission Standard for Hydrogen Chloride</u></p> <p>a.) Prior to January 31, 2016, hydrogen chloride emissions shall be limited to 0.02 lb/MMBtu of heat input.</p>	SR5	TP-B-0501 & 40 CFR 63 Subpart B (Case-by-Case MACT)
	<p>b.) On or after January 31, 2016, HCl emissions shall be limited to 0.022 lb/MMBtu of heat input.</p>	SR5	40 CFR 63 NESHAP Subpart DDDDD
20.	<p><u>MACT Emission Standard for Mercury</u></p> <p>Mercury emissions shall be limited to 0.000003 lb/MMBtu of heat input.</p>	SR5	TP-B-0501 & 40 CFR 63 Subpart B (Case-by-Case MACT) <sup>18</sup>

<sup>17</sup> This condition was established in TP-0085 to ensure that the facility operates in the manner presented in the application for that permit. upon which regulatory review was based.

<sup>18</sup> Mercury emission limit established via case-by-case MACT review is more stringent than 40 CFR 63 Subpart DDDDD limit of 0.0000057 lb/MMBtu.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
21.	<u>Ammonia Slip Emission Standard</u> Ammonia slip from SNCR system shall be limited to 10 ppmvd @ 7% O <sub>2</sub> .	SR5-PC1	TP-B-0501
	Ammonia slip from each SNCR system shall be limited to 10 ppmvd @ 10% O <sub>2</sub> .	SR4-PC2 & SR6-PC2	PO-B-1629 & PO-B-1631
22.	<u>Maximum Sulfur Content Allowable in Coal</u> The sulfur content of coal burned in devices placed in operation after April 15, 1970 shall be limited to: a.) 1.5 lb/MMBTU gross heat content; and b.) 1.0 lb/MMBTU gross heat content, averaged over any consecutive 3-month period.	SR5	Env-A 1606.01(b)
23.	<u>General Compliance Requirements</u> a.) Comply with the requirements of 40 CFR 63 Subparts B & DDDDD including all applicable emission limits at all times the affected unit is operating, except during periods of startup <sup>19</sup> and shutdown <sup>20</sup> (as defined in 40 CFR 63.7575), during which time the Owner or Operator must comply with items b, c & d below. b.) During startup: 1.) Use only natural gas to startup the boiler. <sup>21</sup> 2.) Start limestone injection (for coal combustion), fabric filter and SNCR systems as expeditiously as possible. c.) Operate all continuous monitoring systems (CMS) during startup and shutdown. d.) Collect monitoring data during periods of startup and shutdown, as specified in 40 CFR 63.7535(b).	SR5	40 CFR 63.7500 NESHAP Subpart DDDDD
	e.) At all times, the Owner or Operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.	SR5 & SRSB	

<sup>19</sup> For the purpose of Subpart DDDDD, startup means the first-ever firing of fuel in a boiler or process heater for the purpose of supplying useful thermal energy for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy from the boiler or process heater is supplied for heating, and/or producing electricity, or for any other purpose.

<sup>20</sup> For the purpose of Subpart DDDDD, shutdown means the period in which cessation of operation of a boiler or process heater is initiated for any purpose. Shutdown begins when the boiler or process heater no longer supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes and/or generates electricity or when no fuel is being fed to the boiler or process heater, whichever is earlier. Shutdown ends when the boiler or process heater no longer supplies useful thermal energy (such as steam or heat) for heating, cooling, or process purposes and/or generates electricity, and no fuel is being combusted in the boiler or process heater.

<sup>21</sup> 40 CFR 63.7505(a) requires the use of "clean fuels" specified in Table 3 of Subpart DDDDD for the startup of the boiler. Natural gas is used for the startup of SR5.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
24.	<u>Work Practice Standards</u> a.) No later than January 31, 2016, conduct an initial tune-up of the boiler as specified in Table 7, Item 44; and b.) No later than January 31, 2016, conduct a one-time energy assessment as specified in Table 7, Item 45.	SR5 & SRSB	40 CFR 63.7510(e)
25.	<u>Visible Emission Standard</u> Average opacity shall be limited to 10 percent based on a 1-hr block average.	SR5	40 CFR 63 Subpart B (Case-by-Case MACT) <i>More stringent than</i> 40 CFR 63.7540(a)(1) & Env-A 2003.02
26.	<u>Operating Limits</u> a.) Following each performance test and until the next performance test: 1.) Maintain the 30-day rolling average operating load of the affected unit such that it does not exceed 110 percent of the highest hourly average operating load recorded during the most recent performance test; and 2.) Maintain the 30-day rolling average sorbent injection rate (for coal combustion) at or above the minimum sorbent injection rate as defined in 40 CFR 63.7575. b.) Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed above except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. c.) Operating limits must be confirmed or reestablished during performance tests.	SR5	40 CFR 63.7520(c) & 40 CFR 63.7540(a)(1)
27.	<u>Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970</u> The average opacity from fuel burning devices installed after May 13, 1970 shall not exceed 20 percent for any continuous 6-minute period. <sup>22</sup>	SRCT	Env-A 2002.02 (effective 4-23-2005) (formerly Env-A 1202)
28.	<u>Particulate Emission Standards for Fuel Burning Devices Installed After May 13, 1970, but before January 1, 1985</u> The particulate matter emissions from fuel burning devices installed after May 3, 1970, but before January 1, 1985 shall not exceed 0.10 lb/MMBtu.	SRCT	Env-A 2002.07(c)(3)
29.	<u>NO<sub>x</sub> RACT for Load Shaving Units</u> NO <sub>x</sub> emissions from stationary combustion turbines used as load shaving units shall be limited to 0.90 lb/MMBtu heat input based on an hourly average.	SRCT	Env-A 1313.02(a) effective 10-31-10 (formerly Env-A 1211.13)
30.	<u>NO<sub>x</sub> RACT for Combustion Turbines</u> If the actual NO <sub>x</sub> emissions from the load shaving unit exceeds 50 tpy, the load shaving unit shall immediately become subject to the requirements of Env-A 1306.	SRCT	Env-A 1313.01(b) effective 10-31-10 (formerly 1211.13(d))

<sup>22</sup> Compliance with visible emission limitations shall be determined using 40 CFR 60, Appendix A, Method 9, upon request by the Division.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
31.	<u>Maximum Sulfur Content Allowable in Liquid Fuels</u> The sulfur content of fuel oil shall be limited to 0.05 percent sulfur by weight.	SRCT	TP-0106 & Env-A 607.01(w) <i>More stringent than</i> Env-A 1604.01(a)
32.	<u>Fuel Usage Limitation for SRCT</u> Fuel oil consumption in the SRCT shall be limited to 13,900,000 gallons in any consecutive 12-month period.	SRCT	TP-0106 & Env-A 607.01(w)
33.	<u>Visible Emissions</u> Visible fugitive emissions or visible stack emissions shall not exceed an average of 20 percent opacity for any continuous 6-minute period.	SRCC	PO-BP-2688
34.	<u>NSPS for Coal Preparation Plants</u> Visible emissions from the SRCC2 coal processing and conveying equipment, coal storage system, or coal transfer and loading system shall be limited to 20 percent opacity for any continuous 6-minute period.	SRCC2	40 CFR 60.254(a) NSPS Subpart Y
35.	<u>Operating Requirements for Coal Crushers</u> a.) The primary & secondary coal crushers and granulator shall be fully enclosed in a building to reduce fugitive emissions. b.) If excess visible emissions or breaks in the structure of the enclosures are observed, the Owner or Operator shall make appropriate repairs as expeditiously as possible. c.) The Owner or Operator shall use best management practices <sup>23</sup> to control fugitive emissions from the process equipment, unloading area, and the fuel storage areas.	SRCC & SRCC2	PO-BP-2688 & TP-B-0501
36.	<u>NSPS General Provisions</u> a.) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. b.) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.	SR5 & SRCC2	40 CFR 60.11(d) & 40 CFR 60.11(g)
37.	<u>Visible Emission Standard for Fuel Burning Devices Installed on or Prior to May 13, 1970</u> The average opacity from fuel burning devices installed on or prior to May 13, 1970 shall not exceed 40 percent for any continuous 6-minute period.	SR4, SR6 & SREG	Env-A 2002.01 (effective 4-23-2005, formerly Env-A 1202)

<sup>23</sup> See the Owner or Operator’s Best Management Practices for Coal Unloading (No. Z-1), Unloading coal from the dock (No. C-5), Bunkering during cold weather (No. C-20), Dust suppression system operation (No.C-1) and Schiller Dock Personnel (No. C-6).

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
38.	<p><u>Particulate Emission Standards for Fuel Burning Devices Installed on or Prior to May 13, 1970</u>                      TSP emissions from fuel burning devices installed on or prior to May 13, 1970 shall not exceed 0.60 lb/MMBtu of heat input.</p>	SREG	Env-A 2002.02 (effective 4-23-2005, formerly Env-A 1202)
39.	<p><u>Emergency Generators</u>                      Each emergency generator shall only operate:                      a.) As a mechanical or electrical power source when the primary power source for the Facility has been lost during an emergency such as a power outage; or                      b.) During normal maintenance and testing as recommended by the manufacturer.</p>	SREG	Env-A 1302.15 (effective 10-31-2010, formerly Env-A 1211.02(o))
40.	<p><u>Emergency Stationary Reciprocating Internal Combustion Engine (RICE) Operating Requirements</u>                      SREG shall be operated as follows:                      a.) Change oil and filter every 500 hours or annually, whichever comes first.                      b.) In lieu of “a” above, sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(j) in order to extend the specified oil change requirement in Table 2c of 40 CFR 63 Subpart ZZZZ.                      c.) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.                      d.) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.                      e.) Minimize the RICE's time spent at idle and minimize the RICE's startup time at startup to a period needed for appropriate and safe loading of the RICE, not to exceed 30 minutes.                      f.) Operate and maintain the RICE according to the manufacturer's emission-related operation and maintenance instructions.</p>	SREG	40 CFR 63.6602 NESHAP Subpart ZZZZ
41.	<p><u>Operating Limitations for Emergency Stationary RICE<sup>24</sup></u>                      a.) The emergency RICE shall be limited to 500 hours of operation during any consecutive 12-month period.                      b.) The emergency RICE shall be limited to 100 hours per year of operation for maintenance checks and readiness testing.</p>	SREG	40 CFR 63.6640(f)(2)(i) NESHAP Subpart ZZZZ & Env-A 1301.02(j)(1)
42.	<p><u>NESHAP General Provision</u>                      a.) Maintain compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to the Owner or Operator at all times.                      b.) At all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Owner/Operator to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p>	SREG	40 CFR 63.6605 NESHAP Subpart ZZZZ

<sup>24</sup> SREG is not enrolled in an Emergency Demand Response Program (EDR) with ISO New England. Therefore, 40 CFR Subpart ZZZZ requirements associated with EDR programs have not been included in the permit.



**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
43.	<p><u>Sulfur Content Limitations for Gaseous Fuels</u>                      Gaseous fuels shall contain no more than 5 grains of sulfur per 100 cubic feet of gas, calculated as hydrogen sulfide at standard conditions.</p>	Facility wide	40 CFR 52 <sup>25</sup>
44.	The Owner or Operator shall comply with the asbestos requirements of Env-A 1800 and 40 CFR 61.145 during demolition and/or renovation.	Facility wide	40 CFR 61 Subpart M, Env-A 504.01(e) & Env-A 1800
45.	<p><u>Permit Deviations</u>                      In the event of a permit deviation, the Owner or Operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels.</p>	Facility wide	Env-A 911.03 (effective 4-21-2007)
46.	<p><u>Accidental Release Program Requirements</u>                      The quantities of regulated chemicals stored at the facility are less than the applicable threshold quantities established in 40 CFR 68.130. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities:                      a.) Identify potential hazards which result from such releases using appropriate hazard assessment techniques;                      b.) Design and maintain a safe facility;                      c.) Take steps necessary to prevent releases; and                      d.) Minimize the consequences of accidental releases that do occur.</p>	Facility wide	CAAA 112(r)(1)
47.	<p><u>NESHAP for Coal-Fired EGUs - Hydrogen chloride</u>                      a.) Hydrogen chloride emissions shall be limited to 0.0020 lb/MMBtu.                      b.) The averaging time for emission limitation is determined by the test methods provided in Table 5 to Subpart UUUUU or on a 30-boiler operating day rolling average if CMS is used.                      c.) An EGU may qualify for LEE status for HCl if the performance tests conducted in accordance with §63.10007 for 3 consecutive years demonstrate that the emissions are less than 50 percent of the emission limit specified above.</p>	SR4 & SR6	40 CFR §§63.9991 & 63.10005(h)
48.	<p><u>NESHAP for Coal-Fired EGUs - Mercury</u>                      a.) Mercury emissions shall be limited to 1.2 pounds per trillion British thermal units of heat input (lb/TBtu).                      b.) The averaging time for emission limitation is determined by the test methods provided in Table 5 to Subpart UUUUU or on a 30-boiler operating day rolling average if CMS is used.                      c.) An EGU may qualify for LEE status for Hg emissions if the performance test conducted once every 12 calendar months in accordance with §63.10007 demonstrates that, either:                      1.) Average emissions less than 10% of the above specified emission limit; or                      2.) Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the emission limit specified in Item 48.a above.</p>	SR4 & SR6	40 CFR §§63.9991 & 63.10005(h)

<sup>25</sup> Env-A 402.03, effective December 27, 1990 was adopted as part of the State Implementation Plan (SIP) on September 14, 1992 and is considered federally enforceable until such time as the SIP is amended and approved by EPA.

**Table 5 - Federally Enforceable Operational and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
49.	<p><u>General Compliance Requirements</u></p> <p>a.) Comply with the emission limits at all times except during periods of startup and shutdown.</p> <p>b.) Comply with the following work practice requirements during periods of startup or shutdown:</p> <ol style="list-style-type: none"> <li>1.) Operate all required continuous monitoring system (CMS) during startup<sup>26</sup> and shutdown<sup>27</sup>.</li> <li>2.) For startup of a unit, use clean fuels as defined in §63.10042 for ignition.</li> <li>3.) Upon converting to firing coal or residual oil, engage all of the applicable control technologies (i.e., electrostatic precipitators SR4-PC1 and SR6-PC1) except dry sorbent and activated carbon injection systems. Dry sorbent and activated carbon injection systems must be started appropriately to comply with relevant standards applicable during normal operation.</li> <li>4.) While firing coal or residual oil during shutdown, vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal or residual oil being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. In any case, controls must be operated when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other than Subpart UUUUU and that require operation of the control devices.</li> <li>5.) Collect required monitoring data during startup and shutdown periods, as specified in §63.10020(a).</li> </ol> <p>c.) At all times operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p>	SR4 & SR6	40 CFR 63.10000(a) & (b)
50.	<p><u>Tune-up Requirements</u></p> <p>No later than October 13, 2016, conduct an initial tune-up of each EGU.</p>	SR4 & SR6	40 CFR 63.10005(e)
51.	<p>If mercury emissions are not continuously monitored, maintain the 30-boiler operating day average activated carbon injection rate in lbs/hr at or above the average injection rate observed during the most recent performance test demonstrating compliance with the Hg emission limit.</p>	SR4 & SR6	TP-0157

<sup>26</sup> Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on-site use). Any fraction of an hour in which startup occurs constitutes a full hour of startup.

<sup>27</sup> Shutdown means the period in which cessation of operation of an EGU is initiated for any purpose. Shutdown begins when the EGU no longer generates electricity or makes useful thermal energy (such as heat or steam) for industrial, commercial, heating, or cooling purposes or when no coal, liquid oil, syngas, or solid oil-derived fuel is being fired in the EGU, whichever is earlier. Shutdown ends when the EGU no longer generates electricity or makes useful thermal energy (such as steam or heat) for industrial, commercial, heating, or cooling purposes, and no fuel is being fired in the EGU. Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown.

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Requirement</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
52.	Maintain the daily average sorbent injection rate in lbs/hr at or above the average injection rate observed during the most recent performance stack test demonstrating compliance with the HCl emission limit.	SR4 & SR6	TP-0157

**C. Annual SO<sub>2</sub> Allowance Programs (40 CFR 72, 40 CFR 73 and Env-A 611.07)**

1. SO<sub>2</sub> Allowance Allocation

In accordance with 40 CFR Part 73, SO<sub>2</sub> allowances pursuant to the Federal Acid Rain Program for this facility are allocated as indicated in the following table:

<b>Table 6 - SO<sub>2</sub> Allowance Allocation (tons)</b>							
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
SR4	1440	1440	1440	1440	1440	1440	1440
SR5	1298	1298	1298	1298	1298	1298	1298
SR6	1646	1646	1646	1646	1646	1646	1646

2. Compliance

- a. Pursuant to 40 CFR 73.35, the Owner or Operator shall comply with the SO<sub>2</sub> emission limitation requirements.
- b. At the end of each calendar year, the Owner or Operator shall hold sufficient SO<sub>2</sub> allowances equivalent to the SO<sub>2</sub> emissions during that calendar year.

3. General Provisions

Pursuant to Env-A 611.07, SO<sub>2</sub> allowances lawfully held or acquired by the Owner or Operator shall be governed by the following:

- a. Emissions from the affected units shall not exceed any SO<sub>2</sub> allowances held by the affected unit;
- b. The number of SO<sub>2</sub> allowances held by the Owner or Operator shall not be limited;
- c. The Owner or Operator shall not use SO<sub>2</sub> allowances to avoid compliance with any other applicable requirement of either state or federal rules or of the provisions of the Clean Air Act; and
- d. Any SO<sub>2</sub> allowances held by the Owner or Operator shall be accounted for according to the procedures established in the applicable provisions of 40 CFR 72, 40 CFR 73 and 40 CFR 76.

4. Excess Emissions

Pursuant to 40 CFR 72.9(e) if the affected source has excess emissions in any calendar year, the Owner or Operator shall:

- a. Submit a proposed offset plan as required under 40 CFR 77;

- b. Pay the required penalty without demand and pay upon demand the interest on that penalty, as required by 40 CFR 77; and
  - c. Comply with the terms of an approved offset plan as required by 40 CFR 77.
5. Allowance Transfer  
The Owner or Operator shall transfer allowances according to the procedures in 40 CFR 73.50.

**D. Ozone Season NOx Budget Trading Program (Env-A 3200)**

- 1. NOx Allowance Allocation  
NOx allowances shall be allocated to the Owner/Operator of the NOx budget source according to the methodology in Env-A 3207.04, *Allowance Allocation Methodology*.
- 2. Ozone Season NOx Emissions Cap
  - a. Pursuant to Env-A 3208.02, NOx emissions during any control period<sup>28</sup> shall not exceed the amount of NOx allowances held in budget source's NOx Allowance Tracking System (NATS) compliance account for that control period as of the allowance transfer deadline of November 30.
  - b. The Owner/Operator may obtain additional NOx allowances to comply with the NOx Budget Program.
- 3. Allowance Transfer and Use
  - a. Pursuant to Env-A 3209.01, *Marketable Emissions Authorization*, an allowance shall be a marketable emissions authorization that may be bought, sold, or traded at any time during any year, not just the current year.
  - b. Pursuant to Env-A 3209.02, *Limited Authorizations*, an allowance shall only be used for compliance with the NOx Budget Program in a designated compliance year by being in a compliance account as of the allowance transfer deadline of November 30, or by being transferred into the compliance account by an allowance transfer submitted by the allowance transfer deadline.
  - c. The Owner/Operator shall comply with the NOx allowance transfer and use provisions of Env-A 3209.
  - d. Pursuant to Env-A 3209.09, *Price Disclosure*, subject to a claim of confidentiality in accordance with Env-A 103, the Owner/Operator shall make available to any person, all information regarding transaction cost and allowance price.
- 4. Allowance Banking
  - a. Pursuant to Env-A 3210.01, *Retention of Unused Allowances*, the banking of allowances shall be permitted to allow the retention of unused allowances from one year to a future year in either a compliance account, an overdraft account, or a general account.

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<sup>28</sup> Control period means the period beginning May 1 of each year and ending on September 30 of the same year, inclusive.

- b. Pursuant to Env-A 3210.02, *Account Designation*, unused allowances as of the end of the allowance transfer deadline shall be retained in the compliance, overdraft, or general account and designated as banked allowances after the NATS administrator has made all deductions for a given control period from the compliance account or overdraft account pursuant to Env-A 3215.
        - c. The Owner/Operator shall comply with the NO<sub>x</sub> allowance banking provisions pursuant to Env-A 3210.03, *Requirements for Use*.
5. End-of-Season Reconciliation
  - a. The Owner/Operator of each budget source shall, not later than November 30 of each calendar year, hold a quantity of NO<sub>x</sub> allowances in the budget source's current year NATS account that is equal to or greater than the total NO<sub>x</sub> emitted from that budget source during the period May 1 through September 30 of the subject year.
  - b. Request for Deduction of Allowances
    - i. Pursuant to Env-A 3215.02, each year prior to November 30, the AAR shall request the NATS administrator to deduct current year allowances from the compliance account or overdraft account equivalent to the number of available allowances to cover the NO<sub>x</sub> emissions during the current control period.
    - ii. This request shall be submitted by the AAR to the NATS administrator no later than the allowance transfer deadline, November 30.
    - iii. This request shall identify the compliance account or overdraft account from which the deductions should be made.
    - iv. This request shall identify the serial numbers of the allowances to be deducted, if desired by the source; or not identify serial numbers, in which case allowances usable for that compliance year shall be deducted in the order of their arrival into the unit's account, with allocated allowances being deducted first, followed by the deduction of transferred allowances.
6. Authorized Account Representative (Env-A 3211.04)
  - a. Only the AAR or alternate AAR shall request transfers of allowances in a NATS account.
  - b. The AAR or alternate AAR shall be responsible for all transactions and reports submitted to the NATS.
  - c. The alternative AAR shall have the same authority as the primary representative, however, all correspondence from the NATS administrator shall be directed to the primary AAR.
  - d. A new AAR shall be designated by submitting a revised Account Certificate of Representation to the NATS administrator along with the information contained in Env-A 3211.05(b) and (c) and the name of the AAR who is being replaced.
7. Conversion of Allowances to Discrete Emissions Reductions (DERs)

Pursuant to Env-A 3207.05, a budget source may convert unused allowances to DERs in accordance with Env-A 3206.02(e) and the procedures for DER generation pursuant to Env-A 3103. Upon conversion, the budget source shall surrender those converted allowances as if they had been used for actual emissions.

Under no other circumstances shall unused allowances be converted to, or used as, DERs or ERCs.

8. Prohibition on Property Rights (Env-A 3207.07)
  - a. Neither an allowance nor any future allocations, which are subject to modification by DES, shall constitute a security or other form of property.
  - b. An allowance shall not be used prior to the control period for which the allowance is allocated.
9. Excess Emissions and Enforcement Provisions (Env-A 3217)
  - a. In addition to penalties assessed under b. below, if emissions from a budget source exceed allowances held in the budget source's compliance account or overdraft account for the control period as of the allowance transfer deadline, the NATS administrator shall automatically deduct allowances from the budget source's compliance account or overdraft account for the next control period at a rate of 3 allowances for every one ton of excess emissions.
  - b. In accordance with RSA 125-J:4-a, for purposes of enforcement of the NO<sub>x</sub> Budget Program, in determining the number of days of violation, any excess emissions for the control period shall presume that each day in the control period of 153 days, constitutes a day in violation unless the budget source can demonstrate, through use of verifiable emissions data that a lesser number of days should be considered. In addition, each ton of excess emissions shall constitute a separate violation.

**E. Non-Ozone Season NO<sub>x</sub> Allowance Program (NO<sub>x</sub> RACT Order No. ARD-98-001)**

Pursuant to NO<sub>x</sub> RACT Order No. ARD-98-001, the Owner/Operator shall comply with the non-ozone season (October 1 to April 30) cap of 8,208 tons for the combined NO<sub>x</sub> emissions from Merrimack (units MK1 & MK2), Schiller (SR4, SR5 & SR6) and Newington (NT1) stations. Ozone season DERs and non-ozone season DERS may be used to comply with this non-ozone season limit. Previously generated (1995 through 1998) DERs may be used to comply with this emissions cap. DERs may be generated from GSP's Newington and Schiller Stations, in accordance with the protocols submitted by GSP to comply with this emissions cap.

**F. Sulfur dioxide and Nitrogen oxides Annual Budget Trading and Banking Program (Env-A 2900) - Applicable to SR4 & SR6<sup>29</sup> [State Enforceable Only]**

1. Annual Emission Budgets & Allowance Allocation
  - a. SO<sub>2</sub> Budget and Allowance Allocation
    - i. The annual SO<sub>2</sub> budget for GSP Merrimack Station (units MK1 & MK2), Schiller Station (units SR4 & SR6) and Newington Station (unit NT1) shall be no more than 7,289 tons. The amount of SO<sub>2</sub> Allowances allocated to Schiller Station shall be determined according to the methodology in Env-A 2904.05, *Allowance Allocation Methodology*.

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<sup>29</sup> Per Env-A 2901.02, SR5 shall not be subject to Env-A 2900 because it commenced operation after repowering on October 20, 2006.

- ii. As per Env-A 2904.04 *Transfer of SO<sub>2</sub> Allowances*, GSP shall transfer to DES all annual SO<sub>2</sub> allowance allocations provided under the federal acid rain program. Allowance allocation for Schiller Station for the following calendar year will be calculated by the Department as per Env-A 2904.05 *Allowance Allocation Methodology*.
  - b. NOx Budget and Allowance Allocation
    - i. The annual NOx budget for GSP Merrimack Station (units MK1 & MK2), Schiller Station (units SR4 & SR6) and Newington Station (unit NT1), including the seasonal NOx allowances allocated to each affected source pursuant to Env-A 3200, shall be no more than 3,644 tons.
    - ii. DES shall allocate NOx Allowances to GSP Schiller according to the methodology in Env-A 2904.05, *Allowance Allocation Methodology*.
- 2. Legal Attributes of Allowances (Env-A 2903)
  - a. An allowance shall be a marketable emissions authorization that may be bought, sold, or traded at any time during any year, not just the current year.
  - b. An allowance shall not be a property right or create a property right for any person.
  - c. Future allocations shall not be a property right or create a property right for any person.
  - d. No allowance or future allocation shall constitute a security or other form of property.
- 3. Holding and Using Allowances (Env-A 2903.02)
  - a. The Owner or Operator shall, no later than the allowance transfer deadline of January 30 of each calendar year, hold in the appropriate account for that affected source:
    - i. A quantity of SO<sub>2</sub> allowances equal to or greater than the total SO<sub>2</sub> emitted from that affected source during the previous year; and
    - ii. A quantity of NOx allowances equal to or greater than the total NOx emitted from the affected source during the previous year.
  - b. To use an allowance for compliance with Env-A 2900 in a designated compliance year, the allowance shall be:
    - i. Already in a compliance or overdraft account as of the allowance transfer deadline; or
    - ii. Transferred into the compliance account by an allowance transfer submitted by the allowance transfer deadline.
- 4. Conversion of NOx Allowances to DERs (Env-A 2903.03)
  - a. Allowances shall not be considered offsets as defined in RSA 125-J:1, XII, however NOx allowances that are not used to satisfy the requirements of Env-A 2900 and that are not banked may be converted to non-ozon season NOx DERs in accordance with Env-A 3100.
  - b. If unused NOx allowances are converted to NOx DERs in accordance with Env-A 3103, GSP Schiller shall surrender those converted allowances as if they had been used for actual emissions.

5. Allowance Transfer (Env-A 2905)
  - a. The Owner/Operator shall comply with the allowance transfer provisions of Env-A 2905.01 *Initiating an Allowance Transfer*.
  - b. Pursuant to Env-A 2905.07 *Use of Allowances by Utilities* and RSA 125-J:5, X, the use of allowances by a utility, as defined in RSA 362:2, shall be subject to such additional conditions as are ordered by the New Hampshire public utilities commission pursuant to its authority.
  - c. Pursuant to Env-A 2905.06 *Price Disclosure*, subject to a claim of confidentiality in accordance with Env-A 103, GSP Schiller shall make available to any person, all information regarding transaction cost and allowance price.
6. Banking Unused Allowances (Env-A 2905.08)
  - a. Any allowances remaining in an account after the Allowance Tracking System (ATS) administrator has made all deductions for a given year from the compliance account or overdraft account pursuant to Env-A 2908.03 shall be designated as unused allowances.
  - b. Unused allowances may be retained, or banked, for use in a future year in a compliance, overdraft, or general account.
7. Authorized Account Representative (Env-A 2906.04)
  - a. Each holder of a compliance account, overdraft account, or general account shall designate one individual to be the AAR for the account and one individual to be the alternate AAR for the account.
  - b. The alternate AAR shall have the same authority to initiate allowance transfers and file reports as the AAR.
8. Request for Deduction of Allowances (Env-A 2908.02)
  - a. No later than the allowance transfer deadline of January 30 for each year, the AAR shall request the ATS administrator to deduct allowances available for the previous year from the compliance account or overdraft account, or both, in an amount equivalent to the number of allowances required to cover the emissions during the previous year.
  - b. The request submitted pursuant to (a), above, shall identify:
    - i. The compliance account or overdraft account from which the deductions should be made; and
    - ii. The serial number of each allowance to be deducted.
9. Procurement of Additional Allowances (Env-A 2908.04)

If the emissions of Schiller Station units SR4 and SR6 in the previous year exceed the allowances in compliance account and overdraft account, the Owner/Operator shall obtain additional allowances by January 30 so the total number of allowances in GSP Schiller's compliance account and overdraft account, including allowance transfers properly submitted to the ATS administrator by January 30, equals or exceeds the previous year annual emissions rounded to the nearest whole ton.



**G. Discrete Emission Reduction Trading Program (Env-A 3100)**

In accordance with Env-A 3100, NO<sub>x</sub> RACT Orders Nos. ARD-97-001 and ARD-98-001, and the Notices of Simultaneous Generation and Use of DERs originally submitted on April 10, 1998, and annually thereafter upon entry of the DERs into the registry by DES, the Owner/Operator shall be allowed to bank DERs for future use.

**H. Carbon dioxide (CO<sub>2</sub>) Budget Trading Program (Env-A 4600) - State-only Enforceable**

1. CO<sub>2</sub> Allowance Requirements (Env-A 4605.01)
  - a. The Owner or Operator of each CO<sub>2</sub> budget source and each CO<sub>2</sub> budget unit at the source shall hold CO<sub>2</sub> allowances available for compliance deductions under Env-A 4605.04, as of the CO<sub>2</sub> allowance transfer deadline, in the source's compliance account, in an amount not less than the total CO<sub>2</sub> emissions from fossil fuel-fired generation for the control period from all CO<sub>2</sub> budget units at the source, as determined in accordance with Env-A 4605, Env-A 4607, Env-A 4609.18, and VIII.H.1.c, below.
  - b. CO<sub>2</sub> allowances shall be held in, deducted from, or transferred among CO<sub>2</sub> allowance tracking system accounts in accordance with Env-A 4606, Env-A 4607, Env-A 4608, and Env-A 4700.
  - c. For the purpose of determining compliance with Env-A 4600, total tons of CO<sub>2</sub> emissions for a control period<sup>30</sup> shall be calculated as the sum of all recorded hourly emissions, or the tonnage equivalent of the recorded hourly emissions rates, in accordance with Env-A 4609, with any remaining fraction of a ton equal to or greater than 0.50 ton rounded up to equal one ton and any fraction of a ton less than 0.50 ton rounded down to equal zero tons.
2. CO<sub>2</sub> Allowance Limitations (Env-A 4605.02)
  - a. A CO<sub>2</sub> allowance shall be a limited authorization to emit one ton of CO<sub>2</sub> in accordance with the CO<sub>2</sub> budget trading program.
  - b. A CO<sub>2</sub> allowance shall not be deducted, in order to comply with the requirements of Env-A 4605.01(a), for a control period that ends prior to the year for which the CO<sub>2</sub> allowance was allocated.
  - c. A CO<sub>2</sub> offset allowance shall not be deducted, in order to comply with the requirements of Env-A 4605.01(a), beyond the applicable percent limitations set out in Env-A 4605.04(b).
  - d. Subject to Env-A 4605.02(e) and (f), no provision of the CO<sub>2</sub> budget trading program, the CO<sub>2</sub> budget permit application, or the CO<sub>2</sub> budget permit shall be construed to limit the authority of the Department to terminate or limit such authorization.
  - e. A CO<sub>2</sub> allowance shall not constitute a property right.
3. Allowances Available for Compliance Deduction (Env-A 4605.04)

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<sup>30</sup> Control period means compliance period as defined in New Hampshire RSA 125-O:20, IV.

- a. CO<sub>2</sub> allowances that meet the following criteria shall be available to be deducted for compliance with the requirements of Env-A 4605 for a control period:
    - i. For CO<sub>2</sub> allowances other than CO<sub>2</sub> offset allowances, the allowances are from allocation years that fall within a prior control period or the same control period for which the allowances will be deducted; and
    - ii. The CO<sub>2</sub> allowances are:
      - (a) Held in the CO<sub>2</sub> budget source's compliance account as of the CO<sub>2</sub> allowance transfer deadline for that control period; or
      - (b) Transferred into the compliance account by a CO<sub>2</sub> allowance transfer correctly submitted for recordation under Env-A 4608.01 by the CO<sub>2</sub> allowance transfer deadline for that control period;
    - iii. As provided in RSA 125-O:22, II, a CO<sub>2</sub> budget source may use offset allowances for up to 3.3 percent of its compliance obligation.
  - b. CO<sub>2</sub> allowances shall not be available for current compliance if the allowances were deducted for excess CO<sub>2</sub> emissions for a prior control period under Env-A 4605.08.
  - c. Allowances deducted for the purpose of compliance shall not be available for any other purpose.
4. Excess CO<sub>2</sub> Emissions Requirements (Env-A 4605.07)
- The Owner or Operator of a CO<sub>2</sub> budget source that has excess CO<sub>2</sub> emissions in any control period shall:
- a. Forfeit the CO<sub>2</sub> allowances required for deduction under Env-A 4605.08, provided CO<sub>2</sub> offset allowances shall not be used to cover any part of such excess CO<sub>2</sub> emissions; and
  - b. Pay any fine, penalty, or assessment or comply with any other remedy imposed under RSA 125-O:22, V.
5. Deductions for Excess CO<sub>2</sub> Emissions (Env-A 4605.08)
- a. As provided by RSA 125-O:22, V, the deduction of CO<sub>2</sub> allowances for excess CO<sub>2</sub> emissions shall equal to 3 times the number of the source's excess CO<sub>2</sub> emissions.
  - b. Within 14 calendar days of receipt of notice by from the regional organization<sup>31</sup> that a shortage exists, the source shall transfer sufficient allowances into its compliance account to cover the shortage.
  - c. No CO<sub>2</sub> offset allowances shall be deducted to account for the source's excess CO<sub>2</sub> emissions.
  - d. Any CO<sub>2</sub> allowance deduction required under 5.a, above, shall not affect the liability of the owner(s) and operator(s) of the CO<sub>2</sub> budget source or the CO<sub>2</sub> units at the source for any fine, penalty, or assessment, and shall not affect the obligation of the owner(s) and operator(s) to comply with any other remedy, for the same violation, as ordered under applicable state law.

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<sup>31</sup> Regional organization as defined in NH RSA 125-O:20, XIII

6. Determination of Violations and Deduction of Allowances (Env-A 4605.11)
  - a. For purposes of determining the number of days of violation, if a CO<sub>2</sub> budget source has excess CO<sub>2</sub> emissions for a control period, each day in the control period shall constitute a day of violation unless the owner(s) and operator(s) of the unit demonstrate that a lesser number of days should be considered; and
  - b. Each ton of excess CO<sub>2</sub> emissions shall constitute a separate violation.
7. Submission of CO<sub>2</sub> Allowance Transfers (Env-A 4608.01)

Any CO<sub>2</sub> AAR seeking recordation of a CO<sub>2</sub> allowance transfer shall submit the transfer request to the regional organization in accordance with Env-A 4608.01(b).

