

September 19, 2013

Luly E. Massaro, Commission Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Blvd  
Warwick, Rhode Island 02888

**Re: Burgess BioPower, LLC  
Renewable Energy Resource Eligibility Application, pursuant to the  
Renewable Energy Act Section 39-26-1 et. seq. of the General Laws of  
Rhode Island**

Dear Ms. Massaro,

In accordance with the requirements set forth in The Standard Application Form, Burgess BioPower respectfully submits its RES Eligibility Form Application, along with all applicable Appendices, supporting documentation and certifications, whereby it seeks certification as a New Renewable Energy Resource. The Burgess BioPower facility expects to achieve full commercial operation during the fourth calendar quarter of 2013.

Included in this submission are an original and three (3) copies as required under Commission regulations. In addition, an electronic/email submittal has been made to [res@puc.state.ri.us](mailto:res@puc.state.ri.us), as instructed in the Form, and to all parties listed on the Service List for the Application which was obtained from the Commission's website at [www.ripuc.org/utilityinfo/res.html](http://www.ripuc.org/utilityinfo/res.html).

Please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Kusche', is written over a horizontal line.

Raymond S. Kusche  
Manager, Energy Services

**RIPUC Use Only**

Date Application Received: \_\_\_/\_\_\_/\_\_\_  
Date Review Completed: \_\_\_/\_\_\_/\_\_\_  
Date Commission Action: \_\_\_/\_\_\_/\_\_\_  
Date Commission Approved: \_\_\_/\_\_\_/\_\_\_

GIS Certification #:  
\_\_\_\_\_

## RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM

**The Standard Application Form  
Required of all Applicants for Certification of Eligibility of Renewable Energy Resource  
(Version 8 – December 5, 2012)**

**STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION  
Pursuant to the Renewable Energy Act  
Section 39-26-1 et. seq. of the General Laws of Rhode Island**

**NOTICE:**

When completing this Renewable Energy Resources Eligibility Form and any applicable Appendices, please refer to the State of Rhode Island and Providence Plantations Public Utilities Commission Rules and Regulations Governing the Implementation of a Renewable Energy Standard (RES Regulations, Effective Date: January 1, 2006), and the associated RES Certification Filing Methodology Guide. All applicable regulations, procedures and guidelines are available on the Commission's web site: [www.ripuc.org/utilityinfo/res.html](http://www.ripuc.org/utilityinfo/res.html). Also, all filings must be in conformance with the Commission's Rules of Practice and Procedure, in particular, Rule 1.5, or its successor regulation, entitled "Formal Requirements as to Filings."

- Please complete the Renewable Energy Resources Eligibility Form and Appendices using a typewriter or black ink.
- Please submit one original and three copies of the completed Application Form, applicable Appendices and all supporting documentation to the Commission at the following address:  
Rhode Island Public Utilities Commission  
Attn: Luly E. Massaro, Commission Clerk  
89 Jefferson Blvd  
Warwick, RI 02888

In addition to the paper copies, electronic/email submittals are required under Commission regulations. Such electronic submittals should be sent to [res@puc.state.ri.us](mailto:res@puc.state.ri.us).

- In addition to filing with the Commission, Applicants are required to send, electronically or electronically and in paper format, a copy of the completed Application including all attachments and supporting documentation, to the Division of Public Utilities and Carriers and to all interested parties. A list of interested parties can be obtained from the Commission's website at [www.ripuc.org/utilityinfo/res.html](http://www.ripuc.org/utilityinfo/res.html).
- Keep a copy of the completed Application for your records.
- The Commission will notify the Authorized Representative if the Application is incomplete.
- Pursuant to Section 6.0 of the RES Regulations, the Commission shall provide a thirty (30) day period for public comment following posting of any administratively complete Application.
- Please note that all information submitted on or attached to the Application is considered to be a public record unless the Commission agrees to deem some portion of the application confidential after consideration under section 1.2(g) of the Commission's Rules of Practice and Procedure.
- In accordance with Section 6.2 of the RES Regulations, the Commission will provide prospective reviews for Applicants seeking a preliminary determination as to whether a facility would be eligible prior to the formal certification process described in Section 6.1 of the RES Regulations. Please note that space is provided on the Form for applicant to designate the type of review being requested.
- Questions related to this Renewable Energy Resources Eligibility Form should be submitted in writing, preferably via email and directed to: Luly E. Massaro, Commission Clerk at [res@puc.state.ri.us](mailto:res@puc.state.ri.us).