**I. Monitoring and Testing Requirements**

The Owner or Operator is subject to the monitoring and testing requirements as contained in Table 7 below:

<b>Table 7 - Monitoring/Testing Requirements</b>					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
1.	NO <sub>x</sub> , and O <sub>2</sub> diluent gas	a.) Operate and maintain a NO <sub>x</sub> -diluent CEMS (consisting of a NO <sub>x</sub> pollutant concentration monitor and an O <sub>2</sub> or CO <sub>2</sub> diluent gas monitor) with an automated data acquisition and handling system for measuring and recording: <ol style="list-style-type: none"> <li>1.) NO<sub>x</sub> concentration (in ppm);</li> <li>2.) O<sub>2</sub> or CO<sub>2</sub> concentration (in percent O<sub>2</sub> or CO<sub>2</sub>); and</li> <li>3.) NO<sub>x</sub> emission rate (in lb/MMBtu).</li> </ol> b.) Account for total NO <sub>x</sub> emissions, both NO and NO <sub>2</sub> , either by monitoring for both NO and NO <sub>2</sub> or by monitoring for NO only and adjusting the emissions data to account for NO <sub>2</sub> .                     c.) Follow the procedures of 40 CFR 75.12(b) if a correction for the stack gas moisture content is needed to properly calculate the NO <sub>x</sub> emission rate in lb/MMBtu.                     d.) Calculate hourly, quarterly and annual NO <sub>x</sub> emission rates (in lb/MMBtu) by combining the NO <sub>x</sub> concentration (in ppm), diluent concentration (in percent O <sub>2</sub> or CO <sub>2</sub> ), and percent moisture (if applicable) according to the procedures in 40 CFR 75 Appendix F.	Continuously	SR4, SR5 & SR6	Env-A 808.02, Env-A 3212, 40 CFR 75.10(a)(2), 75.12(c) & 75.71 & NO <sub>x</sub> RACT Order ARD-06-001
2.	SO <sub>2</sub>	Operate and maintain a SO <sub>2</sub> CEMS for measuring and recording the SO <sub>2</sub> : <ol style="list-style-type: none"> <li>a.) Concentration (in ppm) averaged on an hourly and 24-hour calendar day basis.</li> <li>b.) Mass emissions (in lb/hr) averaged on an hourly and 24-hour calendar day basis.</li> <li>c.) Tons/consecutive 12-month period and tons/calendar year basis for each unit.</li> </ol>	Continuously	SR4, SR5 & SR6	Env-A 808.02(a)(1), 40 CFR 75.10(a)(1) & 40 CFR 75.11
		d.) Emission rate (in lb/MMBtu) averaged on a 24-hour calendar day basis.	Daily	SR5	Env-A 808
		e.) For each boiler, compliance with the SO <sub>2</sub> emission limitation in Table 5, Item 6 must be determined by dividing the total amount of SO <sub>2</sub> emissions emitted during each boiler operating day by the total gross boiler heat input for that same day. <ol style="list-style-type: none"> <li>1.) SO<sub>2</sub> mass emission rate (lb/hr) and boiler heat input rate (MMBtu/hr) shall be calculated using 40 CFR 75, Appendix F,</li> </ol>	Each boiler operating day	SR4 & SR6	40 CFR 70.6(a)(3)

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>Eqs. F-1 and F-15, respectively.</p> <p>2.) Diluent capping (i.e., 5% CO<sub>2</sub>) may be applied to the heat input rate for any hours where the measured CO<sub>2</sub> concentration is less than 5% following the procedures in 40 CFR 75 Appendix F Section 3.3.4.1.</p> <p>3.) If SO<sub>2</sub> emissions data or gross heat input data is unavailable for a specific period of time during any boiler operating day, neither the amount of SO<sub>2</sub> emissions nor the amount of gross heat input for that specific period of time shall be used in calculating compliance with the SO<sub>2</sub> emissions limit.</p>			
3.	SO <sub>2</sub>	<p>a.) Subject to b and c below, operate and maintain a SO<sub>2</sub> CEMS which monitors SO<sub>2</sub> at both the inlet and outlet of the SO<sub>2</sub> control device.</p> <p>b.) For a facility that qualifies under the numerical limits of 40 CFR 60.43Da, SO<sub>2</sub> emissions may be only monitored as discharged to the atmosphere.</p> <p>c.) An “as-fired” fuel monitoring system meeting the requirements of US EPA Method 19 may be used to determine potential SO<sub>2</sub> emissions in place of the CEMS at the inlet to the SO<sub>2</sub> control device.</p>	Continuously	SR5	40 CFR 60.49Da(b)
4.	Stack volumetric flow rate	<p>Operate and maintain a flow monitoring system to measure and record stack volumetric gas flow (in scfh) and meet the following requirements:</p> <p>a.) All differential pressure flow monitors shall have an automatic blow-back purge system installed and in wet conditions, shall have the capability for drainage of the sensing lines; and</p> <p>b.) The stack flow monitoring system shall have the capability for manual calibration of the transducer while the system is on-line and for a zero check.</p>	Continuously	SR4, SR5 & SR6	40 CFR 75, Env-A 2910.02 & Env-A 808.03(d)
5.	CO <sub>2</sub>	<p>a.) Operate and maintain a CO<sub>2</sub> CEMS for measuring and recording CO<sub>2</sub>:</p> <ol style="list-style-type: none"> <li>1.) Concentration (in ppm or percent); and</li> <li>2.) CO<sub>2</sub> mass emissions (in tons/hr) discharged to the atmosphere.</li> </ol> <p>b.) Comply with the specific provisions of 40 CFR 75.13 for the CO<sub>2</sub> CEMS.</p>	Continuously	SR4, SR5 & SR6	40 CFR 75.10(a)(3) & 40 CFR 75.13

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
6.	NO <sub>x</sub> , SO <sub>2</sub> & Stack Flow Rate	<p>The NO<sub>x</sub>, SO<sub>2</sub> and stack flow rate CEMS maintained operated to meet the requirements of 40 CFR 75 may be used to meet the CEM requirements of 40 CFR 60 Subpart Da, provided that:</p> <p>a.) For SO<sub>2</sub>:</p> <ol style="list-style-type: none"> <li>1.) A CO<sub>2</sub> or O<sub>2</sub> continuous monitoring system is maintained and operated at the same location as the SO<sub>2</sub> monitor;</li> <li>2.) SO<sub>2</sub> and CO<sub>2</sub> (or O<sub>2</sub>) data are collected simultaneously when relative accuracy testing is conducted; and</li> <li>3.) The relative accuracy (RA) standard in section 13.2 of Performance Specification 2 in Appendix B to 40 CFR 60 is met when the RA is calculated on a lb/MMBtu basis in addition to meeting the applicable SO<sub>2</sub> and CO<sub>2</sub> (or O<sub>2</sub>) relative accuracy specifications in Figure 2 of App. B to 40 CFR 75.</li> </ol> <p>b.) For all parameters, data reported to meet the requirements of 40 CFR 60.51Da shall not include substitute data values derived from the missing data procedures in subpart D of 40 CFR 75, nor shall the data have been bias adjusted according to the procedures of 40 CFR 75.</p>	Continuously	SR5	40 CFR 60.49Da(b), (c) & (m)
7.	Gross electrical output	Install, calibrate, maintain, and operate a wattmeter to measure and record the gross electrical output in MW-hr.	Continuously	SR5	40 CFR 60.49Da(k)
8.	lb NO <sub>x</sub> / megawatt-hour gross heat output	Calculate NO <sub>x</sub> emissions as $1.194 \times 10^{-7}$ lb/scf-ppm times the average hourly NO <sub>x</sub> output concentration in ppm (measured according to the provisions of 40 CFR 60.49Da(c)), times the average hourly flow rate (measured in scfh, according to the provisions of 40 CFR 60.49Da(m)), divided by the average hourly gross energy output (measured according to the provisions of 40 CFR 60.49Da(k)).	Hourly	SR5	40 CFR 60.48Da(i)
9.	NO <sub>x</sub> Mass Emissions	<p>Calculate NO<sub>x</sub> mass emissions as:</p> <p>a.) Hourly (in lb/hr) by multiplying the hourly NO<sub>x</sub> emission rate (in lb/MMBtu) by the hourly heat input rate (in MMBtu/hr) and the unit or stack operating time; and</p> <p>b.) Quarterly, cumulative year-to-date and cumulative for the ozone season (in tons) by summing the hourly NO<sub>x</sub> mass emissions according to the procedures in Appendix F,</p>	Hourly, quarterly and cumulative for the ozone season and year-to-date	SR4, SR5 & SR6	40 CFR 75.71, 40 CFR 75.72, Env-A 2910 & Env-A 3212

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		Section 8 of 40 CFR 75.			
10.	Ozone Season NOx Emission Rate	Calculate the ozone season NOx emission rate (in lb/MMBtu) by dividing ozone season NOx mass emissions (in lbs) by heat input.	During the ozone season	SR4, SR5, SR6 & SRCT	Env-A 3212.01 & 40 CFR 75.75(b)
11.	NOx Mass Emissions Alternative Monitoring System for peaking units	Monitor NOx mass emissions and heat input using: a.) Appendix D for determining hourly heat input and Appendix E for determining hourly NOx emission rate.	Hourly, quarterly, and cumulative ozone season	SRCT	40 CFR 75.74(c)(11), 40 CFR 75, Appendix E & Env-A 3212
		b.) If the unit exceeds the thresholds defining a “peaking unit”, the Owner of Operator shall meet the requirements of 40 CFR 75.71(c)	No later than December 31 of the following calendar year		40 CFR 75.71(d)
		c.) Whenever the monitoring method is to be changed for SRCT, reapply to DES for certification of the new monitoring method.	Apply and obtain approval prior to changing method		40 CFR 75, Appendix E, Section 1.2 & Env-A 3212.09
12.	NOx Mass Emissions - Annual and Ozone Season Monitoring	Meet the requirements of 40 CFR 75 Subpart H.	During the entire calendar year	SR4, SR5 & SR6	40 CFR 75.74(a) & (b)
			During the ozone season	SRCT	
13.	Heat Input Rate	Determine the heat input rate (in MMBtu/hr) to each unit for every hour or part of an hour any fuel is combusted following the procedures in 40 CFR 75 Appendix F.	Hourly	SR4, SR5 & SR6	40 CFR 75.10(c), Env-A 2907.02, Env-A 3212.02 & 40 CFR 75.75(a)
		Determine the heat input rate in MMBtu/hr using the procedures in 40 CFR 75 Appendix D.	Hourly during ozone season	SRCT	Env-A 3212.02 & 40 CFR 75.75(a)
14.	Net Electrical Output	Calculate net electrical output in MW-hr.	Annually	SR4, SR5, SR6 & SRCT	Env-A 2907.02, Env-A 3207.04 & 40 CFR 75
15.	CEMS & COMS Operating Requirements	Each CEMS and COMS required by 40 CFR 75 shall: a.) Meet the equipment, installation, and performance specifications in 40 CFR 75 Appendix A; b.) Be maintained according to the quality assurance and quality control procedures in 40 CFR 75 Appendix B; c.) Be in operation and monitoring emissions or opacity from each boiler at all times that the	As specified	SR4, SR5 & SR6	40 CFR 75.10(b), 40 CFR 75.10(d) & 40 CFR 75.30

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		emission unit combusts any fuel except during periods of: 1.) Calibration, quality assurance, or preventive maintenance, performed pursuant to 40 CFR 75.21 and Appendix B of 40 CFR 75; 2.) Repair; 3.) Backups of data from the data acquisition and handling system; or 4.) Recertification performed pursuant to 40 CFR 75.20; d.) For the COMS, subject to the exceptions noted in c. above, be in operation and monitoring opacity during the time following combustion when fans are still operating.			
16.	CEMS Hourly Operating Requirements and Calculations	a.) Each CEMS and COMS required by 40 CFR 75 shall measure and calculate hourly averages in accordance with the following: 1.) Complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute interval; 2.) Except as provided in c below, compute hourly averages using at least one data point in each fifteen minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour; 3.) An hourly average may be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) if data are unavailable as a result the conditions noted in Table 7, Item 15.c, above; 4.) All valid measurements or data points collected during an hour shall be used to calculate the hourly averages; and 5.) All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. b.) Failure of a CEMS, flow monitor, moisture monitor, to acquire the minimum number of data points for calculation of an hourly average shall result in the failure to obtain a valid hour of data and the loss of such component data for the entire hour. c.) For a NOx-diluent monitoring system, an hourly average NOx emission rate in lb/MMBtu is valid only if the minimum	Hourly	SR4, SR5 & SR6	40 CFR 75.10(b), 40 CFR 75.10(d) & 40 CFR 75.30



**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		number of data points is acquired by both the NO <sub>x</sub> pollutant concentration monitor and the diluent monitor (O <sub>2</sub> or CO <sub>2</sub> ). d.) If a valid quality-assured hour of data is not obtained, follow the procedures in 40 CFR 75 Subpart D.			
17.	CEMS minimum measurement capability	Each CEMS shall: a.) Be capable of accurately measuring, recording, and reporting data; and b.) Not incur an exceedance of the full scale range, except as provided in 40 CFR 75 Appendix A sections 2.1.1.5, 2.1.2.5, and 2.1.4.3.	As specified	SR4, SR5 & SR6	40 CFR 75.10(f)
18.	Opacity COMS	a.) Operate and maintain COMS with an automated data acquisition and handling system for measuring and recording the opacity of emissions (in percent opacity) discharged to the atmosphere. b.) Each COMS shall be maintained and operated in accordance with 40 CFR 60, Appendix B, Performance Specification 1.	Continuously	SR4, SR5 & SR6	40 CFR 75.10(a)(4), 40 CFR 75.14 & Env-A 808.02(a) (for SR4 & SR6) and 40 CFR 75.10(a)(4), 40 CFR 75.14, Env-A 808.02(a) & 40 CFR 60.49Da(a) (for SR5)
19.	COMS Hourly Operating Requirements	Each COMS shall be operated in accordance with the following: a.) Each COMS shall be capable of completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. b.) All opacity data shall be reduced to consecutive, non-overlapping 6-minute averages calculated in accordance with the provisions of 40 CFR 51 Appendix M. c.) For SR4 & SR6, which are subject to the exemption of Env-A 2002.04(b), the COMS shall determine and record the number of minutes in any 8-hour period where the opacity, as averaged in non-overlapping 6-minute periods, exceeds the applicable opacity standard. d.) For SR5, the COMS shall determine and record calendar hourly averages, in addition to the 6-minute averages. e.) Each COMS shall include a means to display instantaneous values of percent opacity.	As specified	SR4, SR5 & SR6	40 CFR 75.10(d) & Env-A 808.03 (for SR4, SR5 & SR6) and 40 CFR 63.8(g)(2) & 40 CFR 63.7525(c) (for SR5)
20.	CO & O <sub>2</sub> CEMS	Operate and maintain CO and O <sub>2</sub> CEMS in	Continuously	SR5	40 CFR 63.7525(a)

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>accordance with the following:</p> <ul style="list-style-type: none"> <li>a.) The CO and O<sub>2</sub> levels shall be monitored at the same location at the outlet of the boiler.</li> <li>b.) The CO CEMS must be certified, maintained and operated according to the applicable procedures under Performance Specification 4, 4A, or 4B of 40 CFR 60, Appendix B, the site-specific monitoring plan and the requirements in 40 CFR 63.7540(a)(8).</li> <li>c.) Evaluate performance in accordance with the following:                             <ul style="list-style-type: none"> <li>1.) Conduct a performance evaluation of each CO CEMS according to the requirements in 40 CFR 63.8(e) and according to Performance Specification 4, 4A, or 4B at 40 CFR 60, Appendix B;</li> <li>2.) Collect, during each relative accuracy test run of the CO CEMS, emission data for CO concurrently (or within a 30- to 60- minute period) by both the CO CEMS and by Method 10, 10A, or 10B at 40 CFR part 60, Appendix A-4;</li> <li>3.) The relative accuracy testing must be at representative operating conditions;</li> <li>4.) Follow the quality assurance procedures (e.g., quarterly accuracy determinations and daily calibration drift tests) of Procedure 1 of appendix F to 40 CFR 60; and</li> <li>5.) The measurement span value of the CO CEMS must be two times the applicable CO emission limit, expressed as a concentration.</li> </ul> </li> <li>d.) Complete a minimum of one cycle of CO and oxygen CEMS operation (sampling, analyzing, and data recording) for each successive 15-minute period.</li> <li>e.) Collect:                             <ul style="list-style-type: none"> <li>1.) CO and oxygen data concurrently;</li> <li>2.) At least four CO and oxygen CEMS data values representing the four 15-minute periods in an hour; or</li> <li>3.) At least two 15-minute data values during an hour when CEMS calibration, quality assurance, or maintenance activities are being performed.</li> </ul> </li> <li>f.) Reduce CO CEMS data as specified in 40 CFR 63.8(g)(2).</li> </ul>			& 63.7535

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		g.) Calculate one-hour arithmetic averages, corrected to 3 percent oxygen from each hour of CO CEMS data in parts per million CO concentration. h.) The one-hour arithmetic averages required shall be used to calculate the 30-day rolling average emissions. i.) Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR 60, Appendix A-7 must be used for calculating the average CO concentration from the hourly values. j.) The CO CEMS must be operated as specified in 40 CFR 63.7535(b). k.) Data collected during all periods must be used in calculating data averages and assessing compliance, except that certain data must be excluded as specified in 40 CFR 63.7535(c).			
21.	Load or Steam generation monitor & Sorbent injection monitor	a.) Operate, and maintain continuous parameter monitoring systems (CPMS) to monitor: <ol style="list-style-type: none"> <li>1.) Unit load or steam generation in MW or lb; and</li> <li>2.) Sorbent injection rate (for coal combustion).</li> </ol> b.) Determine 30-day rolling average of load (or steam generation) and sorbent injection, except as provided in 40 CFR 63.7535(c). c.) Each CPMS must complete a minimum of one cycle of operation every 15-minutes. The CPMS must have a minimum of four successive cycles of operation, one representing each of the four 15-minute periods in an hour, to have a valid hour of data. d.) Each CPMS shall be operated as specified in 40 CFR 63.7535(b), and comply with the data calculation requirements specified in 40 CFR 63.7535(c).	Continuous	SR5	40 CFR 63.7525(d) & 63.7535
22.	Ammonia slip	Operate and maintain an ammonia slip CEMS for measuring and recording ammonia slip. <ol style="list-style-type: none"> <li>a.) The ammonia monitoring system shall be challenged with an ammonia calibration gas on a calendar quarter basis in accordance with Env-A 808.07 and 808.08;</li> <li>b.) The gas shall be certified as at least 5% accurate and be within the range of 5 - 15 ppm;</li> <li>c.) The ammonia calibration gas shall be sent</li> </ol>	Continuously	SR5	TP-B-0501 & Env-A 808

<b>Table 7 - Monitoring/Testing Requirements</b>					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>through the ammonia sampling system three separate times, alternating with a secondary gas (air, zero gas, stack gas, etc.). If the average difference between the value of the calibration gas and the response of the monitoring system to the gas exceeds 5% of the gas value (equivalent to less than 95% or greater than 105% NH<sub>3</sub>-to-NO converter efficiency), then use a factor to correct the response of the ammonia monitoring system to equal the value of the calibration gas (equivalent to 100% converter efficiency);</p> <p>d.) Prior to applying the correction factor, the NH<sub>3</sub>-to-NO conversion efficiency shall be greater than or equal to 80%. An efficiency less than 80% means the measuring system is out of control as defined in Env-A 808.01(g)(1)c;</p> <p>e.) The annual RATA of the system shall be done using as the Reference Method either EPA Conditional Test Method CTM-027, the differential NO<sub>x</sub> method, or a DES-approved alternative (if the differential NO<sub>x</sub> method is used, the NH<sub>3</sub>-to-NO converter efficiency of the as the Reference Method sampling system shall be ≥ 90%);</p> <p>f.) Relative accuracy of the ammonia measurement system shall be within 20% of the reference method or +/-4 ppm; and</p> <p>g.) The results of the converter efficiency check shall be submitted to DES quarterly and shall include the NH<sub>3</sub> calibration gas certification sheet.</p>			
23.	Minimum Specifications for CEMS & COMS	<p>All gaseous CEMS and COMS shall meet the following minimum specifications, as applicable:</p> <p>a.) A gaseous CEMS shall average and record the data for each calendar hour.</p> <p>b.) A “valid hour” of data means a minimum of 42 minutes of gaseous or opacity CEM system readings taken in any calendar hour, during which time the CEM is not in an out of control period as defined in Env-A 808.01(g), and the facility on which the CEM is installed is in operation.</p> <p>c.) All gaseous CEMS shall:</p> <ol style="list-style-type: none"> <li>1.) Include a means to display instantaneous values of gaseous emission concentrations; and</li> <li>2.) Complete a minimum of one cycle of operation, which shall include</li> </ol>	Hourly	SR4, SR5 & SR6	Env-A 808.03

<b>Table 7 - Monitoring/Testing Requirements</b>					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		measuring, analyzing, and data recording for each successive 5-minute period for systems measuring gaseous emissions, unless a longer time period is approved in accordance with Env-A 809.			
24.	General CEMS Audit Requirements	a.) Conduct CEMS audits in accordance with Env-A 808.07 through 808.11 & 40 CFR 75. b.) Notify the Division at least: <ol style="list-style-type: none"> <li>1.) 30 days<sup>32</sup> prior to the performance of a relative accuracy test audit (RATA); and</li> <li>2.) At least 2 weeks prior to any other planned audit or test procedure.</li> </ol>	Quarterly	SR4, SR5 & SR6	Env-A 808.07 through 808.11 & 40 CFR 75.61(a)(5)
25.	CEMS Performance Evaluations and Calibration Checks	a.) Subject to b., below, the methods and procedures of 40 CFR 60.49Da(i) shall be used to conduct monitoring system performance evaluations performed pursuant 40 CFR 60.13 (c) and calibration checks pursuant to 40 CFR 60.13 (d). b.) Acceptable alternative methods and procedures are listed in 40 CFR 60.49Da(j).	During Performance Evaluations and Calibration Checks	SR5	40 CFR 60.49Da(i)
26.	Out-of-Control Periods	a.) If an out-of-control period occurs to a CEMS that is subject to Part 75, take corrective action and repeat the tests applicable to the out of control parameter as described in 40 CFR 75 Appendix B. b.) Out of control periods for CEMS include: <ol style="list-style-type: none"> <li>1.) For daily calibration error tests,                             <ol style="list-style-type: none"> <li>i. When the calibration error of a pollutant concentration monitor exceeds 5.0% based upon the span value;</li> <li>ii. The calibration error of a diluent gas monitor exceeds 1.0% O<sub>2</sub> or CO<sub>2</sub>; or</li> <li>iii. The calibration error of a flow monitor exceeds 6.0% based upon the span value, which is twice the applicable specification in 40 CFR 75 Appendix A.</li> </ol> </li> <li>2.) For quarterly linearity checks, when the error in linearity at any of the three gas concentrations (low, mid-range, and high) exceeds the applicable specification in 40 CFR 75 Appendix A.</li> </ol>	As specified by regulation	SR4, SR5 & SR6	40 CFR 75.21(e)(2) & 75.24 Env-A 3212.10 & Env-A 2907.06

<sup>32</sup> Per 40 CFR 75.61(a)(5), the Owner or Operator shall submit a notification of periodic relative accuracy testing at least 21 days prior to the first scheduled day of testing. Env-A 808.07(c) requires at least a 30-day notification.

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>3.) For RATAs, when the relative accuracy exceeds the applicable specifications in Appendix A of 40 CFR 75.</p> <p>c.) When a monitor or continuous emission monitoring system is out-of-control:</p> <p>1.) Any data recorded by the monitor or monitoring system are not quality-assured and shall not be used in calculating monitor data availabilities pursuant to 40 CFR 75.32; and</p> <p>2.) Apply the procedures for missing data substitution to emissions from affected unit(s) using the applicable procedures in 40 CFR 75, Subpart D, Appendix D or E until the monitor or monitoring system has successfully met the relevant criteria in Appendices A and B of 40 CFR 75 as demonstrated by subsequent tests.</p>			
27.	Certification Status	<p>a.) Pursuant to Env-A 3212.10, whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement pursuant to Env-A 800 or the applicable provisions of 40 CFR 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department shall issue a notice of disapproval of the certification status of such system or component. For the purposes of this section, an audit shall be either a field audit or an audit of any information submitted to the Department or the administrator.</p> <p>b.) The data measured and recorded by the system or component shall not be considered valid quality-assured data from the date of issuance of the notification of the disapproval of certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests in accordance with Env-A 3212.07(t).</p> <p>c.) The Owner or Operator shall follow the initial certification or recertification procedures for each disapproved system.</p>	As specified by regulation	SR4, SR5 & SR6	Env-A 3212.10 & Env-A 2907.06

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
28.	Out of Control Periods for CO CEMS & Opacity	a.) The out of control periods for CO CEMS are defined as follows: <ol style="list-style-type: none"> <li>1.) The time period beginning with the completion of the daily calibration drift check:                             <ol style="list-style-type: none"> <li>i. Where the CD has exceeded twice the allowable limit for five consecutive days; or</li> <li>ii. Preceding the daily CD check that results in the CD being greater than 4 times the allowable limit; and</li> <li>iii. Ending with the CD check following corrective action that results in the CD being within the allowable CD limit; or</li> </ol> </li> <li>2.) The time period beginning with the completion of a RATA, cylinder gas audit (CGA, or relative accuracy audit (RAA) as defined in 40 CFR 60, Appendix F, where the CEMS fails the accuracy criteria established for the respective audit and ending with successful completion of the same audit where the CEMS meets the accuracy criteria established after corrective action has occurred.</li> </ol>	N/A	SR5	Env-A 808.01(g)(1)
		b.) The out of control periods for COMS are defined as follows: <ol style="list-style-type: none"> <li>1.) The time period beginning with the completion of the daily CD check:                             <ol style="list-style-type: none"> <li>i. Where the CD exceeds 2% opacity for 5 consecutive days; or</li> <li>ii. Preceding the daily CD check that results in the CD being greater than 5% opacity; and</li> <li>iii. Ending with the CD check after corrective action has occurred that results in the performance specification drift limits being met; or</li> </ol> </li> <li>2.) The time period beginning with the completion of a quarterly opacity audit where the COMS fails the calibration error test as specified in 40 CFR 60, Appendix B, Specification 1 and ending with successful completion of the same audit where the COMS passes the calibration error test established after corrective action has occurred.</li> </ol>	N/A	SR4, SR5 & SR6	Env-A 808.01(g)(2)

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
29.	Recertification of CEMS and COMS	Recertify CEMS and COMS whenever the Owner or Operator makes a replacement, modification, or change to the systems or to the facility that could significantly affect the ability of the systems to accurately measure and record the requisite data.	As specified	SR4, SR5 & SR6	40 CFR 75.20, 40 CFR 75.70(d), Env-A 808.05, Env-A 3200 & Env-A 2907.04
30.	Reference Test Methods for Certification and Recertification of CEMS or COMS	Use the reference test methods listed in 40 CFR 75.22 and included in Appendix A to 40 CFR 60 to conduct: a.) Monitoring system tests for certification or recertification of CEMS and excepted monitoring systems under 40 CFR 75 Appendix E; and b.) Quality assurance and quality control tests.	During certification or recertification tests	SR4, SR5, SR6 & SRCT	40 CFR 75.22
31.	QA/QC Requirements	Operate and maintain each CEMS according to: a.) The quality assurance and quality control procedures in 40 CFR 75 Appendix B; b.) The procedures specified in Env-A 808. c.) The calibration gas requirements in 40 CFR 72.2; and	Continuously	SR4, SR5 & SR6	40 CFR 75.21 & 75.70
		d.) The quality assurance requirements contained in 40 CFR 75.74, as applicable.	Within and prior to the ozone season		40 CFR 75.74
32.	QA/QC Requirements for Alternative Monitoring System	Comply with the QA/QC procedures of 40 CFR 75 Appendix E and 40 CFR 75.74(c), as applicable.	During the ozone season	SRCT	40 CFR 75.70(e), 40 CFR 75.74(b) & (c) and 40 CFR 75 Appendix E
33.	CEM Minimum Data	a.) Emissions data shall be obtained for at least 18 hours in at least 22 out of 30 successive boiler operating days. b.) If the minimum data requirement in a., above cannot be met with a CEMS, then supplement emission data with: 1.) Other monitoring systems approved by EPA/DES. 2.) The reference methods and procedures specified in 40 CFR 60.49Da(h); or 3.) The alternatives listed in 40 CFR 60.49Da(j). c.) The 1-hour averages required under 40 CFR 60.13(h) shall be: 1.) Calculated using the data points required under 40 CFR 60.13(h)(2);	As specified by regulation	SR5	40 CFR 60.49Da(f), (g), (h) & (j)



<b>Table 7 - Monitoring/Testing Requirements</b>					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		2.) Expressed in ng/J (lb/MMBtu) heat input; and 3.) Used to calculate the average emission rates under §60.48Da.			
34.	Substitute Emission Data (Annual Emission Report)	Any facility that uses the emissions data collected by a gaseous CEM system to calculate and report its annual emissions in accordance with Env-A 900 shall comply with the following: a.) For any facility operating hour during which the gaseous CEM system has not collected a valid hour of CEM system data, the Owner or Operator shall submit to the Division substitute emission data for those hours which has been generated using one of the following methods: 1.) The missing data substitution procedures specified in 40 CFR 75, Subpart D; 2.) If the missing data occurred during a period of steady-state operation, and not during a period of start-up, shutdown, or malfunction: i. An average of the emissions data for the hours prior to and after the period of missing data during which valid CEM data was collected, or ii. Representative emissions data for the device at the same heat input rate, electric generating rate, or steam load; 3.) If the missing data occurred during a start-up, shutdown, or malfunction of the device, substitute data collected by the CEM during a similar period of start-up, shutdown or malfunction, respectively; or 4.) An alternative method of data substitution that meets the following criteria: i. The alternative method was included in the monitoring plan submitted pursuant to Env-A 808.04; ii. The alternative method provides for representative emissions for the conditions of operation of the device during the period of missing data equivalent to the substitution methods described above; and	N/A	SR4, SR5 & SR6	Env-A 808.13 (effective 10-31-2010)

<b>Table 7 - Monitoring/Testing Requirements</b>					
<b>Item #</b>	<b>Parameter</b>	<b>Method of Compliance</b>	<b>Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
		<ul style="list-style-type: none"> <li>iii. The alternative method was approved by DES as part of its approval of the monitoring plan pursuant to Env-A 808.04.</li> <li>b.) For CEM systems and emissions subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall follow those requirements for substituting emissions data in order to calculate emission totals or emission averages as required by 40 CFR 75.</li> <li>c.) For CEM systems and emissions not subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall include substitute emissions data in the calculation of total daily, monthly, quarterly, and annual emissions generated by the permitted device to quantify total actual emissions;</li> <li>d.) Substitute emission data shall not be used in the calculation of emissions totals or averages in order to determine or demonstrate compliance with emissions standards;</li> <li>e.) Substitute data shall not be included in the calculation of data availability.</li> </ul>			
35.	NO <sub>x</sub> Mass Emissions Provisions-Prohibitions	<p>The Owner or Operator is prohibited from the following:</p> <ul style="list-style-type: none"> <li>a.) Using alternative monitoring system, reference method, or any other alternative for the required CEMS without approval through petition process in 40 CFR 75.70(h).</li> <li>b.) Discharging or allowing discharge of NO<sub>x</sub> emissions without accounting for all emissions in accordance with the provisions of Subpart H, except as provided in 40 CFR 75.74.</li> <li>c.) Disrupting the CEMS or any other approved emission monitoring method, and thereby avoid monitoring and recording NO<sub>x</sub> mass emissions, except for periods of re-certification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the provisions of 40 CFR 75 Subpart H applicable to the monitoring systems under 40 CFR 75.71, except as provided in 40 CFR 75.74.</li> <li>d.) Retiring or permanently discontinuing the use of the CEMS, or any other approved emission monitoring system except under one of the following circumstances:                             <ul style="list-style-type: none"> <li>1.) During a period that the unit is covered by a retired unit exemption that is in</li> </ul> </li> </ul>	Continuously	SR4, SR5, SR6 & SRCT	40 CFR 75.70(c)

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>effect under the State or federal NOx mass emission reduction program that adopts the requirements of Subpart H;</p> <p>2.) The owner or operator is monitoring NOx emissions from the affected unit with another certified monitoring system approved, in accordance with the provisions of 40 CFR 75.70(d); or</p> <p>3.) The designated representative submits notification of the date of certification testing of a replacement monitoring system in accordance with 40 CFR 75.61.</p>			
36.	Filterable PM & PM <sub>10</sub>	Conduct stack testing using the following methods:	As specified in Items 61 & 62 of Table 7	SR4 & SR6	40 CFR 63 Subpart UUUUU
		a.) Test methods specified in Table 5 to Subpart UUUUU for filterable PM;			
		b.) EPA Method 201A for PM <sub>10</sub> and Method 202 for condensable PM.	Every 5 years (within 20 calendar quarters) and upon request by DES and/or EPA		40 CFR 70.6 (a)(3)(i)(B)
37.	Ammonia slip	Conduct stack testing using DES-approved method to determine the ammonia slip.	Every 5 years (if SR4-PC2 or SR6-PC2 was operated more than 24-hours in that period) & upon request by DES and/or EPA <sup>33</sup>	SR4 & SR6	40 CFR 70.6 (a)(3)(i)(B)
38.	NOx RACT Testing	Conduct stack testing for NOx using EPA Method 20.	Every 3 years (within 12 calendar quarters)	SRCT	Env-A 803.03
39.	Compliance testing for TSP <sup>34</sup> , HCl & Hg	<u>Performance stack testing</u> a.) Conduct performance testing (or fuel analyses in lieu of performance testing where allowed) for TSP, HCl and Hg.	Annually (within 12 months)	SR5	40 CFR 63 Subpart B (Case-by-case MACT) & 40 CFR 63.7520

<sup>33</sup> If the 5-year stack test is not performed due to lack of run time, a stack test is required within 60 days of the next time SR4-PC2 or SR6-PC2 is operated.

<sup>34</sup> In lieu of testing for PM<sub>10</sub>, assume that TSP and PM<sub>10</sub> emission rates are the same.

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		b.) The Owner or Operator may conduct performance tests for the pollutant every three years if: <ol style="list-style-type: none"> <li>1.) The performance tests for a given pollutant (TSP, HCl or Hg) for at least 3 consecutive years show compliance with the applicable emission limit specified in Table 5 for the pollutant; and</li> <li>2.) There are no changes in the operation of the boiler or air pollution control equipment that could increase emissions.</li> </ol> c.) If a performance test shows noncompliance with an emission limit for TSP, HCl, or mercury, a performance test for that pollutant must be conducted annually until all performance tests over a consecutive 3-year period demonstrate compliance.	or  Every 3 years (within 36 months)          As noted		
40.	Stack Testing Scheduling & Protocol	Compliance stack testing shall be planned and carried out in accordance with the following:	As noted, for each stack test	SR4, SR5, SR6 & SRCT	Env-A 802
		a.) Submit a pre-test protocol to the Division which contains:	At least 30 days prior to commencement of testing		
		1.) The information specified in Env-A 802.04; and		SR5	40 CFR 63.7520
		2.) The information specified in 40 CFR 63.7(c).			
		b.) In the event that the Owner or Operator is unable to conduct the performance test on the date specified in the notification provided pursuant to a. above, notify DES as soon as practicable and obtain prior approval from DES of any new date for the compliance test.	As noted	SR4, SR5, SR6 & SRCT	Env-A 802
		d.) The Owner or Operator and any contractor retained by the Owner or Operator to conduct the test shall meet with a Division representative in person or over the telephone.	At least 15 days prior to the test date		

<b>Table 7 - Monitoring/Testing Requirements</b>					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
41.	Stack Testing - Operating Conditions	a.) Compliance stack testing shall be conducted under one of the following operating conditions: <ol style="list-style-type: none"> <li>1.) Between 90 and 100 percent, inclusive, of maximum production rate or rated capacity;</li> <li>2.) A production rate at which maximum emissions occur; or</li> <li>3.) At such operating conditions agreed upon during a pre-test meeting conducted pursuant to Env-A 802.05.</li> </ol>	Each stack test	SR4, SR5, SR6 & SRCT	Env-A 802
		b.) Compliance stack testing performed to demonstrate compliance with 40 CFR 63 DDDDD limits shall be conducted under the specific conditions listed in Tables 5 & 7 of 40 CFR 63, Subpart DDDDD; and c.) F-factor methodology specified in EPA Method 19 of Appendix A-7 of 40 CFR 60 must be used to convert the measured concentrations of TSP, PM10, HCl and mercury into lb/MMBtu emission rates.		SR5	40 CFR 63.7520
42.	Fuel analysis	If compliance with the mercury or HCl emissions limits is demonstrated based on fuel analysis, then conduct fuel analysis in accordance with 40 CFR 63.7521 for each type of fuel burned.	As specified in the regulation	SR5	40 CFR 63.7515(e) & 40 CFR 63.7521
43.	Mercury & HCl for new fuels	a.) Recalculate maximum HCl or mercury input using Equations 7 or 8 of 40 CFR 63.7530 if: <ol style="list-style-type: none"> <li>1.) Compliance with an applicable HCl or mercury emission limit is demonstrated through performance testing; and</li> <li>2.) The Owner or Operator plans to burn a new type of fuel or a new mixture of fuels.</li> </ol>	Prior to combusting a new type of fuel or new fuel mixture	SR5	40 CFR 63.7540(a)(4)
		b.) If the results of recalculating the maximum HCl or mercury input from a. above are greater than the maximum input level established during the previous performance test, then conduct a new performance test according to the procedures in 40 CFR 63.7520 to: <ol style="list-style-type: none"> <li>1.) Demonstrate that the mercury or HCl emissions do not exceed the emission limit; and</li> <li>2.) Establish new operating limits according to the procedures in 40 CFR 63.7530(b).</li> </ol>	Within 60 days of burning the new type of fuel or fuel mixture		

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
44.	Boiler Tune-up	Conduct a tune-up of the boiler, which shall consist of the following: a.) As applicable, inspect the burner <sup>35</sup> , and clean or replace any components of the burner as necessary. b.) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. c.) As applicable, inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. d.) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject. e.) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made. Measurements may be taken using a portable CO analyzer. <sup>36</sup>	Initial by January 31, 2016 & every 5 years thereafter <sup>37</sup>	SR5 & SRSB	40 CFR 63.7540(a)(10)
45.	Energy Assessment	Have an energy assessment performed by a qualified energy assessor, as defined in 40 CFR 63.7575. The energy assessment shall include the items a. to e., with extent of the evaluation appropriate for the on-site technical hours listed in 40 CFR 63.7575 under the definition for "Energy Assessment": a.) A visual inspection of the boiler system. b.) An evaluation of operating characteristics of the boiler, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints. c.) An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater	One time by January 31, 2016	SR5 & SRSB	40 CFR 63.7510(e)

<sup>35</sup> The burner inspection may be delayed until the next scheduled or unscheduled unit shutdown. The burner must be inspected at least once every 72 months.

<sup>36</sup> Measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made.

<sup>37</sup> If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		owner/operator. d.) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage. e.) A review of the facility’s energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified. f.) A list of cost-effective energy conservation measures that are within the facility’s control. g.) A list of the energy savings potential of the energy conservation measures identified. h.) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.			
46.	Urea consumption	Monitor the amount of urea injected into the SNCR.	Daily	SR5	40 CFR 70.6 (a)(3)(i)(B)
47.	Urea and water usage	Monitor or calculate the amount of water and urea injected into the SNCR.	Daily when SNCR is in operation	SR4 & SR6	40 CFR 70.6 (a)(3)(i)(B)
48.	Fuel Flow Meters-Periodic Monitoring	a.) Operate and maintain a fuel flow monitoring system to measure and record fuel flow, in gallons or tons, on a continuous basis.	In accordance with manufacturers specifications	SR4 & SR6	40 CFR 70.6 (a)(3)(i)(B)
		b.) Calibrate or validate accurate operation of the fuel flow meters.	During planned major turbine-generator outages		
49.	Sulfur Content of No. 6 Fuel Oil	Maintain fuel delivery tickets, other documentation from the fuel supplier or conduct testing in accordance with appropriate ASTM test methods that certify the weight-percent of sulfur for each delivery of the No. 6 fuel oil.	Each delivery of fuel	SR4 & SR6	Env-A 806.02 (effective 10-31-2010)
50.	Sulfur Content of Bituminous Coal	Maintain documentation from the fuel supplier or conduct testing in accordance with appropriate ASTM test methods that certify the weight-percent of sulfur for each delivery of bituminous coal.	Each delivery of fuel	SR4, SR5 & SR6	Env-A 806.04 (effective 10-31-2010)
51.	Sulfur Content of Blended Fuel Oil	Conduct testing in accordance with appropriate ASTM test methods to measure the weight-percent of sulfur in the blended fuel oil.	Each blending	SR4 & SR6	Env-A 806.02(b) (effective 10-31-2010)

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
52.	Sulfur content of Gaseous Fuels	Conduct testing to determine the sulfur content of gaseous fuels in grains of sulfur per 100 cubic feet.	Upon written request by EPA or DES	Facility Wide	Env-A 806.03 (effective 10-31-2010)
53.	Sulfur content of Distillate Fuel Oil	Conduct testing in accordance with appropriate ASTM test methods or retain delivery tickets in accordance with Table 9, Item 8 in order to demonstrate compliance with the sulfur content limitation provisions specified in this permit for liquid fuels.	For each delivery of JP-4 fuel oil or kerosene to the facility	SRCT	Env-A 806.02 & Env-A 806.05 (effective 10-31-2010)
54.	Opacity from Coal Crusher(s)	<u>Visible Emissions Monitoring</u> Conduct visible emissions test using Method 22.	Monthly (if SRCC or SRCC2 operates during that calendar month)	SRCC & SRCC2	Env-A 807.05 (effective 10-31-2010), PO-BP-2688 & TP-0085
55.	Inspection/Maintenance for the baghouse	a.) Inspect the baghouse; and	Annually	SR5-PC3	40 CFR 70.6(a)(3)
		b.) Perform maintenance on the baghouse according to manufacturer's recommendations and/or current facility maintenance practices.	As specified		
56.	Hours of Operation	The emergency engine shall be equipped with a non-resettable hour meter.	Continuous	SREG	40 CFR 63.6625, Subpart ZZZZ
57.	Periodic Monitoring	a.) If the indicator ranges specified in Table 8, Item 2 accumulate excursions over 5% of the rolling 12-month total operating time for SR4-PC1 or SR6-PC1, develop and implement a Quality Improvement Plan (QIP). b.) The QIP shall include procedures for evaluating the control performance problems. c.) Based on the evaluation, modify the plan to include procedures for conducting one or more of the following actions, as appropriate: 1.) Improve preventive maintenance practices. 2.) Operational changes. 3.) Appropriate improvements to control methods. 4.) Other steps to improve control performance. 5.) More frequent or improved monitoring.	As expeditiously as practicable	SR4-PC1 & SR6-PC1	40 CFR 64.8
58.	To Be Determined	When conditions warrant, the Division may require the Owner or Operator to conduct stack testing in accordance with USEPA or other Division approved methods.	Upon request by the Division	Facility Wide	RSA 125-C:6, XI



Table 7 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
59.	Hg	<p><u>LEE Testing Provisions for Hg</u></p> <p>a.) To determine whether a unit qualifies for LEE status for Hg, conduct performance testing in accordance with 40 CFR 63.10005(h) and Table 5 to Subpart UUUUU.</p> <p>b.) If any Hg testing results show that the emission unit does not meet LEE eligibility requirements, LEE status is lost. The Owner or Operator must obtain three calendar years of testing and CEMS or sorbent trap monitoring system data that satisfy the LEE emission criteria to reestablish LEE status.</p>	Initially by October 13, 2016 and once every year thereafter <sup>38</sup>	SR4 & SR6	40 CFR §§ 63.10005(h) & 63.10006(b)
60.	Hg	<p><u>Non-LEE Compliance Demonstration for Hg</u></p> <p>a.) If a coal-fired EGU does not qualify as a LEE for Hg, demonstrate initial and continuous compliance through use of a Hg CEMS or a sorbent trap monitoring system<sup>39</sup>.</p> <p>b.) A single sorbent trap monitoring system may be used to demonstrate compliance with the mercury emissions limit at all times (including startup periods and shutdown periods) and to report average mercury concentration. Follow the startup or shutdown requirements as specified in Table 3 of Subpart UUUUU for each coal-fired EGU.</p> <p>c.) The Hg CEMS or a sorbent trap monitoring system must be installed, certified, operated, maintained and quality-assured in accordance with Appendix A to Subpart UUUUU. Calculate and record a 30-boiler operating day rolling average Hg emission rate, in units of the standard (i.e., lb/TBtu), updated after each new boiler operating day<sup>40</sup>. Each 30-boiler operating day rolling average emission rate, calculated according to section 6.2 of Appendix A to the Subpart UUUUU, is the average of all of the valid hourly Hg emission rates in the preceding 30-boiler operating days.</p> <p>d.) Operate the monitoring system and collect data as per §63.10020.</p>	Initial compliance demonstration by October 13, 2016 and continuously	SR4 & SR6	<p>40 CFR §§ 63.10000(c)(1)(vi) &amp; 63.10005(d)(3)</p> <p>40 CFR §§63.10010(a)(1), 63.10010(g) &amp; 63.100021(b)</p> <p>40 CFR 63.10020</p>

<sup>38</sup> Applicable if the facility chooses LEE option for Hg.

<sup>39</sup> The facility has installed and is currently operating a sorbent trap monitoring system on each boiler SR4 and SR6 to demonstrate continuous compliance with the MATS Hg emission limit.

<sup>40</sup> Update after each new boiler operating day if using Hg CEMS. Update the rolling average Hg emission rate within one day of receipt of the analytical data for sorbent traps.

<b>Table 7 - Monitoring/Testing Requirements</b>					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		e.) The Hg CEMS or sorbent trap monitoring system must pass an initial performance evaluation.  f.) The first 30-boiler operating day rolling average emission rate obtained with a certified Hg CEMS or sorbent trap monitoring system after April 16, 2016, expressed as lb/TBtu, is the initial performance test.  g.) To demonstrate initial compliance using either a Hg CEMS or a sorbent trap monitoring system, the initial performance test consists of 30- boiler operating days of data collected with the certified monitoring system. Pollutant emission rates measured during startup and shutdown periods must be included in the compliance demonstration, as provided in b) above. Initial compliance is achieved if the arithmetic average of 30-boiler operating days of quality assured Hg CEMS or sorbent trap monitoring system data expressed in lb/TBtu meets the mercury emission limit.	Prior to initial compliance demonstration		40 CFR 63.10005(d)  40 CFR 63.10011(c)(1)  40 CFR §§ 63.10005(a)(2) & 63.10005(d)(3)
61.	PM & HCl <sup>41</sup>	<u>LEE Testing Provisions for PM and HCl</u> a.) To demonstrate initial and periodic compliance with the PM and HCl emission limits, conduct stack testing in accordance with Table 5 of Subpart UUUUU and 40 CFR §63.10007. b.) When conducting LEE testing, the minimum sample volume specified in Table 2 of Subpart UUUUU must be increased nominally by a factor of two. c.) Follow the instructions in §63.10007(e) and Table 5 of Subpart UUUUU to convert the test data to lb/MMBtu. d.) For candidate LEE units, performance tests must be conducted quarterly over a 3 consecutive year period and in all such tests, emission results must be less than 50 percent of the applicable emission limit. e.) Upon achieving LEE status for a given pollutant, in order to demonstrate continued LEE status for PM or HCl emission limit, a performance test must be conducted at least	Initial compliance demonstration by October 13, 2016 and as specified thereafter	SR4 & SR6	40 CFR §§ 63.10005(h), 63.10007, 63.10000(c)(iii), 63.10006(b) & 63.10006(h)

<sup>41</sup> The facility is currently demonstrating compliance with the MATS PM and HCl limits through stack testing.

<b>Table 7 - Monitoring/Testing Requirements</b>					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>once every three years.</p> <p>f.) LEE status for a pollutant is lost if a performance test on a PM or HCl LEE unit shows emissions in excess of 50 percent of the respective emission limit, In order to reapply for LEE status, conduct quarterly performance tests (except as otherwise provided in §63.10021(d)) for that pollutant, until all performance tests over a consecutive 3-year period show compliance with the LEE criteria.</p>			
62.	PM from non-LEE	<p>a.) If a coal-fired EGU does not qualify as a LEE for filterable particulate matter, then demonstrate compliance through the use of a PM CEMS or conduct compliance performance testing quarterly<sup>42</sup>.</p> <p>b.) Conduct stack testing according to §63.10007 and Table 5 to Subpart UUUUU, except as otherwise provided in §63.10021(d).</p> <p>Alternatively, if compliance with the PM limit is demonstrated through CEMS:</p> <p>c.) The PM CEMS must be installed, maintained, quality-assured and operated in accordance with Env-A 808 and §63.10010(i). The compliance limit will be expressed as a 30-boiler operating day rolling average of the applicable numerical emissions limit value specified in Table 2 of Subpart UUUUU.</p> <p>d.) Operate the monitoring system and collect data as per §63.10020.</p> <p>e.) Prior to the initial compliance demonstration with the PM emission limit, the PM CEMS must pass a performance evaluation.</p> <p>f.) The first 30-boiler operating day average emission rate obtained with certified CEMS after April 16, 2016, expressed in lb/MMBtu, is the initial performance test.</p> <p>g.) Initial compliance is achieved if the arithmetic average of 30-boiler operating days of quality-assured CEMS data, expressed as lb/MMBtu, meets the PM emissions limit in specified in Table 2 Subpart UUUUU. Use Equation 19-19 of</p>	<p>Initial compliance demonstration by October 13, 2016</p> <p>Quarterly</p> <p>Continuously</p>	<p>SR4 &amp; SR6</p>	<p>40 CFR 63.10000(c)(iv)</p> <p>40 CFR §§ 63.10006(c) &amp; 63.10007</p> <p>40 CFR §§ 63.10005(a) &amp; (d), 63.10010(a)(1), 63.10010(i), 63.10011(c)(2), 63.10020 &amp; 63.10021(b)</p>

<sup>42</sup> Please note that the periodic stack testing requirements under the MATS rule (i.e., quarterly testing for the first three years followed by once every three years for LEE and quarterly testing for non-LEE) for particulate matter are more stringent than the once every five years testing required under the previously effective Title V Operating Permits for the facility.

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>Method 19 in Appendix A-7 to 40 CFR 60 to calculate the 30-boiler operating day average emissions rate.</p> <p>h.) Pollutant emission rates measured during startup and shutdown periods are not to be included in the compliance demonstration.</p>			
63.	HCl from non-LEE	<p>a.) If a coal-fired EGU does not qualify as a LEE for hydrogen chloride, initial and continuous compliance may be demonstrated through use of an HCl CEMS or by conducting an initial and periodic quarterly performance stack test.</p> <p>b.) Conduct stack testing quarterly according to §63.10007 and Table 5 to Subpart UUUUU, except as otherwise provided in §63.10021(d).</p> <p>Alternatively, if compliance with the HCl limit is demonstrated through CEMS:</p> <p>c.) Install, certify, operate, maintain, and quality-assure the data from the HCl CEMS in accordance with Appendix B to Subpart UUUUU. Calculate and record a 30-boiler operating day rolling average HCl emission rate in lb/MMBtu, updated after each new boiler operating day. Each 30-boiler operating day rolling average emission rate is the average of all the valid hourly HCl emission rates in the preceding 30 boiler operating days (see section 9.4 of Appendix B).</p> <p>d.) Operate the monitoring system and collect data as per §63.10020.</p> <p>e.) Prior to the initial compliance demonstration with the emission limit, the HCl CEMS must pass a performance evaluation.</p> <p>f.) The first 30 boiler operating day average emission rate obtained with certified CEMS after April 16, 2016, expressed in lb/MMBtu, is the initial performance test.</p> <p>g.) Initial compliance is achieved if the arithmetic average of 30-boiler operating days of quality-assured CEMS data, expressed as lb/MMBtu, meets the HCl emissions limit in specified in Table 2 of Subpart UUUUU.</p> <p>h.) Pollutant emission rates measured during startup and shutdown periods are not to be included in the compliance demonstration.</p>	<p>Initial compliance demonstration by October 13, 2016</p> <p>Quarterly</p> <p>Continuously</p>	<p>SR4 &amp; SR6</p>	<p>40 CFR 63.10000 (c)(v)</p> <p>40 CFR §§ 63.10006(d) &amp; 63.10007</p> <p>40 CFR §§ 63.10005(a) &amp;(d), 63.10010(a)(1), 63.10010(e), 63.10011(c)(1), 63.10020 &amp; 63.10021(b)</p>

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
64.	PM, HCl & Hg	<p><u>MATS Stack Testing Frequency &amp; Time Between Performance Tests</u></p> <p>a.) Except as otherwise provided in b. below, conduct the required performance tests at the intervals specified in §63.10006(f).</p> <p>b.) Performance test may be skipped in those quarters during which less than 168 boiler operating hours occur, except that a performance test must be conducted at least once every calendar year.</p>	As specified	SR4 & SR6	40 CFR §§63.10006(f) & 63.10021(d)
65.	Tune-up	<p>Conduct a tune-up of each EGU, which shall consist of the following:</p> <p>a.) As applicable, inspect the burner<sup>43</sup> and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows:</p> <ol style="list-style-type: none"> <li>1.) Burner or combustion control component parts needing replacement that affect the ability to optimize NOx and carbon monoxide (CO) must be installed within 3 calendar months after the burner inspection;</li> <li>2.) Burner or combustion control component parts that do not affect the ability to optimize NOx and CO may be installed on a schedule determined by the operator;</li> </ol> <p>b.) As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer’s specifications, if available, or in accordance with best combustion engineering practice for that burner type;</p> <p>c.) As applicable, observe the damper operations as a function of mill and/or cyclone loadings, cyclone and pulverizer coal feeder loadings, or other pulverizer and coal mill performance parameters, making adjustments and effecting repair to dampers, controls, mills, pulverizers, cyclones, and sensors;</p>	Initial by October 13, 2016 & every 36 calendar months thereafter	SR4 & SR6	40 CFR 63.10021(e)

<sup>43</sup> The first burner inspection may be delayed until the next scheduled unit outage, provided the requirements of §63.10005(f) are met. Subsequently, the burner must be inspected at least once every 36 calendar months.

**Table 7 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
		<p>d.) As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors;</p> <p>e.) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O<sub>2</sub> probes and/or sensors, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary;</p> <p>f.) Optimize combustion to minimize generation of CO and NO<sub>x</sub>. This optimization should be consistent with the manufacturer’s specifications, if available, or best combustion engineering practice for the applicable burner type. NO<sub>x</sub> optimization includes burners, overfire air controls, concentric firing system improvements, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR and SNCR; CO optimization includes burners, overfire air controls, concentric firing system improvements, control systems calibrations, and adjusting combustion zone temperature profiles;</p> <p>g.) While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO<sub>x</sub> in ppm, by volume, and oxygen in volume percent, before and after the tune-up adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Portable CO, NO<sub>x</sub> and O<sub>2</sub> monitors may be used for this measurement.</p>			
66.	Sorbent injection rate	The sorbent injection rate for each boiler must be continuously monitored and recorded during the boiler operation.	Continuously	SR4-PC3 & SR6-PC3	40 CFR 70.6(a)(3)
67.	DSI air blower pressure	The DSI system air blower pressure must be continuously monitored during the boiler operation. Normal operating range is 3-12 psi.	Continuously	SR4-PC3 & SR6-PC3	40 CFR 70.6(a)(3)

<b>Table 7 - Monitoring/Testing Requirements</b>					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
68.	ACI air blower pressure	The ACI system air blower pressure must be continuously monitored during the boiler operation. Normal operating range is 5-8 psi.	Continuously	SR4 & SR6-PC4	40 CFR 70.6(a)(3)

**J. Compliance Assurance Monitoring**

<b>Table 8 - Compliance Assurance Monitoring (40 CFR 64)</b>			
<b>Electrostatic Precipitator (ESP) for the control of Particulate Matter - SR4 &amp; SR6</b>			
1.	Indicators	Secondary voltage	Inspection and Maintenance (I/M)
	Measurement Approach	The voltage drop is measured by the precipitator control system at each transformer rectifier (TR) set.	Inspections shall be performed according to ESP I/M Plan. Maintenance shall be performed as needed.
2.	Indicator Range	An excursion is defined as a secondary voltage level less than 25 kV. Excursions <sup>44</sup> trigger an inspection, corrective action, and a reporting requirement.	Failure to perform an inspection triggers a reporting requirement. Equipment failures identified during an inspection trigger corrective action and a reporting requirement.
3.	Performance Criteria	Secondary voltage is measured electronically by circuit boards in the control system.	Inspections are performed at the ESP
	a.) Data Representativeness		
	b.) QA/QC Practices and Criteria	Confirm that Distributive Control System (DCS) monitoring PC displays zero when the unit is not operating.	Inspections shall be conducted by qualified personnel.
	c.) Monitoring Frequency	The secondary voltage shall be monitored continuously.	Inspections shall be performed according to ESP I/M plan. Maintenance shall be performed as needed.
	1.) Data Collection Procedure	Data is collected on a continuous basis using the DCS.	Records of the inspections and maintenance shall be stored in the Plant Maintenance Management System.
	Averaging Period	3-hour block average	Not applicable
	d.) Verification of Operational Status	N/A	N/A

<sup>44</sup> Excursion shall mean a departure from an indicator range established for monitoring under 40 CFR 64, consistent with any averaging period specified for averaging the results of the monitoring.

**K. Recordkeeping Requirements**

The Owner or Operator shall be subject to the recordkeeping requirements identified in Table 9 below:

<b>Table 9 - Recordkeeping Requirements</b>				
<b>Item #</b>	<b>Recordkeeping Requirement</b>	<b>Records Retention/ Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1.	<u>Record Retention and Availability</u> Keep the records required by this permit on file. These records shall be available for review by the Division upon request.	Retain for a minimum of 5 years <sup>45</sup> unless longer as specified	Facility wide	Env-A 902, Env-A 3213 & 40 CFR 70.6(a)(3)(ii)(B)
2.	<u>CO<sub>2</sub> Budget Source and Unit Records</u> a.) Maintain the following records regarding the CO <sub>2</sub> budget source and each CO <sub>2</sub> budget unit: 1.) The account certificate of representation and all documents that demonstrate the truth of the statements in the account certificate of representation prepared in accordance with Env-A 4604.05; 2.) All emissions monitoring information, in accordance with Env-A 4609 and 40 CFR 75; 3.) Copies of all reports, compliance certifications and other submissions and all records made or required under Env-A 4600; and 4.) Copies of all documents used to complete a CO <sub>2</sub> budget permit application and any other submission under the CO <sub>2</sub> Budget Trading Program or to demonstrate compliance with the requirements of Env-A 4600. b.) Records required in a. shall be retained beyond the 10-year minimum retention period until such documents are superseded because of the submission of a new account certificate of representation changing the CO <sub>2</sub> AAR.	Maintain up-to-date records  Retain for a minimum of 10 years from the date the document is created, or beyond as noted in b.	SR4, SR5 & SR6	Env-A 4605.03(a)
3.	<u>Certificate of Representation</u> a.) Complete and retain a certificate of representation for a designated representative or an alternate designated representative including the elements pursuant to 40 CFR 72.24, <i>Certificate of representation</i> . b.) The certificate of representation required in a. shall be retained beyond the 5-year minimum period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.	Maintain at the facility at all times	SR4, SR5 & SR6	40 CFR 72.9(f) & 40 CFR 72.24

<sup>45</sup> Note that record retention for five years is more stringent than the three year record retention required in some sections of 40 CFR 75 and 40 CFR 60.



**Table 9 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
4.	<p><u>Actual Emissions for Use in Calculating Emission-based Fee</u>                      Maintain records of actual emissions of regulated air pollutants from each significant activity for determination of emission based fees.</p>	Monthly	SR4, SR5, SR6, SRCT, SRCC, SRCC2, SREG & SRSB	Env-A 705.02 & 705.04
5.	<p><u>General Recordkeeping Requirements for Combustion Devices</u>                      Maintain the records of the type (e.g., coal, wood, etc.) and amount of fuel burned in each device.</p>	Monthly	SR4, SR5, SR6, SRCT, SREG & SRSB	Env-A 903.03
6.	<p><u>Characteristics of Fuel Combusted</u>                      Maintain records of the following characteristics for all fuel consumed in the devices:                      a.) For gaseous fuels:                          1.) Sulfur content as percent sulfur by weight or in grains per 100 cf;                          2.) Documentation that the fuel source is from a utility pipeline; or                          3.) Documentation that the fuel meets state sulfur limits;                      b.) For liquid, residual fuel oil:                          1.) Sulfur content as percent sulfur by weight;                      c.) For liquid, distillate fuel oil:                          1.) Sulfur content as percent sulfur by weight; or                          2.) Documentation that the fuel meets state sulfur limits;                      d.) For coal:                          1.) Ash content in percent by weight;                          2.) Chloride content                          3.) Sulfur content as:                              i. Percent sulfur by weight; and                              ii. lb sulfur/MMBtu gross heat content; and                              iii. Gross heat content in Btu/lb.</p>	Monthly	SR4, SR5, SR6, SRCT & SREG	Env-A 903.03(a) & Env-A 906.01
7.	<p><u>Gaseous Fuel Delivery</u>                      Maintain one of the following:                      a.) Sulfur content as percent sulfur by weight or in grains per 100 cubic feet of fuel;                      b.) Documentation that the fuel source is from a utility pipeline; or                      c.) Documentation that the fuel meets state sulfur standards.</p>	<p>For LPG:                      each delivery                       For natural gas:                      annually and                      whenever there is a                      change fuel supplier</p>	SR4, SR5, SR6, SRCT & SREG	Env-A 903.03

**Table 9 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
8.	<p><u>Liquid, Distillate Fuel Oil Delivery</u>                      In lieu of sulfur testing pursuant to Table 7, Item 53, the Owner or Operator may maintain a written statement from the fuel supplier stating that the sulfur content of the distillate fuel oil as delivered does not exceed state or federal standards for that fuel.</p>	<p>Annually and whenever there is a change in fuel supplier</p>	<p>SRCT</p>	<p>Env-A 806.05                      Effective                      10-31-2010</p>
9.	<p><u>Liquid, Residual Fuel Oil Delivery</u>                      Maintain records of the following information for each delivery of residual fuel oil received:</p> <ul style="list-style-type: none"> <li>a.) The quantity of fuel received;</li> <li>b.) The maximum weight percentage sulfur in the fuel delivered ;</li> <li>c.) Records showing either:                             <ul style="list-style-type: none"> <li>1.) The analytical method used and the specific fuel analysis results of the shipment or consignment from which the shipment came; or</li> <li>2.) Records sufficient to allow for traceability of the analytical results corresponding to each shipment received by the facility, showing:                                     <ul style="list-style-type: none"> <li>i. The date of the delivery;</li> <li>ii. The quantity of the delivery;</li> <li>iii. The type of fuel;</li> <li>iv. The maximum weight percentage sulfur; and</li> <li>v. The name, address, and telephone number of the company making the delivery.</li> </ul> </li> </ul> </li> </ul>	<p>For each delivery of residual fuel oil</p>	<p>SR4 &amp; SR6</p>	<p>Env-A 806.05                      Effective                      10-31-2010</p>
10.	<p><u>Coal Delivery</u>                      Maintain delivery records from each coal supplier which include the following information for each shipment of coal received:</p> <ul style="list-style-type: none"> <li>a.) The name of the fuel supplier;</li> <li>b.) The address of the fuel supplier;</li> <li>c.) The telephone number of the fuel supplier;</li> <li>d.) The type of coal delivered;</li> <li>e.) The quantity of coal delivered;</li> <li>f.) The date of delivery;</li> <li>g.) Ash content in percent by weight;</li> <li>h.) Subject to k., below, maximum sulfur content as:                             <ul style="list-style-type: none"> <li>1.) Percent sulfur by weight; and</li> <li>2.) lb sulfur/MMBtu gross heat content;</li> </ul> </li> <li>i.) Gross heat content in Btu/lb;</li> <li>j.) Identification of the mine from which the coal originated;</li> <li>k.) If the delivery records do not contain sulfur content</li> </ul>	<p>For each delivery of coal</p>	<p>SR4, SR5 &amp; SR6</p>	<p>Env-A 806.05                      Effective                      10-31-2010                      &amp;                      Env-A 906.01</p>

**Table 9 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	information required in h, above, the Owner or Operator shall perform sulfur content testing in pursuant to Table 7, Item 50; and l.) Chloride content			
11.	<u>General Recordkeeping Requirements for Process Operations</u> Maintain records of raw material (coal) throughput for each of the crusher systems.	Monthly and consecutive 12 month period	SRCC & SRCC2	Env-A 903.02
12.	<u>Pollution Control Equipment Utilization Usage</u> Maintain records of: a.) The amount of urea used in each SNCR system. ----- b.) The amount of sorbent injected into the boiler.	Monthly	SR4-PC2 SR5-PC1 SR6-PC2 ----- SR5-PC2	Env-A 906.01
13.	<u>General NO<sub>x</sub> Recordkeeping</u> Maintain records of: a.) Identification of each fuel burning device. b.) Operating schedule during the high ozone season for each fuel burning device identified in a. above, including: 1.) Typical hours of operation per calendar day; 2.) Typical days of operation per calendar month; 3.) Number of weeks of operation; 4.) Heat input rate in MMBtu/hr. c.) The following NO <sub>x</sub> emission data: 1.) Actual NO <sub>x</sub> emissions from each combustion device identified in a. above for: i. Each calendar year, in tons; and ii. A typical high ozone season day, in pounds per day; and 2.) The emission factors and the origin of the emission factors used to calculate the NO <sub>x</sub> emissions, or CEM data, as applicable.	Continuous, annually, and during the high ozone season, as specified	SR4, SR5, SR6, SRCT & SREG	Env-A 905.02
14.	<u>Add-On NO<sub>x</sub> Control Equipment</u> Maintain records of the following information: a.) Air pollution control device identification number, type, model number, and manufacturer; b.) Installation date; c.) Unit(s) controlled; d.) Type and location of the capture system, capture efficiency percent, and method of determination; e.) Information as to whether the air pollution control device is always in operation when the fuel burning device it is serving is in operation; f.) Destruction or removal efficiency of the air pollution control equipment, including the following	Maintain at the facility at all times	SR4, SR5 & SR6	Env-A 905.03

Table 9 - Recordkeeping Requirements				
Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	information: 1.) Destruction or removal efficiency, in percent; 2.) Date tested; 3.) Emission test results; and 4.) Method of determining destruction or removal efficiency, if not tested.			
15.	<u>VOC Emission Statements</u> Maintain records of the following information: a.) Identification of each VOC-emitting process or device; b.) The operating schedule during the high ozone season for each VOC-emitting process or device identified in a. above, including: 1.) Typical hours of operation per day; and 2.) Typical days of operation per calendar month; and c.) The following VOC emission data: 1.) Actual VOC emissions from each combustion device identified in a. above for: i. Each calendar year, in tons; and ii. A typical high ozone season day during that calendar year, in pounds per day; and 2.) The emission factors and the origin of the emission factors used to calculate the VOC emissions.	Continuous, annually, and during the high ozone season, as specified	SR4, SR5, SR6, SRCT & SREG	Env-A 904.02
16.	<u>Coal Crusher Visible Emissions and Corrective Actions</u> Maintain records of the following information: a.) The monthly visible emission observation results; b.) Problems observed and corrective actions taken, including: 1.) The date a problem was observed; 2.) A description of the problem; 3.) The date of the corrective action; and 4.) The corrective actions taken.	As specified	SRCC & SRCC2	Env-A 906.01
17.	<u>Fly Ash Reinjection System Utilization</u> Maintain records of the following for each fly ash reinjection system: a.) The operating hours of the flyash reinjection system blowers; and b.) The amount of fly ash reinjected, which may be based upon the blower hours of operation multiplied by the fly ash reinjection rate or another equivalent method. <sup>46</sup>	Daily when operating with flyash reinjection	SR4 & SR6	Env-A 906 & 40 CFR 70.6 (a)(3)(i)(B)

<sup>46</sup> Note that the flyash reinjection rate typically remains constant at 3.5 tons per hour.

**Table 9 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
18.	<p><u>Startup/Shutdown Records for SR5</u>                      Maintain records of the following data:</p> <p>a.) For each startup:</p> <ol style="list-style-type: none"> <li>1.) Date and time of first fuel fire in the boiler; and</li> <li>2.) Date and time unit reaches 50% generating capacity.</li> </ol> <p>b.) For each shutdown:</p> <ol style="list-style-type: none"> <li>1.) Reason for shutdown; and</li> <li>2.) Date and time shutdown process begins.</li> </ol>	Each startup and shutdown	SR5	Env-A 906.01
19.	<p><u>Regulated Toxic Air Pollutants</u>                      Maintain records documenting compliance with Env-A 1400. Compliance was demonstrated at the time of permit issuance as described in the Application Review Summary prepared by the Division for permit application 11-0134. The compliance demonstration must be updated if:</p> <p>a.) There is a revision to the list of RTAPs lowering the AAL for any RTAP emitted at the facility;</p> <p>b.) The amount of any RTAP emitted is greater than the amount that was evaluated in the Permit Application Review Summary (e.g., use of a coating increases beyond levels previously evaluated);</p> <p>c.) An RTAP that was not evaluated in the Permit Application Review Summary will be emitted (e.g., a new coating will be used); and</p> <p>d.) Stack conditions (e.g. air flow rate) change.</p>	Update prior to process changes and within 90 days of each revision of Env-A 1400	Facility wide	Env-A 902.01
20.	<p><u>Quality Improvement Plan</u>                      Maintain a written QIP when the conditions in Table 7, Item 57 are met.</p>	Maintain continuously if required	SR4-PC1 & SR6-PC1	40 CFR 64.8
21.	<p><u>QA/QC Plan</u>                      a.) Prepare and maintain the quality assurance/quality control (QA/QC) plan which shall contain written procedures for implementation of a QA/QC program that meets the criteria specified in 40 CFR 60, Appendix F, Procedure 1, Section 3 for each CEMS.</p>	Maintain Continuously	SR4, SR5 & SR6	Env-A 808.06 (effective 10-31-2010) & 40 CFR 63.10000(d)
	<p>b.) Review the QA/QC plan and all data generated by its implementation;</p>	At least annually		

**Table 9 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	c.) Revise or update the QA/QC plan by: <ol style="list-style-type: none"> <li>1.) Documenting the replacement of any damaged or malfunctioning CEM system components in order to maintain the collection of valid CEM data and to maximize data availability.</li> <li>2.) Documenting any changes made to the CEM or changes to any information provided in the monitoring plan required pursuant to Env-A 808.04 and Table 9, Item 22.</li> <li>3.) Including a schedule of, and describing, all maintenance activities that are required by the CEM manufacturer or that might have an effect on the operation of the system.</li> <li>4.) Describing how the audits and testing required by Env-A 808 and this permit will be performed.</li> <li>5.) Including examples of the reports that will be used to document the audits and tests required by Env-A 808 and this permit.</li> </ol> d.) The QA/QC plan and any revisions to the QA/QC plan shall be considered updates to the CEM monitoring plan required by Env-A 808.04.	As necessary based upon results of the annual review		
22.	<u><i>CEMS &amp; COMS Monitoring Plan</i></u> <sup>47</sup> a.) Prepare and maintain a monitoring plan for the CEMS and COMS which contains: <ol style="list-style-type: none"> <li>1.) Sufficient information to demonstrate that all unit SO<sub>2</sub> emissions, NO<sub>x</sub> emissions, CO<sub>2</sub> emissions and opacity are monitored and reported.</li> <li>2.) The information specified in 40 CFR 75.53 &amp; Env-A 808.04.</li> <li>3.) Pursuant to Env-A 3212.13(a) and Env-A 2907.09, the units subject to acid rain emission limitations (SR4, SR5, SR6) shall comply with the requirements of 40 CFR 75.62, except the monitoring plan shall also include all of the information required by 40 CFR 75, Subpart H.</li> <li>4.) Pursuant to Env-A 3212.13(b), a unit not subject to acid rain emission limitations (SRCT) shall comply with the requirements of 40 CFR 75.62, except the monitoring plan shall only include the information required by 40 CFR 75, Subpart H.</li> <li>5.) Pursuant to 40 CFR 75.73(c)(3), the</li> </ol>	Maintain on a continuous basis and update as necessary	SR4, SR5, SR6 & SRCT	40 CFR 75.53, 40CFR 75.73, 40 CFR 63.7505(d), 40 CFR 10000(d), Env-A 808.04, Env-A 2907.09, Env-A 3212.13 & Env-A 4609

<sup>47</sup> This permit condition has been streamlined to cover various state and federal regulations. This includes the "site-specific monitoring plan" required by 40 CFR 63, Subparts DDDDD and UUUUU.

**Table 9 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	<p>monitoring plan for a unit not subject to acid rain emission limitations (SRCT) shall include the provisions of 40 CFR 75.53(h)(2)(i) in electronic format and 40 CFR 75.53(h)(2)(ii) in hardcopy format.</p> <p>6.) The monitoring plan for SR5 must include the elements described in §63.7505(d).</p> <p>7.) Pursuant to Env-A 808.12(d), the monitoring plan must include which of the two percent data availability calculation methods described in 40 CFR 75.32 or Env-A 808.12(c) is used for each opacity, gaseous concentration, and stack flow volumetric flow monitor located at the source.</p> <p>b.) Revise or update the monitoring plan whenever the Owner or Operator makes a replacement, modification or change that could affect the CEMS or COMS or other approved monitoring method.</p>			
23.	<p><u>General Acid Rain Recordkeeping Provisions</u>                      Maintain records of:</p> <p>a.) Opacity, operating parameters (operating time, heat input, volumetric flow rate &amp; load), diluent monitor data, SO<sub>2</sub>, NO<sub>x</sub> &amp; CO<sub>2</sub> emissions and percent monitor availability; and</p> <p>b.) The causes of any missing data periods and the actions taken to correct such causes.</p>	Maintain on a continuous basis	SR4, SR5 & SR6	40 CFR 75.57
24.	<p><u>Specific NO<sub>x</sub> Emission Record Provisions For Peaking Units Using Optional Protocol in Appendix E to Part 75</u>                      Maintain the records of the information (as applicable) specified in 40 CFR 75.58(d).</p>	Maintain on a continuous basis (For Ozone season)	SRCT	40 CFR 75.58(d)
25.	<p><u>Certification, Quality Assurance and Quality Control Records</u></p> <p>a.) Maintain records of the information required pursuant to 40 CFR 75.59 and 75.73(b) which includes the certification, quality assurance, and quality control records.</p> <p>b.) These shall include records of all daily &amp; 7-day calibration error tests, daily interference checks, cycle time tests, linearity checks and relative accuracy test audits, as applicable.</p>	Maintain on a continuous basis	SR4, SR5 & SR6	40 CFR 75.59, 40 CFR 75.73 & Env-A 3212
26.	<p><u>Additional Monitoring Records</u>                      Maintain records of data required to be monitored pursuant to Tables 7 &amp; 8 including:</p> <p>a.) TSP &amp; PM<sub>10</sub> emissions in tons (per month &amp; 12-month rolling sum) for SR4 and SR6 calculated using the most recent stack test results.</p> <p>b.) Maintenance and inspection conducted on control</p>	Maintain on a continuous basis	SR4, SR6, SR6 & SRCT	40 CFR 70.6(a)(3)(ii)

**Table 9 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	equipment listed in Table 3. c.) Secondary voltage readings for SR4-PC1 & SR6-PC1. d.) Net electrical output (MWh) for SR4, SR5, SR6 and SRCT. e.) Fuel flow metering calibrations for SR4 and SR6.			
27.	<u>Alternative Operating Scenario Records</u> Maintain records of operation under alternative operating scenarios including: a.) The date and hour that operation in the alternative operating scenario began; b.) The date hour that operation in the alternative operating scenario ceased; and c.) Which alternative operating scenario is in use.	Whenever operation method changes from normal operation to a specific alternative operating scenario	SR4 & SR6	40 CFR 70.6(a)(9)
28.	<u>Retention of NSPS Records</u> Maintain records of: a.) Measurements, including CEMS, COMS, CPMS, and performance testing measurements. b.) Any periods during which a CEMS or monitoring device is inoperative c.) CEMS, COMS and CPMS performance evaluations. d.) CEMS, COMS, CPMS and monitoring device: 1.) Calibration checks; 2.) Adjustments; 3.) Maintenance; and e.) All other information required by 40 CFR 60 Subpart Da and Subpart Y.	All NSPS records to be maintained for 5 years	SR5 & SRCC2	40 CFR 60.7(b) & (f)
29.	<u>MACT CO Records</u> Maintain records of: a.) CO CEMS performance audits; and b.) Dates and duration of periods when the CO CEMS is out of control to completion of the corrective actions necessary to return the CO CEMS to operation consistent with the monitoring plan.	Each performance audit and as specified	SR5	40 CFR 63.7540(a)(8)
30.	<u>General MACT Recordkeeping</u> The Owner or Operator shall maintain the following records: a.) A copy of each notification and report that was submitted to comply with 40 CFR 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that was submitted; b.) Records of performance tests, fuel analyses, or other	Continuous	SR5	40 CFR 63.7540(a)(2), 40 CFR 63.7555 & 40 CFR 63.7560



**Table 9 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	<p>compliance demonstrations and performance evaluations;</p> <p>c.) For each CEMS, COMS, and continuous monitoring system the following information:</p> <ol style="list-style-type: none"> <li>1.) Records described in 40 CFR 63.10(b)(2)(vii) through (xi).</li> <li>2.) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in 40 CFR 63.6(h)(7)(i) and (ii).</li> <li>3.) Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).</li> <li>4.) Request for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i).</li> <li>5.) Records of the date and time that each deviation started and stopped.</li> <li>6.) Results of each inspection, calibration and validation checks for CPMS.</li> </ol> <p>d.) Records of all monitoring data and calculated averages for applicable operating limits, such as opacity, sorbent injection rate (when used) and operating load, to show continuous compliance with each applicable emission limit and operating limit.</p> <p>e.) Monthly records of the type and amount of all fuels burned in the boiler during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in lower fuel input of chlorine and mercury than the maximum values calculated during the last performance test.</p> <p>f.) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing.</p> <p>g.) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing.</p> <p>h.) If, consistent with Table 7, Item 39, the Owner or Operator chooses to stack test less frequently than annually, the Owner or Operator must keep a record that documents that emissions in the previous stack test(s) were less than the applicable emission limit, and document that there was no change in source</p>			

**Table 9 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	<p>operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.</p> <p>i.) Records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment.</p> <p>j.) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.7500(a)(3), including corrective actions to restore the malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation.</p> <p>k.) Records of the calendar date, time, occurrence and duration of each startup and shutdown.</p> <p>l.) Records of the type(s) and amount(s) of fuels used during each startup and shutdown.</p>			
31.	<p><u>MACT Boiler Tune-up Records</u>                      Maintain on-site and submit if requested by EPA/DES, a report containing following information:</p> <p>a.) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;</p> <p>b.) A description of any corrective actions taken as a part of the tune-up; and</p> <p>c.) The type and amount of fuel used over the 12 months prior to the tune-up.</p>	Each boiler tune-up	SR5 & SRSB	40 CFR 63.7540(a)(10)(vi)
32.	<p><u>Operation Log for the Emergency RICE</u>                      Maintain records of:</p> <p>a.) Hours of operation;</p> <p>b.) Number of hours spent for emergency operation, including what classified the operation as emergency and maintenance &amp; testing hours;</p> <p>c.) Maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE was operated and according to the maintenance plan; and</p> <p>d.) A current copy of the O&amp;M manual for the engine and its associated control device (if any).</p>	Continuous	SREG	40 CFR 63.6655 NESHP Subpart ZZZZ
33.	<p><u>Recordkeeping Requirements for Permit Deviations</u>                      Recordkeeping of deviations from Permit requirements shall be conducted in accordance with Section XXVII of this Permit.</p>	Maintain Up-to-date Data	Facility Wide	Env-A 911

**Table 9 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
34.	<p><u>Update to Air Pollution Dispersion Modeling Impact Analysis</u></p> <p>If an update to the facility’s air pollution dispersion modeling impact analysis is required pursuant to Env-A 606.02, submit the information required pursuant to Env-A 606.04:</p> <p>a.) With the permit application submitted for the change which triggered the analysis; or</p> <p>b.) Within 15-days of completion of the change which triggered the analysis, if a permit application is not required.</p>	As specified	Facility-wide	Env-A 910.01
35.	<p>Maintain the following information for sorbent and activated carbon:</p> <p>a.) Type (for example trona, sodium bicarbonate, etc.), manufacturer and product ID; and</p> <p>b.) Amount (in pounds) for each unit.</p>	<p>Daily and 30-boiler operating day average for activated carbon</p> <p>Daily for acid gas sorbent</p>	SR4 & SR6	TP-0157
36.	<p>Maintain the following records:</p> <p>a.) If the facility is required to (or elects to) continuously monitor Hg and/or HCl emissions, the records required under Appendix A and/or Appendix B to Subpart UUUUU must also be kept.</p> <p>b.) A copy of each notification and report that was submitted to comply with Subpart UUUUU, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report, according to the requirements in §63.10(b)(2)(xiv).</p> <p>c.) Records of performance stack tests, or other compliance demonstrations and performance evaluations, as required in § 63.10(b)(2)(viii).</p> <p>d.) If compliance is demonstrated using CEMS, keep the following records:</p> <ol style="list-style-type: none"> <li>1.) Records described in § 63.10(b)(2)(vi) through (xi).</li> <li>2.) Previous (i.e., superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).</li> <li>3.) Request for alternatives to relative accuracy test for CEMS as required in § 63.8(f)(6)(i).</li> <li>4.) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.</li> </ol> <p>e.) Records of quarterly performance tests and periodic performance tune-ups as specified in Table 7 to Subpart UUUUU.</p> <p>f.) Records of monthly fuel use by each EGU,</p>	On a continuous basis	SR4 & SR6	40 CFR 63.10032, Env-A 902 & 40 CFR 70.6(a)(3)(ii) (B)

**Table 9 - Recordkeeping Requirements**

Item #	Recordkeeping Requirement	Records Retention/ Frequency	Applicable Unit	Regulatory Basis
	including the type(s) of fuel and amount(s) used. g.) For an EGU that qualifies as an LEE under §63.10005(h), annual records that document that emissions from the EGU in the previous stack test(s) continue to qualify the unit for LEE status for an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year. h.) Records of the occurrence and duration of each startup and/or shutdown. i.) Records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment. j.) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. k.) Records of the type(s) and amount(s) of fuel used during each startup or shutdown.			
37.	<u><i>EGU Tune-up Report</i></u> Maintain on-site and submit, if requested by DES or EPA, an annual report containing the details of tune-ups conducted in accordance with Table 7, Item 65, including: a.) The concentrations of CO and NO <sub>x</sub> in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems; b.) A description of any corrective actions taken as a part of the combustion adjustment; and c.) The type(s) and amount(s) of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period.	Maintain on site	SR4 & SR6	40 CFR 63.10021(e)

**L. Reporting Requirements**

1. Pursuant to Env-C 203.02(b), *Date of Issuance or Filing*, written documents shall be deemed to have been filed with or received by the Division on the actual date of receipt by the Division, as evidenced by a date stamp placed on the document by the Division in the normal course of business<sup>48</sup>.
2. All emissions data submitted to the Division shall be available to the public. Claims of confidentiality for any other information required to be submitted to the Division pursuant to this permit shall be made at the time of submission in accordance with Env-A 103, Claims of Confidentiality.
3. The Owner or Operator shall be subject to the reporting requirements identified in Table 10 below:

<b>Table 10 - Applicable Reporting Requirements</b>				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
1.	Any report submitted to the DES and/or EPA shall include the certification of accuracy statement outlined in Section XXI.B. of this Permit and shall be signed by the responsible official.	With each report	Facility wide	40 CFR 70.6(c)(1)
2.	<p><u><i>Semi-annual Permit Deviation and Monitoring Report</i></u> The Owner or Operator shall submit a semi-annual permit deviation and monitoring report, which contains:</p> <p>a.) Summaries of all monitoring and testing requirements contained in this permit; and</p> <p>b.) A summary of all permit deviations and excursions that have occurred during the reporting period.</p>	Semi-annually received by DES no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year.	Facility wide	Env-A 911 & 40 CFR 70.6(a)(3)(iii)(A)
3.	<p><u><i>Annual Emissions Report</i></u> Submit an annual emissions report which shall include the following information:</p> <p>a.) Actual calendar year emissions from each device<sup>49</sup> of NOx, CO, SO<sub>2</sub>, TSP, VOCs, HAPs and RTAPs (speciated by individual RTAP)<sup>50</sup>.</p> <p>b.) The methods used in calculating such emissions in accordance with Env-A 705.02, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fees</i>.</p> <p>c.) The information recorded in accordance with Table 9, Items 5, 6 &amp; 11 compiled on a monthly basis.</p>	Annually (received by DES no later than April 15 <sup>th</sup> of the following year)	SR4, SR5, SR6, SRCT, SRCC, SRCC2, SREG & SRSB	Env-A 907.01 & Env-A 907.02
4.	<p><u><i>Payment of Emission-Based Fee</i></u> Payment of emission based fees shall be conducted in accordance with Section XXIII of this Permit.</p>	Quarterly	Significant Activities	Env-A 705.04(b)

<sup>48</sup> Reports that are required to be submitted to DES shall be considered as having been received prior to the deadline specified in the permit, if they are received electronically by DES prior to the close of business on the due date. A written copy of the document signed by the responsible official shall follow the electronic submittal.

<sup>49</sup> Virgin fuel burning devices do not need to speciate VOCs or HAPs.

<sup>50</sup> Devices exempt from Env-A 1400 do not need to report RTAPs.

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
5.	<p><u>VOC Reporting Requirements</u>                      Include the following information in the annual emissions report required in Table 10, Item 3:</p> <ul style="list-style-type: none"> <li>a.) Facility information, including the following:                             <ul style="list-style-type: none"> <li>1.) Source name;</li> <li>2.) Source industrial classification (SIC) code;</li> <li>3.) Physical address; and</li> <li>4.) Mailing address;</li> </ul> </li> <li>b.) A breakdown of VOC emissions reported pursuant to Table 10, Item 3, by month; and</li> <li>c.) All dated recorded pursuant to Table 9, Item 15.</li> </ul>	Annually (no later than April 15 <sup>th</sup> of the following year)	SR4, SR5, SR6, SRCT & SREG	Env-A 908
6.	<p><u>NOx Reporting Requirements</u>                      Include the following information in the annual emissions report required in Table 10, Item 3:</p> <ul style="list-style-type: none"> <li>a.) A breakdown of NOx emissions reported pursuant to Table 10, Item 3, by month; and</li> <li>b.) All data recorded pursuant to Table 9, Item 13.</li> </ul>	Annually (received by DES no later than April 15 <sup>th</sup> of the following year)	SR4, SR5, SR6, SRCT & SREG	Env-A 909.03
7.	<p><u>Fly Ash Reinjection System Reports</u>                      Submit quarterly reports of the following fly ash reinjection system information:</p> <ul style="list-style-type: none"> <li>a.) Daily hours of operation of the fly ash reinjection system for each boiler; and</li> <li>b.) Calculation of the increase in PM<sub>10</sub> and TSP emissions from the use of flyash reinjection on a monthly and 12-month rolling average basis for SR4 and SR6 combined to demonstrate compliance with the TSP and PM<sub>10</sub> emission limitations.</li> </ul>	Quarterly (received by DES no later than 30 days following the end of each quarterly reporting period)	SR4 & SR6	Env-A 910
8.	<p><u>Coal Crusher Opacity Notifications</u>                      If any opacity monitoring performed pursuant to Table 7, Item 54 indicates the presence of visible emissions:</p> <ul style="list-style-type: none"> <li>a.) Notify the department of the opacity observation by telephone, electronic mail, or fax, within 24 hours; and</li> <li>b.) Submit a written notification to be received at DES within 10 days of the opacity observation.</li> </ul>	When opacity monitoring indicates any visible emissions from coal crusher	SRCC & SRCC2	Env-A 910.01
9.	<p><u>Net Electrical Output</u>                      Include the following net electrical output information in the annual emissions report required in Table 10, Item 3:</p> <ul style="list-style-type: none"> <li>a.) For SR4, SR5 and SR6, net electrical output for the entire year, on a monthly basis; and</li> <li>b.) For SRCT, net electrical output for the ozone season, on a monthly basis.</li> </ul>	Annually (no later than April 15 <sup>th</sup> of the following year)	SR4, SR5, SR6 & SRCT	Env-A 2904.05(f) & Env-A 3207.04(h)

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
10.	<p><u>Data Availability Restoration Plan</u>                      If the Owner or Operator of the source discovers that it has failed to meet the percent data availability requirement in the previous calendar quarter or in the calendar quarter in which it is currently operating:</p> <ul style="list-style-type: none"> <li>a.) Notify DES by telephone, fax, or e-mail (pdeviations@des.nh.gov) within 10 days of discovery of the permit deviation.</li> <li>b.) Submit a plan to the Division, within 30 days of discovery, specifying in detail the steps it plans to take in order to meet the availability requirements for future calendar quarters.</li> <li>c.) Implement the plan to meet the data availability requirements no later than 30 days after the end of the quarter of failure.</li> </ul>	As specified	SR4, SR5 & SR6	Env-A 808.12 & Env-A 911.04
11.	<p><u>Quality Improvement Plan Submittal</u>                      Notify DES if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.</p>	As expeditiously as practicable	SR4-PC1 & SR6-PC1	40 CFR 64.8
12.	<p><u>NSPS SO<sub>2</sub> &amp; NO<sub>x</sub> Reports<sup>51</sup></u></p> <ul style="list-style-type: none"> <li>a.) For SO<sub>2</sub> and NO<sub>x</sub>, submit the following information to EPA and DES for each 24-hour period.                             <ul style="list-style-type: none"> <li>1.) Calendar date.</li> <li>2.) The average SO<sub>2</sub> and NO<sub>x</sub> emission rates (lb/MMBtu or lb/MWh) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and a description of corrective actions taken.</li> <li>3.) When complying with the percent reduction, percent reduction of the potential combustion concentration of SO<sub>2</sub> for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and a description of corrective actions taken.</li> <li>4.) Identification of boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75 percent of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.</li> <li>5.) Identification of the times when emissions data have been excluded from the calculation of average</li> </ul> </li> </ul>	Quarterly (received no later than 30 days after the end of the calendar quarter)	SR5	40 CFR 60.51Da(b) & (k)

<sup>51</sup> Per DES letter dated June 16, 2006, the Owner or Operator is authorized to document compliance with the 30-day rolling NSPS standards for SO<sub>2</sub> and NO<sub>x</sub> on a 24-hour daily averaging period (i.e., calendar day basis).