**SECTION I: Identification Information**

1.1 Name of Generation Unit (sufficient for full and unique identification):

BURGESS BIOWATER

1.2 Type of Certification being requested (check one):

Standard Certification     Prospective Certification (Declaratory Judgment)

1.3 This Application includes: (Check all that apply)<sup>1</sup>

- APPENDIX A: Authorized Representative Certification for Individual Owner or Operator
- APPENDIX B: Authorized Representative Certification for Non-Corporate Entities Other Than Individuals
- APPENDIX C: Existing Renewable Energy Resources
- APPENDIX D: Special Provisions for Aggregators of Customer-sited or Off-grid Generation Facilities
- APPENDIX E: Special Provisions for a Generation Unit Located in a Control Area Adjacent to NEPOOL
- APPENDIX F: Fuel Source Plan for Eligible Biomass Fuels

1.4 Primary Contact Person name and title: Raymond S. Kusche  
Director, Energy Services

1.5 Primary Contact Person address and contact information:

Address: Cate Street Capital  
One Cate Street, Suite 100  
Portsmouth, New Hampshire 03801  
Phone: 603-319-4400      Fax: 603-546-4006  
Email: RKUSCHE@CATECAPITAL.COM

1.6 Backup Contact Person name and title: Charles Grecco  
Managing Director

1.7 Backup Contact Person address and contact information:

Address: - same as Primary Contact Person -  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: CGRECCO@CATECAPITAL.COM

<sup>1</sup> Please note that all Applicants are required to complete the Renewable Energy Resources Eligibility Standard Application Form and all of the Appendices that apply to the Generation Unit or Owner or Operator that is the subject of this Form. Please omit Appendices that do not apply.

1.8 Name and Title of Authorized Representative (i.e., the individual responsible for certifying the accuracy of all information contained in this form and associated appendices, and whose signature will appear on the application):

Charles Grecco, Managing Director

Appendix A or B (as appropriate) completed and attached?  Yes  No  N/A

1.9 Authorized Representative address and contact information:

Address: c/o GATE STREET CAPITAL, LLC  
One Gate Street, Suite 100  
Portsmouth, New Hampshire 03801  
Phone: 603-318-4400 Fax: 603-546-4006  
Email: CGRECCO@GATECAPITAL.COM

1.10 Owner name and title: BERLIN STATION LLC

1.11 Owner address and contact information:

Address: - same as above -  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

1.12 Owner business organization type (check one):

Individual  
 Partnership  
 Corporation  
 Other: Limited Liability Company

1.13 Operator name and title: Delta Power Services LLC

1.14 Operator address and contact information:

Address: c/o Burgess BioPower  
One Community Street  
Berlin, New Hampshire 03570  
Phone: 603 752-8401 Fax: \_\_\_\_\_  
Email: DWALKER@DELTAPOWERSERVICES.COM

1.15 Operator business organization type (check one):

Individual  
 Partnership  
 Corporation  
 Other: Limited Liability Company

**SECTION II: Generation Unit Information, Fuels, Energy Resources and Technologies**

2.1 ISO-NE Generation Unit Asset Identification Number or NEPOOL GIS Identification Number (either or both as applicable): 16653 ASSET ID

2.2 Generation Unit Nameplate Capacity: 76.5 GROSS MW GEN GROSS = 85,000 KVA  
X POWER FACTOR = 90%

2.3 Maximum Demonstrated Capacity: \_\_\_\_\_ MW 76,500 KW

2.4 Please indicate which of the following Eligible Renewable Energy Resources are used by the Generation Unit: (Check ALL that apply) – *per RES Regulations Section 5.0*

- Direct solar radiation
- The wind
- Movement of or the latent heat of the ocean
- The heat of the earth
- Small hydro facilities
- Biomass facilities using Eligible Biomass Fuels and maintaining compliance with all aspects of current air permits; Eligible Biomass Fuels may be co-fired with fossil fuels, provided that only the renewable energy fraction of production from multi-fuel facilities shall be considered eligible.
- Biomass facilities using unlisted biomass fuel
- Biomass facilities, multi-fueled or using fossil fuel co-firing
- Fuel cells using a renewable resource referenced in this section