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>emission rates because of startup, shutdown or malfunction.</p> <p>6.) Identification of “F” factor used for calculations, method of determination, and type of fuel combusted.</p> <p>7.) Identification of times when hourly averages have been obtained based on manual sampling methods.</p> <p>8.) Identification of the times when the pollutant concentration exceeded full span of the CEMs.</p> <p>9.) Description of any modifications to the CEMS which could affect the ability of the CEMS to comply with the Performance Specifications 2 or 3 of 40 CFR 60.</p> <p>b.) The Owner or Operator may submit electronic reports in lieu of submitting the written reports. The format of the electronic reports must be approved by DES. Each electronic report must be accompanied by a certification statement from the Owner or Operator, indicating whether compliance with the applicable emission standards and minimum data requirements was achieved during the reporting period.</p>			
13.	<p><u>NSPS Reports for Periods when Minimum Data Availability Requirements are not met</u></p> <p>When the minimum quantity of emission data required pursuant to 40 CFR 60.49Da is not obtained for any 30 successive boiler operating days, submit a report to EPA and DES which contains following information obtained by following the applicable procedures of Section 7 of Method 19 for that 30-day period:</p> <p>a.) The number of hourly averages available for outlet emission rates (<math>n_o</math>) and inlet emission rates (<math>n_i</math>) as applicable.</p> <p>b.) The standard deviation of hourly averages for outlet emission rates (<math>s_o</math>) and inlet emission rates (<math>s_i</math>) as applicable.</p> <p>c.) The lower confidence limit for the mean outlet emission rate (<math>E_o^*</math>) and the upper confidence limit for the mean inlet emission rate (<math>E_i^*</math>) as applicable.</p> <p>d.) The applicable potential combustion concentration.</p> <p>e.) The ratio of the upper confidence limit for the mean outlet emission rate (<math>E_o^*</math>) and the allowable emission rate (<math>E_{std}</math>) as applicable.</p>	Semi Annually (received no later than 30 days following the end of the end of each 6-month period)	SR5	40 CFR 60.51Da(c)
14.	<p><u>NSPS Report for Fuel Pretreatment Credit</u></p> <p>If fuel pretreatment credit toward the SO<sub>2</sub> emission standard under 40 CFR 60.43Da is claimed, submit a signed statement to EPA and DES:</p> <p>a.) Indicating what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions of 40 CFR</p>	Semi Annually (received no later than 30 days following the end of the end of each 6-month period)	SR5	40 CFR 60.51Da(e)



**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	60.50Da and Method 19 of Appendix A of 40 CFR 60; and b.) Listing the quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter; the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the previous quarter.			
15.	<u>NSPS Reports for periods when opacity, SO<sub>2</sub> and NO<sub>x</sub> emissions data are not available</u> For any periods for which opacity, SO <sub>2</sub> or NO <sub>x</sub> emissions data are not available, submit a.) A signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability; and b.) A comparison of operations of the control system and affected facility during periods of data unavailability with their operation before and following the period of data unavailability.	Semi Annually (received no later than 30 days following the end of the end of each 6-month period)	SR5	40 CFR 60.51Da(f)
16.	<u>NSPS Compliance Certifications</u> Submit a signed statement indicating whether: a.) The required CEMS calibration, span, and drift checks or other periodic audits have or have not been performed as specified. b.) The data used to show compliance was or was not obtained in accordance with approved methods and procedures and is representative of plant performance. c.) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable. d.) Compliance with the standards has or has not been achieved during the reporting period.	Semi Annually (received no later than 30 days following the end of the end of each 6-month period)	SR5	40 CFR 60.51Da(h)
17.	<u>NSPS Excess Emission Reports</u> Submit excess emissions <sup>52</sup> and monitoring systems performance reports and/or summary report forms to EPA and DES, which shall include the following information: a.) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period. b.) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the facility, the nature and cause of any malfunction (if	Quarterly (received no later than 30 days after the end of the calendar quarter)	SR5	40 CFR 60.7(c) & (d) and 40 CFR 60.51Da(i) & (k)

<sup>52</sup> Pursuant to 40 CFR 60.51Da(i), for the purposes of the reports required under 40 CFR 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under 40 CFR 60.42Da(b).

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>known), the corrective action taken or preventative measures adopted.</p> <p>c.) The date and time identifying each period during which the continuous monitoring systems was inoperative except for zero and span checks and the nature of the system repairs or adjustments.</p> <p>d.) When no excess emissions have occurred or the continuous monitoring systems have not been operative, repaired, or adjusted, such information shall be stated in the report.</p>			
18.	<p><u>Compliance Stack Test Reports</u></p> <p>a.) A compliance stack test report shall be submitted to the Division within 60 days after the completion of testing. The test report shall contain the information specified in Env-A 802.11(c).</p> <p>b.) The compliance test report must also include fuel analyses (if any). This report must also verify that the operating limits for the boiler have not changed or provide documentation of revised operating limits established according to 40 CFR 63.7530 and Table 5, Item 26.</p> <p>c.) Results of the compliance tests, including any associated fuel analyses must be submitted to the EPA’s WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA’s Central Data Exchange (CDX) (<a href="http://www.epa.gov/cdx">www.epa.gov/cdx</a>). Performance test data must be submitted in the file format generated through use of the EPA’s Electronic Reporting Tool (ERT) (see <a href="http://www.epa.gov/ttn/chieflert/index.html">http://www.epa.gov/ttn/chieflert/index.html</a>).</p> <p>d.) The results of each MATS performance test and CEMS performance evaluation must be submitted to EPA in the format prescribed in Subpart UUUUU.</p>	<p>Within 60 days after the completion of each test</p>	<p>SR4, SR5, SR6 &amp; SRCT</p> <p>SR5</p> <p>SR5</p> <p>SR4 &amp; SR6</p>	<p>Env-A 802.11</p> <p>40 CFR 63.7515(f)</p> <p>40 CFR 63.7550(h)</p> <p>40 CFR 63.10031(f)</p>
19.	<p><u>Semi-annual MACT Compliance Reports</u></p> <p>Submit a semi-annual compliance report to DES and EPA containing the following information</p> <p>a.) Company and Facility name and address.</p> <p>b.) Process unit information, emissions limitations, and operating parameter limitations.</p> <p>c.) Date of report and beginning and ending dates of the reporting period.</p> <p>d.) The total operating time during the reporting period.</p> <p>e.) For each CEMS, COMS, or CPMS, the manufacturer(s) and model numbers and the date of the last CMS certification or audit.</p> <p>f.) The total fuel use by the boiler within the reporting period,</p>	<p>Semi-annually by January 31<sup>st</sup> and July 31<sup>st</sup> of each calendar year</p>	<p>SR5 &amp; SRSB (For SRSB - only items a.) through d.) and l.) apply)</p>	<p>40 CFR 63.7550</p>

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the EPA or the Owner or Operator's basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.</p> <p>g.) If conducting performance tests once every 3 years consistent with Table 7, Item 39, the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions.</p> <p>h.) A statement indicating that no new types of fuel subject to an emission limit were burned in the boiler. Or,</p> <p>1.) If a new type of fuel subject to a HCl emission limit was burned in the boiler, the calculation of chlorine input, using Equation 7 of 40 CFR 63.7530, that demonstrates that the source is still within its maximum chlorine input level established during the previous performance testing; and/or</p> <p>2.) If a new type of fuel subject to a mercury emission limit was burned in the boiler, the calculation of mercury input, using Equation 8 of § 63.7530, that demonstrates that the source is still within its maximum mercury input level established during the previous performance testing.</p> <p>i.) If there are no deviations from any applicable emission limits or operating limits in Subpart DDDDD, a statement that there were no deviations from the emission limits or operating limits during the reporting period.</p> <p>j.) If there were no deviations from the monitoring requirements including no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in § 63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period.</p> <p>k.) If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the Owner or Operator during a malfunction of the boiler or associated air pollution control device or CMS to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction.</p> <p>l.) Include the date of the most recent tune-up conducted according to §63.7540(a)(12). Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.</p>			

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>m.) All of the calculated 30 day rolling average values based on the daily CEMS CO data.</p> <p>n.) For each deviation from an emission limit or operating limit in this subpart that occurs where a CMS is not used to comply with that emission limit or operating limit, the compliance report must additionally contain the following information:</p> <ol style="list-style-type: none"> <li>1.) A description of the deviation and which emission limit or operating limit from which the facility deviated.</li> <li>2.) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.</li> <li>3.) If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.</li> </ol> <p>o.) For each deviation from an emission limit, operating limit, and monitoring requirement in Subpart DDDDD occurring where a CMS is used to comply with that emission limit or operating limit, the compliance report must additionally contain the following information, including any deviations from the site specific monitoring plan as required in §63.7505(d).</p> <ol style="list-style-type: none"> <li>1.) The date and time that each deviation started and stopped and description of the nature of the deviation (i.e., what was deviated from).</li> <li>2.) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.</li> <li>3.) The date, time, and duration that each CMS was out of control, including the information in § 63.8(c)(8).</li> <li>4.) The date and time that each deviation started and stopped.</li> <li>5.) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.</li> <li>6.) A characterization of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.</li> <li>7.) A summary of the total duration of CMS's downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.</li> <li>8.) A brief description of the source for which there was a deviation.</li> <li>9.) A description of any changes in CMSs, processes, or</li> </ol>			

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>controls since the last reporting period for the source for which there was a deviation.</p> <p>p.) This report must be submitted in writing to the Division and electronically to US EPA, Region 1 using CEDRI that is accessed through EPA’s Central Data Exchange (CDX) (<a href="http://www.epa.gov/cdx">www.epa.gov/cdx</a>). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to US EPA, Region 1.</p>			
20.	<p><u>Notification of Compliance Status</u></p> <p>Submit to DES and EPA a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii), which contains:</p> <p>a.) A description of the affected unit including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR 63, Subpart DDDDD, description of the fuel(s) burned, including:</p> <ol style="list-style-type: none"> <li>1.) Whether the fuel(s) were a secondary material determined by the Owner or Operator or the EPA through a petition process to be a non-waste under 40 CFR 241.3;</li> <li>2.) Whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3; and</li> <li>3.) Justification for the selection of fuel(s) burned during the compliance demonstration.</li> </ol> <p>b.) Summary of the results of all performance tests and fuel analyses<sup>53</sup>, and calculations conducted to demonstrate initial compliance including all established operating limits, and including:</p> <ol style="list-style-type: none"> <li>1.) Identification of whether the emission unit is complying with the PM emission limit or the alternative total selected metals (TSM) emission limit.</li> <li>2.) Identification of whether the emission unit is complying with the output-based emission limits or the heat input-based (i.e., lb/MMBtu or ppm) emission limits.</li> </ol> <p>c.) Identification of whether the emission unit is demonstrating compliance with each applicable emission limit through performance testing, a CEMS, or fuel analysis.</p> <p>d.) Identification of whether the facility is planning to demonstrate compliance by using efficiency credits</p>	<p>Within 60 days of completion of all performance test and/or initial compliance demonstrations for the boiler according to 40 CFR 63.10(d)(2)</p>	<p>SR5 &amp; SRSB</p>	<p>40 CFR 63.7545(e)</p>

<sup>53</sup> Schiller Station conducted a compliance stack test in November 2006 to demonstrate compliance with case-by-case MACT emission limits (40 CFR 63 Subpart B). These stack test results can be used in the Notification of Compliance Status required by 40 CFR 63.7545(e).

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>through energy conservation.</p> <p>e.) A signed certification that the Owner or Operator has met all applicable emission limits and work practice standards.</p> <p>f.) If there was a deviation from any emission limit, work practice standard, or operating limit, the Owner or Operator must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.</p> <p>g.) In addition to the information required in 40 CFR 63.9(h)(2), the notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:</p> <ol style="list-style-type: none"> <li>1.) “This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10).”</li> <li>2.) “This facility has had an energy assessment performed according to § 63.7530(e).”</li> <li>3.) “No secondary materials that are solid waste were combusted in any affected unit.”</li> </ol>			
21.	<p><u>MACT Applicability Changes</u></p> <p>If the Owner or Operator has switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory or a different subpart to 40 CFR 63, submit notice of fuel switch or physical change, which shall identify:</p> <ol style="list-style-type: none"> <li>a.) The name of the Owner or Operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler that has switched fuels or was physically changed, and the date of the notice.</li> <li>b.) The currently applicable subcategory under 40 CFR 63 Subpart DDDDD.</li> <li>c.) The date upon which the fuel switch or physical change occurred.</li> </ol>	Within 30 days of the fuel switch or physical change	SR5 & SRSB	40 CFR 63.7545(h)
22.	<p><u>CO<sub>2</sub> Budget Trading Program Reports</u></p> <p>Submit quarterly CO<sub>2</sub> Budget reports which include:</p> <ol style="list-style-type: none"> <li>a.) The CO<sub>2</sub> mass emissions data for the CO<sub>2</sub> budget unit, in an electronic format prescribed by EPA unless otherwise prescribed by the regional organization, for each calendar quarter in the manner specified in Subpart H of 40 CFR 75 and 40 CFR 75.64;</li> <li>b.) For each CO<sub>2</sub> budget unit, all of the data and information required in Subpart G of 40 CFR 75, except for opacity, NO<sub>x</sub>, and SO<sub>2</sub> provisions; and</li> <li>c.) A compliance certification with, and in support of, each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit’s emissions are correctly and fully monitored. The</li> </ol>	Quarterly (no later than 30 days following the end of each quarterly reporting period)	SR4, SR5 & SR6	Env-A 4609.16(c)

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	certification shall state that: 1.) The monitoring data submitted were recorded in accordance with the applicable requirements of both 40 CFR 75 and Env-A 4600, including the quality assurance procedures and specifications; and 2.) The CO <sub>2</sub> concentration values substituted for missing data under Subpart D of 40 CFR 75 do not systematically underestimate CO <sub>2</sub> emissions.			
23.	<u>CO<sub>2</sub> Budget Program Annual Compliance Certification</u> For each control period in which a CO <sub>2</sub> budget source is subject to the requirements of Env-A 4605, submit a compliance certification report which includes the information specified in Env-A 4605.09(b).	By March 1 (following the relevant control period)	SR4, SR5 & SR6	Env-A 4605.09
24.	<u>Certification by the CO<sub>2</sub> Authorized Account Representative</u> Any submission under the CO <sub>2</sub> budget trading program shall be signed and certified by the CO <sub>2</sub> Authorized Account Representative and shall include the certification statement pursuant to Env-A 4604.02(a).	With each CO <sub>2</sub> Budget Program submittal	SR4, SR5 & SR6	Env-A 4604.02
25.	<u>NO<sub>x</sub> Budget Program Compliance Certification</u> For each control period, submit an annual compliance certification containing the information listed in Env-A 3216.03.	By November 30 <sup>th</sup> of each year	SR4, SR5, SR6 & SRCT	Env-A 3216
26.	<u>SO<sub>2</sub> &amp; NO<sub>x</sub> Annual Budget Trading and Banking Program Annual Compliance Certification</u> Submit an annual compliance certification for the prior year containing the information specified in Env-A 2909.02.	By January 30 <sup>th</sup> of each year	SR4 & SR6	Env-A 2909
27.	<u>Offset Plans for Excess Emissions of SO<sub>2</sub></u> If a unit has excess SO <sub>2</sub> emissions, submit an offset plan which contains the information specified in 40 CFR 77.3(d).	60 days after the end of any calendar year in which the unit has excess SO <sub>2</sub> emissions	SR4, SR5 & SR6	40 CFR 77.3
28.	<u>Certification by the Designated Representative or the Alternate Designated Representative</u> Any document submitted under the Acid Rain program shall be signed and certified by the designated representative or the alternate designated representative and include the statements pursuant to 40 CFR 72.21(a)(1) and (2).	With each Acid Rain submittal	SR4, SR5 & SR6	40 CFR 72.21
29.	<u>CEMS Recertification Notifications and Reports</u> a.) Notification of full recertification: 1.) Submit notifications of full recertification testing under 40 CFR 75.20(b)(2) to DES and EPA at least 30 days prior to the first scheduled day of recertification testing. 2.) In emergency situations when full recertification	As specified	SR4, SR5 & SR6	40 CFR 75.61 (a)(1), 75.63, 75.70, 75.73(d), Env-A 808, Env-A 2910 & Env-A 3212

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>testing is required following an uncontrollable failure of equipment that results in lost data, notice shall be sufficient if provided within 2 business days following the date when testing is scheduled.</p> <p>3.) Testing may be performed on a date other than that already provided in a notice as long as notice of the new date is provided either in writing or by telephone or other means at least 7 days prior to the original scheduled test date or the revised test date, whichever is earlier.</p> <p>b.) Notification of partial recertification testing:</p> <p>1.) Submit notifications for retesting required following a loss of certification under 40 CFR 75.20(a)(5) or for partial recertification testing required under 40 CFR 75.20(b)(2), to DES and EPA either in writing or by telephone at least 7 days prior to the first scheduled day of testing,</p> <p>2.) Except that in emergency situations when testing is required following an uncontrollable failure of equipment that results in lost data, notice shall be sufficient if provided within 2 business days following the date when testing is scheduled.</p> <p>3.) Testing may be performed on a date other than that already provided in a notice long as notice of the new date is provided by telephone or other means at least 2 business days prior to the original scheduled test date or the revised test date, whichever is earlier.</p> <p>c.) Within 45 calendar days after completing all recertification tests submit to EPA and DES, the electronic and hardcopy information contained in 40 CFR 75.63.</p> <p>d.) Pursuant to Env-A 3212.14 and Env-A 2910.10, submit an application to DES within 45 days after completing all recertification tests including the information required under 40 CFR 75, Subpart H.</p>			
30.	<p><u>Relative Accuracy Test Audit Reports</u></p> <p>a.) Submit a summary of the results of the RATA testing by the earlier of 45 calendar days following the completion of the RATA or the date established in the section of 40 CFR 60 or 40 CFR 75 that requires performance of the RATA.</p> <p>1.) For gaseous CEM audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1 or §75.59(a)(9), as applicable; and</p> <p>2.) For opacity CEM audits, the report format shall conform to that presented in EPA-600/8-87-025, April 1992, "Technical Assistance Document: Performance Audit Procedures for Opacity Monitors".</p> <p>b.) If requested, submit a hardcopy RATA report to EPA</p>	As specified	SR4, SR5 & SR6	<p>40 CFR 75.59(a)(9), 75.60(b)(6), 40 CFR 75.73(d), Env-A 3212 &amp; Env-A 808.07(e)</p> <p>40 CFR 60.51Da(a) for SR5</p>



**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	within 45 days after completing the RATA or within 15 days of receiving the request, whichever is later.			
	c.) Within 60 days after the date of completing the RATA for CO & O <sub>2</sub> CEMS, submit CO & O <sub>2</sub> RATA data to the EPA's Central Data Exchange by using CEDRI.	Within 60 days after the date of completing the RATA	SR5	40 CFR 63.7550(h)
31.	<p><u>Monitoring Plan Submittals</u></p> <p>a.) Electronic copy: Submit a complete, electronic, up-to-date monitoring plan file (except for hardcopy portion) to EPA as follows:</p> <ol style="list-style-type: none"> <li>1.) At the time of recertification application submission;</li> <li>2.) Prior to or concurrent with the submittal of the electronic quarterly report for a reporting quarter where an update of the electronic monitoring plan information is required under 40 CFR 75.53(b).</li> </ol> <p>b.) Hardcopy: Submit hardcopy information to EPA only if that portion of the monitoring plan is revised. The Owner or Operator shall submit the required hardcopy information as follows: with any certification or recertification application, if a hardcopy monitoring plan change is associated with the certification or recertification event; and within 30 days of any other event with which a hardcopy monitoring plan change is associated, pursuant to 40 CFR 75.53(b). Electronic submittal of all monitoring plan information, including hardcopy portions, is permissible provided that a paper copy of the hardcopy portions can be furnished upon request.</p>	As specified	SR4, SR5, SR6 & SRCT	40 CFR 75.62 & 40 CFR 75.73(e)
32.	<p><u>CEMS &amp; COMS QA/QC Plan Updates</u></p> <p>a.) No later than April 15<sup>th</sup> of each year, either:</p> <ol style="list-style-type: none"> <li>1.) Submit to DES the revised QA/QC plan and the reasons for each change, and certify in writing that the Owner or Operator is implementing the revised QA/QC plan; or</li> <li>2.) Certify in writing that no changes have been made to the plan and that the Owner or Operator will continue to implement the existing QA/QC plan.</li> </ol> <p>b.) If DES requests a revision to the QA/QC plan, the Owner or Operator shall submit a revised plan within 45 days of the date of the request.</p>	Annually	SR4, SR5 & SR6	Env-A 808.06
33.	<p><u>Quarterly Reports required by 40 CFR 75</u></p> <p>a.) Electronically submit to DES &amp; EPA quarterly reports which include the following:</p> <ol style="list-style-type: none"> <li>1.) The data and information in 40 CFR 75.64(a), (b) &amp; (c) and 75.73(f).</li> <li>2.) Pursuant to Env-A 3214.02, NO<sub>x</sub> emissions in lb/hr for every hour during the control period and</li> </ol>	Quarterly (no later than 30 days following the end of each quarterly reporting period)	SR4, SR5 & SR6	40 CFR 75.64, 40 CFR 75.73(f), 40 CFR 75.74, Env-A 2907 & Env-A 3214

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>cumulative quarterly and seasonal NOx emission data in pounds.</p> <p>3.) Pursuant to Env-A 2907.13, SO2 and NOx emissions in lb/hr for every hour during the year and cumulative quarterly and annual SO2 and NOx emissions data in pounds.</p> <p>4.) Pursuant to Env-A 3214.01 and Env-A 2907.12, the Owner or Operator shall also submit emissions and operations information in electronic format as part of the quarterly reports.</p> <p>5.) A certification by the Designated Representative that the component and system identification codes and formulas in the quarterly electronic reports represent current operating conditions</p> <p>6.) The reports may include explanatory text or comments, so long as the information is provided in a format that is compatible with the other data required to be reported under 40 CFR 75.64.</p> <p>b.) Electronic format: Each quarterly report shall be submitted in a format to be specified by EPA, including both electronic submission of data and (unless otherwise approved by EPA) electronic submission of compliance certifications.</p> <p>c.) Method of submission: All quarterly reports shall be submitted to EPA by direct computer-to-computer electronic transfer via EPA-provided software, unless otherwise approved by EPA.</p>			
34.	<p><u>Quarterly Emission Reports required by Env-A 808</u></p> <p>a.) Submit to DES emission reports containing the following information:</p> <ol style="list-style-type: none"> <li>1.) Excess emission data recorded by the CEM system, including:</li> <li>2.) The date and time of the beginning and ending of each period of excess emission;</li> <li>3.) The actual emissions measured by the CEM system during the excess emission;</li> <li>4.) The total amount of emissions above the emissions limit, or percent above the emissions limit, during the period of excess emissions;</li> <li>5.) The specific cause of the excess emission; and</li> <li>6.) The corrective action taken;</li> </ol> <p>b.) Exceedances of opacity standard as recorded by the COMS;</p> <p>c.) If no excess emissions have occurred, a statement to that effect;</p> <p>d.) For gaseous measuring CEM systems, the daily averages of the measurements made and emission rates calculated;</p>	<p>Quarterly (received by DES no later than 30 days following the end of each quarterly reporting period)</p>	<p>SR4, SR5 &amp; SR6</p>	<p>40 CFR 75.65, Env-A 808.14, Env-A 808.15 &amp; Env-A 808.16 (effective 10-31-2010)</p>

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>e.) A statement as to whether the CEM system was inoperative, repaired, or adjusted during the reporting period;</p> <p>f.) If the CEM system was inoperative, repaired, or adjusted during the reporting period, the following information:</p> <p>1.) The date and time of the beginning and ending of each period when the CEM was inoperative;</p> <p>The reason why the CEM was inoperative;</p> <p>The corrective action taken;</p> <p>g.) For all “out of control periods” the following information:</p> <p>1.) Beginning and ending times of the out of control period;</p> <p>2.) The reason for the out of control period;</p> <p>3.) The corrective action taken.</p> <p>h.) The date and time of the beginning and ending of each period when the source of emissions which the CEM system is monitoring was not operating;</p> <p>i.) The span value, as defined in Env-A 101.176, and units of measurement for each analyzer in the CEM system;</p> <p>j.) When calibration gas is used, the following information:</p> <p>1.) The calibration gas concentration;</p> <p>2.) If a gas bottle was changed during the quarter:</p> <p>i. The date of the calibration gas bottle change;</p> <p>ii. The gas bottle concentration before the change;</p> <p>iii. The gas bottle concentration after the change;</p> <p>iv. The expiration date for all calibration gas bottles used.</p> <p>k.) The percent data availability calculated in accordance with Env-A 808.12 for each gaseous and opacity monitor in the CEM system;</p> <p>l.) All information required above shall be clearly indicated, labeled, and formatted such that compliance with all emissions standards to which the source is subject, can be determined and any periods of excess emissions, substitution of missing or invalid CEM data, CEM calibration, CEM maintenance, or startup, shutdown, or malfunction can be easily identified.</p>			
35.	<p><u>Quarterly Reports for SRCT</u></p> <p>Submit to EPA in electronic format or other format as approved by EPA the following information:</p> <p>a.) Pursuant to Env-A 3212.15(b), NOx mass emissions for the period of May 1 through September 30<sup>th</sup>;</p> <p>b.) Pursuant to Env-A 3212.15(g), the information required in 40 CFR 75.73(f) (as applicable); and</p> <p>c.) Pursuant to Env-A 3214.02, NOx emissions in lb/hr for every hour during the control period and cumulative</p>	30 calendar days after the end of the 2 <sup>nd</sup> and 3 <sup>rd</sup> calendar quarters	SRCT	Env-A 3212, Env-A 3214 & 40 CFR 75.73(f)

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	quarterly and seasonal NOx emission data in pounds.			
36.	<p><u>Annual Compliance Certification</u>                      Annual compliance certification shall be submitted in accordance with Section XXI of this Permit.</p>	Annually (received by DES no later than April 15th of the following year)	Facility wide	40 CFR 70.6(c)(1)
37.	<p><u>Annual Emissions Compliance Report for Mercury</u>                      The Owner shall submit to DES a report of annual mercury emissions from the affected sources to demonstrate compliance with Table 4, Item 9. This report shall include all references and methodologies used to calculate the total mercury emissions from the affected sources.</p>	Annually by April 15 <sup>th</sup> of each calendar year	Affected Sources as defined in RSA 125-O:12	Env-A 910
38.	<p><u>Notification of Compliance Status for MATS</u>                      Submit a Notification of Compliance Status (NOCS) report containing all the information specified below, as applicable.</p> <p>a.) A description of the affected source(s) including identification of which subcategory the source is in, the design capacity of the source, a description of the add-on controls used on the source, description of the fuel(s) burned, and justification for the selection of fuel(s) burned during the performance test.</p> <p>b.) Summary of the results of all performance tests and calculations conducted to demonstrate initial compliance including all established operating limits.</p> <p>c.) Identification of whether the facility is planning to demonstrate compliance with each applicable emission limit through performance testing, CEMS, or a sorbent trap monitoring system.</p> <p>d.) Identification of whether the facility is planning to demonstrate compliance by emissions averaging.</p> <p>e.) A signed certification that the facility has met all applicable emission limits and work practice standards.</p> <p>f.) If there is a deviation from any emission limit, or work practice standard, submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation in the Notification of Compliance Status report.</p> <p>g.) In addition to the information required in §63.9(h)(2), the notification of compliance status must include the following:</p> <p>i. Certifications of compliance, as applicable, and must be signed by a responsible official stating:</p> <p>A. “This EGU complies with the requirements in § 63.10021(a) to demonstrate continuous compliance.” and</p> <p>B. “No secondary materials that are solid waste were</p>	Within 60 days of completion of all performance tests and/or initial compliance demonstrations for the EGUs	SR4 & SR6	40 CFR §§ 63.9(h)(2)(ii), 63.10030(e) & 63.10031(f)(6)

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>combusted in any affected unit.’’</p> <p>ii. Identification of whether the facility will rely on paragraph (1) or (2) of the definition of startup in §63.10042.</p> <p>h.) The NOCS must be submitted in writing to the Division. The NOCS must be submitted to EPA in electronic portable document format (PDF) using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. The data elements specified in § 63.10031(f)(6)(i) through (xii), as applicable, must be entered into the ECMPS Client Tool at the time of submission of the PDF file.</p>			
39.	<p><u>MATS Semi-annual MATS Compliance Report</u></p> <p>a.) A compliance report containing the following information shall be submitted to EPA and DES:</p> <p>i. The information required by the summary report located in 40 CFR 63.10(e)(3)(vi).</p> <p>ii. The total fuel use by each affected source subject to an emission limit, for each calendar month within the semi-annual reporting period, including a description of the fuel and the total fuel usage amount with units of measure.</p> <p>iii. Indicate whether new types of fuel were burned during the reporting period. If a new type of fuel was burned, include the date of performance test where that fuel was in use.</p> <p>iv. Include the date of the most recent tune-up for each unit.</p> <p>v. Include the date of the most recent burner inspection if it was not done every 36 months and was delayed until the next scheduled unit shutdown.</p> <p>vi. If stack tests are conducted once every 3 years consistent with §63.10006(b), the date of the last three stack tests, a comparison of the emission level achieved in the last three stack tests to the 50 percent emission limit threshold required in § 63.10006(i), and a statement as to whether there have been any operational changes since the last stack test that could increase emissions.</p> <p>vii. For each instance of startup and shutdown:</p> <p>A. If CEMS is used for compliance purposes, include hourly average CEMS values and hourly average flow rates. Use units of milligrams per cubic meter for PM CEMS, micrograms per cubic meter</p>	Semi-annually received no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year <sup>54</sup>	SR4 & SR6	40 CFR 63.10031 & Table 8 to Subpart UUUUU

<sup>54</sup> The first compliance report must cover the period from April 16, 2016 to December 31, 2016 and is due by January 31, 2017. Each subsequent compliance report must cover the semi-annual reporting period from January 1 through June 30 (report due by July 31<sup>st</sup>) or the semi-annual reporting period from July 1 through December 31 (report due by January 31<sup>st</sup>).

**Table 10 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<p>for Hg CEMS, and ppmv for HCl CEMS. Use units of standard cubic meters per hour on a wet basis for flow rates.</p> <p>B. If a separate sorbent trap measurement system is used for startup or shutdown reporting periods, include hourly average mercury concentration in terms of micrograms per cubic meter.</p> <p>viii. If there are no deviations from any applicable emission limitation and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, and operating parameter monitoring systems, were out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and</p> <p>ix. If a deviation from any emission limitation (emission limit and operating limit) or work practice standard occurred during the reporting period, the report must contain the information in § 63.10031(d). If there were periods during which the CMSs, including continuous emissions monitoring systems and continuous parameter monitoring systems, were out-of-control, as specified in § 63.8(c)(7), the report must contain the information in § 63.10031(e).</p> <p>b.) For each excess emission occurring at an affected source where a CMS is used to comply with that emission limit, include the information required in § 63.10(e)(3)(v) in the compliance report specified in (a) above.</p> <p>c.) If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.</p>			
40.	<p><u>Projected Actual Emissions Report</u>                      Beginning 2016, for a period of 5 years, submit post-project New Source Review/Prevention of Significant Deterioration applicability reports for the DSI/ACI systems installation project. For example, the report for CY 2016 is due by April 15, 2017. The report shall include a comparison of actual calendar year emissions with the projections provided in the application #14-0081.</p>	Annually received no later than April 15 <sup>th</sup>	SR4 & SR6	TP-0157

Table 10 - Applicable Reporting Requirements				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
41.	<p><u>Sorbent Switch Notification</u>                      Notify DES any change in the type, manufacturer or product ID of sorbent or activated carbon. Notification shall include:</p> <p>a.) Type, manufacturer and product ID of new sorbent or activated carbon;                      b.) New injection rate in lb/hr; and                      c.) Method used to determine injection rate.</p>	As specified	SR4 & SR6	TP-0157

**IX. Requirements Currently Not Applicable**

Requirements not currently applicable to the facility were not identified by the Owner or Operator.

**GENERAL TITLE V REQUIREMENTS**

**X. Issuance of a Title V Operating Permit**

- A. This Permit is issued in accordance with the provisions of Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the five (5) years after issuance of this Permit.
- B. Permit expiration terminates the Owner or Operator's right to operate the emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is received by the Department at least 6 months before the expiration date.

**XI. Title V Operating Permit Renewal Procedures**

Pursuant to Env-A 609.07(b), an application for renewal of this Permit shall be considered timely if it is **received by the Department** at least six months prior to the designated expiration date of the current Title V operating permit.

**XII. Application Shield**

Pursuant to Env-A 609.08, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part until the Director takes final action on the application.

**XIII. Permit Shield**

- A. Pursuant to Env-A 609.09(a), a permit shield shall provide that:
  - 1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and
  - 2. The Owner or Operator need not comply with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and specifically identified in Section IX of this Title V Operating Permit as not applicable to the stationary source or area source.

- B. The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.09(b). It shall not apply to certain conditions as specified in Env-A 609.09(c) that may be incorporated into this Permit following permit issuance by DES.
- C. If a Title V Operating Permit and amendments thereto issued by the DES does not expressly include or exclude an applicable requirement or a state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the Owner or Operator shall comply with the provisions of said requirement to the extent that it applies to the Owner or Operator, or device.
- D. If DES determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.
- E. Pursuant to Env-A 609.09(f), nothing contained in Section XIII of this Permit shall alter or affect the ability of the DES to reopen this Permit for cause in accordance with Env-A 609.19 or to exercise its summary abatement authority.
- F. Pursuant to Env-A 609.09(g), nothing contained in this section or in any Title V operating permit issued by the DES shall alter or affect the following:
1. The ability of the DES to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;
  2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;
  3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the EPA Administrator under that section;
  4. 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;
  5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;
  6. The ability of the DES or the EPA Administrator to obtain information about a stationary source, area source, or device from the Owner or Operator pursuant to section 114 of the CAA; or
  7. The ability of the DES or the EPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

#### **XIV. Reopening for Cause**

The Director shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.19(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.19(b) through (g).

#### **XV. Administrative Permit Amendments**

- A. Pursuant to Env-A 612.01, the Owner or Operator may implement the changes addressed



in the request for an administrative permit amendment as defined in Env-A 101 immediately upon filing the request with the DES.

- B. Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

## **XVI. Operational Flexibility**

- A. Pursuant to Env-A 612.02, the Owner or Operator subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Section XVI. B through E of this permit, as applicable.
1. The change is not a modification under any provision of Title I of the CAA;
  2. The change does not cause emissions to exceed the emissions allowable under the Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;
  3. The Owner or Operator has obtained any temporary permit required by Env-A 600;
  4. The Owner or Operator has provided written notification to the director and administrator of the proposed change and such written notification includes:
    - a. The date on which each proposed change will occur;
    - b. A description of each such change;
    - c. Any change in emissions that will result;
    - d. A request that the operational flexibility procedures be used; and
    - e. The signature of the responsible official, consistent with Env-A 605.04(b);
  5. The change does not exceed any emissions limitations established under any of the following:
    - a. The New Hampshire Code of Administrative Rules, Env-A 100-3800;
    - b. The CAA; or
    - c. This Title V Operating Permit; and
  6. The Owner or Operator, DES, and EPA have attached each written notice required above to their copy of this Title V Operating Permit.
- B. For changes involving the trading of emissions, the Owner or Operator must also meet the following conditions:
1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions

- cap that is established in the permit independent of otherwise applicable requirements;
2. The Owner or Operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes to the Title V Operating Permit which qualify under a federally- enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;
  3. The Director has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce emissions trades; and
  4. The written notification required above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.
- C. For off-permit changes, the Owner or Operator must also meet the following conditions:
1. Each off-permit change meets all applicable requirements and does not violate any existing permit term or condition;
  2. The written notification required above is made contemporaneously with each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.04;
  3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;
  4. The Owner or Operator keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this Permit, and the emissions resulting from those changes; and
  5. The written notification required above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.
- D. For section 502(b)(10) changes, the Owner or Operator must also meet the following conditions:
1. The written notification required above is made at least 7 days prior to the proposed change; and
  2. The written notification required above includes any permit term or condition that is no longer applicable as a result of the change.
- E. Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) change shall not qualify for the permit shield under Env-A 609.09.

## **XVII. Minor Modifications**

- A. Prior to implementing a minor permit modification, the Owner or Operator shall submit a written request to the Director in accordance with the requirements of Env-A 612.05(b).
- B. The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.05(c) through (g).

- C. Pursuant to Env-A 612.05(j), the permit shield specified in Env-A 609.09 shall not apply to minor permit amendments under Section XVII. of this Permit.
- D. Pursuant to Env-A 612.05(a), the Owner or Operator shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the Director of a request for a minor permit amendment.

### **XVIII. Significant Permit Modifications**

- A. Pursuant to Env-A 612.06, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.06(a)(1) through (5).
- B. Prior to implementing the significant permit amendment, the Owner or Operator shall file a written request to the Director which includes all the information as referenced in Env-A 612.06(c) and (d) and shall be issued an amended Title V Operating Permit from the DES. The Owner or Operator shall be subject to the provisions of RSA 125-C:15 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Title V Operating Permit.
- C. The Director shall take final action on the significant permit amendment in accordance with the Procedures specified in Env-A 612.06(e) and (f).
- D. The owner or operator shall obtain an amended title V operating permit incorporating the significant permit modification prior to implementing such modification, except as provided in Env-A 609.07(a)(3).

### **XIX. Title V Operating Permit Suspension, Revocation or Nullification**

- A. Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:
  - 1. The Owner or Operator has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order or permit condition in force and applicable to it; or
  - 2. The emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.
- B. The Director shall nullify any Permit if, following a hearing in accordance with RSA 541-A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

### **XX. Inspection and Entry**

EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6, VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

### **XXI. Certifications**

- A. Compliance Certification Report

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify for the previous calendar year that the facility is in compliance with the requirements of this permit. The report shall be submitted annually, no later than April 15<sup>th</sup> of the following year. The report shall be submitted to

the DES and to the U.S. Environmental Protection Agency – Region I. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5), the report shall describe:

1. The terms and conditions of the Permit that are the basis of the certification;
2. The current compliance status of the source with respect to the terms and conditions of this Permit, and whether compliance was continuous or intermittent during the reporting period;
3. The methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
4. Any additional information required by the DES to determine the compliance status of the source.

**B. Certification of Accuracy Statement**

All documents submitted to the DES shall contain a certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

"I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents 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."

**C. All reports submitted to DES (except those submitted as emission based fees as outlined in Section XXIII of this Permit) shall be submitted to the following address:**

New Hampshire Department of Environmental Services  
Air Resources Division  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095  
ATTN: Section Supervisor, Compliance Bureau

All reports submitted to EPA shall be submitted to the following address:

EPA-New England, Region 1  
5 Post Office Sq. Suite 100  
Mail Code OES04-2  
Boston, MA 02109-3912

## **XXII. Enforcement**

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the DES and/or EPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the

Owner or Operator from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

In accordance with 40 CFR 70.6 (a)(6)(ii), the Owner or Operator shall not claim as a defense 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 this Permit.

### XXIII. Emission-Based Fee Requirements

- A. Env-A 705.01, *Emission-based Fees*: The Owner or Operator shall pay to the Division each year an emission-based fee for emissions from the facility.
- B. Env-A 705.02, *Determination of Actual Emissions for use in Calculating of Emission-based Fees*: The Owner or Operator shall determine the total actual annual emissions from the facility for each calendar year in accordance with the methods specified in Env-A 705.02.
- C. Env-A 705.03, *Calculation of Emission-based Fees*: The Owner or Operator shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 705.03 and the following equation:

$$FEE = E * DPT$$

where:

FEE = The annual emission-based fee for each calendar year as specified in Env-A 705;

E = Total actual emissions as determined pursuant to Condition XXIII.B; and

DPT = The annual fee, in dollars per ton of emissions, which the Division has calculated in accordance with Env-A 705.03<sup>55</sup>.

- D. Env-A 705.04, *Payment of Emission-based Fee*: The Owner or Operator shall submit to the Division payment of the emission-based fee on a quarterly basis, as follows.
1. Payment for emissions in January through March shall be made on or before the 15<sup>th</sup> day of July of the same year;
  2. Payment for emissions in April through June shall be made on or before the 15<sup>th</sup> day of October of the same year;
  3. Payment for emissions in July through September shall be made on or before the 15<sup>th</sup> day of January of the following year; and
  4. Payment for emissions in October through December shall be made on or before the 15<sup>th</sup> day of April of the following year.

### XXIV. Duty To Provide Information

In accordance with 40 CFR 70.6 (a)(6)(v), upon the DES's written request, the Owner or Operator shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Owner or Operator shall furnish to the DES copies

<sup>55</sup> For additional information on emission-based fees, visit the DES website at <http://des.nh.gov/organization/divisions/air/pehb/apps/fees.htm>.

of records that the Owner or Operator is required to retain by this Permit. The Owner or Operator may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Env-A 103 at the time such information is submitted to DES. DES shall evaluate such requests in accordance with the provisions of Env-A 103.

## **XXV. Property Rights**

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

## **XXVI. Severability Clause**

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

## **XXVII. Permit Deviation**

Deviations are instances where any Permit condition is violated. In accordance with Env-A 911, *Recordkeeping and Reporting Requirements for Permit Deviations*, the Owner or Operator shall maintain records and report to the DES deviations from Permit requirements as follows:

- A. Recordkeeping Requirement - All Deviations - In accordance with Env-A 911.03, in the event of a permit deviation, the Owner or Operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels; and record the information per Env-A 911.03(b).
- B. Excess Emissions Reporting Requirement - Excess Emission Deviations Only - In the event the permit deviation causes excess emissions, the Owner or Operator of the affected device, process, or air pollution control equipment shall:
  1. Notify DES by telephone, fax, or e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)) within 24 hours of discovery of the permit deviation<sup>56</sup>; and
  2. Submit a written report in accordance with Env-A 911.04(d) within 10 days of the discovery of the permit deviation reported in Section XXVII B.
- C. Reporting Requirements for Permit Deviations Continuing for Greater Than 9 Consecutive Days - In the event the deviation does not cause an excess emission but continues for a period greater than 9 consecutive days, the Owner or Operator of the affected device, process, or air pollution control equipment shall notify DES of the subsequent corrective actions to be taken by telephone, fax, or e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)) on the tenth day of the permit deviation<sup>57</sup>.
- D. Semi-Annual Summary Report – Pursuant to Env-A 911.05, the Owner or Operator shall submit a summary of all permit deviations previously reported pursuant to Section XXVII

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<sup>56, 57</sup> Unless it is Saturday, Sunday or a state legal holiday, in which event DES shall be notified on the next business day.

- B. and C. and a list of all permit deviations recorded pursuant to Section XXVII A. to DES in the Semi-Annual Permit Deviation and Monitoring report due January 31<sup>st</sup> and July 31<sup>st</sup> of each calendar year covering the periods of July 1<sup>st</sup> through December 31<sup>st</sup> and January 1<sup>st</sup> through June 30<sup>th</sup>, respectively, or an alternative time period approved by DES pursuant to Env-A 912.
- E. Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.





Facility (Source): Schiller Station

### **Permit Requirements**

#### **STEP 3**

Read the standard requirements.

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

### **Monitoring Requirements**

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

### **Sulfur Dioxide Requirements**

- (1) The owners and operators of each source and each affected unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Facility (Source): Schiller 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

Facility (Source): Schiller Station

submission of a new certificate of representation changing the designated representative;

**STEP 3, Cont'd. Recordkeeping and Reporting Requirements, 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:

Facility (Source): Schiller Station

**STEP 3, Cont'd.**

(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

**Effect on Other Authorities, 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;

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

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

**Certification**

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

Name: John M. MacDonald	
Signature <i>John M. MacDonald</i>	Date <i>Sept 29, 2011</i>



# Phase II NO<sub>x</sub> Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9  
This submission is:  New  Revised

**STEP 1**  
Indicate plant name, State,  
and ORIS code from NADB,  
if applicable

Plant Name: Schiller Station	State: NH	ORIS Code: 2367
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**STEP 2**

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID#: SR4	ID#:SR6	ID#:	ID#:	ID#	ID#
Type: DBW	Type: DBW	Type	Type	Type	Type

- (a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)
- (b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)
- (c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)
- (d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)
- (e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)
- (f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)
- (g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)
- (h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)
- (i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)
- (j) NO<sub>x</sub> Averaging Plan (include NO<sub>x</sub> Averaging form)
- (k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)
- (l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO<sub>x</sub> Averaging (check the NO<sub>x</sub> Averaging Plan box and include NO<sub>x</sub> Averaging form)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Plant Name: Schiller Station

STEP 2, cont'd.

	ID#: SR4	ID#: SR6	ID#:	ID#	ID#	ID#
	Type	Type	Type	Type	Type	Type
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(p) Repowering extension plan approved or under review	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

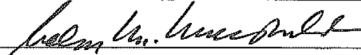
Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(ii).

Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

Certification

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

Name: John M. MacDonald	
Signature: 	Date: Sept 29, 2011

Public Service of New Hampshire  
Schiller Station  
400 Gosling Road, Portsmouth, NH

**Final NOx RACT ORDER**  
**ARD-06-001**  
**August 4, 2006**

#### A. Introduction

This NOx RACT Order is issued by the New Hampshire Department of Environmental Services, Air Resources Division, to Public Service of New Hampshire pursuant to RSA 125-C.

#### B. Parties

1. The New Hampshire Department of Environmental Services, Air Resources Division ("DES"), is a duly constituted administrative agency of the State of New Hampshire having its principal offices at 29 Hazen Drive, Concord, NH 03302-0095, telephone number (603) 271-1370.
2. Public Service of New Hampshire (PSNH), a subsidiary of Northeast Utilities, is a New Hampshire Corporation, having a mailing address of 780 North Commercial Street, Manchester, NH 03101.

#### C. Statements of Fact and Law

1. PSNH operates the Schiller Station Power Facility (Schiller Station) located at 400 Gosling Road in Portsmouth, NH.
2. Schiller Station is a 153 megawatt fossil fuel fired electric generating facility, owned and operated by PSNH. The power generating equipment is comprised of three utility boilers (Units #4, 5, and 6), one combustion turbine operating as a load shaving unit, and an emergency generator.
3. On January 30, 2004, PSNH applied for a Temporary Permit to replace the Unit #5 coal-fired boiler with a new 50 megawatt utility boiler and a secondary coal crusher at Schiller Station. The new utility boiler ("NWPP Boiler") will be a circulating fluidized bed (CFB) design and will be capable of combusting wood or coal. The NWPP Boiler will utilize the Unit #5 generator and turbine. To preheat the furnace fluidized bed material prior to combusting the solid fuel, a natural gas-fired burner system will be used during startup. The startup burner system consists of one natural gas-fired duct burner.

4. Effective May 20, 1994, DES adopted New Hampshire Administrative Rule PART Env-A 1211 NITROGEN OXIDES (NO<sub>x</sub>). Effective October 31, 2002, DES revised and adopted New Hampshire Administrative Rule PART Env-A 1211 NITROGEN OXIDES (NO<sub>x</sub>).
5. Env-A 1211.03 establishes NO<sub>x</sub> emission limitations for specific types of utility boilers. Env-A 1211.03 does not establish emission limitations for CFB type boilers; therefore, PSNH was required to submit a request for Alternative RACT Emission Limits pursuant to Env-A 1211.15.
6. On May 28, 2004, PSNH submitted a request for alternative RACT emission limit pursuant to Env-A 1211.15
7. Pursuant to Env-A 1211.15(c)(1), PSNH conducted a study of the technological and economic feasibility of NO<sub>x</sub> control techniques, including low NO<sub>x</sub> burners, overfire air, flue gas recirculation, natural gas reburn, burners out of service, use of alternative fuels, selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR). PSNH proposes the use of the circulating fluidized bed technology, which is recognized as a low emission, advanced solid fuel combustion technology. The formation of NO<sub>x</sub> in the CFB boiler is reduced as a result of the low combustion temperatures and low excess air within the fluidized bed. While both natural gas reburn and flue gas recirculation are theoretically technically feasible for wood and oil fired boilers, the CFB boiler technology is not designed to utilize such methods of NO<sub>x</sub> reduction. The use of low-NO<sub>x</sub> burners and burners out of service are not technically feasible as NO<sub>x</sub> control options for the proposed CFB boiler. The use of alternative fuels is also not an option for NO<sub>x</sub> control from the boiler.
8. PSNH contends that the only two technically feasible control techniques available for the CFB are SCR and SNCR. PSNH concluded that SCR would be economically infeasible because the high particulate loading in the gas stream would require increased capital, operating and maintenance costs to pretreat the particulate upstream of the SCR. The only viable NO<sub>x</sub> control technique is SNCR because it can operate effectively with a gas stream with high particulate loading.
9. PSNH proposes to use an SNCR system where urea will be injected into the boiler furnace, where it is converted to ammonia. The NO<sub>x</sub> will react with the ammonia and form nitrogen gas and water.
10. Although PSNH did not specifically address the use of ERCs or DERs as an emission reduction strategy, it is an economically viable option. However, the use of a control technique, such as SNCR, will result in a greater overall reduction in NO<sub>x</sub>.
11. In PSNH's Request for Alternative RACT Emission Limits, PSNH proposes to use circulating fluidized bed boiler technology with SNCR resulting in a NO<sub>x</sub> emission factor of 0.075 lb/MMBtu.



**D. Order**

Based upon the above findings and determinations, DES hereby orders PSNH Schiller Station as follows:

1. Install and operate the CFB boiler.
2. Install and operate the SNCR as necessary to comply with the NOx emission rate when the CFB boiler is in operation.
3. Comply with a 0.075 lb/MMBtu NOx emission rate for the CFB boiler.
4. Conduct initial performance tests in accordance with Env-A 802 and 803 within 60 days of achieving the maximum production rate, but no later than 180 days from start-up (first firing of solid fuel).
5. Use the continuous emissions monitoring systems to determine continuous compliance with the NOx emission rate.
6. Continue to comply with the NOx RACT Order ARD-98-001 Conditions D.1.c. and D.1.d., i.e., non-ozone season NOx cap of 8,208 tons and ozone season NOx cap of 3,727 tons for the combined NOx emissions from MK1, MK2, NT1, SR4, SR5, and SR6.
7. Comply with the recordkeeping and reporting requirements of Env-A 900.

Please address any correspondence and communication in reference to this Order to the following:

Douglas C. Laughton  
NHDES, Air Resources Division  
Bureau of Permitting & Environmental Health  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095  
(603) 271-1370



Robert R. Scott, Director  
Department of Environmental Services  
Air Resources Division

cc: Timothy Drew, PIP Office  
David Conroy, US EPA  
Town Selectmen, Portsmouth

RRS/dcl

Final NWPP NOx RACT Order  
August 4, 2006

GSP Schiller LLC	]	<b>NOx RACT ORDER</b>
Schiller Station	]	<b>September 6, 2018</b>
400 Gosling Road	]	<b>RO-003</b>
Portsmouth, NH 03801	]	
	]	

**A. Introduction**

This NOx RACT Order is issued by the New Hampshire Department of Environmental Services, Air Resources Division, to Granite Shore Power (GSP) Schiller LLC pursuant to RSA 125-C.

**B. Parties**

1. The New Hampshire Department of Environmental Services, Air Resources Division (NHDES), is a duly constituted administrative agency of the State of New Hampshire having its principal offices at 29 Hazen Drive, Concord, NH 03301, telephone number (603) 271-1370.
2. Schiller Station is owned and operated by GSP Schiller LLC (GSP Schiller), a wholly owned subsidiary of Granite Shore Power LLC, with a mailing address of 431 River Road, Bow, NH 03304.

**C. Statements of Fact and Law**

1. GSP Schiller LLC owns and operates the Schiller Station Power Facility (Schiller Station) located at 400 Gosling Road in Portsmouth, NH. Schiller Station is a 155 megawatt (MW) wood and fossil fuel-fired electric generating facility.
2. The facility includes three utility boilers: one wood and fossil fuel-fired boiler (designated as emission unit SR5) and two fossil fuel-fired boilers (designated as emission units SR4 and SR6). The facility also operates one combustion turbine operating as a load shaving unit, and an emergency generator.
3. SR4 and SR6 are dry-bottom, face-fired utility boilers capable of firing bituminous coal or residual fuel oil. Each boiler is rated at 575 MMBtu/hr. SR4 and SR6 were installed in 1952 and 1957, respectively. SR4 and SR6 are rated at approximately 48 MW each.
4. Effective May 20, 1994, NHDES adopted the New Hampshire Code of Administrative Rules Env-A 1211, *Nitrogen Oxides (NOx)*. This part defines the sources that are subject to Reasonably Available Control Technology (RACT) requirements and specifies the RACT requirements.<sup>1</sup>
5. SR4 and SR6 are currently subject to a NOx RACT limit of 0.50 lb/MMBtu of heat input based on a 24-hour calendar day average, as per Env-A 1303.06(b) *RACT Requirements: Dry-Bottom Utility Boilers Firing Coal and/or Oil*.

<sup>1</sup> Effective October 31, 2010, NHDES adopted Part Env-A 1300 *Nitrogen Oxides (NOx) Reasonably Available Control Technology (RACT)* which replaced Part Env-A 1211.

6. SR4 and SR6 boilers are each equipped with low NO<sub>x</sub> burners<sup>2</sup>, overfire air (OFA) systems<sup>3</sup> and selective non-catalytic reduction (SNCR) systems<sup>4</sup>. As per Schiller Station's Title V Operating Permit<sup>5</sup>, SNCR systems are operated on an "as needed" basis to comply with the current permit limits for NO<sub>x</sub>.
7. In accordance with 40 Code of Federal Regulation (CFR) 51.1116, states within the Ozone Transport Region (OTR) must submit a SIP revision that meets the RACT requirements of Section 182(b)(2) of the Clean Air Act within 24 months after designation of an Ozone National Ambient Air Quality Standard (NAAQS). In an effort to meet those obligations for both the 2008 and 2015 Ozone NAAQS, NHDES requested in a letter dated May 3, 2018 that GSP conduct a NO<sub>x</sub> RACT analysis for optimization of the SNCR systems on utility boilers SR4 and SR6 including an evaluation of the technical and economic feasibility of operating the SNCR systems on a year-round basis to achieve more stringent NO<sub>x</sub> emission levels.
8. On June 25, 2018, GSP Schiller submitted a NO<sub>x</sub> RACT analysis for SR4 and SR6.
9. GSP Schiller conducted a technical and economic feasibility analysis of year-round SNCR operation to achieve the NO<sub>x</sub> emission levels of 0.15 lb/MMBtu, 0.20 lb/MMBtu and 0.25 lb/MMBtu (calendar day average) as requested by NHDES.
10. GSP Schiller contends that NO<sub>x</sub> emission levels of 0.15 and 0.20 lb/MMBtu are technically not feasible. GSP concluded that NO<sub>x</sub> emission level of 0.25 lb/MMBtu can be achieved using existing combustion controls (i.e., LNB and OFA).
11. Economic feasibility analysis conducted by GSP Schiller indicated that year-round mandatory operation of SNCR to achieve compliance with the NO<sub>x</sub> RACT limit is not cost effective or economically feasible.
12. Based on technical and economic analysis, GSP Schiller proposed a NO<sub>x</sub> RACT limit of 0.25 lb/MMBtu, 24-hour calendar day average, for each of SR4 and SR6. GSP proposed to comply with this emission limit using existing combustion controls (i.e., LNB and OFA).
13. GSP Schiller proposed to use SNCR systems on an as needed basis to achieve compliance with the proposed emission limit.

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<sup>2</sup> SR4 and SR6 boilers were each retrofitted with RJM Corporation's low-NO<sub>x</sub> burners in mid-1999.

<sup>3</sup> Selective non-catalytic reduction NO<sub>x</sub> control systems were installed on SR4 and SR6 in 1999.

<sup>4</sup> Overfire air systems were installed in the early 2000's. The OFA systems are comprised of ports, ducts, and dampers that allow up to 15 percent of the combustion airflow to be diverted from the top of the window box through ports located above the top elevation of burners.

<sup>5</sup> <http://www4.des.state.nh.us/OneStopPub/Air/330150001218-0008TypePermit.pdf>

**D. Order**

Based upon the above findings and determinations, NHDES hereby orders GSP Schiller as follows:

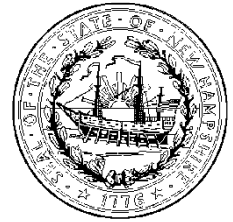
1. Comply with a NOx emission limit of less than or equal to 0.25 lb NOx/MMBtu on a 24-hour calendar day average, for each of SR4 and SR6. This limit applies at all times, including periods of startup and shutdown.
2. Operate the SNCR as necessary to comply with the NOx emission rate when the boiler(s) is in operation.
3. Use the continuous emissions monitoring systems to determine compliance with the NOx emission rate.
4. Comply with the monitoring requirements in Env-A 808 *Continuous Emission Monitoring* and 40 Code of Federal Requirements (CFR) Part 75 *Continuous Emission Monitoring*.
5. Comply with the recordkeeping and reporting requirements of Env-A 900 *Owner or Operator Recordkeeping and Reporting Obligations*.

Please address any correspondence and communication in reference to this Order to the following:

Padmaja Baru  
NHDES, Air Resources Division  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095  
(603) 271-1370

  
\_\_\_\_\_  
Craig A. Wright, Director  
Department of Environmental Services  
Air Resources Division

ec: Melissa Cole, Granite Shore Power  
Tara Olson, Granite Shore Power  
Bob McConnell, USEPA  
City of Portsmouth  
Zachery Fabish, Sierra Club



# TITLE V OPERATING PERMIT

Permit No: **TV-0018**  
Date Issued: **June 7, 2016**  
Administrative Amendment: **November 29, 2016**  
Administrative Amendment: **January 19, 2021**

This certifies that:

**Stored Solar Tamworth, LLC**  
**469 Plains Road**  
**Tamworth, NH 03886**

has been granted a Title V Operating Permit for the following facility and location:

**Stored Solar Tamworth, LLC**  
**469 Plains Road**  
**Tamworth, NH 03886**

Facility ID No: **3300300019**  
Application No: **14-0487**, received December 23, 2014 - Permit Renewal Application  
**16-0181**, received October 28, 2016 – request for Administrative Amendment  
**20-0656**, received October 28, 2020 – request for Administrative Amendment

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V application referenced above filed with the New Hampshire Department of Environmental Services under the signature of the responsible official certifying to the best of his knowledge that the statements and information therein are true, accurate and complete.

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of the Code of Federal Regulations, Title 40, Part 70.

This Permit is effective upon issuance and expires on **May 31, 2021**.

*Craig Wright*  
**COPY**

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Director  
Air Resources Division

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**ABBREVIATIONS**

ARD	Air Resources Division
AAL	Ambient Air Limit
acf	actual cubic foot
ags	above ground surface
ASTM	American Society of Testing and Materials
Btu	British thermal units
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstracts Service
CEMS	Continuous Emission Monitoring System
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
DER	Discrete Emission Reduction
DES	New Hampshire Department of Environmental Services
DSCFM	dry standard cubic feet per minute
Env-A	New Hampshire Code of Administrative Rules – Air Resources Division
ERC	Emission Reduction Credit
ft	foot or feet
ft <sup>3</sup>	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
hp	horsepower
hr	hour
kW	kilowatt
lb	pound
LPG	Liquefied Petroleum Gas
MM	million
MSDS	Material Safety Data Sheet
MW	megawatt
NAAQS	National Ambient Air Quality Standard
NG	Natural Gas
NO <sub>x</sub>	Oxides of Nitrogen
NSPS	New Source Performance Standard
PM <sub>10</sub>	Particulate Matter < 10 microns
ppm	parts per million
psig	pounds per square inch gauge
QIP	Quality Improvement Plan
RACT	Reasonably Available Control Technology
RSA	Revised Statutes Annotated
RTAP	Regulated Toxic Air Pollutant
scf	standard cubic foot
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
TSP	Total Suspended Particulate
tpy	tons per consecutive 12-month period
USEPA	United States Environmental Protection Agency



**Facility Specific Title V Operating Permit Conditions**

**I. Facility Description of Operations**

Stored Solar Tamworth, LLC (Stored Solar Tamworth), formerly known as Pinetree Power-Tamworth LLC operates a 25 megawatt (MW) gross output, power generation facility located in Tamworth, New Hampshire. The primary sources of emissions at the facility are a wood-fired boiler, an emergency diesel generator, a fire pump and a cooling tower.

On March 17, 2008, the Department of Environmental Services (department) issued Temporary Permit TP-B-0543 authorizing the installation of nitrogen oxide (NOx) emission control equipment on the wood-fired boiler. Pinetree Power Tamworth installed overfire air and flue gas recirculation technologies, as well as a selective non-catalytic reduction (SNCR) system and a selective catalytic reduction (SCR) system.

The facility is a major source for nitrogen oxides (NOx) and carbon monoxide (CO) and is therefore required to obtain a Title V Operating Permit.

**II. Permitted Activities**

In accordance with all of the applicable requirements identified in the Permit, the Owner or Operator is authorized to operate the devices and/or processes identified in Sections III, IV, V, and VI within the terms and conditions specified in this permit.

**III. Emission Unit Identification**

**A. Significant Activities**

The activities identified in Table 1 are subject to and regulated by this Title V Operating Permit.

<b>Table 1 - Significant Activities</b>			
<b>Emission Unit ID</b>	<b>Description of Emission Unit</b>	<b>Installation Date</b>	<b>Maximum Design Capacity and Permitted Fuel Types</b>
EU01	Zurn Two Drum Open Pass Waterwall Wood-fired Boiler Model No: 2-Drum Open Pass Type of Burner: Spreader Stoker	1987	404 MMBtu/hr - 47.5 tons/hour of untreated wood <sup>1</sup> with a heating value of 4,250 Btu/lb, assuming approximately 50% moisture. This is equivalent to 220,000 lb/hr of steam production <sup>2</sup> .
EU02	745 hp Emergency Generator Manufacturer: Caterpillar Model #3412 S/N81Z06460	1987	5.40 MMBtu/hr Diesel - equivalent to 39.4 gal/hr <sup>3</sup>

<sup>1</sup> "Untreated wood" means any timber, board or sawn dimensional lumber, which has not been treated, coated or preserved. This term does not include any manufactured building material, such as plywood or wafer board. Pursuant to RSA 125-C:10-c, *Combustion Ban*, "...no person shall combust the wood component of construction and demolition debris, as defined in RSA 149-M:4, IV-a, or any mixture or derivation from said component[...]"

<sup>2</sup> At 900 °F and 700 psig, assuming a boiler efficiency of 71% and boiler feedwater temperature of 405 °F

<sup>3</sup> Based on a heating value of 137,000 Btu/gal for diesel

Table 1 - Significant Activities			
Emission Unit ID	Description of Emission Unit	Installation Date	Maximum Design Capacity and Permitted Fuel Types
EU03	Cooling Tower Manufacturer: Custodis Cottrell	1987	Circulation Rate = 26,000 gal/minute
EU04	187 hp Fire pump Manufacturer: Cummins Model # V-504-F2 S/N 20247573	1987	1.4 MMBtu/hr Diesel - equivalent to 10.2 gal/hr

**B. Stack Criteria**

The following device at the Facility shall have an exhaust stack that discharges vertically, without obstruction, and meets the criteria in Table 2:

Table 2 - Stack Criteria			
Stack #	Emission Unit #	Minimum Height (feet above ground surface)	Maximum Exit Diameter (feet)
Stack 1	EU01	197.5	8.5

**IV. Insignificant Activities Identification**

All activities at this facility, which meet the criteria identified in Env-A 609.04, shall be considered insignificant activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this Permit.

**V. Exempt Activities Identification**

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this permit.

**VI. Pollution Control Equipment Identification**

Air pollution control equipment<sup>4</sup> listed in Table 3 shall be operated at all times that the wood-fired boiler is operating in order to meet permit conditions:

Table 3 - Pollution Control Equipment Identification		
Pollution Control Equipment Number	Description of Equipment	Activity
PCE1	Multiclone - primary particulate control	Control of particulate matter
PCE2	Electrostatic Precipitator (ESP) - secondary particulate control	Control of particulate matter

<sup>4</sup> PCE3 and PCE4 are installed voluntarily by the Permittee and as such, the Permittee may operate these devices at its discretion.

Table 3 - Pollution Control Equipment Identification		
Pollution Control Equipment Number	Description of Equipment	Activity
PCE3	Selective Non-Catalytic Reduction (SNCR) System	Control of nitrogen oxides
PCE4	Selective Catalytic Reduction (SCR) System	Control of nitrogen oxides

**VII. Alternative Operating Scenarios**

No alternative operating scenarios were identified for this permit.

**VIII. Applicable Requirements**

**A. State-only Enforceable Operational and Emission Limitations**

The Owner or Operator shall be subject to the state-only<sup>5</sup> operational and emission limitations identified in Table 4 below:

Table 4 - State-only Enforceable Operational and Emission Limitations			
Item #	Applicable Requirements	Applicable Emission Unit	Regulatory Citation
1.	<u>24-hour and Annual Ambient Air Limit<sup>6</sup></u> The emissions of any Regulated Toxic Air Pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual Ambient Air Limit (AAL) as set forth in Env-A 1450.01, <i>Table of All Regulated Toxic Air Pollutants</i> .	Facility Wide	Env-A 1400
2.	<u>Revisions of the List of RTAPs</u> In accordance with RSA 125-I:5 IV, if the department revises the list of RTAPs or their respective AALs or classifications under RSA 125-I:4, II and III, and as a result of such revision the Owner or Operator is required to obtain or modify the permit under the provisions of RSA 125-I or RSA 125-C, the Owner or Operator shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such permit or permit modification.	Facility Wide	RSA 125-I:5 IV
3.	<u>Precautions to Prevent, Abate, and Control Fugitive Dust</u> The Owner or Operator shall take precautions to prevent, abate, and control the emission of fugitive dust. Such precautions shall include but are not limited to wetting, covering, shielding, or vacuuming.	Facility wide	Env-A 1002.03
4.	<u>Activities Exempt from Visible Emission Standards</u> The average opacity shall be allowed to be in excess of those standards specified in Env-A 2002.02 for one period of 6 continuous minutes in any 60 minute period during startup, shutdown and malfunction.	EU02 & EU04	Env-A 2002.04(c)

<sup>5</sup> The term “state-only requirement” is used to refer to those requirements that are not federally enforceable but are state requirements as defined in Env-A 101.186.

<sup>6</sup> Env-A 1450.01, *Table of All Regulated Toxic Air Pollutants*, is typically updated annually. The updates can be found at <http://des.nh.gov/organization/commissioner/legal/rulemaking/index.htm#air>.

**B. Federally Enforceable Operational and Emission Limitations**

The Owner or Operator shall be subject to the federally enforceable operational and emission limitations identified in Table 5 below:

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Applicable Requirement</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Cite</b>
1.	Wood for the wood-fired boiler shall be limited to wood chips uncontaminated by glues, preservatives, oils or similar substances. The Owner or Operator shall notify the department/USEPA of all proposed sources of wood fuel other than wood chips and of the nature of said fuels. The Owner or Operator shall obtain written permission from the department/USEPA prior to the securing of any purchase/utilization agreements for said fuels.	EU01	PSD Permit No. 040-149NH06
2.	The startup and shutdown periods for the wood-fired boiler are defined as follows: a. Startup periods <sup>7</sup> are those periods of time from the initiation of wood firing until the unit reaches steady-state operation (85% to 100% load conditions). This period shall not exceed 8 hours (480 minutes) for a cold startup, nor 4 hours (240 minutes) for a hot startup. A cold startup shall be defined as startup when the boiler has been down for more than 24 hours. b. Shutdown periods shall not exceed 4 hours (240 minutes) from the moment the wood fuel supply to the boiler is eliminated. c. The number of hours that the boiler can operate in a startup or shutdown mode, on a calendar year basis, shall not exceed 15% of the total operating hours of the plant.	EU01	PSD Permit No. 040-149NH06
3.	The wood-fired boiler is subject to the following opacity limits: a. Startup/Shutdown Conditions Visible emissions from the boiler shall not exceed 20 percent (6-minute average), except for one 6-minute average per hour of not more than 27 percent opacity. b. Steady State Operating Conditions Visible emissions from the boiler shall not exceed 15 percent <sup>8</sup> (6-minute average), except for one 6-minute average per hour of not more than 27 percent opacity.	EU01	PSD Permit No. 040-149NH06 and PO-B-1706
4.	<u>Emission Standards for Nitrogen Oxides</u> NO <sub>x</sub> emissions from the wood-fired boiler shall be limited to 107 lb/hr and 0.265 lb/MMBtu, as averaged over any consecutive 24-hour period.	EU01	PSD Permit No. 040-149NH06

<sup>7</sup> The startup period clock shall begin once the combustion fans and automatic wood feed system are started.

<sup>8</sup> This limit is more stringent than the opacity limit specified in 40 CFR 60.43b(f), Subpart Db, Env-A 2002.02 and Env-A 2002.04(a).

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Cite
	Compliance with this emission limit shall be demonstrated using the NO <sub>x</sub> Continuous Emissions Monitoring System (CEMS) data. <sup>9</sup>		
5.	<p><u>Emission Standards for Carbon Monoxide</u></p> <p>a. During steady state operating conditions, carbon monoxide emissions from the wood-fired boiler shall be limited to 0.5 lb/MMBtu and 202 lb/hr as averaged over any rolling 24-hour period. Compliance with this emission limit shall be demonstrated using the CO CEMS data.</p> <p>b. During startup and shutdown conditions, carbon monoxide emissions from the wood-fired boiler shall be limited to 202 lb/hr as averaged over any rolling 24-hour period.</p>	EU01	PSD Permit No. 040-149NH06
6.	<p><u>Emission Standard for Particulate Matter</u><sup>10</sup></p> <p>Total suspended particulate matter emissions from the wood-fired boiler shall be limited to 0.025 lb/MMBtu heat and 10 lb/hr at all times.</p>	EU01	PSD Permit No. 040-149NH06
7.	<p><u>Emission Standard for Volatile Organic Compounds</u></p> <p>Volatile organic compound emissions from the wood-fired boiler shall be limited to 0.096 lb/MMBtu heat input and 38.80 lb/hr at all times.</p>	EU01	PSD Permit No. 040-149NH06
8.	<p><u>Ammonia Slip Emissions Limit</u></p> <p>Ammonia slip emissions from the wood-fired boiler shall be limited to 20 ppmvd @ 6% oxygen (O<sub>2</sub>) dry volume.</p>	EU01, PCE3, & PCE4	TP-B-0543
9.	<p><u>Fugitive Emission Control Requirements</u></p> <p>If particulate matter emissions occur on site which are visible or in excess of 5% opacity, the Owner or Operator shall cover all wood-handling equipment to eliminate all visible particulate matter emissions and maintain such covers as long as necessary to prevent any such emissions.</p>	Facility wide Wood-Handling Equipment	PSD Permit No. 040-149NH06
10.	<p><u>Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970</u></p> <p>The average opacity from fuel burning devices installed after May 13,</p>	EU02 & EU04	Env-A 2002.02 (formerly Env-A 1202 effective 12-27-90)

<sup>9</sup> This device is subject to both the Prevention of Significant Deterioration (PSD) limit of 0.265 lb NO<sub>x</sub>/MMBtu and the NO<sub>x</sub> Reasonable Achievable Control Technology (RACT) limit of 0.33 lb/MMBtu (Env-A 1304.04(b), *Steam Electric Boilers*, and Env-A 1305.15(a), *RACT Requirements: Boilers Firing Wood*, although the PSD limit shall take priority as the most stringent federally enforceable limit.

<sup>10</sup> This permit condition has been streamlined to cover the following state and federal air regulations:

- a. The 0.1 lb/MMBtu emission limit contained in 40 CFR 60.43b(c) (1), Subpart Db, New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units; and
- b. The 0.10 lb/MMBtu emission limit contained in Env-A 2003.03(b)(3) Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985.

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Cite
	1970 shall not exceed 20 percent for any continuous 6-minute period.		
11.	<u>Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985</u> Total suspended particulate matter emissions from fuel burning devices installed on or after January 1, 1985 shall not exceed 0.30 lb/MMBtu.	EU02 & EU04	Env-A 2003.03 (formerly Env-A 1202 effective 12-27-90)
12.	<u>Emergency Generators</u> The emergency generator shall only operate: a. As a mechanical or electrical power source when the primary power source for the Facility has been lost during an emergency such as a power outage; or b. During normal maintenance and testing as recommended by the manufacturer. c. No emergency engine shall operate as a load-shaving or peaking power production unit.	EU02	Env-A 1302.15
13.	<u>Operating Hours Limitation</u> The emergency generator and the fire pump shall each be limited to 500 hours of operation during any consecutive 12-month period.	EU02 & EU04	Env-A 1301.02(j)(i)
14.	<u>Maximum Sulfur Content Allowable in Liquid Fuels</u> The sulfur content of No. 2 oil shall not exceed 0.40 percent sulfur by weight.	EU02 & EU04	Env-A 1603.01(a) (formerly Env-A 402 effective 12-24-90)
15.	<u>Operating Limitations for Existing CI and SI Emergency Engines</u> In addition to the operating hours limitation in Table 5, Item 13, the owner or operator shall operate the emergency engine for any combination of the purposes listed below for a maximum of 100 hours per calendar year <sup>11</sup> : a. Emergency engines may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine.	EU02 & EU04	40 CFR 63.6640(f) (Subpart ZZZZ)

<sup>11</sup> The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency engine beyond 100 hours per calendar year.

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Cite
16.	<p><u>RICE NESHAP - Existing Emergency Engines</u><sup>12</sup></p> <p>The owner or operator of all existing emergency engines subject to 40 CFR 63, Subpart ZZZZ shall:</p> <ul style="list-style-type: none"> <li>a. Change oil and filter annually, or in accordance with an Oil Analysis Program prepared and implemented as specified in §63.6625(i) ;</li> <li>b. Inspect the air cleaner annually and replace as necessary;</li> <li>c. Inspect all hoses and belts annually and replace as necessary;</li> <li>d. Operate and maintain the stationary engine according to the manufacturer's emission-related written instructions (O&amp;M manual) or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions; and</li> <li>e. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.</li> </ul>	EU02 & EU04	<p>40 CFR 63.6603                      &amp;                      40 CFR 63.6625                      (Subpart ZZZZ)</p>
17.	<p><u>NESHAP General Provisions</u></p> <p>At all times, the Owner or Operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Owner or Operator to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the USEPA, Region 1 and the department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p> <ul style="list-style-type: none"> <li>a. For boilers subject to the work practice standard, emission reduction measure, and management practice requirements specified in § 63.11201, the Owner or Operator must comply at all times the affected boiler is operating.</li> <li>b. For emergency engines subject to 40 CFR 63, Subpart ZZZZ, the Owner or Operator shall maintain compliance with the emission limitations and operating limitations in Subpart ZZZZ that apply to the Owner/Operator at all times.</li> </ul>	EU01, EU02 & EU04	<p>40 CFR 63.11205                      (Subpart JJJJJ)                      &amp;                      40 CFR 63.6605                      (Subpart ZZZZ)</p>

<sup>12</sup> If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 5, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Applicable Requirement</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Cite</b>
18.	<p><u><i>NSPS General Provisions</i></u></p> <p>a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source;</p> <p>b. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.</p>	EU01	40 CFR 60.11(d) & 40 CFR 60.11(g)
19.	<p><u><i>Accidental Release Program Requirements</i></u></p> <p>The quantities of regulated chemicals stored at the facility are less than the applicable threshold quantities established in 40 CFR 68.130. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities:</p> <p>a. Identify potential hazards which result from such releases using appropriate hazard assessment techniques;</p> <p>b. Design and maintain a safe facility;</p> <p>c. Take steps necessary to prevent releases; and</p> <p>d. Minimize the consequences of accidental releases that do occur.</p>	Facility wide	CAAA 112(r)(1)



**C. Emission Reductions Trading Requirements**

The Owner or Operator did not request emissions reductions trading in its operating permit application. At this point, the Department has not included any permit terms authorizing emissions trading in this permit. All emission reduction trading, must be authorized under the applicable requirements of either Env-A 3000 *Emissions Reductions Credits Trading Program*, or Env-A 3100 *Discrete Emissions Reductions Trading Program* and 42 U.S.C §§7401 et seq. (the “Act”), and must be provided for in this permit.

**D. Monitoring and Testing Requirements**

The Owner or Operator is subject to the monitoring and testing requirements as contained in Table 6 below:

Table 6 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
1.	Opacity	Operate and maintain a continuous opacity monitoring system (COMS) for measuring the opacity of emissions from the wood-fired boiler <sup>13</sup> . Determination of compliance with the opacity limits established in Table 5, Item #3 shall be made by the COMS or, during any COMS downtime, by visible emission readings taken once per shift following the procedures specified in 40 CFR 60, Appendix A, Method 9.	Continuous	EU01	PSD Permit No. 040-149NH06
2.	NO <sub>x</sub>	Operate and maintain a continuous emissions monitoring system (CEMS) to measure the emissions of nitrogen oxides from the wood-fired boiler. The NO <sub>x</sub> CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 2 and Env-A 808. Determination of compliance with the NO <sub>x</sub> emission limits established in Table 5, Item #4 shall be made by the NO <sub>x</sub> CEMS.	Continuous	EU01	PSD Permit No. 040-149NH06
3.	CO	Operate and maintain a CEMS for measuring the emissions of carbon monoxide from the wood-fired boiler. The CO CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 4 and Env-A 808. Determination of compliance with the CO emission limits established in Table 5, Item #5 shall be made by the facility CO CEMS.	Continuous	EU01	PSD Permit No. 040-149NH06
4.	O <sub>2</sub>	Operate and maintain a CEMS for measuring the oxygen (O <sub>2</sub> ) content of the flue gas from the wood-fired boiler. The O <sub>2</sub> CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 3 and Env-A 808.	Continuous	EU01	PSD Permit No. 040-149NH06

<sup>13</sup> The COMS shall meet the applicable requirements of 40 CFR 60, Appendix B, Performance Standard 1; Appendix F, Procedure 3; and Env-A 808.