2.5 If the box checked in Section 2.4 above is “Small hydro facilities”, please certify that the facility’s aggregate capacity does not exceed 30 MW. – *per RES Regulations Section 3.32*

- ← check this box to certify that the above statement is true
- N/A or other (please explain) \_\_\_\_\_

2.6 If the box checked in Section 2.4 above is “Small hydro facilities”, please certify that the facility does not involve any new impoundment or diversion of water with an average salinity of twenty (20) parts per thousand or less. – *per RES Regulations Section 3.32*

- ← check this box to certify that the above statement is true
- N/A or other (please explain) \_\_\_\_\_

2.7 If you checked one of the Biomass facilities boxes in Section 2.4 above, please respond to the following:

A. Please specify the fuel or fuels used or to be used in the Unit: Biomass - clean forest residue; chips, grindings

B. Please complete and attach Appendix F, Eligible Biomass Fuel Source Plan.  
Appendix F completed and attached?  Yes  No  N/A

2.8 Has the Generation Unit been certified as a Renewable Energy Resource for eligibility in another state's renewable portfolio standard?

Yes       No      If yes, please attach a copy of that state's certifying order.

Copy of State's certifying order attached?       Yes       No       N/A

**SECTION III: Commercial Operation Date**

Please provide documentation to support all claims and responses to the following questions:

3.1 Date Generation Unit first entered Commercial Operation: \_\_\_ / \_\_\_ / \_\_\_ at the site.

*Expected COD is December 2013*

If the commercial operation date is after December 31, 1997, please provide independent verification, such as the utility log or metering data, showing that the meter first spun after December 31, 1997. This is needed in order to verify that the facility qualifies as a New Renewable Energy Resource.

Documentation attached?       Yes       No       N/A

3.2 Is there an Existing Renewable Energy Resource located at the site of Generation Unit?

Yes

No

3.3 If the date entered in response to question 3.1 is earlier than December 31, 1997 or if you checked "Yes" in response to question 3.2 above, please complete Appendix C.

Appendix C completed and attached?       Yes       No       N/A

3.4 Was all or any part of the Generation Unit used on or before December 31, 1997 to generate electricity at any other site?

Yes

No

3.5 If you checked "Yes" to question 3.4 above, please specify the power production equipment used and the address where such power production equipment produced electricity (attach more detail if the space provided is not sufficient):

---

---

---

**SECTION IV: Metering**

4.1 Please indicate how the Generation Unit's electrical energy output is verified (check all that apply):

ISO-NE Market Settlement System

Self-reported to the NEPOOL GIS Administrator

Other (please specify below and see Appendix D: Eligibility for Aggregations):

Appendix D completed and attached?

Yes

No

N/A

### SECTION V: Location

5.1 Please check one of the following that apply to the Generation Unit:

Grid Connected Generation

Off-Grid Generation (not connected to a utility transmission or distribution system)

Customer Sited Generation (interconnected on the end-use customer side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer)

5.2 Generation Unit address:

One Community Street  
Berlin, New Hampshire

5.3 Please provide the Generation Unit's geographic location information:

A. Universal Transverse Mercator Coordinates: 19.327006.4926501

B. Longitude/Latitude: 71°10'30" / 44°28'16"

5.4 The Generation Unit located: (please check the appropriate box)

In the NEPOOL control area

In a control area adjacent to the NEPOOL control area

In a control area other than NEPOOL which is not adjacent to the NEPOOL control area ← *If you checked this box, then the generator does not qualify for the RI RES – therefore, please do not complete/submit this form.*

5.5 If you checked "In a control area adjacent to the NEPOOL control area" in Section 5.4 above, please complete Appendix E.

Appendix E completed and attached?

Yes

No

N/A

**SECTION VI: Certification**

6.1 Please attach documentation, using one of the applicable forms below, demonstrating the authority of the Authorized Representative indicated in Section 1.8 to certify and submit this Application.

**Corporations**

If the Owner or Operator is a corporation, the Authorized Representative shall provide **either**:

- (a) Evidence of a board of directors vote granting authority to the Authorized Representative to execute the Renewable Energy Resources Eligibility Form, **or**
- (b) A certification from the Corporate Clerk or Secretary of the Corporation that the Authorized Representative is authorized to execute the Renewable Energy Resources Eligibility Form or is otherwise authorized to legally bind the corporation in like matters.