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
5.	Volumetric flow	<p>Operate and maintain a stack volumetric flow measuring device for measuring stack flow from the wood-fired boiler which meets the following requirements:</p> <ol style="list-style-type: none"> <li>a. All differential pressure flow monitors shall have an automatic blow-back purge system installed, and in wet stack conditions, shall have the capability for drainage of the sensing lines;</li> <li>b. The stack flow monitoring system shall have the capability for manual calibration of the transducer and for a zero check; and</li> <li>c. Alternatives to in-stack flow monitoring devices for determination of stack volumetric flow rate may be used if the Owner or Operator provides the department with technical justification that the alternative can meet the same requirements for data availability, data accuracy, and quality assurance as an in-stack device.</li> </ol>	Continuous	EU01	Env-A 808.03(d) & (e)
6.	Continuous steam flow monitor	<p>Operate and maintain a continuous steam flow rate monitoring system for measuring steam production from the wood-fired boiler output steam pipe which meets the following requirements:</p> <ol style="list-style-type: none"> <li>a. The steam flow rate monitoring system shall meet all applicable ASME specifications;</li> <li>b. The steam flow transducer shall be calibrated at least once annually in accordance with manufacturer's specifications; and</li> <li>c. If adequate straight length of piping is not available, then in lieu of a measuring system that meets ASME specifications, the Owner or Operator may use a steam flow rate monitoring system that can be calibrated by instruments installed, maintained and calibrated per ASME specifications or by other methods approved by the department.</li> </ol>	As specified	EU01	PSD Permit No. 040-149NH06
7.	Urea Flow to SNCR & SCR	Operate and maintain a department-approved urea flow monitor for measuring urea flow to the SNCR and SCR when they are in operation.	Continuous & daily calculations	PCE3 & PCE4	TP-B-0543
8.	SCR Catalyst Bed Temperature	Operate and maintain a department-approved temperature monitor for measuring the temperature of the SCR catalyst bed(s).	Continuous	PCE4	TP-B-0543

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
9.	Stack Testing Requirements for particulate matter and ammonia slip	Conduct compliance stack testing for total suspended particulate and ammonia slip. Particulate test results will be used to evaluate compliance with the particulate emission limit in Table 5, Item #6. Ammonia test results will be used to evaluate compliance with the ammonia slip emission limit in Table 5, Item #8. Compliance stack testing shall be planned and carried out in accordance with the following schedule: <ul style="list-style-type: none"> <li>a. A pre-test protocol shall be submitted to the department at least 30 days prior to the commencement of testing. The pre-test protocol shall contain the information specified in Env-A 802.04;</li> <li>b. The Owner or Operator and any contractor retained by the Owner or Operator to conduct the test shall meet with a department representative at least 15 days prior to the test date to finalize the details of the testing;</li> <li>c. A test report shall be submitted to the department within 60 days after the completion of testing. The test report shall contain the information specified in Env-A 802.11(c);</li> <li>d. Method 5, or department approved alternatives, shall be used to measure the concentration of particulate matter; and</li> <li>e. Ammonia slip shall be determined using department-approved method.</li> </ul>	Every 5 years for particulate matter & annually for ammonia slip	EU01	TP-B-0543, 40 CFR 70.6(a)(3) & Env-A 802
10.	General Stack Testing Requirements	<u>Operating Conditions During a Stack Emissions Test</u> Compliance stack tests shall be conducted under one of the following operating conditions: <ul style="list-style-type: none"> <li>a. Between 90 and 100 percent, inclusive, of maximum production rate or rated capacity;</li> <li>b. A production rate at which maximum emissions occur; or</li> <li>c. At such operating conditions agreed upon during a pre-test meeting conducted pursuant to Env-A 802.05.</li> </ul>	As specified	EU01	Env-A 802.10

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
11.	Minimum Specifications for CEM Systems	The Owner or Operator shall ensure that each CEMS meets the following operating requirements: <ul style="list-style-type: none"> <li>a. The COMS for measuring opacity emissions shall average the opacity data to result in consecutive, non-overlapping 6-minute averages;</li> <li>b. The CEMS for measuring gaseous emissions shall average and record the data for each calendar hour;</li> <li>c. All COMS and CEMS shall include a means to display instantaneous values of percent opacity and gaseous emission concentrations and complete a minimum of one cycle of operation which shall include measuring, analyzing, and data recording for each 10-second period for systems measuring opacity and each successive 5-minute period for systems measuring gaseous emissions, unless a longer time period is approved in accordance with Env-A 809; and</li> <li>d. A valid hour of COM/CEM emissions data, as defined in Env-A 808.01(i), means a minimum of 42 minutes of COMS/CEMS readings taken in any calendar hour, during which the COMS/CEMS is not in an out of control period, as defined in Env-A 808.01(g), and the facility is in operation.</li> </ul>	N/A	EU01	Env-A 808.03
12.	QA/QC Plan Requirements	The Owner or Operator shall perform the following QA/QC activities for the COMS and CEMS systems: <ul style="list-style-type: none"> <li>a. Prepare a quality assurance/quality control (QA/QC) plan, which shall contain written procedures for implementation of its QA/QC program that meets the criteria specified in 40 CFR 60, Appendix F, Procedure 1, section 3 for each CEM system;</li> <li>b. Review the QA/QC plan and all data generated by its implementation at least once each year;</li> <li>c. Revise or update the QA/QC plan, as necessary, based on the results of the annual review, by:                             <ul style="list-style-type: none"> <li>i) Documenting the replacement of any damaged or malfunctioning COM/CEM system components in order to maintain the collection of valid COM/CEM data and to maximize data availability;</li> <li>ii) Documenting any changes made to the COM/CEM or changes to any information provided in the monitoring plan submitted in accordance with Env-A 808.04;</li> <li>iii) Including a schedule of, and describing, all</li> </ul> </li> </ul>	Review annually and revise as necessary	EU01	Env-A 808.06

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
		<p>maintenance activities that are required by the CEM manufacturer or that might have an effect on the operation of the system;</p> <ul style="list-style-type: none"> <li>iv) Describing how the audits and testing required by Env-A 808 will be performed; and</li> <li>v) Including examples of the reports that will be used to document the audits and tests required by Env-A 808;</li> </ul> <p>d. Make the revised QA/QC plan available for on-site review by the department at any time; and</p> <p>e. No later than April 15 of each year, either:</p> <ul style="list-style-type: none"> <li>i. Submit to the department the revised QA/QC plan and the reasons for each change, and certify in writing that the Owner or Operator is implementing the revised QA/QC plan; or</li> <li>ii. Certify in writing that no changes have been made to the plan and that the Owner or Operator will continue to implement the existing QA/QC plan.</li> </ul>			
13.	General Audit Requirements for all CEM & COM Systems	<p>The Owner or Operator shall audit each COMS/CEMS in accordance with the following:</p> <ul style="list-style-type: none"> <li>a. Required quarterly audits anytime during each calendar quarter, provided that successive quarterly audits shall occur no more than 4 months apart.</li> <li>b. Subject to (d), below, within 30 calendar days following the end of each quarter, the Owner or Operator shall submit to the department a written summary report of the results of all audits required by (a), above, that were performed during that quarter, in accordance with the following:                             <ul style="list-style-type: none"> <li>i. For gaseous CEM audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1; and</li> <li>ii. For COM audits, the report format shall conform to that presented in EPA-600/8-87-025, April 1992, "Technical Assistance Document: Performance Audit Procedures for Opacity Monitors".</li> </ul> </li> <li>c. The Owner or Operator shall notify the department:                             <ul style="list-style-type: none"> <li>i. At least 30 days prior to the performance of a RATA; and</li> <li>ii. At least 2 weeks prior to any other planned audit or test procedure required under Env-A 808.</li> </ul> </li> <li>d. The Owner or Operator shall file with the department a written summary of the results of the</li> </ul>	Quarterly	EU01	Env-A 808.07

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
		RATA testing required by Env-A 808.08 by the earlier of 45 calendar days following the completion of the RATA test or the date established in the section of 40 CFR 60 that requires performance of the RATA.			
14.	Gaseous CEM Audit Requirements	Audit requirements for gaseous CEMS shall be performed in accordance with procedures described in 40 CFR 60, Appendix F and Env-A 808.08.	Quarterly	EU01	Env-A 808.08
15.	COMS Audit Requirements	Audit requirements for COMS shall be performed in accordance with procedures described in Env-A 808.11 and 40 CFR 60, Appendix F, Procedure 3, Section 10.3.	Quarterly and Annually, as specified	EU01	Env-A 808.11
16.	Data Availability Requirements	<p>a. The Owner or Operator shall operate the gaseous CEM systems, volumetric and steam flow monitors at all times during operation of the source, <b>except</b> when the stack flow is less than 39,384 DSCFM or during periods of CEM breakdown, repairs, calibration checks, preventive maintenance, and zero/span adjustments.</p> <p>b. The COMS shall be continuously monitoring and recording opacity data during all periods of operation, regardless of the stack flow rate, except during periods of COM breakdown, repairs, calibration checks, preventative maintenance, and zero/span adjustments ; and</p> <p>c. The percentage data availability for opacity and all gaseous concentration monitors shall be maintained at a minimum of 90% on a calendar quarter basis.</p>	N/A	EU01	Env-A 808.12
17.	Data Availability Calculations	<p>The Owner or Operator shall use the following equation for calculating percentage data availability:</p> $\text{Percentage Data Availability} = \frac{(VH + CalDT) \times 100}{(OH - AH)}$ <p>Where:</p> <p>VH = Number of valid hours of COM/CEM data in a given time period for which the data availability is being calculated when the plant is in operation;</p> <p>CalDT = Number of hours, not to exceed one hour per day, during facility operation when the COM/CEM is not operating due to the performance of the daily COM/CEM calibrations as required in 40 CFR 60, Appendix F;</p> <p>OH = Number of facility operating hours during a given time period for which the data availability is being calculated; and</p>	As specified	EU01	Env-A 808.12, 40 CFR 60 Subpart A Section 60.7(b)

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
		AH = Number of hours during facility operation when the performance of quarterly audits as required by those procedures specified in Env A 808.08 through 808.11, as applicable, require that the COM/CEM be taken out of service in order to conduct the audit.			
18.	Audit requirements for the stack flow monitor	a. Whenever compliance with a mass flow emissions limit is determined using a stack flow volumetric monitor, the Owner or Operator shall conduct, at least once every 4 calendar quarters, a minimum 9-run RATA with the relative accuracy calculated in the units of the mass emissions measurement as specified in 40 CFR 60, Appendices B and F;  b. The Owner or Operator of a stationary source subject to a. above, and using a stack volumetric flow monitor for the mass flow emissions calculation shall in addition to the 9-run RATA, also perform one of the audit options specified in Env-A 808.09 or Env-A 808.10.	As specified	EU01	Env-A 808.08(e) & (f)
19.	Requirement for Substitute Emission Data	Any facility that uses the emissions data collected by a gaseous CEM system to calculate and report its annual emissions in accordance with Env-A 900 shall comply with the following:  a. For any facility operating hour during which the gaseous CEM system has not collected a valid hour of CEM system data, the Owner or Operator shall submit to the department substitute emission data for those hours which has been generated using <b>one</b> of the following methods: i. The missing data substitution procedures specified in 40 CFR 75, Subpart D; ii. If the missing data occurred during a period of steady-state operation, and not during a period of start-up, shutdown, or malfunction: 1. An average of the emissions data for the hours prior to and after the period of missing data during which valid CEM data was collected, or 2. Representative emissions data for the device at the same heat input rate, electric generating rate, or steam load; iii. If the missing data occurred during a start-up, shutdown, or malfunction of the device, substitute data collected by the CEM during a similar period of start-up, shutdown or malfunction, respectively; or iv. An alternative method of data substitution that meets the following criteria:	N/A	EU01	Env-A 808.13

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
		<ol style="list-style-type: none"> <li>1. The alternative method was included in the monitoring plan submitted pursuant to Env-A 808.04;</li> <li>2. The alternative method provides for representative emissions for the conditions of operation of the device during the period of missing data equivalent to the substitution methods described in (i) through (iii), above; and</li> <li>3. The alternative method was approved by the department as part of its approval of the monitoring plan pursuant to Env-A 808.04.</li> </ol> <ol style="list-style-type: none"> <li>b. For CEM systems and emissions not subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall include substitute emissions data in the calculation of total daily, monthly, quarterly, and annual emissions generated by the permitted device to quantify total actual emissions;</li> <li>c. Substitute emission data shall not be used in the calculation of emissions totals or averages in order to determine or demonstrate compliance with emissions standards;</li> <li>d. Substitute data shall not be included in the calculation of data availability.</li> </ol>			
20.	Valid averaging period	The number of hours of valid COM/CEM system data required for the calculation and determination of compliance with a 24-hour emission standard period shall be 18 hours of valid data.	N/A	EU01	Env-A 808.17
21.	Boiler Tune-up	<p>The biennial tune-up of the boiler shall consist of the following:</p> <ol style="list-style-type: none"> <li>a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary;<sup>14</sup></li> <li>b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer’s specifications if available;</li> <li>c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;</li> </ol>	Biennially <sup>16</sup>	EU01	40 CFR 63.11201(b) & 40 CFR 63.11223 Subpart JJJJJ

<sup>14</sup> The burner inspection may be delayed until the next scheduled unit shutdown, but must be inspected at least once every 36 months.

<sup>16</sup> Each biennial tune-up must be conducted no more than 25 months after the previous tune-up [§63.11223(a)]. In addition, if the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup. [§63.11223(b)(7)]



**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
		d. Optimize total emissions of carbon monoxide, consistent with the manufacturer’s specifications, if available, and with any NOx requirement to which the unit is subject; and  e. Measure the concentration in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made. <sup>15</sup>			
22.	Sulfur Content of Liquid Fuels	Conduct testing in accordance with appropriate ASTM test methods or retain delivery tickets in accordance with Table 7, Item #7 in order to demonstrate compliance with the sulfur content limitation provisions specified in this permit for liquid fuels.	For each delivery of fuel oil/diesel to the facility	Facility Wide	Env-A 806.05
23.	Hours of Operation	Emergency generator and fire pump shall each be equipped with a non-resettable hour meter.	Continuous	EU03 & EU04	40 CFR 63.6625 Subpart ZZZZ
24.	Periodic Monitoring	If the indicator ranges specified in Tables 6A and 6B, Item #2 accumulate exceedances over 5% of the rolling 12-month total operating time for PCE1 and PCE2, the Owner or Operator shall prepare and submit a Quality Improvement Plan (QIP) to the department. The QIP shall include procedures for evaluating the control performance problems. Based on the evaluation, the Owner or Operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:  a. Improve preventive maintenance practices; b. Operational changes; c. Appropriate improvements to control methods; d. Other steps to improve control performance; and e. More frequent or improved monitoring.	Continuous	PCE1 & PCE2	40 CFR 64.8

**Table 6A - Compliance Assurance Monitoring - 40 CFR 64  
 Electrostatic Precipitator (ESP) for the control of Particulate Matter**

Indicator	Indicator No. 1 - Secondary Voltage	Indicator No. 2 - Inspection/Maintenance
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<sup>15</sup> Measurements may be either on a dry or wet basis, as long as it is the same basis, before and after the adjustments are made. Measurements may be taken with a portable CO analyzer.

<b>Table 6A - Compliance Assurance Monitoring - 40 CFR 64                      Electrostatic Precipitator (ESP) for the control of Particulate Matter</b>		
Indicator	Indicator No. 1 - Secondary Voltage	Indicator No. 2 - Inspection/Maintenance
1. Measurement Approach	Secondary voltage is transmitted through a serial connection which sends the signal to a data acquisition system. Standard voltmeters are used as backup. All three ESP fields must be in operation.	a) Inspections shall be conducted according to the I/M checklist; b) Inspections of casing, piping, ducts, and ash conveyor for leaks, abnormal noise, hot spots, and fires; c) Inspection of the ash hopper, high-level probes and remote alarms for correction operation; and d) Maintenance performed as needed.
2. Indicator Range	The indicator range is a secondary voltage between 3 kilovolts and 60 kilovolts for each field, with all three fields of the ESP in operation. Excursions <sup>17</sup> trigger an inspection, corrective action, and a reporting requirement.	Failure to perform an inspection triggers a reporting requirement. Failure of mechanical inspections listed in Item 1 above, triggers corrective action, and recordkeeping requirement.
3. Performance Criteria		
a) Data Representativeness	The minimum accuracy of the readings is $\pm 3\%$ of span.	Inspections are performed at the ESP.
b) QA/QC Practices and Criteria	The local secondary voltmeter shall be calibrated annually and the results recorded. The Owner or Operator shall maintain the monitoring equipment at all times, including but not limited to, maintaining necessary parts for routine repair and maintenance.	Inspections shall be conducted by qualified personnel.
c) Monitoring Frequency	The secondary voltage shall be recorded once per shift.	a) Annual inspection according to the I/M checklist; b) Once per shift inspections shall include inspections of casing, piping, ducts, and ash conveyor for leaks, abnormal noise, hot spots, and fires; and c) Annual inspections shall include inspection of the ash hopper, high-level probes and remote alarms for correction operation.
i) Data Collection Procedure	Records to be maintained on standard operating logs.	Record results of all inspection and maintenance in a logbook.
ii) Averaging Period	NA	NA

<sup>17</sup> Excursion shall mean a departure from an indicator range established for monitoring under 40 CFR 64, consistent with any averaging period specified for averaging the results of the monitoring.

<b>Table 6B - Compliance Assurance Monitoring - 40 CFR 64                      Multiclone for the control of Particulate Matter</b>		
<b>Indicator</b>	<b>Indicator No. 1 -                      Pressure differential across the                      multiclone</b>	<b>Indicator No. 2 -                      Inspection/Maintenance</b>
1. Measurement Approach	Measurement of pressure using a pressure transmitter to data acquisition system.	a) Inspections shall be conducted according to the I/M checklist including inspection of the inlet and outlet vanes and boots for any buildup of caked dust; b) Inspections of the multiclone shall include checking for any apparent abnormalities or damage that would cause air leakage into the unit; and c) Maintenance performed as needed.
2. Indicator Range	The indicator range is a pressure differential reading between 2" and 8" of water column. Excursions <sup>16</sup> trigger an inspection, corrective action, and a reporting requirement.	Failure to perform an inspection triggers a reporting requirement. Failure of mechanical inspections listed in Item 1 above, triggers corrective action, and recordkeeping requirement.
3. Performance Criteria		
a) Data Representativeness	The pressure transmitter is located at the inlet and outlet of multiclone. The minimum accuracy of the gage is ± 0.5 inches of water column.	Inspections are performed at the multiclone.
b) QA/QC Practices and Criteria	The pressure transmitter shall be calibrated annually.	Inspections shall be conducted by qualified personnel.
c) Monitoring Frequency	Pressure drop shall be recorded once per shift.	a) Annual inspection according to the I/M checklist including inspection of the inlet and outlet vanes and boots for any buildup of caked dust; and b) Daily Inspections of the multiclone shall include checking for any apparent abnormalities or damage that would cause air leakage into the unit.
i) Data Collection Procedure	Records to be maintained on standard operating logs.	Record results of all inspection and maintenance in a logbook.
ii) Averaging Period	NA	NA

**E. Recordkeeping Requirements**

The Owner or Operator shall be subject to the recordkeeping requirements identified in Table 7 below:

<b>Table 7 - Applicable Recordkeeping Requirements</b>				
<b>Item #</b>	<b>Applicable Recordkeeping Requirement</b>	<b>Records Retention/ Frequency</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Citation</b>
1.	Retain records of all required monitoring data, recordkeeping and reporting requirements, and support information for a period of at least 5 years from the date of origination.	Retain for a minimum of 5 years	Facility Wide	40 CFR 70.6(a)(3)(ii)(B)
2.	<u>Air Pollution Control Device Operational Records</u> Maintain records of all malfunctions, routine maintenance, and other downtimes of any air pollution control equipment in whole or part. These records must be available for review by the department/EPA upon request.	At each occurrence	PCE1, PCE2, PCE3 & PCE4	Env-A 906.01, 40 CFR 60 Subpart A Section 60.7(b)
3.	<u>General Recordkeeping Requirements for Sources with Continuous Emissions Monitoring Systems</u> Maintain records for the CEMS and COMS specified in Table 6, Items 1 through 5 in accordance with Env-A 800 and all applicable federal regulations. The records shall be maintained in a permanent form suitable for inspection.	As specified in Env-A 800 and applicable federal requirements	EU01	Env-A 903.04, 40 CFR 60 Subpart A Section 60.7(f), 40 CFR 60 Subpart Db Section 60.49b(f)
4.	<u>General Recordkeeping Requirements for Combustion Devices</u> Maintain the following records of fuel characteristics and utilization for the fuel used in each fuel burning device at the facility: a. Consumption; b. Fuel type; and c. Hours of operation for the emergency generator and the fire pump.	Monthly	EU02 & EU04	Env-A 903.03
5.	<u>Records on Process Operations</u> Maintain records of the type and quantity of boiler and cooling tower treatment chemicals used that are necessary to calculate emissions.	Monthly	EU01 & EU03	Env-A 903.02
6.	<u>NSPS Fuel Consumption Recordkeeping</u> Maintain records of the amount of fuel combusted in the wood-fired boiler.	Daily	EU01	40 CFR 60.49b(d)

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Citation
7.	<p><u>Liquid Fuel Oil Recordkeeping Requirements</u>                      In lieu of sulfur testing pursuant to Table 6, Item #22, the Owner or Operator may maintain fuel delivery tickets that contain a written statement from the fuel supplier that the sulfur content of the fuel as delivered does not exceed state or federal standards for that fuel.</p>	Whenever there is a change in fuel supplier but at least annually	EU02 & EU04	Env-A 806.05
8.	<p><u>General NO<sub>x</sub> Recordkeeping Requirements</u>                      If the actual annual NO<sub>x</sub> emissions from all permitted devices located at the Facility are greater than or equal to 10 tpy, then record the following information:</p> <ol style="list-style-type: none"> <li>a. Identification of each fuel burning device;</li> <li>b. Operating schedule during the high ozone season (June 1 through August 31) for each fuel burning device identified in Table 7, Item 8a, above, including:                             <ol style="list-style-type: none"> <li>1. Typical hours of operation per day;</li> <li>2. Typical days of operation per calendar month;</li> <li>3. Type and amount of fuel burned;</li> <li>4. Design heat input rate in MMBtu/hr;</li> <li>5. Actual monthly NO<sub>x</sub> emissions (lb/month);</li> <li>6. Typical high ozone season day NO<sub>x</sub> emissions (lb/day); and</li> <li>7. Emission factors and the origin of the emission factors used to calculate the NO<sub>x</sub> emissions.</li> </ol> </li> </ol>	Maintain Data for Annual Report	EU01 – EU04	Env-A 905.02
9.	<p><u>SCR &amp; SNCR Recordkeeping Requirements</u>                      Maintain records of the following information for the SCR and SNCR systems in accordance with the required timeframes:</p> <ol style="list-style-type: none"> <li>a. Total urea usage in gallons;</li> <li>b. Average daily urea flow in gal/hr;</li> <li>c. Ratio of average daily urea flow rate in gal/hr to the average daily NO<sub>x</sub> emission rate in lb/hr, for the purpose of evaluating PCE performance; and</li> <li>d. Average daily SCR catalyst bed temperature in deg °F.</li> </ol>	Daily	PCE3 & PCE4	Env-A 906 & TP-B-0543

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Citation
10.	<p><u>Recordkeeping Requirements for Add-On NOx Control Equipment</u></p> <p>The Owner or Operator shall record and maintain the following information:</p> <ul style="list-style-type: none"> <li>a. Air pollution control device identification number, type, model number, and manufacturer;</li> <li>b. Installation date;</li> <li>c. Unit(s) controlled;</li> <li>d. Type and location of the capture system, capture efficiency percent, and method of determination; and</li> <li>e. Information as to whether the air pollution control device is always in operation when the fuel burning device it is serving is in operation.</li> </ul>	Maintain at the facility at all times	PCE3 & PCE4	Env-A 905.03 & TP-B-0543
11.	<p>The Owner or Operator shall maintain the following records:</p> <ul style="list-style-type: none"> <li>a. Records of stack testing conducted in accordance with Table 6, Item #9; and</li> <li>b. To meet the requirements of Item #2 of Table 5, the Owner or Operator shall record the number of hours that the facility is operated in startup or shutdown modes, the total number of hours of operation and the total number of hours that the facility is down for maintenance and repairs. This information shall be used to demonstrate that the number of hours that the boiler operates in a startup or shutdown mode does not exceed 15% of the total operating hours of the plant.</li> </ul>	Maintain on a continuous basis	EU01	40 CFR 70.6(a)(3)(iii)(A), 40 CFR 60 Subpart A Section 60.7(b) & (f), 40 CFR 63.11225(c) & (d)
12.	<p><u>Additional Recordkeeping Requirements</u></p> <p>The Owner or Operator shall record the average daily steam production in lb/hr along with the temperature (in deg °F) and pressure (in psig).</p>	Daily	EU01	Env-A 906
13.	<p><u>Operation Log for the Emergency Generator &amp; Fire pump</u></p> <p>The Owner or Operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Owner or Operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the Owner or Operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.</p>	Keep a running Log	EU02 & EU04	40 CFR 63.6655 Subpart ZZZZ

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Citation
14.	<p><u>Additional 40 CFR 63, Subpart JJJJJ Recordkeeping</u></p> <p>Maintain the following records:</p> <ul style="list-style-type: none"> <li>a. Each notification and report that was submitted, including all documentation supporting Initial Notifications, or Notification of Compliance Status submitted;</li> <li>b. For each boiler required to conduct an energy assessment, keep a copy of the energy assessment report;</li> <li>c. Records documenting conformance with the biennial boiler tune-up required by Table 6, Item 21 including:                             <ul style="list-style-type: none"> <li>i. Records identifying each boiler;</li> <li>ii. The date of tune-up;</li> <li>iii. The procedures followed for tune-up; and</li> <li>iv. The manufacturer’s specifications to which the boiler was tuned.</li> </ul> </li> <li>d. The occurrence and duration of each malfunction of the boiler<sup>18</sup>;</li> <li>e. Actions taken during periods of malfunction to minimize emission in accordance with the general duty to minimize emissions in Table 5, Item 17, including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation; and</li> <li>f. The records must be in a form suitable and readily available for expeditious review.</li> </ul>	Maintain on a continuous basis	EU01	40 CFR 63.11225(c) Subpart JJJJJ, 40 CFR 63.11223(b)(6) Subpart JJJJJ
15.	<p><u>Regulated Toxic Air Pollutants</u></p> <p>The Owner or Operator shall maintain records documenting compliance with Env-A 1400. Compliance was demonstrated at the time of permit issuance as described in the department’s Application Review Summary for application #14-0487. The source must update the compliance demonstration using one of the methods provided in Env-A 1405 if:</p> <ul style="list-style-type: none"> <li>a. There is a revision to the list of RTAPs lowering the AAL or <i>de minimis</i> Value for any RTAP emitted from the Facility;</li> <li>b. The amount of any RTAP emitted is greater than the amount that was evaluated in the Application Review Summary (e.g., use of a coating will increase);</li> <li>c. An RTAP that was not evaluated in the Application Review Summary will be emitted (e.g. a new coating will be used); or</li> </ul>	Update prior to process changes or within 90 days of each revision of Env-A 1400	Facility Wide	Env-A 902.01

<sup>18</sup> Records of any malfunctions of the boiler are also required under 40 CFR 60.7(b).

<b>Table 7 - Applicable Recordkeeping Requirements</b>				
<b>Item #</b>	<b>Applicable Recordkeeping Requirement</b>	<b>Records Retention/ Frequency</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Citation</b>
	d. Stack conditions (e.g. air flow rate) change.			
16.	<u>Quality Improvement Plan</u> Prepare and submit a QIP when the conditions in Table 6, Item #24 are met.	Initially within 180 days of becoming subject to this condition. Maintain on a continuous basis.	PCE1 & PCE2	40 CFR 64.8
17.	Recordkeeping of deviations from Permit requirements shall be conducted in accordance with Section XXVII of this Permit.	Maintain up-to-date data	Facility Wide	Env-A 911

**F. Reporting Requirements**

1. Pursuant to Env-C 203.02(b), *Date of Issuance or Filing*, written documents shall be deemed to have been filed with or received by the department on the actual date of receipt by the department, as evidenced by a date stamp placed on the document by the department in the normal course of business.
2. All emissions data submitted to the department shall be available to the public. Claims of confidentiality for any other information required to be submitted to the department pursuant to this permit shall be made at the time of submission in accordance with Env-A 103, *Claims of Confidentiality*.
3. The Owner or Operator shall be subject to the reporting requirements identified in Table 8 below.

<b>Table 8 - Applicable Reporting Requirements</b>				
<b>Item #</b>	<b>Reporting Requirements</b>	<b>Frequency of Reporting</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Citation</b>
1.	Any report submitted to the department and/or EPA shall include the certification of accuracy statement outlined in Section XXI.B. of this Permit and shall be signed by the responsible official.	As specified in Section XXI. B.	Facility Wide	40 CFR 70.6(c)(1)



<b>Table 8 - Applicable Reporting Requirements</b>				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
2.	<p><u><i>Annual Emissions Report</i></u> Submit an annual emissions report which shall include the following information:</p> <ol style="list-style-type: none"> <li>a. Actual calendar year emissions from each emission unit of NO<sub>x</sub>, CO, SO<sub>2</sub>, VOCs, total filterable and condensable PM, filterable PM<sub>10</sub>, filterable PM<sub>2.5</sub>, HAPs (speciated by individual HAP and reported by CAS number), CO<sub>2e</sub>, ammonia, lead, and RTAPs (speciated by individual RTAP and reported by CAS number)<sup>19</sup>;</li> <li>b. The methods used in calculating such emissions in accordance with Env-A 705.02, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fees</i>;</li> <li>c. All information recorded in accordance with Table 7, Item 4, 5, and 6, compiled on a monthly basis.</li> </ol>	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	Significant Activities	Env-A 907.02 (formerly Env-A 907.01 effective 4-21-07)
3.	<p><u><i>Reporting Permit Deviation Caused by Failure to Comply with Data Availability Requirements</i></u> If the Owner or Operator of the source discovers that it has failed to meet the percent data availability requirement pursuant to Table 6, Item 16 in the previous calendar quarter or in the calendar quarter in which it currently is operating, the Owner or Operator of the source shall, in addition to the permit deviation reporting required by Section XXVII:</p> <ol style="list-style-type: none"> <li>a. Notify the department by telephone, fax, or e-mail (pdeviations@des.nh.gov) within 10 days of discovery of the permit deviation.</li> <li>b. Submit a plan to the department, within 30 days of discovery, specifying in detail the steps it plans to take in order to meet the availability requirements for future calendar quarters; and</li> <li>c. Implement the plan to meet the data availability requirements no later than 30 days after the end of the quarter of failure.</li> </ol>	As required	EU01	Env-A 808.12(e) & Env-A 911.04
4.	<p><u><i>Semi-annual Permit Deviation and Monitoring Report</i></u> Submit a semi-annual permit deviation and monitoring report, which contains:</p> <ol style="list-style-type: none"> <li>a. Summaries of all monitoring and testing requirements contained in this permit; and</li> <li>b. A summary of all permit deviations and excursions that have occurred during the reporting period.</li> </ol>	Semi-annually received by the department no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year.	Facility Wide	Env-A 911 & 40 CFR 70.6(a)(3)(iii)(A)

<sup>19</sup> The required list of pollutants to be included in the annual report is listed in the currently state-approved regulation, Env-A 907.02 and is more stringent than the SIP-approved version of the rule.



**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	<ul style="list-style-type: none"> <li>2. The reason for the out of control period; and</li> <li>3. The corrective action taken.</li> <li>g. The date and time of the beginning and ending of each period when the source of emissions which the CEM system is monitoring was not operating;</li> <li>h. The span value, as defined in Env-A 101.178 and units of measurement for each analyzer in the CEM system; and</li> <li>i. When calibration gas is used, the following information:                             <ul style="list-style-type: none"> <li>1. The calibration gas concentration;</li> <li>2. If a gas bottle was changed during the quarter:                                     <ul style="list-style-type: none"> <li>i. The date of the calibration gas bottle change;</li> <li>ii. The gas bottle concentration before the change;</li> <li>iii. The gas bottle concentration after the change; and</li> </ul> </li> <li>3. The expiration date for all calibration gas bottles used.</li> </ul> </li> <li>j. The percent data availability calculated in accordance with Table 6, Item 17 for each gaseous, opacity, and flow rate monitor in the CEM system;</li> <li>k. Even if sufficient valid hours have been measured by the CEM system necessary for calculation of a valid averaging period as defined in Env-A 808.17, the Owner or Operator shall still report for any invalid hours that occurred during the emission standard period the substitute data, as approved in accordance with Env-A 808.13, that will be used to determine the source's total emissions;</li> <li>l. All information required above shall be clearly indicated, labeled, and formatted such that compliance with all emissions standards to which the source is subject, can be determined and any periods of excess emissions, substitution of missing or invalid CEM data, CEM calibration, CEM maintenance, or startup, shutdown, or malfunction can be easily identified;</li> <li>m. This report shall also include:                             <ul style="list-style-type: none"> <li>i. Data for each startup and shutdown event (recorded in accordance with Item #11.b of Table 7) that occurred during the reporting period; and</li> <li>ii. Information recorded under Table 7, Item #9.</li> </ul> </li> </ul>			
7.	<p><u><i>NO<sub>x</sub> Emission Statement Reporting Requirements</i></u></p> <p>Submit a report which contains:</p> <ul style="list-style-type: none"> <li>a. A breakdown of NO<sub>x</sub> emissions reported pursuant to Table 8, Item #2 by month; and</li> <li>b. All data recorded in accordance with Item #8 of Table 7.</li> </ul>	<p>Annually                      (received by the department no later than April 15<sup>th</sup> of the following year)</p>	<p>EU01 –                      EU04</p>	<p>Env-A 909                      Federally Enforceable</p>

**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
8.	<p><u>NESHAP Compliance Certification Report</u></p> <p>Prepare a compliance certification report biennially containing the following information:</p> <ul style="list-style-type: none"> <li>a. Company name and address;</li> <li>b. Statement by a responsible official, with the official’s name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all relevant standards and other requirements of this subpart. The notification must include the following certification(s) of compliance, as applicable , and signed by a responsible official:                             <ul style="list-style-type: none"> <li>i. “This facility complies with the requirements in §63.11223 to conduct a biennial tune-up of each boiler”;</li> <li>ii. No secondary materials that are solid waste were combusted in any affected unit”; and</li> <li>iii. "This facility complies with the requirements in §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available".</li> </ul> </li> <li>c. The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through USEPA’s Central Data Exchange (CDX) (<a href="http://www.epa.gov/cdx">www.epa.gov/cdx</a>). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the USEPA Administrator at the following address and the department:                             <p style="margin-left: 40px;">USEPA New England                                  Attn: Air Compliance Clerk                                  5 Post Office Square                                  Suite 100 (OES04-2)                                  Boston, MA 02109-3912</p> </li> </ul>	<p>Prepared biennially no later than March 1<sup>st</sup> and submitted to USEPA Region 1 and the department upon request</p>	<p>EU01</p>	<p>40 CFR 63.11225(b) subpart JJJJJ</p>
9.	<p><u>Update to Air Pollution Dispersion Modeling Impact Analysis</u></p> <p>If an update to the facility’s air pollution dispersion modeling impact analysis is required pursuant to Env-A 606.02, submit the information required pursuant to Env-A 606.04:</p> <ul style="list-style-type: none"> <li>a. With the permit application submitted for the change which triggered the analysis; or</li> <li>b. Within 15-days of completion of the change which triggered the analysis, if a permit application is not required.</li> </ul>	<p>As specified</p>	<p>Facility-wide</p>	<p>Env-A 910.01</p>

**Table 8 - Applicable Reporting Requirements**

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
<p>10.</p>	<p><u>Monitoring Parameter Excursion</u></p> <p>In the event of an excursion of the any monitored parameter specified in Table 6A and/or 6B, lasting more than 48 hours in duration:</p> <p>a. Notify the department of the permit deviation and excess emissions by telephone (603-271-1370), fax (603-271-7053) or e-mail (pdeviations@des.nh.gov), within 24 hours of discovery of the permit deviation, unless it is a Saturday, Sunday, or state legal holiday, in which event, the department shall be notified on the next day which is not a Saturday, Sunday, or state legal holiday;</p> <p>b. Submit a written report of the deviation on paper or by electronic means to the department within 10 days of discovery of the permit deviation reported above. The report shall include all of the following information:</p> <ol style="list-style-type: none"> <li>1. Facility name;</li> <li>2. Facility address;</li> <li>3. Name of the responsible official;</li> <li>4. Facility telephone number;</li> <li>5. A description of the permit deviation, including the applicable permit number and permit condition(s);</li> <li>6. The probable cause of the permit deviation;</li> <li>7. The date and time of the discovery of the permit deviation;</li> <li>8. The actual date(s) and time(s) of the permit deviation;</li> <li>9. The duration of the permit deviation, including the date and time that the device, process or air pollution control equipment returned to operation in compliance with an enforceable emission limitation or operating condition;</li> <li>10. The specific device, process or air pollution control equipment that contributed to the permit deviation;</li> <li>11. Any corrective measures taken to address the permit deviation;</li> <li>12. Preventative measures taken to prevent future permit deviations;</li> <li>13. The type and amount of excess emissions that occurred as a result of the permit deviation; and</li> <li>14. The calculation or estimation used to quantify the excess emissions.</li> </ol>	<p>As specified</p>	<p>PCE1 &amp; PCE2</p>	<p>Env-A 911.04                      State only enforceable</p>
<p>11.</p>	<p><u>Payment of Emission-Based Fee</u></p> <p>Submit payment of emission-based fees in accordance with Section XXIII of this Permit.</p>	<p>Annually (received by the department no later than April 15<sup>th</sup> of the following year)</p>	<p>Significant Activities</p>	<p>Env-A 705.04</p>

Table 8 - Applicable Reporting Requirements				
Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
12.	Report deviations from Permit requirements in accordance with Section XXVII of this Permit.	Prompt reporting (within 24 hours of an occurrence)	Facility Wide	40 CFR 70.6(a)(3)(iii)(B)
13.	Annual compliance certification shall be submitted in accordance with Section XXI of this Permit.	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	Facility wide	40 CFR 70.6(c)(1)
14.	<u>Quality Improvement Plan Submittal</u> Submit the QIP required in Table 7, Item 16 and notify the department if submittal will exceed 180 days from the day the source becomes subject to the permit condition.	As expeditiously as practicable	PCE1 & PCE2	40 CFR 64.8

**IX. Requirements Currently Not Applicable**

Requirements not currently applicable to the facility were not identified by the Owner or Operator.

**General Title V Operating Permit Conditions**

**X. Issuance of a Title V Operating Permit**

- A. This Permit is issued in accordance with the provisions of Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the five (5) years after issuance of this Permit.
- B. Permit expiration terminates the Owner or Operator's right to operate the emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is **received by the department** at least 6 months before the expiration date.

**XI. Title V Operating Permit Renewal Procedures**

Pursuant to Env-A 609.07(b), an application for renewal of this Permit shall be considered timely if it is **received by the department** at least six months prior to the designated expiration date of the current Title V operating permit.

**XII. Application Shield**

Pursuant to Env-A 609.08, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part unless or until the department takes final action on the application.

**XIII. Permit Shield**

- A. Pursuant to Env-A 609.09(a), a permit shield shall provide that:
1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and
  2. The Owner or Operator need not comply with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and specifically identified in Section IX of this Title V Operating Permit as not applicable to the stationary source or area source.
- B. The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.09(b). It shall not apply to certain conditions as specified in Env-A 609.09(c) that may be incorporated into this Permit following permit issuance by the department.
- C. If a Title V Operating Permit and amendments thereto issued by the department does not expressly include or exclude an applicable requirement or a state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the Owner or Operator shall comply with the provisions of said requirement to the extent that it applies to the Owner or Operator, stationary source, area source or device.
- D. If the department determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant, owner or operator of a stationary source, area source or device, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.
- E. Pursuant to Env-A 609.09(f), nothing contained in Section XIII of this Permit shall alter or affect the ability of the department to reopen this Permit for cause pursuant to Env-A 609.19 and Condition XIV, or to exercise its summary abatement authority pursuant to RSA 125-C:15, I.
- F. Pursuant to Env-A 609.09(g), nothing contained in this section or in any Title V operating permit issued by the department shall alter or affect the following:
1. The ability of the department to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;
  2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;
  3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the USEPA Administrator under that section;
  4. 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;

5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;
6. The ability of the department or the USEPA Administrator to obtain information about a stationary source, area source, or device from the Owner or Operator pursuant to section 114 of the CAA; or
7. The ability of the department or the USEPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

#### **XIV. Reopening for Cause**

The department shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.19(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the department shall follow the provisions specified in Env-A 609.19(b) through (g).

#### **XV. Administrative Permit Amendments**

- A. Pursuant to Env-A 612.01, the Owner or Operator may implement the changes addressed in the request for an administrative permit amendment as defined in Env-A 101 immediately upon filing the request with the department.
- B. Pursuant to Env-A 612.01, the department shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

#### **XVI. Operational Flexibility**

- A. Pursuant to Env-A 612.02, the Owner or Operator subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Section XVI. B through E of this permit, as applicable. At this point, the department has not included any permit terms authorizing emissions trading in this permit.
  1. The change is not a modification under any provision of Title I of the CAA;
  2. The change does not cause emissions to exceed the emissions allowable under the Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;
  3. The Owner or Operator has obtained any temporary permit required by Env-A 600;
  4. The Owner or Operator has provided written notification to the department and USEPA Administrator of the proposed change and such written notification includes:
    - a. The date on which each proposed change will occur, or has occurred;
    - b. A description of each such change;
    - c. Any change in emissions that will result;
    - d. A request that the operational flexibility procedures be used; and
    - e. The signature of the responsible official, consistent with Env-A 605.04(b);



5. The Owner or Operator has attached each written notice required above to their copy of this Title V Operating Permit.
- B. For changes involving the trading of emissions, the Owner or Operator must also meet the following conditions:
1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;
  2. The Owner or Operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes at the permitted facility which qualify under a federally- enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;
  3. The department has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce emissions trades; and
  4. The written notification required in Condition XVI.A above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.
- C. For off-permit changes, the Owner or Operator must also meet the following conditions:
1. Each off-permit change meets all applicable requirements and does not violate any existing permit term or condition;
  2. The Owner or Operator provides contemporaneous written notification to the department and the USEPA Administrator of each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.04;
  3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;
  4. The Owner or Operator keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this Permit, and the emissions resulting from those changes; and
  5. The written notification required in Condition XVI.A above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.
- D. For section 502(b)(10) changes, the Owner or Operator must also meet the following conditions:

1. The written notification required in Condition XVI.A above is made at least 7 days prior to the proposed change; and
  2. The written notification required in Condition XVI.A above includes any permit term or condition that is no longer applicable as a result of the change.
- E. Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) change shall not qualify for the permit shield under Env-A 609.09.

**XVII. Minor Modifications**

- A. Prior to implementing a minor Title V Operating Permit modification, the owner or operator shall submit a written request to the department in accordance with the requirements of Env-A 612.05(b) through (d).
- B. The request for a minor permit modification shall include the following:
1. An application form containing all information pertinent to the modification, including, if applicable, the information specified in Env-A 1709;
  2. The fee(s) specified in Env-A 702 through Env-A 705, as applicable;
  3. A description of the change, the emissions resulting from the change, and any new requirements that will apply if the change occurs;
  4. Where air pollution dispersion modeling is required for a source or device pursuant to Env-A 606.02, the information required pursuant to Env-A 606.03;
  5. The owner or operator's proposed draft permit conditions;
  6. Certification by a responsible official, consistent with the provisions of Env-A 605.04(b), that the proposed change meets the criteria for the use of the minor permit modification procedures; and
  7. A request that minor permit modification procedures be used.
- C. The department shall take final action on the minor permit modification request in accordance with the provisions of Env-A 612.05(e) through (g).
- D. Pursuant to Env-A 612.05(h), the owner or operator may implement the proposed change immediately upon filing a request for a minor permit modification with the department.
- E. Pursuant to Env-A 612.05(i), pending final action on the permit modification by the department, the owner or operator shall comply with both the applicable requirements governing the change and the proposed permit conditions.
- F. Pursuant to Env-A 612.05(j) the permit shield specified in Env-A 609.09 shall not apply to minor permit modifications under Section XVII. of this Permit.
- G. Pursuant to Env-A 612.05(a), the owner or operator shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the department of a request for a minor permit amendment.

**XVIII. Significant Permit Modifications**

- A. Pursuant to Env-A 612.06, a change at the facility shall qualify as a significant permit modification if it meets the criteria specified in Env-A 612.06(a)(1) through (5).

- B. Prior to implementing a significant permit modification, the owner or operator shall file a written request with the department which includes the following:
1. An application form containing all information pertinent to the modification, including, if applicable, the supplemental information specified in Env-A 1709;
  2. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  3. The owner or operator's suggested draft permit conditions;
  4. Certification by a responsible official, consistent with the provisions of Env-A 605.04(b), that the proposed change meets the criteria for the use of the significant permit modification procedures;
  5. A request that the significant permit modification procedures be used;
  6. Air pollution dispersion modeling impact analysis documentation in accordance with Env-A 606.04, as applicable; and
  7. The fee(s) specified in Env-A 702 through Env-A 705, as applicable.
- C. Pursuant to Env-A 612.06(d), the applicant shall forward a copy of the request for a significant permit modification, including those items listed in Condition XVIII.B(1) through (4), to USEPA.
- D. The department shall take final action on the significant permit modification request in accordance with the provisions of Env-A 612.06(e) and (f).
- E. Pursuant to Env-A 612.06(g), the owner or operator shall obtain an amended Title V Operating Permit from the department which incorporates the significant permit modification prior to implementing such modification, except as provided in Env-A 609.07(a)(3).
- F. The owner or operator shall be subject to the provisions of RSA 125-C:15 if a request for a significant permit amendment is not filed with the department and/or the change is made prior to the issuance of an amended Title V Operating Permit.

**XIX. Title V Operating Permit Suspension, Revocation or Nullification**

Pursuant to RSA 125-C:13 and 541-A:30, the department may terminate, modify, revoke, or reissue for cause any permit or authorization issued to an affected source, prior to expiration of such permit, consistent with the requirements of the Clean Air Act.

**XX. Inspection and Entry**

USEPA and department personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6, VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

**XXI. Certifications**

A. Compliance Certification Report

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify for the previous calendar year that the facility is in compliance with the requirements of this permit. The report shall be submitted annually, no later than April 15<sup>th</sup> of the following year. The

report shall be submitted to the department and to the U.S. Environmental Protection Agency – Region 1. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5) and Env-A 907.04, include the following information for each and every requirement and condition of the effective permit:

1. The particular permit condition or item number that references each requirement, and a brief summary of the requirement;
2. The compliance status of the source with respect to the requirement and whether during the year compliance with the requirement was continuous, intermittent, not achieved, or not applicable;
3. The method(s) used to determine compliance, including a description of the monitoring, recordkeeping, and reporting requirements or test methods;
4. The frequency, either continuous or intermittent, of the method(s) used to determine compliance;
5. If compliance was not continuous, a description of each permit deviation; and
6. Any additional information required in order for the department to determine the compliance status of the source.

B. Certification of Accuracy Statement

All documents (including any application form, report or compliance certification) submitted to the department and USEPA shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

"I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents 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."

All reports submitted to the department (except those submitted as emission based fees as outlined in Section XXIII of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services  
Air Resources Division  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095  
ATTN: Section Supervisor, Compliance Bureau

All reports submitted to USEPA shall be submitted to the following address:

USEPA-New England, Region 1  
5 Post Office Sq. Suite 100

Mail Code OES04-2  
 Boston, MA 02109-3912  
 Attn: Air Compliance Clerk

## **XXII. Enforcement**

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the department and/or USEPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the Owner or Operator from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

In accordance with 40 CFR 70.6 (a)(6)(ii), the Owner or Operator shall not claim as a defense 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 this Permit.

## **XXIII. Emission-Based Fee Requirements**

- A. Env-A 705.01, *Emission-based Fees*: The Owner or Operator shall pay to the department each year an emission-based fee for emissions from the facility.
- B. Env-A 705.02, *Determination of Actual Emissions for use in Calculating of Emission-based Fees*: The Owner or Operator shall determine the total actual annual emissions from the facility for each calendar year in accordance with the methods specified in Env-A 705.02.
- C. Env-A 705.03, *Calculation of Emission-based Fees*: The Owner or Operator shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 705.03 and the following equation:

$$FEE = E * DPT$$

where:

FEE = The annual emission-based fee for each calendar year as specified in Env-A 705;  
 E = Total actual emissions as determined pursuant to Condition XXIII.B; and  
 DPT = The annual fee, in dollars per ton of emissions the department has calculated in accordance with Env-A 705.03<sup>20</sup>.

- D. Env-A 705.04, *Payment of Emission-based Fee*: The Owner or Operator shall submit, to the department, payment of the emission-based fee so that the department receives it on or before April 15th for emissions during the previous calendar year.

## **XXIV. Duty To Provide Information**

In accordance with 40 CFR 70.6 (a)(6)(v), the Owner or Operator shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to

<sup>20</sup> For additional information on emission-based fees, visit the department website at <http://des.nh.gov/organization/divisions/air/pehb/apps/fees.htm>

determine compliance with the Permit. Upon request, the Owner or Operator shall also furnish to the department copies of records that the Owner or Operator is required to keep by this Permit. The Owner or Operator may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Env-A 103 at the time such information is submitted to the department. The department shall evaluate such requests in accordance with the provisions of Env-A 103.

**XXV. Property Rights**

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

**XXVI. Severability Clause**

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

**XXVII. Permit Deviation**

Deviations are instances where any permit condition is violated. In accordance with Env-A 911, *Recordkeeping and Reporting Requirements for Permit Deviations*, the owner or operator shall maintain records and report to the department deviations from permit requirements as follows:

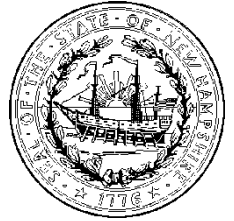
- A. Recordkeeping Requirement – All Deviations – In accordance with Env-A 911.03, in the event of a permit deviation, the owner or operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels; and record the information per Env-A 911.03(b).
- B. Excess Emissions Reporting Requirement – Excess Emission Deviations Only – In the event of a permit deviation that causes excess emissions, the owner or operator of the affected device, process, or air pollution control equipment shall:
  1. Notify the department of the permit deviation and excess emissions by telephone (603) 271-1370, e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)), or fax (603) 271-7053, within 24 hours of discovery of the permit deviation<sup>21</sup>; and
  2. Submit a written report in accordance with Env-A 911.04(a)(2) to the department within 10 days of the discovery of the permit deviation reported in Section XXVII.B.1.
- C. Reporting Requirements for Permit Deviations Continuing for Greater Than 9 Consecutive Days – In the event the permit deviation does not cause an excess emission but continues for a period greater than 9 consecutive days, the owner or operator of the affected device, process, or air pollution control equipment shall notify the department of the subsequent corrective actions to be taken by telephone (603) 271-1370, e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)), or fax (603) 271-7053 on the tenth day of the permit deviation.
- D. Semi-Annual Summary Report – Pursuant to Env-A 911.05, the owner or operator shall submit a summary of all permit deviations previously reported to the department pursuant to Section XXVII.B. and C. and a list of all permit deviations recorded pursuant to Section

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<sup>21</sup> Unless it is Saturday, Sunday or a state legal holiday, in which event the department shall be notified on the next day which is not a Saturday, Sunday, or state legal holiday.

XXVII.A. to the department in the Semi-Annual Permit Deviation and Monitoring Report due January 31st and July 31st of each calendar year covering the periods of July 1st through December 31st and January 1st through June 30th, respectively, or an alternative time period approved by the department pursuant to Env-A 912.

Reporting a permit deviation is not an affirmative defense for action brought for noncompliance.



## TITLE V OPERATING PERMIT

Permit No: **TV-0032**  
Date Issued: **January 24, 2019**

This certifies that:

**Wheelabrator Environmental Systems Inc.**  
**100 Arboretum Drive, Suite 310**  
**Portsmouth, NH 03801**

has been granted a Title V Operating Permit for the following facility and location:

**Wheelabrator Concord Company, L.P.**  
**11 Whitney Road**  
**Concord, NH 03303**

Facility ID No: **3301300102**  
Application No: **14-0175**, Renewal of Title V Operating Permit, received on April 15, 2014

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V application referenced above filed with the New Hampshire Department of Environmental Services under the signature of the responsible official certifying to the best of his knowledge that the statements and information therein are true, accurate and complete.

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of the Code of Federal Regulations, Title 40, Part 70.

This Permit is effective upon issuance and expires on **December 31, 2023**.

*Craig Wright*  
**COPY**

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Director  
Air Resources Division



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**ABBREVIATIONS**

AAL	Ambient Air Limit
ASTM	American Society of Testing and Materials
Btu	British thermal units
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAS	Chemical Abstracts Service
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO <sub>2e</sub>	Carbon Dioxide equivalent
COMS	Continuous Opacity Monitoring System
dscm	dry standard cubic meter
Env-A	New Hampshire Code of Administrative Rules – Air Resources Division
Env-Sw	New Hampshire Code of Administrative Rules – Solid Waste Division
gal	gallon
HAP	Hazardous Air Pollutant
HCl	hydrogen chloride
hp	horsepower
hr	hour
lb	pound
mg	milligram
MM	million
MSW	Municipal Solid Waste
MWC	Municipal Waste Combustor
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHDES	New Hampshire Department of Environmental Services
ng	nanogram
NO <sub>x</sub>	Oxides of Nitrogen
NSPS	New Source Performance Standard
O <sub>2</sub>	Oxygen
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter < 10 microns
PM <sub>2.5</sub>	Particulate Matter < 2.5 microns
ppmdv	parts per million by volume
psi	pounds per square inch
QA/QC	Quality assurance/quality control
RATA	Relative Accuracy Test Audit
RCRA	Resource Conservation and Recovery Act
RSA	Revised Statutes Annotated
RTAP	Regulated Toxic Air Pollutant
SDA	Spray Dryer Absorber
SIP	State Implementation Plan
SNCR	Selective Non-Catalytic Reduction
SO <sub>2</sub>	Sulfur Dioxide
tpy	tons per consecutive 12-month period
USEPA	United States Environmental Protection Agency

**Facility Specific Title V Operating Permit Conditions**

**I. Facility Description of Operations**

Wheelabrator Concord Company, L.P. (Wheelabrator) operates two large municipal waste combustors (MWC) in Concord, New Hampshire. Wheelabrator burns municipal solid waste (MSW) in two identical mass burn waterwall boilers to generate steam. Each boiler is equipped with two auxiliary propane-fired burners. A single steam driven turbine/generator is 16 MW.

The two large MWC units are subject to Section 129(e) of the 1990 Clean Air Act Amendments and the facility, therefore, requires a Title V Operating Permit. The facility is also a major source of nitrogen oxides (NOx), carbon monoxide (CO) and hazardous air pollutant (HAP) emissions.

**II. Permitted Activities**

In accordance with all of the applicable requirements identified in this permit, the Owner or Operator is authorized to operate the devices and/or processes identified in Conditions III, IV, V, and VI within the terms and conditions specified in this permit.

**III. Emission Unit Identification**

**A. Significant Activities**

The activities identified in Table 1 are subject to and regulated by this Title V Operating Permit.

<b>Table 1 - Significant Activities</b>			
<b>Emission Unit ID</b>	<b>Description of Emission Unit</b>	<b>Installation Date</b>	<b>Maximum Design Capacity</b>
EU01	MWC Unit #1 Babcock and Wilcox Serial No. 137-1012	1988	Heat input rate: 107.82 MMBtu/hr Maximum fuel charge rate: 23,960 lb/hr and 104,950 tpy of MSW <sup>1</sup> Maximum steam production: 68,900 lb/hr (8-hour average) Auxiliary burners: 2 burners, 18 MMBtu/hr each, equivalent to 383 gal/hr of propane <sup>2</sup>
EU02	MWC Unit #2 Babcock and Wilcox Serial No. 137-1013	1988	Heat input rate: 107.82 MMBtu/hr Maximum fuel charge rate: 23,960 lb/hr and 104,950 tpy of MSW Maximum steam production: 68,900 lb/hr (8-hour average) Auxiliary burners: 2 burners, 18 MMBtu/hr each, equivalent to 383 gal/hr of propane
EU03	Emergency Generator Caterpillar Model #3208	1987	Heat input rate: 1.64 MMBtu/hr equivalent to 11.7 gal/hr of diesel Output rate: 224 hp
EU04	Fire pump Caterpillar Model # 3306D1	1987	Heat input rate: 2.19 MMBtu/hr equivalent to 16 gal/hr of diesel Output rate: 231 hp
EU05	Induced Draft Wet Cooling Tower	1988	Circulation rate: 12,000 gallons/minute

<sup>1</sup> Based on a heating value of 4,500 Btu/lb for type 2 waste

<sup>2</sup> Based on a heating value of 94,000 Btu/gal for propane

**B. Stack Criteria**

The following devices at the facility shall have exhaust stacks that discharge vertically, without obstruction, and meet the criteria in Table 2. Note that the two stacks exhaust out of one common shell.

Table 2 - Stack Criteria			
Stack #	Emission Unit #	Minimum Height (feet above ground surface)	Maximum Exit Diameter (feet)
Stack #1	EU01	240	4
Stack #2	EU02	240	4

**C. Insignificant Activities Identification**

All activities at this facility, which meet the criteria identified in Env-A 609.04, shall be considered insignificant activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Condition XXI of this Permit.

**D. Exempt Activities Identification**

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Condition XXI of this permit.

**IV. Pollution Control Equipment Identification**

Air pollution control equipment shall be operated at all times that the MSW units are operating in order to meet permit conditions:

Table 3 - Pollution Control Equipment Identification			
Pollution Control Equipment Number	Description of Equipment	Pollutant Controlled	Emission Unit Number
PCE1	Baghouse	Particulate matter (PM) and regulated metals	EU01
PCE2	Spray Dryer Absorber (SDA) – lime injection	Acid gases Hydrogen chloride (HCl) and sulfur dioxide (SO <sub>2</sub> )	
PCE3	Powdered Activated Carbon Injection (PACIS)	Mercury	
PCE4	Selective Non-Catalytic Reduction (SNCR) – urea injection	NOx	
PCE5	Baghouse	PM and regulated metals	EU02
PCE6	SDA – lime injection	Acid gases	
PCE7	PACIS	Mercury	
PCE8	SNCR – urea injection	NOx	

**V. Alternative Operating Scenarios**

No alternative operating scenarios were identified for this permit.

**VI. Applicable Requirements**

**A. State-only Enforceable Operational and Emission Limitations**

The owner or operator shall be subject to the state-only<sup>3</sup> operational and emission limitations identified in Table 4 below:

<b>Table 4 - State-only Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Applicable Requirements</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Basis</b>
1.	<u>24-hour and Annual Ambient Air Limit<sup>4</sup></u> The emissions of any Regulated Toxic Air Pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual Ambient Air Limit (AAL) as set forth in Env-A 1450.01, <i>Table of All Regulated Toxic Air Pollutants</i> .	EU05	Env-A 1400
2.	<u>Revisions of the List of RTAPs</u> In accordance with RSA 125-I:5 IV, if the department revises the list of RTAPs or their respective AALs or classifications under RSA 125-I:4, II and III, and as a result of such revision the owner or operator is required to obtain or modify the permit under the provisions of RSA 125-I or RSA 125-C, the owner or operator shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such permit or permit modification.	EU05	RSA 125-I:5 IV

**B. Federally Enforceable Operational and Emission Limitations**

The owner or operator shall be subject to the federally enforceable operational and emission limitations identified in Table 5 below:

<sup>3</sup> The term “state-only requirement” is used to refer to those requirements that are not federally enforceable but are state requirements as defined in Env-A 101.186.

<sup>4</sup> Env-A 1450.01, *Table of All Regulated Toxic Air Pollutants*, is typically updated annually. The updates can be found at <http://des.nh.gov/organization/commissioner/legal/rulemaking/index.htm#air>.

Table 5 - Federally Enforceable Operational and Emission Limitations					
Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Basis		
1.	The MSW Units shall be subject to the following emission limits:		EU01 and EU02	Env-A 3303	
	<b>Pollutant</b>	<b>Emission Limit at 7% O2</b>			<b>Averaging Time</b>
	Particulate Matter	25 mg/dscm			3-run average (run duration specified in test method)
	Cadmium	0.035 mg/dscm			3-run average (run duration specified in test method)
	Lead	0.4 mg/dscm			3-run average (run duration specified in test method)
	Dioxins/Furans	30 ng/dscm (total mass)			3-run average (minimum run duration is 4 hours)
	Opacity	10% (6-minute average)			30 6-minute averages
	Nitrogen Oxides	205 ppm <sub>dv</sub>			24-hour daily arithmetic average
	Sulfur Dioxide	29 ppm <sub>dv</sub> , or 25% of the potential sulfur dioxide emission concentration			24-hour daily geometric average
	Carbon Monoxide	100 ppm <sub>dv</sub>			4-hour block arithmetic average
	Mercury	0.028 mg/dscm or 85% control efficiency			3-run average (run duration specified in test method)
Hydrogen Chloride	29 ppm <sub>dv</sub> , or 5% of the potential hydrogen chloride concentration	3-run average (minimum run duration is 1 hour)			
2.	Ammonia emissions from each MWC Unit shall be limited to 20 ppm <sub>dv</sub> .	EU01 and EU02	FP-T-0042		
3.	<p><u>Operating Conditions</u></p> <p>Each MWC boiler shall be limited to:</p> <p>a.) 23,960 lb/hr and 104,950 tpy of MSW;</p> <p>b.) Maximum steam production shall be limited to 68,900 lb/hr (8-hour rolling average) at 755°F and 710 psi; and</p> <p>c.) MSW is limited to types 0, 1, 2, 3, and 6 wastes.</p>	EU01 and EU02	PSD Permit No. 037-121NH04		

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Applicable Requirement</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Basis</b>
4.	<p><u>Startup, Shutdown, and Malfunction</u></p> <p>a.) The emission standards apply at all times except during periods of startup, shutdown and malfunction. Duration of startup, shutdown or malfunction periods are limited to 3 hours per occurrence, except as provided in Table 5, item #4, e.) below;</p> <p>b.) During periods of startup, shutdown or malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d)(7);</p> <p>c.) The startup period commences when the MWC unit begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other non-municipal solid waste fuel, and no municipal solid waste is being fed to the combustor;</p> <p>d.) Continuous burning is the continuous, semi-continuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning; and</p> <p>e.) For the purpose of compliance with the carbon monoxide emission limit in Table 5, Item #1 above, if a loss of boiler water level control (e.g. boiler waterwall tube failure) or a loss of combustion air control (e.g. loss of combustion air fan, induced draft fan, or combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence. During such periods of malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d)(7).</p> <p>f.) During a loss of boiler water level control or loss of combustion air control malfunction period as specified in 4.e. above, a diluent cap of 14 percent oxygen may be used in the emission calculations for SO<sub>2</sub> and NO<sub>x</sub>.</p>	EU01 and EU02	Env-A 3306.01(a) and 40 CFR 60.58b(a)
5.	<p><u>Operating Practices</u></p> <p>a.) Except as specified in 40 CFR 60.53b(b)(1) and (2), the Owner or Operator shall not operate at a MWC unit load level greater than 110% of the maximum demonstrated MWC unit load as defined in §60.51b. The averaging time is specified in Table 6, Item 7;</p> <p>b.) Except as provided in 40 CFR 60.53b(c)(1) and (2), the Owner or Operator shall not cause the MWC units to operate at an inlet temperature to the particulate control device greater than 17°C (30.6°F) above the maximum demonstrated particulate matter control device temperature as defined in §60.51b. The averaging time is specified under Table 6, Item 8.</p>	EU01 and EU02	Env-A 3304.01, 40 CFR 60.53b(b) and (c)

<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Applicable Requirement</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Basis</b>
6.	<p><u>Operating Practices</u></p> <p>The Owner or Operator shall comply with the following operating practice requirements:</p> <p>a.) No toxic or hazardous wastes which are subject to the Resource Conservation and Recovery Act (RCRA) shall be burned at this facility;</p> <p>b.) Prior to ash loadout and transport, all fires must be extinguished. The bottom ash, fly ash, and scrubber residue must be quenched or otherwise wetted to suppress fugitive dust. Ash transport vehicles must be totally enclosed or covered; and</p> <p>c.) During MWCs startup and while burning municipal solid waste, the control equipment PCE1 and PCE5 shall not be by-passed.</p> <p>d.) No toxic or hazardous wastes which are subject to the New Hampshire hazardous waste rules, Env-Hw 100 – 1200, as amended, or that are defined as hazardous waste under RSA 147-A, as amended, shall be burned at this facility.</p>	EU01 and EU02	FP-T-0042 and Env-Hw 100-1200
7.	<p><u>Operating Practices</u></p> <p>The Owner or Operator shall comply with the facility staffing requirements specified in Env-Sw 1005.07.</p>	EU01 and EU02	Env-A 3304.03
8.	<p><u>NSPS General Provisions</u></p> <p>a.) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source;</p> <p>b.) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.</p>	EU01 and EU02	40 CFR 60.11(d) & 40 CFR 60.11(g)
9.	<p><u>Fugitive Ash Emissions</u></p> <p>a.) Visible emissions of combustion ash from the ash conveying system (including conveyor transfer points) shall not exceed 5% of the observation period (9 minutes per 3-hour period), as determined by EPA Reference Method 22 observations as specified in §60.58b(k), except as noted in paragraphs b.) and c.) below.</p> <p>b.) The fugitive ash emission limitation does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit specified in paragraph (a) above does cover visible ash emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems; and</p> <p>c.) The fugitive ash emission limitation does not apply during maintenance and repair of ash conveying systems.</p>	Facility Wide	Env-A 3303.01(d), 40 CFR 60.55b, and 40 CFR 60.58b(k)



<b>Table 5 - Federally Enforceable Operational and Emission Limitations</b>			
<b>Item #</b>	<b>Applicable Requirement</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Basis</b>
10.	<p><u>Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970</u></p> <p>The average opacity from fuel burning devices installed after May 13, 1970 shall not exceed 20 percent for any continuous 6-minute period.</p>	EU03 and EU04	Env-A 2002.02 (formerly Env-A 1202 effective 12-27-1990)
11.	<p><u>Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985</u></p> <p>Total suspended particulate matter emissions from fuel burning devices installed on or after January 1, 1985 shall not exceed 0.30 lb/MMBtu.</p>	EU03 and EU04	Env-A 2003.03 (formerly Env-A 1202 effective 12-27-1990)
12.	<p><u>Emergency Generators</u></p> <p>Each emergency generator and fire pump shall only operate:</p> <p>a.) As a mechanical or electrical power source when the primary power source for the Facility has been lost during an emergency such as a power outage;</p> <p>b.) During normal maintenance and testing as recommended by the manufacturer; and</p> <p>c.) No emergency engine shall operate as a load-shaving or peaking power production unit.</p>	EU03 and EU04	Env-A 1302.15
13.	<p><u>Operating Hours Limitation</u></p> <p>The emergency generator and the fire pump shall each be limited to 500 hours of operation during any consecutive 12-month period.</p>	EU03 and EU04	Env-A 1301.02(j)(1)
14.	<p><u>Operating Limitations for Existing Emergency Engines</u></p> <p>In addition to the operating hours limitation in Table 5, Item 13, the owner or operator may operate the emergency engine and fire pump for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine, for a maximum of 100 hours per calendar year<sup>5</sup>.</p>	EU03 and EU04	40 CFR 63.6640(f) (Subpart ZZZZ)
15.	<p><u>RICE NESHAP - Existing Emergency Engines</u></p> <p>The owner or operator of all existing emergency engines subject to 40 CFR 63, Subpart ZZZZ shall:</p> <p>a.) Change oil and filter annually, or in accordance with an Oil Analysis Program prepared and implemented as specified in §63.6625(i);</p> <p>b.) Inspect the air cleaner annually and replace as necessary;</p> <p>c.) Inspect all hoses and belts annually and replace as necessary;</p> <p>d.) Operate and maintain the stationary engine according to the manufacturer's emission-related written instructions (O&amp;M manual) or develop your own maintenance plan which must provide, to the extent practicable, for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions; and</p> <p>e.) Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.</p>	EU03 and EU04	40 CFR 63.6603 & 40 CFR 63.6625 (Subpart ZZZZ)

<sup>5</sup> The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency engine beyond 100 hours per calendar year.

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Basis
16.	<p><u>NESHAP General Provisions</u></p> <p>At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the USEPA, Region I and the department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p> <p>For emergency engines subject to 40 CFR 63, Subpart ZZZZ, the Owner or Operator shall maintain compliance with the emission limitations and operating limitations in Subpart ZZZZ that apply to the Owner/Operator at all times.</p>	EU03 and EU04	40 CFR 63.11201 & 40 CFR 63.6605 (Subpart ZZZZ)
17.	<p><u>Accidental Release Program Requirements</u></p> <p>The quantities of regulated chemicals stored at the facility are less than the applicable threshold quantities established in 40 CFR 68.130. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities:</p> <ul style="list-style-type: none"> <li>a.) Identify potential hazards which result from such releases using appropriate hazard assessment techniques;</li> <li>b.) Design and maintain a safe facility;</li> <li>c.) Take steps necessary to prevent releases; and</li> <li>d.) Minimize the consequences of accidental releases that do occur.</li> </ul>	Facility wide	CAAA 112(r)(1)
18.	<p><u>Stratospheric Ozone Protection</u></p> <p>In accordance with 40 CFR 82.154, <i>Recycling and Emission Reduction</i>, effective June 13, 2005, no person servicing, maintaining, repairing or disposing of appliances may knowingly vent or otherwise release into the environment any refrigerant or refrigerant substitute from such appliances.</p>	Facility wide	40 CFR 82, Subpart F

**C. MWC Operator Training and Site-Specific Operating Manual**

Pursuant to Env-A 3305.01, Env-A 3305.02 and 40 CFR 60.54b, Wheelabrator-Concord shall comply with the following requirements:

**1. General Operator Training and Certification**

- a. In accordance with RSA 149-M:6, XIII and 40 CFR 60.54b, operator training and certification shall be obtained through the New Hampshire state program specified in Env-Sw 1600, *Solid Waste Facility Operator Training and Certification*.
- b. The following employees at Wheelabrator-Concord shall complete the operator certification requirements specified in a. above:
  - i. Chief facility operators;
  - ii. Shift supervisors; and
  - iii. Control room operators.
- c. An employee specified in b. above shall obtain operator certification no later than six months after the employee transfers to or is hired to work at the MWC unit.

- d. To maintain certification, the trained and certified MWC operator shall complete an annual review or refresher course that meets the requirements specified in Env-Sw 1606.
- e. If all certified operators must be temporarily off-site, the MWC unit Owner or Operator shall comply with the requirements of 40 CFR 60.54b(c).

## 2. Plant-Specific Operator Training

- a. The following employees at Wheelabrator-Concord shall complete a plant-specific operator training course:
  - i. Chief facility operators;
  - ii. Shift supervisors;
  - iii. Control room operators;
  - iv. Ash handlers;
  - v. Maintenance personnel; and
  - vi. Crane or load handlers.
- b. The Owner or Operator shall develop and update on a yearly basis, a site-specific operating manual that shall, at a minimum, address the elements of municipal waste combustor unit operation specified below:
  - i. A summary of the applicable standards under 40 CFR 60 Subpart Eb;
  - ii. A description of basic combustion theory applicable to a municipal waste combustor unit;
  - iii. Procedures for receiving, handling, and feeding municipal solid waste;
  - iv. Procedures for municipal waste combustor unit start-up, shutdown and malfunction;
  - v. Procedures for maintaining proper combustion air supply levels;
  - vi. Procedures for operating the municipal waste combustor unit within the standards established under 40 CFR 60 Subpart Eb;
  - vii. The carbon injection system operational indicator used to provide additional verification of carbon injection system operation, including basis for selecting the indicator and operator response to the indicator alarm,
  - viii. Procedures for responding to periodic upset or off-specification conditions;
  - ix. Procedures for minimizing particulate matter carryover;
  - x. Procedures for handling ash;
  - xi. Procedures for monitoring municipal waste combustor unit emissions; and
  - xii. Reporting and recordkeeping procedures.
- c. The Owner or Operator shall establish a training program to review the operating manual according to the schedule specified below with each person who has responsibilities affecting the operation of the facility, including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers;
  - i. Each person specified in Condition C.2.c. above shall undergo initial training no later than the date prior to the day the person assumes responsibilities affecting municipal waste combustor unit operation; and
  - ii. Each person specified in Condition C.2.c. above shall undergo annual training, following the initial review required in i. above.
- d. The operating manual shall be kept in a location readily accessible to each person required to undergo training. The operating manual and records of training shall be available for inspection by the EPA and NHDES.

**D. Emission Reductions Trading Requirements**

The owner or operator did not request emissions reductions trading in its operating permit application. At this point, the department has not included any terms authorizing emissions trading in this permit. All emission reduction trading must be authorized under the applicable requirements of either Env-A 3000 *Emissions Reduction Credits Trading Program*, or Env-A 3100 *Discrete Emissions Reduction Trading Program* and 42 U.S.C §§7401 et seq. (the “Act”), and must be provided for in this permit.

**E. Monitoring and Testing Requirements**

The owner or operator is subject to the monitoring and testing requirements as contained in Table 6 below:

Table 6 - Monitoring/Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Basis
1.	Particulate matter, hydrogen chloride, dioxins/furans, lead, mercury, cadmium, ammonia and fugitive ash	a.) Conduct compliance stack testing for the noted pollutants in accordance with 40 CFR60.58b. Test results will be used to evaluate compliance with the emission limits in Table 5, Items #1, 2 and 9; b.) The alternative performance testing schedule for dioxins/furans specified in 40 CFR 60.58b(g)(5)(iii) shall apply when all performance tests for the affected units over a 2-year period, achieve a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter, corrected to 7% oxygen; c.) Compliance stack testing shall be planned and carried out in accordance with the following schedule: i. A pre-test protocol shall be submitted to the department at least 30 days prior to the commencement of testing. The pre-test protocol shall contain the information specified in Env-A 802.04; ii. The owner or operator and any contractor retained by the owner or operator to conduct the test, shall meet with a department representative, either in person or over the telephone, at least 15 days prior to the test date to finalize the details of the testing; and iii. A test report shall be submitted to the department within 60 days after the completion of testing. The test report shall contain the information specified in Env-A 802.11(c). d.) Conduct the following tests, or department approved alternatives: i. USEPA Method 23 for dioxins/furans; ii. USEPA Method 5 for particulate matter; iii. USEPA Method 26 or 26A (modified) for hydrogen chloride; iv. USEPA Method 29 for cadmium, lead, and mercury; v. NHDES approved method for ammonia; and vi. USEPA Method 22 for fugitive ash. The minimum observation time shall be a series of three 1-hour observations. The observation period shall include times when the facility is transferring ash from the	Annually except as provided in item #1.b.)	EU01 and EU02 and Facility wide for fugitive ash	Env-A 3306.01, 40 CFR 60.58b, 40 CFR 60.55b & Env-A 802

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Basis
		<p>municipal waste combustor unit to the area where ash is stored or loaded into container or trucks.</p> <p>e.) During the performance test for dioxins/furans, the Owner or Operator shall determine the maximum demonstrated MWC unit load. The maximum demonstrated MWC unit load shall be the highest 4-hour arithmetic average load achieved during four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved.</p>			
2.	Opacity	Operate and maintain a continuous opacity monitoring system (COMS) for measuring the opacity of emissions from each MWC unit. The COMS shall meet the applicable requirements of 40 CFR 60, Appendix B, Performance Standard 1; Appendix F, Procedure 3; and Env-A 808. Determination of compliance with the opacity limits established in Table 5, Item #1 shall be made by the COMS.	Continuous	EU01 and EU02	Env-A 3306.01(a)
3.	SO <sub>2</sub>	Operate and maintain a continuous emissions monitoring system (CEMS) to measure the emissions of sulfur dioxide from each MWC unit. The SO <sub>2</sub> CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 2 and Env-A 808. Determination of compliance with the SO <sub>2</sub> emission limits established in Table 5, Item #1 shall be made by the SO <sub>2</sub> CEMS.	Continuous	EU01 and EU02	Env-A 3306.01(a)
4.	NO <sub>x</sub>	Operate and maintain a CEMS to measure the emissions of nitrogen oxides from each MWC unit. The NO <sub>x</sub> CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 2 and Env-A 808. Determination of compliance with the NO <sub>x</sub> emission limits established in Table 5, Item #1 shall be made by the NO <sub>x</sub> CEMS.	Continuous	EU01 and EU02	Env-A 3306.01(a)
5.	CO	Operate and maintain a CEMS for measuring the emissions of carbon monoxide from each MWC unit. The CO CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 4A and Env-A 808. Determination of compliance with the CO emission limits established in Table 5, Item #1 shall be made by the CO CEMS.	Continuous	EU01 and EU02	Env-A 3306.01(a)
6.	O <sub>2</sub>	Operate and maintain a CEMS for measuring the oxygen (O <sub>2</sub> ) content of the flue gas from each MWC unit. The O <sub>2</sub> CEMS shall meet the requirements of 40 CFR 60, Appendix B, Performance Specification 3 and Env-A 808.	Continuous	EU01 and EU02	Env-A 3306.01(a)

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Basis
7.	MWC unit load	<p>The procedures specified below shall be used to determine compliance with the load level requirements:</p> <p>a.) The Owner or Operator shall install, calibrate, maintain, and operate a steam flow meter or a feedwater flow meter; measure steam (or feedwater) flow in pounds per hour on a continuous basis; and record the output of the monitor. Steam (or feedwater) flow shall be calculated in 4-hour block arithmetic averages;</p> <p>b.) The method included in the “American Society of Mechanical Engineers Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1-1964 (R1991)” section 4 shall be used for calculating the steam (or feedwater) flow;</p> <p>c.) Measurement devices such as flow nozzles and orifices are not required to be recalibrated after they are installed; and</p> <p>d.) All signal conversion elements associated with steam (or feedwater) flow measurements must be calibrated according to the manufacturer’s instructions before each dioxin/furan performance test, and at least once per year.</p>	Continuous	EU01 and EU02	Env-A 3306.01(a) and 40 CFR 60.58b(i)(6)
8.	Inlet temperature to the baghouse	<p>The Owner or Operator shall install, calibrate, maintain and operate a department approved temperature sensor system for measuring the temperature of the flue gas stream at the inlet of each baghouse. Temperature shall be calculated in 4-hour block arithmetic averages.</p>	Continuous	EU01 and EU02	Env-A 3306.01(a), 40 CFR 60.58b(i)(7), and PSD Permit 037-121NH04
9.	Carbon Feed Rate	<p>The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit and/or the dioxin/furan emission limits shall follow the following procedures.</p> <p>a.) During the annual performance test for mercury and dioxins/furans emissions, the Owner or Operator shall estimate average carbon mass feed rate (in lb/hr) based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency etc, as specified in (a)(i) and (a)(ii) below:</p> <p>i.) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during each performance test for mercury emissions.</p> <p>ii.) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during each performance test for dioxin/furan emissions. If a subsequent dioxin/furan performance test is being performed on only one affected facility at the MWC plant, as provided in Table 6, Item 1.b, the owner or operator may elect to apply the same estimated average carbon mass feed rate from the tested facility for all the similarly designed and operated affected facilities at the MWC plant.</p>	Continuous	EU01 and EU02	Env-A 3306.01 and 40 CFR 60.58b(m)

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Basis
		b.) During the operation of the MWC unit, the carbon injection system operating parameters(s) that are the primary indicator(s) of the carbon mass feed rate (e.g. screw feed setting) shall be averaged over a block 8-hour period and the 8-hour block average must equal or exceed the level(s) documented during the performance tests specified in a(a)(i) and (a)(ii) above. c.) During the annual dioxin/furans or mercury performance test and two weeks preceding the annual dioxin/furans or mercury performance test, no limit is applicable for average mass carbon feed rate if the provisions of 40 CFR 60.58b(m)(2)(ii) are met. d.) The Owner or Operator shall estimate the total carbon usage of the plant for each calendar quarter by two independent methods: i. The weight of carbon delivered to the plant; and ii. Estimate the average carbon mass feed rate in lb/hr for each hour of operation for each MWC unit based on carbon injection system operating parameters as specified in paragraph a.) above and sum the results for both the MWC units at the facility for the total number of hours of operation during the calendar quarter. e.) Pneumatic injection pressure or other carbon injection system operational indicator shall be used to provide additional verification of proper carbon injection system operation. The operational indicator shall provide an instantaneous visual and/or audible alarm to alert the operator of a potential interruption in the carbon feed that would not normally be indicated by direct monitoring of carbon mass feed rate (e.g., continuous weight loss feeder) or monitoring of the carbon system operating parameter(s) that are the indicator(s) of carbon mass feed rate (e.g., screw feeder speed).			
10.	General Stack Testing Requirements	<u>Operating Conditions During a Stack Emissions Test</u> A compliance test shall be conducted under one of the following operating conditions: a.) Between 90 and 100 percent, inclusive, of maximum production rate or rated capacity; b.) A production rate at which maximum emissions occur; or c.) At such operating conditions agreed upon during a pre-test meeting conducted pursuant to Env-A 802.05.	As specified	EU01 and EU02	Env-A 802.10

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Basis
11.	Minimum Specifications for CEM Systems	The owner or operator shall ensure that each CEMS meets the following operating requirements: a.) The COMS for measuring opacity emissions shall average the opacity data to result in consecutive, non-overlapping 6-minute averages; b.) The CEMS for measuring gaseous emissions shall average and record the data for each calendar hour; c.) All COMS and CEMS shall include a means to display instantaneous values of percent opacity and gaseous emission concentrations and complete a minimum of one cycle of operation which shall include measuring, analyzing, and data recording for each 10-second period for systems measuring opacity and each successive 5-minute period for systems measuring gaseous emissions, unless a longer time period is approved in accordance with Env-A 809; and d.) A valid hour of COM/CEM emissions data, as defined in Env-A 808.01(i), means a minimum of 42 minutes of COMS/CEMS readings taken in any calendar hour, during which the COMS/CEMS is not in an out of control period, as defined in Env-A 808.01(g), and the facility is in operation.	N/A	EU01 and EU02	Env-A 808.03 & 40 CFR 60.58b



**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Basis
12.	QA/QC Plan Requirements	<p>The owner or operator shall perform the following quality assurance/quality control (QA/QC) activities for the COMS and CEMS systems:</p> <ul style="list-style-type: none"> <li>a.) Prepare a QA/QC plan, which shall contain written procedures for implementation of its QA/QC program, that meets the criteria specified in 40 CFR 60, Appendix F, Procedure 1, Section 3 for each CEM system;</li> <li>b.) Review the QA/QC plan and all data generated by its implementation at least once each year;</li> <li>c.) Revise or update the QA/QC plan, as necessary, based on the results of the annual review, by:                             <ul style="list-style-type: none"> <li>i. Documenting the replacement of any damaged or malfunctioning COM/CEM system components in order to maintain the collection of valid COM/CEM data and to maximize data availability;</li> <li>ii. Documenting any changes made to the COM/CEM or changes to any information provided in the monitoring plan submitted in accordance with Env-A 808.04;</li> <li>iii. Including a schedule of, and describing, all maintenance activities that are required by the COM/CEM manufacturer or that might have an effect on the operation of the system;</li> <li>iv. Describing how the audits and testing required by Env-A 808 will be performed; and</li> <li>v. Including examples of the reports that will be used to document the audits and tests required by Env-A 808;</li> </ul> </li> <li>d.) Make the revised QA/QC plan available for on-site review by the department at any time; and</li> <li>e.) No later than April 15 of each year, either:                             <ul style="list-style-type: none"> <li>i. Submit to the department the revised QA/QC plan and the reasons for each change, and certify in writing that the Owner or Operator is implementing the revised QA/QC plan; or</li> <li>ii. Certify in writing that no changes have been made to the plan and that the Owner or Operator will continue to implement the existing QA/QC plan.</li> </ul> </li> </ul>	Review annually and revise as necessary	EU01 and EU02	Env-A 808.06

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Basis
13.	General Audit Requirements for all CEM & COM Systems	The owner or operator shall audit each COMS/CEMS in accordance with the following: a.) Required quarterly audits anytime during each calendar quarter, provided that successive quarterly audits shall occur no more than 4 months apart. b.) Subject to (d), below, within 30 calendar days following the end of each quarter, the Owner or Operator shall submit to the department a written summary report of the results of all audits required by (a), above, that were performed during that quarter, in accordance with the following: i. For gaseous CEM audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1; and ii. For COM audits, the report format shall conform to that presented in EPA-600/8-87-025, April 1992, "Technical Assistance Document: Performance Audit Procedures for Opacity Monitors". c.) The owner or operator shall notify the department: i. At least 30 days prior to the performance of an annual Relative Accuracy Test Audit (RATA); and ii. At least 2 weeks prior to any other planned audit or test procedure required under Env-A 808. d.) The owner or operator shall file with the department a written summary of the results of the RATA testing required by Env-A 808.08 by the earlier of 45 calendar days following the completion of the RATA test or the date established in the section of 40 CFR 60 that requires performance of the RATA.	Quarterly	EU01 and EU02	Env-A 808.07
14.	Gaseous CEM Audit Requirements	Audit requirements for gaseous CEMS shall be performed in accordance with procedures described in 40 CFR 60, Appendix F and Env-A 808.08.	Quarterly	EU01 and EU02	Env-A 808.08
15.	COMS Audit Requirements	Audit requirements for COMS shall be performed in accordance with procedures described in Env-A 808.11 and 40 CFR 60, Appendix F, Procedure 3, Section 10.3.	Quarterly	EU01 and EU02	Env-A 808.11
16.	Data Availability Requirements	a.) The owner or operator shall operate the COM/CEM systems at all times during operation of the source, except for periods of COM/CEM breakdown, repairs, calibration checks, preventive maintenance, and zero/span adjustments; and b.) The percentage COM/CEM data availability for opacity, and all gaseous concentration, monitors shall be maintained at a minimum of 90% of the operating hours on a calendar quarter basis and 95% of the operating days per calendar year.	N/A	EU01 and EU02	Env-A 808.12 & 40 CFR 58b(e)(7)

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Basis
17.	Data Availability Calculations	<p>The owner or operator shall use the following equation for calculating percentage data availability:</p> $\text{Percentage Data Availability} = \frac{\text{VH} + \text{CalDT}}{\text{OH} - \text{AH}} \times 100$ <p>Where:</p> <p>VH = Number of valid hours of COM/CEM data in a given time period for which the data availability is being calculated when the plant is in operation;</p> <p>CalDT = Number of hours, not to exceed one hour per day, during facility operation when the COM/CEM is not operating due to the performance of the daily COM/CEM calibrations as required in 40 CFR 60, Appendix F;</p> <p>OH = Number of facility operating hours during a given time period for which the data availability is being calculated; and</p> <p>AH = Number of hours during facility operation when the performance of quarterly audits as required by those procedures specified in Env A 808.08 through Env-A 808.11, as applicable, require that the COM/CEM be taken out of service in order to conduct the audit.</p>	As specified	EU01 and EU02	Env-A 808.12, 40 CFR 60 Subpart A Section 60.7(b)

**Table 6 - Monitoring/Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Basis
18.	Requirement for Substitute Emission Data	<p>Any facility that uses the emissions data collected by a gaseous CEM system to calculate and report its annual emissions in accordance with Env-A 900 shall comply with the following:</p> <ul style="list-style-type: none"> <li>a.) For any facility operating hour during which the gaseous CEM system has not collected a valid hour of CEM system data, the Owner or Operator shall submit to the Division substitute emission data for those hours which have been generated using one of the following methods:                             <ul style="list-style-type: none"> <li>i. The missing data substitution procedures specified in 40 CFR 75, Subpart D;</li> <li>ii. If the missing data occurred during a period of steady-state operation, and not during a period of start-up, shutdown, or malfunction:                                     <ul style="list-style-type: none"> <li>1) An average of the emissions data for the hours prior to and after the period of missing data during which valid CEM data was collected, or</li> <li>2) Representative emissions data for the device at the same heat input rate, electric generating rate, or steam load;</li> </ul> </li> <li>iii. If the missing data occurred during a start-up, shutdown, or malfunction of the device, substitute data collected by the CEM during a similar period of start-up, shutdown or malfunction, respectively; or</li> <li>iv. An alternative method of data substitution that meets the following criteria:                                     <ul style="list-style-type: none"> <li>1) The alternative method was included in the monitoring plan submitted pursuant to Env-A 808.04;</li> <li>2) The alternative method provides for representative emissions for the conditions of operation of the device during the period of missing data equivalent to the substitution methods described in (i) through (iii), above; and</li> <li>3) The alternative method was approved by the department as part of its approval of the monitoring plan pursuant to Env-A 808.04.</li> </ul> </li> </ul> </li> <li>b.) The facility shall include substitute emissions data in the calculation of total daily, monthly, quarterly, and annual emissions generated by the permitted device to quantify total actual emissions;</li> <li>c.) Substitute emission data shall not be used in the calculation of emissions totals or averages in order to determine or demonstrate compliance with emissions standards;</li> <li>d.) Substitute data shall not be included in the calculation of data availability.</li> </ul>	N/A	EU01 and EU02	Env-A 808.13

<b>Table 6 - Monitoring/Testing Requirements</b>					
<b>Item #</b>	<b>Parameter</b>	<b>Method of Compliance</b>	<b>Frequency of Method</b>	<b>Device</b>	<b>Regulatory Basis</b>
19.	Valid averaging period	The number of hours of valid CEM system data required for the calculation and determination of compliance shall be: a.) For a 24-hour emission standard period, 18 hours of valid data. b.) For a 4-hour emission standard period, 3 hours of valid data.	N/A	EU01 and EU02	Env-A 808.17
20.	Alternate test methods	The Owner or Operator shall follow the procedures outlined in Env-A 809 in order to use alternative test methods during compliance stack test.	N/A	EU01 and EU02	Env-A 809
21.	Inspection/Maintenance	The Owner or Operator shall annually inspect and perform maintenance on each baghouse according to manufacturer’s recommendations and/or current facility maintenance practices.	As specified	PCE1 and PCE5	40 CFR 70.6(a)(3)
22.	Hours of Operation	Emergency generator and fire pump shall each be equipped with a non-resettable hour meter.	Continuous	EU03 and EU04	40 CFR 63.6625 Subpart ZZZZ

**F. Recordkeeping Requirements**

The owner or operator shall be subject to the recordkeeping<sup>6</sup> requirements identified in Table 7 below:

<b>Table 7 - Applicable Recordkeeping Requirements</b>				
<b>Item #</b>	<b>Applicable Recordkeeping Requirement</b>	<b>Records Retention/Frequency</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Basis</b>
1.	Retain records of all required monitoring data, recordkeeping and reporting requirements, and support information for a period of at least 5 years from the date of origination.	Retain for a minimum of 5 years	Facility Wide	40 CFR 70.6(a)(3)(ii)(B)

<sup>6</sup> NH rules cited in this Condition as Federally Enforceable are contained in the EPA-approved State Implementation Plan (SIP), or they are awaiting EPA approval and are at least as stringent as the SIP rule. Each citation of a non-SIP rule is followed by “State-only Enforceable”.