Evidence of Board Vote provided?  Yes  No  N/A

Corporate Certification provided?  Yes  No  N/A

**Individuals**

If the Owner or Operator is an individual, that individual shall complete and attach APPENDIX A, or a similar form of certification from the Owner or Operator, duly notarized, that certifies that the Authorized Representative has authority to execute the Renewable Energy Resources Eligibility Form.

Appendix A completed and attached?  Yes  No  N/A

**Non-Corporate Entities**

(Proprietorships, Partnerships, Cooperatives, etc.) If the Owner or Operator is not an individual or a corporation, it shall complete and attach APPENDIX B or execute a resolution indicating that the Authorized Representative named in Section 1.8 has authority to execute the Renewable Energy Resources Eligibility Form or to otherwise legally bind the non-corporate entity in like matters.

Appendix B completed and attached?  Yes  No  N/A

6.2 Authorized Representative Certification and Signature:

I hereby certify, under pains and penalties of perjury, that I have personally examined and am familiar with the information submitted herein and based upon my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties, both civil and criminal, for submitting false information, including possible fines and punishment. My signature below certifies all information submitted on this Renewable Energy Resources Eligibility Form. The Renewable Energy Resources Eligibility Form includes the Standard Application Form and all required Appendices and attachments. I acknowledge that the Generation Unit is obligated to and will notify the Commission promptly in the event of a change in a generator's eligibility status (including, without limitation, the status of the air permits) and that when and if, in the Commission's opinion, after due consideration, there is a material change in the characteristics of a Generation Unit or its fuel stream that could alter its eligibility, such Generation Unit must be re-certified in accordance with Section 9.0 of the RES Regulations. I further acknowledge that the Generation Unit is obligated to and will file such quarterly or other reports as required by the Regulations and the Commission in its certification order. I understand that the Generation Unit will be immediately de-certified if it fails to file such reports.

Signature of Authorized Representative:

SIGNATURE:

  
\_\_\_\_\_  
Director

(Title)

DATE:

9/12/13  
\_\_\_\_\_

GIS Certification #:  
-----

**APPENDIX B**  
**(Required When Owner or Operator is a Non-Corporate Entity**  
**Other Than An Individual)**

**STATE OF RHODE ISLAND**  
**PUBLIC UTILITIES COMMISSION**

**RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM**

**Pursuant to the Renewable Energy Act**  
**Section 39-26-1 et. seq. of the General Laws of Rhode Island**

**RESOLUTION OF AUTHORIZATION**

**Resolved:** that Charles E. Grecco, named in Section 1.8 of the Renewable Energy Resources Eligibility Form as Authorized Representative, is authorized to execute the Application on the behalf of Burgess BioPower, LLC, the Owner or Operator of the Generation Unit named in section 1.1 of the Application.

SIGNATURE:

Charles E. Grecco, Director

DATE:

September 12, 2013

Charles E. Grecco, Director

State: New Hampshire

County: Coos

(TO BE COMPLETED BY NOTARY) I, Alexandra K. Ritchie as a notary public, certify that I witnessed the signature of the above named Charles Grecco, and that said person stated that he/she is authorized to execute this resolution, and the individual verified his/her identity to me, on this date: September 12 2013

SIGNATURE:

Alexandra K. Ritchie

DATE:

September 12, 2013

My commission expires on: 7-28-2015

NOTARY SEAL



# RENEWABLE ENERGY RESOURCE ELIGIBILITY FORM

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

SECTION 2.8

**BURGESS BIOPOWER**

Copy of other New England State's RPS Eligibility Certification:

**New Hampshire**

**Maine**

THE STATE OF NEW HAMPSHIRE

CHAIRMAN  
Amy L. Ignatius

COMMISSIONERS  
Michael D. Harrington  
Robert R. Scott

EXECUTIVE DIRECTOR  
Debra A. Howland



**PUBLIC UTILITIES COMMISSION**

21 S. Fruit Street, Suite 10  
Concord, N.H. 03301-2429

TDD Access: Relay NH  
1-800-735-2964

Tel. (603) 271-2431

FAX (603) 271-3878

Website:  
[www.puc.nh.gov](http://www.puc.nh.gov)

July 12, 2012

Robert Desrosiers  
VP Compliance  
Berlin Station, LLC  
Cate Street Capital, Inc.  
One Cate Street  
Portsmouth, NH 03801