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Basis
2.	<p><u>Records of Certified Operators</u>                      Maintain the following records:</p> <ul style="list-style-type: none"> <li>a.) The names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have obtained provisional certification by the American Society of Mechanical Engineers, or an equivalent State-approved certification program as required by 40 CFR 60.54b(a) including the dates of initial and renewal certifications and documentation of current certification;</li> <li>b.) The names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have obtained full certification by the American Society of Mechanical Engineers, or an equivalent State-approved certification program as required by 40 CFR 60.54b(b) including the dates of initial and renewal certifications and documentation of current certification;</li> <li>c.) The names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have completed EPA municipal waste combustor operator training course, or an equivalent State-approved course as required by 40 CFR 60.54b(d) including the documentation of training completion; and</li> <li>d.) When a certified operator is temporarily off site including the following:                             <ul style="list-style-type: none"> <li>i. Record the dates when the certified chief facility operator and certified shift supervisor are off site for more than 12 hours, but for 2 weeks or less, and no other certified operator is on site;</li> <li>ii. When the certified chief facility operators and certified shift supervisors are off site for more than 2 weeks and no other certified operator is on site, keep the following records;                                     <ul style="list-style-type: none"> <li>1) Time of day that all certified persons are off site;</li> <li>2) The conditions that caused those people to be off site;</li> <li>3) The corrective action taken to ensure that a certified chief facility operator or certified shift supervisor is on site as soon as practicable; and</li> <li>4) Copies of the written reports submitted every 4 weeks that summarize the corrective actions taken to ensure that certified personnel are on site.</li> </ul> </li> </ul> </li> </ul>	Maintain of a continuous basis	Facility wide	Env-A 3307.01 and 40 CFR 60.59b(d)(12)

<b>Table 7 - Applicable Recordkeeping Requirements</b>				
<b>Item #</b>	<b>Applicable Recordkeeping Requirement</b>	<b>Records Retention/ Frequency</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Basis</b>
3.	<u>Records of Operating Manual Review</u> Maintain records showing the names of persons who have completed a review of the operating manual as required by Condition VI.C.2.c, including the date of initial and subsequent annual reviews.	Maintain on a continuous basis	Facility wide	Env-A 3307.01 and 40 CFR 60.59b(d)(13)
4.	Recordkeeping of deviations from Permit requirements shall be conducted in accordance with Condition XXV of this Permit.	Maintain up-to-date data	Facility Wide	Env-A 911
5.	Maintain records of actual emissions for each significant activity for determination of emission based fees.	Annually	EU01 – EU05	Env-A 705.02
6.	<u>General Recordkeeping Requirements for Combustion Devices</u> Maintain the following records of fuel characteristics and utilization for the fuel used in each fuel burning device at the facility: a.) Consumption; b.) Fuel type (i.e. propane, diesel fuel); and c.) Hours of operation for the emergency generator and the fire pumps.  For each MWC unit the Owner or Operator shall also maintain the following: a.) Amount of waste consumed; b.) Type of waste consumed; and c.) Hours of operation of each MWC unit.	Monthly	EU01 – EU04	Env-A 903.03
7.	<u>VOC Emission Statements Recordkeeping Requirements</u> If the actual annual VOC emissions from all permitted devices located at the Facility are greater than or equal to 10 tpy, then record the following information: a.) Identification of each VOC-emitting process or device; b.) The operating schedule during the high ozone season (June 1 through August 31) for each VOC-emitting process or device identified in a.) above, including: i. Typical hours of operation per day; and ii. Typical days of operation per calendar month. c.) The following VOC emission data from all VOC-emitting processes or devices identified in a.) above, including: i. Actual monthly VOC emissions in tons; ii. Typical high ozone season day VOC emissions, in pounds per day; and iii. The emission factors and the origin of the emission factors used to calculate the VOC emissions.	Maintain Data for Annual Report	EU01 – EU04	Env-A 904

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Basis
8.	<p><u>General NOx Recordkeeping Requirements</u></p> <p>If the actual annual NOx emissions from all permitted devices located at the Facility are greater than or equal to 10 tpy, then record the following information:</p> <p>a.) Identification of each fuel burning device;</p> <p>b.) Operating schedule during the high ozone season (June 1 through August 31) for each fuel burning device identified in Table 7, Item 8.a), above, including:</p> <ul style="list-style-type: none"> <li>i. Typical hours of operation per day;</li> <li>ii. Typical days of operation per calendar month;</li> <li>iii. Type and amount of fuel burned;</li> <li>iv. Design heat input rate in MMBtu/hr;</li> <li>v. The following NOx emission data: <ul style="list-style-type: none"> <li>1) Actual NOx emission per month;</li> <li>2) Typical high ozone day NOx emissions; in pounds per day; and</li> <li>3) Emission factors and the origin of the emission factors used to calculate the NOx emissions.</li> </ul> </li> </ul>	Maintain Data for Annual Report	EU01 – EU04	Env-A 905.02
9.	<p><u>General Recordkeeping Requirements for Sources with Continuous Emissions Monitoring Systems</u></p> <p>Maintain records for the CEMS and COMS specified in Table 6, Items 2 through 6 in accordance with Env-A 800 and all applicable federal regulations. The records shall be maintained in a permanent form suitable for inspection.</p>	As specified in Env-A 800 and applicable federal requirements	EU01 and EU02	Env-A 903.04, 40 CFR 60 Subpart A Section 60.7(f)



<b>Table 7 - Applicable Recordkeeping Requirements</b>				
<b>Item #</b>	<b>Applicable Recordkeeping Requirement</b>	<b>Records Retention/ Frequency</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Basis</b>
10.	<p><u><i>CEMS and Operational Parameters Records</i></u></p> <p>a.) Keep the dated records of emission data of each CEM system including:</p> <ul style="list-style-type: none"> <li>i.. All 6-minute average opacity levels;</li> <li>ii. All 1-hour average CO emission concentrations;</li> <li>iii. All 1-hour arithmetic averages of SO<sub>2</sub> emission concentrations;</li> <li>iv. All 1-hour arithmetic averages of NO<sub>x</sub> emission concentrations;</li> <li>v. All 1-hour arithmetic average of steam load levels;</li> <li>vi. All 1-hour average PCE1 and PCE5 inlet temperatures;</li> </ul> <p>b.) The average concentrations shall be computed and recorded as follows:</p> <ul style="list-style-type: none"> <li>i. All 4-hour block average CO emission concentrations;</li> <li>ii. All 24-hour daily geometric average SO<sub>2</sub> emission concentrations;</li> <li>iii. All 24-hour daily arithmetic average NO<sub>x</sub> emission concentrations;</li> <li>iv. All 4-hour block arithmetic average steam load levels;</li> <li>v. All 4-hour block PCE1 and PCE5 inlet temperatures;</li> </ul> <p>c.) Identification of the calendar dates when any of the average emission concentrations, or operating parameters listed in Item #9.b). above, or the opacity levels recorded under Item #9.a.)i, are above the applicable limits, with reasons for such exceedances and a description of corrective actions taken;</p> <p>d.) The results of daily drift tests and quarterly accuracy determinations for SO<sub>2</sub>, CO and NO<sub>x</sub> CEM systems as required under 40 CFR 60, Appendix F, Procedure 1;</p> <p>e.) Stack test results for PM, opacity, hydrogen chloride, cadmium, lead, mercury, dioxins/furans, ammonia and fugitive ash along with supporting calculations; and</p> <p>f.) For the dioxin/furans tests, the maximum demonstrated MWC load and maximum demonstrated baghouse inlet temperature for each device.</p>	Continuous	EU01, EU02, PCE1 and PCE5	Env-A 3307.01 and 40 CFR 60.59b(d)

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Basis
11.	<p><u>Data Availability</u></p> <p>a.) Maintain records of the calendar dates and times (hours) for which valid hourly data have not been obtained, including reasons for not obtaining sufficient data and a description of the corrective action taken:</p> <ul style="list-style-type: none"> <li>i. Nitrogen oxide;</li> <li>ii. Sulfur dioxide;</li> <li>iii. Carbon monoxide;</li> <li>iv. Steam load; and</li> <li>v. Particulate matter control device inlet temperature.</li> </ul> <p>b.) Maintain records of each occurrence when the emissions data (for SO<sub>2</sub> and NO<sub>x</sub>) or operational data (CO emissions, steam load and particulate matter control device temperature) have been excluded from the calculation of average emission concentrations or parameters and the reason for excluding the data.</p>	At each occurrence	EU01 and EU02	Env-A 3307.01 and 40 CFR 60.59b(d)
12.	<p><u>Carbon Feed Rate</u></p> <p>Maintain the following records of carbon feed rate:</p> <p>a.) Average carbon mass feed rate (in lb/hour) estimated during the annual mercury and dioxin/furan performance tests, with supporting calculations;</p> <p>b.) Average carbon mass feed rate (in lb/hour) estimated for each hour of operation as required under 40 CFR 60.58b(m)(3)(ii), with supporting calculations;</p> <p>c.) Total carbon usage for each calendar quarter estimated as specified in 40 CFR 60.58b(m)(3), with supporting calculations; and</p> <p>d.) Carbon injection system operating parameters data that are primary indicators of carbon feed rate (e.g. screw feeder speed).</p>	Continuous	EU01 and EU02	Env-A 3307.01 and 40 CFR 60.59b(d)(4)
13.	<p><u>When Average Carbon Feed Rates Do Not Meet the Required Level</u></p> <p>Maintain records of the calendar dates when the following occurs:</p> <p>a.) Average carbon mass feed rates recorded under Item #12.b of Table 7 (based on 8-hour block average) are less than the hourly rate estimated during the performance tests for mercury and dioxins/furans, including reasons for such feed rates and any corrective actions taken; and</p> <p>b.) Carbon injection system operating parameters that are the primary indicators of the carbon feed rate (based on 8-hour block average) are below the level(s) estimated during the performance test, including the reason for such occurrence and any corrective actions taken.</p>	At each occurrence	EU01 and EU02	Env-A 3307.01 and 40 CFR 60.59b(d)(14) and (15)

**Table 7 - Applicable Recordkeeping Requirements**

Item #	Applicable Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Basis
14.	<p><u><i>Air Pollution Control Device Operational Records</i></u>                      Maintain records of all malfunctions, routine maintenance, and other downtimes of any air pollution control equipment in whole or part. These records must be available for review by the department/USEPA upon request.</p>	At each occurrence	PCE1 – PCE8	Env-A 906.01, & 40 CFR 60 Subpart A Section 60.7(b)
15.	<p><u><i>Recordkeeping Requirements for Add-On NOx Control Equipment</i></u>                      Record and maintain the following information:                      a.) Air pollution control device identification number, type, model number, and manufacturer;                      b.) Installation date;                      c.) Unit(s) controlled;                      d.) Information as to whether the air pollution control device is always in operation when the fuel burning device it is serving is in operation.</p>	Maintain at the facility at all times	PCE4 & PCE8	Env-A 905.03
16.	<p><u><i>Operation Log for the Emergency Generator &amp; Fire pumps</i></u>                      The owner or operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation.</p>	Keep a running Log	EU03 and EU04	40 CFR 63.6655 Subpart ZZZZ
17.	<p><u><i>Records on Process Operations</i></u>                      Records of the type and quantity of cooling tower treatment chemicals used that are necessary to calculate emissions.</p>	Annual	EU05	Env-A 903.02
18.	<p><u><i>Regulated Toxic Air Pollutants</i></u>                      The Owner or Operator shall maintain records documenting compliance with Env-A 1400. Compliance was demonstrated at the time of permit issuance as described in the department’s Application Review Summary for application #14-0175. The source must update the compliance demonstration using one of the methods provided in Env-A 1405 if:                      a.) There is a revision to the list of RTAPs lowering the AAL or De minimis Value for any RTAP emitted from the Facility;                      b.) The amount of any RTAP emitted is greater than the amount that was evaluated in the Application Review Summary (e.g., use of a coating will increase); or                      c.) An RTAP that was not evaluated in the Application Review Summary will be emitted (e.g. a new coating will be used).</p>	Update prior to process changes or within 90 days of each revision of Env-A 1400	EU05	Env-A 902.01 State-only Enforceable

## G. Reporting Requirements

1. Pursuant to Env-C 203.02(b), *Date of Issuance or Filing*, written documents shall be deemed to have been filed with or received by the department on the actual date of receipt by the department, as evidenced by a date stamp placed on the document by the department in the normal course of business.
2. All emissions data submitted to the department shall be available to the public. Claims of confidentiality for any other information required to be submitted to the department pursuant to this permit shall be made at the time of submission in accordance with Env-A 103, *Claims of Confidentiality*.
3. The owner or operator shall be subject to the reporting requirements identified in Table 8 below.

<b>Table 8 - Applicable Reporting Requirements</b>				
<b>Item #</b>	<b>Requirement</b>	<b>Frequency</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Basis</b>
1.	Any report submitted to the department and/or USEPA shall include the certification of accuracy statement outlined in Condition XIX.B. of this Permit and shall be signed by the responsible official.	As specified in Condition XIX.B.	Facility Wide	40 CFR 70.6(c)(1)
2.	Report deviations from Permit requirements in accordance with Condition XXV of this Permit.	Prompt notification (within 24 hours of an occurrence)	Facility Wide	40 CFR 70.6(a)(3)(iii)(B)
3.	Annual compliance certification shall be submitted in accordance with Condition XIX of this Permit.	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	Facility wide	40 CFR 70.6(c)(1)
4.	<p><u><i>Semi-annual Permit Deviation and Monitoring Report</i></u> Submit a semi-annual permit deviation and monitoring report, which contains:</p> <p>a.) Summaries of all monitoring and testing requirements contained in this permit; and</p> <p>b.) A summary of all permit deviations and excursions that have occurred during the reporting period.</p>	Semi-annually (received by the department no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year)	Facility Wide	Env-A 911 & 40 CFR 70.6(a)(3)(iii)(A)
5.	<p><u><i>Update to Air Pollution Dispersion Modeling Impact Analysis</i></u> If an update to the facility's air pollution dispersion modeling impact analysis is required pursuant to Env-A 606.02, submit the information required pursuant to Env-A 606.04:</p> <p>a.) With the permit application submitted for the change which triggered the analysis; or</p> <p>b.) Within 15-days of completion of the change which triggered the analysis, if a permit application is not required.</p>	As specified	Facility-wide	Env-A 910.01

<b>Table 8 - Applicable Reporting Requirements</b>				
Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
6.	<p><u>Annual Emissions Report</u></p> <p>Submit an annual emissions report which shall include the following information:</p> <p>a.) Actual calendar year emissions from each device of NO<sub>x</sub>, CO, SO<sub>2</sub>, VOCs, total filterable and condensable PM, filterable PM<sub>10</sub>, filterable PM<sub>2.5</sub>, HAPs (speciated by individual HAP and reported by CAS number), CO<sub>2e</sub>, ammonia, lead, and RTAPs (speciated by individual RTAP and reported by CAS number)<sup>7</sup>;</p> <p>b.) The methods used in calculating such emissions in accordance with Env-A 705.02, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fee</i>; and</p> <p>c.) All information recorded in accordance with Table 7, Items 6 and 18, compiled on a monthly basis.</p>	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	EU01 – EU05	Env-A 907.02 (formerly Env-A 907.01 effective 4-21-07)
7.	<p><u>Payment of Emission-Based Fee</u></p> <p>Submit payment of emission-based fees in accordance with Condition XXI of this Permit.</p>	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	EU01 – EU05	Env-A 705.04
8.	<p><u>VOC Emission Statements Reporting Requirements</u></p> <p>If the actual annual VOC emissions from all permitted devices located at a facility are greater than or equal to 10 tpy, then include the following information with the annual emission report;</p> <p>a.) All VOC emissions reported pursuant to Table 8, Item #6 by month, and;</p> <p>b.) All the data recorded in Table 7, Item 7.</p>	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	EU01 – EU04	Env-A 908
9.	<p><u>NO<sub>x</sub> Emission Statement Reporting Requirements</u></p> <p>If actual NO<sub>x</sub> emissions from all permitted devices located at the Facility are greater than or equal to 10 tpy, then include the following information with the annual emissions:</p> <p>a.) A breakdown of NO<sub>x</sub> emissions reported pursuant to Table 8, Item #6 by month; and</p> <p>b.) All data recorded in accordance with Table 7, Item #8.</p>	Annually (received by the department no later than April 15 <sup>th</sup> of the following year)	EU01 – EU04	Env-A 909
10.	<p><u>Semi-Annual Report for Large MWC Units</u></p> <p>Submit semi-annual reports to the department and USEPA. The summary of data specified below shall cover a 2-year period (reporting year and the calendar year preceding the year being reported):</p> <p>a.) A summary of the following data collected for all pollutants and parameters;</p> <p>i. The emission levels achieved during the performance tests for particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride and fugitive ash;</p> <p>ii. The highest emission/parameter level recorded for SO<sub>2</sub>,</p>	By August 1 and February 1	EU01 and EU02	Env-A 3307.01 and 40 CFR 60.59b(g) & (h)

<sup>7</sup> The required list of pollutants to be included in the annual report is listed in the currently state-approved regulation, Env-A 907.02 and is more stringent than the SIP-approved version of the rule.

**Table 8 - Applicable Reporting Requirements**

Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
	<p>NOx, CO, MWC load level and baghouse inlet temperature;</p> <ul style="list-style-type: none"> <li>iii. The highest opacity level recorded;</li> <li>iv. The total number of hours per calendar quarter and hours per calendar year that valid data for pollutants/parameters listed below were not obtained;                             <ul style="list-style-type: none"> <li>1) Sulfur dioxide;</li> <li>2) Nitrogen oxide;</li> <li>3) Carbon monoxide;</li> <li>4) Steam load level;</li> <li>5) Baghouse inlet temperature;</li> </ul> </li> <li>v. The total number of hours that data for SO<sub>2</sub>, NOx, CO, MWC load level and baghouse inlet temperature were excluded from calculation of average emission concentrations or parameters based on data recorded under Item #10.b of Table 7;</li> </ul> <ul style="list-style-type: none"> <li>b.) The summary of data included in item #10.a) above shall highlight any emission or parameter levels that did not achieve the emission or parameter limits;</li> <li>c.) Documentation of periods when all certified chief facility operators and certified shift supervisors are off site for more than 12 hours;</li> <li>d.) A notification of intent to begin the reduced dioxin/furan performance testing schedule specified in Env-A 3306.01(b);</li> <li>e.) Information recorded under Item #10.c of Table 7 for opacity, SO<sub>2</sub>, CO, NOx, load level and particulate matter control device inlet temperature that exceed the applicable limits with reasons for such exceedances and corrective actions taken;</li> <li>f.) For each date recorded and reported at in Item #9.a) above, the semi-annual report shall include SO<sub>2</sub>, CO, NOx, load level and particulate matter control device inlet temperature data recorded under Item #10.b of Table 7 and opacity data recorded under Item #10.a.i of Table 7, as applicable;</li> <li>g.) A copy of any test report for particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash that documents the levels above the applicable limits and any corrective action;</li> <li>h.) The calendar dates when the carbon injection system operating parameter(s) (based on 8-hour block average) that are the primary indicator(s) of the carbon mass feed rate are below the level(s) estimated during the stack tests, reason for such occurrences and a description of the corrective action taken; and</li> <li>i.) For each operation data reported in paragraph h. above, the semiannual report shall include the average carbon mass feed rate estimated for each hour of operations (based on 8-hour block average).</li> </ul>			

**Table 8 - Applicable Reporting Requirements**

Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
11.	<p><u>Quarterly Emission Report</u>                      Submit to the department emission reports containing the following information:</p> <ul style="list-style-type: none"> <li>a.) Excess emission data recorded by the CEM system, including:                             <ul style="list-style-type: none"> <li>i. The date and time of the beginning and ending of each period of excess emission;</li> <li>ii. The actual emissions measured by the CEM system during the excess emissions;</li> <li>iii. The total amount of emissions above the emission limit, or percent above the emission limit, during the period of excess emissions;</li> <li>iv. The specific cause of the excess emission; and</li> <li>v. The corrective action taken.</li> </ul> </li> <li>b.) If no excess emissions have occurred, a statement to that effect;</li> <li>c.) For gaseous measuring CEM systems, the daily averages of the measurements made and emission rates calculated;</li> <li>d.) A statement as to whether the CEM system was inoperative, repaired, or adjusted during the reporting period;</li> <li>e.) If the CEM system was inoperative, repaired, or adjusted during the reporting period, the following information:                             <ul style="list-style-type: none"> <li>i. The date and time of the beginning and ending of each period when the CEM was inoperative;</li> <li>ii. The reason why the CEM was inoperative; and</li> <li>iii. The corrective action taken.</li> </ul> </li> <li>f.) For all “out of control periods” the following information:                             <ul style="list-style-type: none"> <li>i. Beginning and ending times of the out of control period;</li> <li>ii. The reason for the out of control period; and</li> <li>iii. The corrective action taken.</li> </ul> </li> <li>g.) The date and time of the beginning and ending of each period when the source of emissions which the CEM system is monitoring was not operating;</li> <li>h.) The span value, as defined in Env-A 101.178, and units of measurement for each analyzer in the CEM system; and</li> <li>i.) When calibration gas is used, the following information:                             <ul style="list-style-type: none"> <li>i. The calibration gas concentration;</li> <li>ii. If a gas bottle was changed during the quarter:                                     <ul style="list-style-type: none"> <li>1) The date of the calibration gas bottle change;</li> <li>2) The gas bottle concentration before the change;</li> <li>3) The gas bottle concentration after the change; and</li> </ul> </li> <li>iii. The expiration date for all calibration gas bottles used.</li> </ul> </li> <li>j.) The percent data availability calculated in accordance with Table 6, Item 17 for each gaseous and opacity in the CEM system;</li> <li>k.) Even if sufficient valid hours have been measured by the CEM system necessary for calculation of a valid averaging period as defined in Env-A 808.17, the Owner or Operator shall still report for any invalid hours that occurred during the emission standard period the substitute data, as approved in accordance with Env-A 808.13, that will be used to determine the source's total emissions;</li> </ul>	Quarterly (received by the department no later than 30 days following the end of each quarterly reporting period)	EU01 and EU02	Env-A 808.13, Env-808.14, Env-A 808.15, Env-A 808.18, Env-A 910 & FP-T-0042

Table 8 - Applicable Reporting Requirements				
Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis
	l.) All information required above shall be clearly indicated, labeled, and formatted such that compliance with all emissions standards to which the source is subject, can be determined and any periods of excess emissions, substitution of missing or invalid CEM data, CEM calibration, CEM maintenance, or startup, shutdown, or malfunction can be easily identified; m.) Specific identification of each period of excess emissions that occurs during start-ups, shutdowns, and malfunctions of the boiler/boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted shall also be reported.			
12.	<p><u>Reporting Permit Deviation Caused by Failure to Comply with Data Availability Requirements</u></p> <p>If the owner or operator of the source discovers that it has failed to meet the percent data availability requirement pursuant to Table 6, Item 17 in the previous calendar quarter or in the calendar quarter in which it currently is operating, the owner or operator of the source shall, in addition to the permit deviation reporting required by Condition XXV:</p> <p>a.) Notify the department by telephone, fax, or e-mail (pdeviations@des.nh.gov) within 10 days of discovery of the permit deviation.</p> <p>b.) Submit a plan to the department, within 30 days of discovery, specifying in detail the steps it plans to take in order to meet the availability requirements for future calendar quarters; and</p> <p>c.) Implement the plan to meet the data availability requirements no later than 30 days after the end of the quarter of failure.</p>	As required	EU01 and EU02	Env-A 808.12(e) & Env-A 911.04

**VII. Requirements Currently Not Applicable**

At the time of issuance of this Permit, the Permittee is not subject to the requirements of 40 CFR 60, Subpart Db, *Standards of Performance for Industrial-Commerical-Institutional Steam Generating Units*, and Subpart E, *Standards of Performance for Incinerators*.

**General Title V Operating Permit Conditions**

**VIII. Issuance of a Title V Operating Permit**

- A. This Permit is issued in accordance with the provisions of Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the five (5) years after issuance of this Permit.
- B. Permit expiration terminates the Owner or Operator's right to operate the emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is **received by the department** at least 6 months before the expiration date.



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**IX. Title V Operating Permit Renewal Procedures**

Pursuant to Env-A 609.07(b), an application for renewal of this Permit shall be considered timely if it is **received by the department** at least six months prior to the designated expiration date of the current Title V operating permit.

**X. Application Shield**

Pursuant to Env-A 609.08, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part unless or until the department takes final action on the application.

**XI. Permit Shield**

A. Pursuant to Env-A 609.09(a), a permit shield shall provide that:

1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and
  2. The owner or operator need not comply with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and specifically identified in Condition VII of this Title V Operating Permit as not applicable to the stationary source or area source.
- B. The permit shield identified in Condition XI.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.09(b). It shall not apply to certain conditions as specified in Env-A 609.09(c) that may be incorporated into this Permit following permit issuance by the department.
- C. If a Title V Operating Permit and amendments thereto issued by the department does not expressly include or exclude an applicable requirement or a state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the Owner or Operator shall comply with the provisions of said requirement to the extent that it applies to the Owner or Operator, stationary source, area source or device.
- D. If the department determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant, owner or operator of a stationary source, area source or device, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.
- E. Pursuant to Env-A 609.09(f), nothing contained in Condition XI of this Permit shall alter or affect the ability of the department to reopen this Permit for cause pursuant to Env-A 609.19 and Condition XII, or to exercise its summary abatement authority pursuant to RSA 125-C:15, I.
- F. Pursuant to Env-A 609.09(g), nothing contained in this section or in any Title V operating permit issued by the department shall alter or affect the following:
1. The ability of the department to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;

2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;
3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the USEPA Administrator under that section;
4. 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;
5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;
6. The ability of the department or the USEPA Administrator to obtain information about a stationary source, area source, or device from the Owner or Operator pursuant to section 114 of the CAA; or
7. The ability of the department or the USEPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

## **XII. Reopening for Cause**

The Director shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.19(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.19(b) through (g).

## **XIII. Administrative Permit Amendments**

- A. Pursuant to Env-A 612.01, the owner or operator may implement the changes addressed in the request for an administrative permit amendment as defined in Env-A 101 immediately upon filing the request with the department.
- B. Pursuant to Env-A 612.01, the department shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

## **XIV. Operational Flexibility**

- A. Pursuant to Env-A 612.02, the owner or operator subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) of the CAA changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Condition XIV. B through E of this permit, as applicable. At this point, the department has not included any permit terms authorizing emissions trading in this permit.
  1. The change is not a modification under any provision of Title I of the CAA;
  2. The change does not cause emissions to exceed the emissions allowable under the Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;
  3. The owner or operator has obtained any temporary permit required by Env-A 600;
  4. The owner or operator has provided written notification to the department and USEPA Administrator of the proposed change and such written notification includes:
    - a. The date on which each proposed change will occur, or has occurred;

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- b. A description of each such change;
  - c. Any change in emissions that will result;
  - d. A request that the operational flexibility procedures be used; and
  - e. The signature of the responsible official, consistent with Env-A 605.04(b);
5. The owner or operator has attached each written notice required above to their copy of this Title V Operating Permit.
- B. For changes involving the trading of emissions, the owner or operator must also meet the following conditions:
1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;
  2. The owner or operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes at the permitted facility which qualify under a federally- enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;
  3. The department has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce emissions trades; and
  4. The written notification required in Condition XIV.A above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.
- C. For off-permit changes, the owner or operator must also meet the following conditions:
1. Each off-permit change meets all applicable requirements and does not violate any existing permit term or condition;
  2. The owner or operator provides contemporaneous written notification to the department and the USEPA Administrator of each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.04;
  3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;
  4. The owner or operator keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this Permit, and the emissions resulting from those changes; and
  5. The written notification required in Condition XIV.A above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.
- D. For section 502(b)(10) changes, the owner or operator must also meet the following conditions:

1. The written notification required in Condition XIV.A above is made at least 7 days prior to the proposed change; and
  2. The written notification required in Condition XIV.A above includes any permit term or condition that is no longer applicable as a result of the change.
- E. Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) of the CAA change shall not qualify for the permit shield under Env-A 609.09.

**XV. Minor Modifications**

- A. Prior to implementing a minor Title V Operating Permit modification, the owner or operator shall submit a written request to the department in accordance with the requirements of Env-A 612.05(b) through (d).
- B. The request for a minor permit modification shall include the following:
  1. An application form containing all information pertinent to the modification, including, if applicable, the information specified in Env-A 1709;
  2. The fee(s) specified in Env-A 702 through Env-A 705, as applicable;
  3. A description of the change, the emissions resulting from the change, and any new requirements that will apply if the change occurs;
  4. Where air pollution dispersion modeling is required for a source or device pursuant to Env-A 606.02, the information required pursuant to Env-A 606.03;
  5. The owner or operator's proposed draft permit conditions;
  6. Certification by a responsible official, consistent with the provisions of Env-A 605.04(b), that the proposed change meets the criteria for the use of the minor permit modification procedures; and
  7. A request that minor permit modification procedures be used.
- C. The department shall take final action on the minor permit modification request in accordance with the provisions of Env-A 612.05(e) through (g).
- D. Pursuant to Env-A 612.05(h), the owner or operator may implement the proposed change immediately upon filing a request for a minor permit modification with the department.
- E. Pursuant to Env-A 612.05(i), pending final action on the permit modification by the department, the owner or operator shall comply with both the applicable requirements governing the change and the proposed permit conditions.
- F. Pursuant to Env-A 612.05(j) the permit shield specified in Env-A 609.09 shall not apply to minor permit modifications under Condition XV. of this Permit.
- G. Pursuant to Env-A 612.05(a), the owner or operator shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the department of a request for a minor permit amendment.

**XVI. Significant Permit Modifications**

- A. Pursuant to Env-A 612.06, a change at the facility shall qualify as a significant permit modification if it meets the criteria specified in Env-A 612.06(a)(1) through (5).
- B. Prior to implementing the significant permit modification, the owner or operator shall file a written request with the department which includes the following information:

1. An application form containing all information pertinent to the modification, including, if applicable, the supplemental information specified in Env-A 1709;
  2. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  3. The owner or operator's suggested draft permit conditions;
  4. Certification by a responsible official, consistent with the provisions of Env-A 605.04(b), that the proposed change meets the criteria for the use of the significant permit modification procedures;
  5. A request that the significant permit modification procedures be used;
  6. Air pollution dispersion modeling impact analysis documentation in accordance with Env-A 606.04, as applicable; and
  7. The fee(s) specified in Env-A 702 through Env-A 705, as applicable.
- C. Pursuant to Env-A 612.06(d), the applicant shall forward a copy of the request for a significant permit modification, including those items listed in Condition XVI.B(1) through (4), to USEPA.
- D. The department shall take final action on the significant permit modification request in accordance with the provisions of Env-A 612.06 (e) and (f).
- E. Pursuant to Env-A 612.06(g), the owner or operator shall obtain an amended Title V Operating Permit from the department which incorporates the significant permit modification prior to implementing such modification, except as provided in Env-A 609.07(a)(3).
- F. The owner or operator shall be subject to the provisions of RSA 125-C:15 if a request for a significant permit amendment is not filed with the department and/or the change is made prior to the issuance of an amended Title V Operating Permit.

#### **XVII. Title V Operating Permit Suspension, Revocation or Nullification**

Pursuant to RSA 125-C:13, the department may terminate, modify, revoke or reissue for cause any permit or authorization issued to an affected source prior to the expiration of such permit, consistent with the requirements of the Clean Air Act.

#### **XVIII. Inspection and Entry**

USEPA and department personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6, VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

#### **XIX. Certifications**

##### **A. Compliance Certification Report**

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify for the previous calendar year that the facility is in compliance with the requirements of this permit. The report shall be submitted annually, no later than April 15<sup>th</sup> of the following year. The report shall be submitted to the department and to the U.S. Environmental Protection Agency – Region 1. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5) and Env-A 907.04, include the following information for each and every requirement and condition of the effective permit, the report shall describe:

1. The particular permit condition or item number that references each requirement, and a brief summary of the requirement;
2. The compliance status of the source with respect to the terms and conditions of this Permit, and whether compliance was continuous or intermittent during the reporting period;
3. The method(s) used to determine compliance, including a description of the monitoring, recordkeeping, and reporting requirements and test methods;
4. The frequency, either continuous or intermittent, of the method(s) used to determine compliance;
5. If compliance was not continuous, a description of each permit deviation; and
6. Any additional information required in order for the department to determine the compliance status of the source.

**B. Certification of Accuracy Statement**

All documents (including any application form, report or compliance certification) submitted to the department and USEPA shall contain a certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

"I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents 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."

All reports submitted to the department (except those submitted as emission based fees as outlined in Condition XXI of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services  
Air Resources Division  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095  
ATTN: Section Supervisor, Compliance Bureau

All reports submitted to USEPA shall be submitted to the following address:

USEPA-New England, Region 1  
5 Post Office Sq. Suite 100  
Mail Code OES04-2  
Boston, MA 02109-3912  
Attn: Air Compliance Clerk

**XX. Enforcement**

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the department and/or USEPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the owner or operator from the obligation to comply with any other provisions of RSA

125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

In accordance with 40 CFR 70.6 (a)(6)(ii), the owner or operator shall not claim as a defense 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 this Permit.

## **XXI. Emission-Based Fee Requirements**

- A. Env-A 705.01, *Emission-based Fee*: The owner or operator shall pay to the department each year an emission-based fee for emissions from the facility.
- B. Env-A 705.02, *Determination of Actual Emissions for use in Calculating of Emission-based Fee*: The owner or operator shall determine the total actual annual emissions from the facility for each calendar year in accordance with the methods specified in Env-A 705.02.
- C. Env-A 705.03, *Calculation of Emission-based Fee*: The owner or operator shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 705.03 and the following equation:

$$FEE = E * DPT$$

where:

- FEE = The annual emission-based fee for each calendar year as specified in Env-A 705;  
E = Total actual emissions as determined pursuant to Condition XXI.B; and  
DPT = The annual fee, in dollars per ton of emissions, the department has calculated in accordance with Env-A 705.03<sup>8</sup>.

- D. Env-A 705.04, *Payment of Emission-based Fee*: The owner or operator shall submit, to the department, payment of the emission-based fee so that the department receives it on or before April 15th for emissions during the previous calendar year.

## **XXII. Duty To Provide Information**

In accordance with 40 CFR 70.6 (a)(6)(v), upon the department's written request, the owner or operator shall furnish to the department, within a reasonable time, any information that the department 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 owner or operator shall also furnish to the department copies of records that the owner or operator is required to keep by this Permit. The owner or operator may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Env-A 103 at the time such information is submitted to the department. The department shall evaluate such requests in accordance with the provisions of Env-A 103.

## **XXIII. Property Rights**

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

## **XXIV. Severability Clause**

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid,

<sup>8</sup> For additional information on emission-based fees, visit the NHDES website at <http://des.nh.gov/organization/divisions/air/pehb/apps/fees.htm>

the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

## **XXV. Permit Deviation**

Deviations are instances where any permit condition is violated. In accordance with Env-A 911, *Recordkeeping and Reporting Requirements for Permit Deviations and Pollution Control Equipment Parameter Excursions*, the owner or operator shall maintain records and report to the department deviations from permit requirements as follows:

- A. Recordkeeping Requirement – All Deviations – In accordance with Env-A 911.03, in the event of a permit deviation, the owner or operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels; and record the information per Env-A 911.03(b).
- B. Excess Emissions Reporting Requirement – Excess Emission Deviations Only – In the event of a permit deviation that causes excess emissions, the owner or operator of the affected device, process, or air pollution control equipment shall:
  1. Notify the department of the permit deviation and excess emissions by telephone (603) 271-1370, e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)), or fax (603) 271-7053, within 24 hours of discovery of the permit deviation<sup>9</sup>; and
  2. Submit a written report in accordance with Env-A 911.04(a)(2) to the department within 10 days of the discovery of the permit deviation reported in Condition XXV.B.1.
- C. Reporting Requirements for Permit Deviations Continuing for Greater Than 9 Consecutive Days – In the event the permit deviation does not cause an excess emission but continues for a period greater than 9 consecutive days, the owner or operator of the affected device, process, or air pollution control equipment shall notify the department of the subsequent corrective actions to be taken by telephone (603) 271-1370, e-mail ([pdeviations@des.nh.gov](mailto:pdeviations@des.nh.gov)), or fax (603) 271-7053 on the tenth day of the permit deviation.
- D. Semi-Annual Summary Report – Pursuant to Env-A 911.05, the owner or operator shall submit a summary of all permit deviations previously reported to the department pursuant to Condition XXV.B. and C. and a list of all permit deviations recorded pursuant to Condition XXV.A. to the department in the Semi-Annual Permit Deviation and Monitoring Report due January 31st and July 31st of each calendar year covering the periods of July 1st through December 31st and January 1st through June 30th, respectively, or an alternative time period approved by the department pursuant to Env-A 912.

Reporting a permit deviation is not an affirmative defense for action brought for noncompliance.

## **XXVI. Emergency Conditions**

Pursuant to 40 CFR 70.6(g), the owner or operator shall be shielded from enforcement action brought for noncompliance with technology based emission limitations specified in this Permit as a result of an emergency. In order to use emergency as an affirmative defense to an action brought for noncompliance, the owner or operator shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

<sup>9</sup> Unless it is Saturday, Sunday or a state legal holiday, in which event the department shall be notified on the next day which is not a Saturday, Sunday, or state legal holiday.



- A. An emergency occurred and that the owner or operator can identify the cause(s) of the emergency;
- B. The permitted facility was at the time being properly operated;
- C. During the period of the emergency, the owner or operator took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- D. The owner or operator submitted notice of the emergency to the NHDES within two (2) business days of the time when emission 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.