Re: DE 12-091, Berlin Station LLC – Burgess BioPower  
Application for Class I, New Hampshire Renewable Energy Certificates, for the  
Electrical Production from the Berlin Station Biomass Plant Currently Under  
Construction Pursuant to RSA 362-F

Dear Mr. Desrosiers:

On April 11, 2012, the Commission received an application from Burgess BioPower requesting that the proposed Berlin Station, located in Berlin, NH, be certified to produce New Hampshire Class I RECs. Staff has reviewed the application and recommends conditional certification noting that the Berlin Station application was completed on May 25, 2012 with the exception of the Department of Environmental Services' (DES) approval of emission test results that would qualify the Berlin Station as a Class 1 renewable energy source.

Berlin Station is converting and upgrading the existing facility equipment and infrastructure located at the former Fraser Pulp Mill in Berlin, NH, in order to develop a biomass fueled energy generating facility. The facility will be a base loaded electric generating facility with a nominal gross electrical output of 75 MW. It will utilize only clean biomass as a fuel.

RSA 362-F:11, III provides that the Commission may certify a biomass facility on a conditional basis subject to compliance with the applicable nitrogen oxides (NO<sub>x</sub>) and particulate matter (PM) emission standards. On May 18, 2012, the Commission received a Conditional Certification as a Class I Renewable Energy Source for the Berlin Station from DES. Prior to final approval to produce RECs, DES recommends the following conditions:

- a) Berlin station shall emit NO<sub>x</sub> at a quarterly average rate less than or equal to 0.075 lb/MMBtu; and,
- b) Berlin Station shall emit PM at an average rate less than or equal to 0.02 lb/MMBtu.

The ISO-New England asset identification number has not yet been assigned because the Berlin Station facility is under construction. All the process steps for obtaining a GIS number have been completed, and the Lead Participant number of 51176 has been assigned. Burgess shall provide these codes to the Commission as soon as they are obtained from NEPOOL and the GIS Administrator.

The Commission has reviewed Burgess BioPower's application in conjunction with the information received from DES and determined that Burgess BioPower has provided all the necessary documentation to demonstrate that the Berlin Station is eligible for conditional certification as a Class I facility. Upon receipt of verification of compliance with emissions standards from DES, the Commission will designate the Berlin Station as eligible to produce Class I renewable energy certificates. Please be advised, however, that the Commission is aware of project amendments that will be taken up by the Site Evaluation Committee and the outcome of that proceeding could affect this certificate.

Finally, attached please find a copy of the notice of this conditional certification provided to the GIS administrator. The New Hampshire Renewable Portfolio Standard certification code for the Berlin Station is NH-I-12-019.

Sincerely,



Debra A. Howland  
Executive Director

Enclosure

STATE OF MAINE  
PUBLIC UTILITIES COMMISSION

Docket No. 2013-00112

April 1, 2013

BURGESS BIOPOWER LLC  
PER PRO. BERLIN STATION LLC  
Request for Certification for RPS Eligibility

ORDER GRANTING NEW  
RENEWABLE RESOURCE  
CERTIFICATION

WELCH, Chairman; LITTELL and VANNOY, Commissioners

---

## I. SUMMARY

The Burgess Biopower biomass Facility is certified as a Class I new renewable resource that is eligible to satisfy Maine's new renewable resource portfolio requirement pursuant to Chapter 311, § 3(B) of the Commission's rules.

## II. BACKGROUND

### A. New Renewable Resource Portfolio Requirement

During its 2007 session, the Legislature enacted an Act To Stimulate Demand for Renewable Energy (Act). P.L. 2007, ch. 403 (codified at 35-A M.R.S. § 3210(3-A)). The Act added a mandate that specified percentages of electricity that supply Maine's consumers come from "new" renewable resources.<sup>1</sup> Generally, new renewable resources are renewable facilities that have an in-service date, resumed operation or were refurbished after September 1, 2005. The percentage requirement starts at one percent in 2008 and increases in annual one percent increments to ten percent in 2017, unless the Commission suspends the requirement pursuant to the provisions of the Act.

As required by the Act, the Commission modified its portfolio requirement rule (Chapter 311) to implement the "new" renewable resource requirement. *Order Adopting Rule and Statement of Factual and Policy Basis*, Docket No. 2007-391 (Oct. 22, 2007). The implementing rules designated the "new" renewable resource

---

<sup>1</sup> Maine's electric restructuring law, which became effective in March 2000, contained a portfolio requirement that mandated that at least 30% of the electricity to supply retail customers in the State come from eligible resources, which are either renewable or efficient resources. 35-A M.R.S. § 3210(3). The Act did not modify this 30% requirement.

requirement as “Class I”<sup>2</sup> and incorporated the resource type, capacity limit and the vintage requirements as specified in the Act. The rules thus state that a new renewable resource used to satisfy the Class I portfolio requirement must be of the following types:

- fuel cells;
- tidal power;
- solar arrays and installations;
- wind power installations;
- geothermal installations;
- hydroelectric generators that meet all state and federal fish passage requirement; or
- biomass generators, including generators fueled by landfill gas.

In addition, except for wind power installations, the generating resource must not have a nameplate capacity that exceeds 100 MW. Finally, the resource must satisfy one of four vintage requirements. These are:

- 1) renewable capacity with an in-service date after September 1, 2005;
- 2) renewable capacity that has been added to an existing facility after September 1, 2005;
- 3) renewable capacity that has not operated for two years or was not recognized as a capacity resource by the ISO-NE or the NMISA and has resumed operation or has been recognized by the ISO-NE or NMISA after September 1, 2005; or
- 4) renewable capacity that has been refurbished after September 1, 2005 and is operating beyond its useful life or employing an alternate technology that significantly increases the efficiency of the generation process.

The implementing rules (Chapter 311, § 3(B)(4)) establish a certification process that requires generators to pre-certify facilities as a new renewable resource under the requirements of the rule and provides for a Commission determination of resource eligibility on a case-by-case basis.<sup>3</sup> The rule contains the information that must be included in a petition for certification and specifies that the Commission shall provide an opportunity for public comment if a petitioner seeks certification under

---

<sup>2</sup> The “new” renewable resource requirement was designated as Class I because the requirement is similar to portfolio requirements in other New England states that are referred to as “Class I.” Maine’s pre-existing “eligible” resource portfolio requirement is designated as Class II.

<sup>3</sup> In the *Order Adopting Rule* at 6, the Commission noted that a request for certification can be made at any time so that a ruling can be obtained before a capital investment is made in a generation facility.

vintage categories 2, 3 and 4. Finally, the rule specifies that the Commission may revoke a certification if there is a material change in circumstance that renders the generation facility ineligible as a new renewable resource.

**B. Petition for Certification**

On January 17, 2013, Berlin Station, LLC (Berlin Station) filed a petition on behalf of Burgess Biopower, LLC to certify the Burgess Biopower 75 MW (gross) biomass-fired generation facility (Facility) located in Berlin, New Hampshire as a Class I New Renewable Resource under the new generation provision of the Commission's renewable portfolio rules. Ch. 311, § 3(B)(3)(a). The project includes conversion of the existing black liquor recovery boiler at the former Fraser pulp mill (which was shut down in 2006) to a bubbling fluidized-bed boiler that burns biomass.

Since there was a question as to which vintage category to apply to the Facility, Commission Staff issued an opportunity for comment on the Petition on January 24, 2013. No comments were filed. Commission Staff issued an information request on February 26, 2013 requesting more details on the project. Berlin Station filed responses on March 19, 2013.

**III. DECISION**

The petition states that the Facility is part of a redevelopment of the former Fraser Pulp Mill. According to Berlin Station, the project includes the conversion of the former black liquor recovery boiler located at the site into a biomass fuel fired, bubbling fluidized bed boiler. Berlin Station's responses to Staff's information request state that only limited portions of the old boiler, the control room building and the stack are being reutilized.<sup>4</sup> Berlin Station further states that all other features are new, including, among other items, a new steam turbine generator and its building. The petition indicates that the construction of the Facility began in the Fall of 2011 and is scheduled for commercial operation in October 2013.

As stated above, given that some of the old recovery boiler from the Mill is being reconstituted, it is not clear whether this generation facility may be classified as new generation pursuant to section 3(B)(3)(a), as additional capacity (generation added to an existing facility) pursuant to section 3(B)(3)(b), or as a refurbished facility pursuant to section 3(B)(3)(d). However, it is not necessary to determine exactly which vintage category(ies) apply in this case, as it is apparent from the work performed that the Facility falls within at least one of these vintage categories.

---

<sup>4</sup> According to Berlin Station's March 19, 2013 Responses to Staff's Information Request, only the following portions of the original recovery boiler remain: (i) upper water walls; (ii) generating bank station; (iii) economizer; (iv) deaerator; (v) steam drum minus the internals; (vi) structural support steel.

Based on the information provided by Berlin Station, I conclude that the Facility satisfies the resource type, capacity limit and vintage requirements of the rule.<sup>5</sup> The Facility is fueled solely by biomass, its capacity does not exceed 100 MW, and it will have commenced commercial operations and/or been refurbished after September 1, 2005.<sup>6</sup>

Accordingly, the Burgess Biopower facility is hereby certified as a Class I new renewable resource that is eligible to satisfy Maine's new renewable resource portfolio requirement pursuant to Chapter 311, § 3(B)(3) of the Commission rules. Berlin Station, or the Facility's successive owner, shall provide timely notice to the Commission of any material change in the characteristics or operation of the Facility, including the type of fuel used in the generation process, from that described in the petition filed in this proceeding.

BY ORDER OF THE DIRECTOR OF THE ELECTRIC AND GAS  
UTILITY INDUSTRIES



Faith Huntington

---

<sup>5</sup> The Commission has delegated to the Director of the Electric and Gas Division the authority to certify generation facilities as Class I new renewable resources pursuant to Chapter 311, § 3(B) of the Commission rules. *Delegation Order*, Docket No. 2008-184 (April 23, 2008).

<sup>6</sup> As stated in the Renewable Resources Statute, to "refurbish" means "to make an investment in equipment or facilities, other than for routine maintenance and repair, to renovate, reequip, or restore the renewable capacity resource. 35-A M.R.S. § 3210(2)(B-4). As the Commission determined in the Lincoln Pulp and Paper proceeding, the installation of a new turbine generator in place of an old one constitutes a refurbishment. *Lincoln Paper and Tissue, LLC, Request for Certification for RPS Eligibility*, Docket No. 2008-173, Order Granting New Renewable Resource Certification at 7 (January 27, 2009). Although in this case, there was no turbine generator replacement because no steam turbine generator was connected to the old recovery boiler in old Fraser Pulp Mill, to the extent that this Facility falls within the refurbishment vintage category because the boiler is being converted, I find that the installation of a new turbine generator, combined with the significant work conducted on the boiler to convert it, satisfies the statutory definition of refurbishment.

**APPENDIX F**  
**(Revised 6/11/10)**  
**Eligible Biomass Fuel Source Plan**  
**(Required of all Applicants Proposing to Use An Eligible Biomass Fuel)**

**STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION**  
**Part of Application for Certificate of Eligibility**  
**RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM**  
**Pursuant to the Renewable Energy Act**  
**Section 39-26-1 et. seq. of the General Laws of Rhode Island**

**Note to Applicants:** Please refer to the RES Certification Filing Methodology Guide posted on the Commission's web site ([www.ripuc.org/utilityinfo/res.html](http://www.ripuc.org/utilityinfo/res.html)) for information, templates and suggestions regarding the types and levels of detail appropriate for responses to specific application items requested below. Also, please see Section 6.9 of the RES Regulations for additional details on specific requirements.

The phrase "Eligible Biomass Fuel" (per RES Regulations Section 3.7) means fuel sources including brush, stumps, lumber ends and trimmings, wood pallets, bark, wood chips, shavings, slash, yard trimmings, site clearing waste, wood packaging, and other clean wood that is not mixed with other unsorted solid wastes<sup>5</sup>; agricultural waste, food and vegetative material; energy crops; landfill methane<sup>6</sup> or biogas<sup>7</sup>, provided that such gas is collected and conveyed directly to the Generation Unit without use of facilities used as common carriers of natural gas; or neat biodiesel and other neat liquid fuels that are derived from such fuel sources.

In determining if an Eligible Biomass Generation Unit shall be certified, the Commission will consider if the fuel source plan can reasonably be expected to ensure that only Eligible Biomass Fuels will be used, and in the case of co-firing ensure that only that proportion of generation attributable to an Eligible Biomass Fuel be eligible. Certification will not be granted to those Generation Units with fuel source plans the Commission deems inadequate for these purposes.

---

<sup>5</sup> Generation Units using wood sources other than those listed above may make application, as part of the required fuel source plan described in Section 6.9 of the RES Regulations, for the Commission to approve a particular wood source as "clean wood." The burden will be on the applicant to demonstrate that the wood source is at least as clean as those listed in the legislation. Wood sources containing resins, glues, laminates, paints, preservatives, or other treatments that would combust or off-gas, or mixed with any other material that would burn, melt, or create other residue aside from wood ash, will not be approved as clean wood.

<sup>6</sup> Landfill gas, which is an Eligible Biomass Fuel, means only that gas recovered from inside a landfill and resulting from the natural decomposition of waste, and that would otherwise be vented or flared as part of the landfill's normal operation if not used as a fuel source.

<sup>7</sup> Gas resulting from the anaerobic digestion of sewage or manure is considered to be a type of biogas, and therefore an Eligible Biomass Fuel that has been fully separated from the waste stream.

This Appendix must be attached to the front of Applicant's Fuel Source Plan required for Generating Units proposing to use an Eligible Biomass Fuel (per Section 6.9 of RES Regulations).

- F.1 The attached Fuel Source Plan includes a detailed description of the type of Eligible Biomass Fuel to be used at the Generation Unit.

Detailed description attached?  Yes  No  N/A

Comments: \_\_\_\_\_  
\_\_\_\_\_

- F.2 If the proposed fuel is "other clean wood," the Fuel Source Plan should include any further substantiation to demonstrate why the fuel source should be considered as clean as those clean wood sources listed in the legislation.

Further substantiation attached?  Yes  No  N/A

Comments: \_\_\_\_\_  
\_\_\_\_\_

- F.3 In the case of co-firing with ineligible fuels, the Fuel Source Plan must include a description of (a) how such co-firing will occur; (b) how the relative amounts of Eligible Biomass Fuel and ineligible fuel will be measured; and (c) how the eligible portion of generation output will be calculated. Such calculations shall be based on the energy content of all of the proposed fuels used.

Description attached?  Yes  No  N/A

Comments: \_\_\_\_\_  
\_\_\_\_\_

- F.4 The Fuel Source Plan must provide a description of what measures will be taken to ensure that only the Eligible Biomass Fuel are used, examples of which may include: standard operating protocols or procedures that will be implemented at the Generation Unit, contracts with fuel suppliers, testing or sampling regimes.

Description provided?  Yes  No  N/A

Comments: \_\_\_\_\_  
\_\_\_\_\_

- F.5 Please include in the Fuel Source Plan an acknowledgement that the fuels stored at or brought to the Generation Unit will only be either Eligible Biomass Fuels or fossil fuels used for co-firing and that Biomass Fuels not deemed eligible will not be allowed at the premises of the certified Generation Unit. And please check the following box to certify that this statement is true.

← check this box to certify that the above statement is true

N/A or other (please explain) \_\_\_\_\_

- F.6 If the proposed fuel includes recycled wood waste, please submit documentation that such fuel meets the definition of Eligible Biomass Fuel and also meets material separation, storage, or handling standards acceptable to the Commission and furthermore consistent with the RES Regulations.

Documentation attached?  Yes  No  N/A

Comments: \_\_\_\_\_

- F.7 Please certify that you will file all reports and other information necessary to enable the Commission to verify the on-going eligibility of the renewable energy generators pursuant to Section 6.3 of the RES Regulations. Specifically, RES Regulations Section 6.3(i) states that Renewable Energy Resources of the type that combust fuel to generate electricity must file quarterly reports due 60 days after the end of each quarter on the fuel stream used during the quarter. Instructions and filing documents for the quarterly reports can be found on the Commissions website or can be furnished upon request.

← check this box to certify that the above statement is true

N/A or other (please explain) \_\_\_\_\_

- F.8 Please attach a copy of the Generation Unit's Valid Air Permit or equivalent authorization.

Valid Air Permit or equivalent attached?  Yes  No  N/A

Comments: \_\_\_\_\_

- F.9 Effective date of Valid Air Permit or equivalent authorization:

07/26/10

- F.10 State or jurisdiction issuing Valid Air Permit or equivalent authorization:

New Hampshire

## APPENDIX F

### FUEL SOURCE PLAN

#### Burgess BioPower

#### Specifications for Biomass Fuel

I. **Criteria.** "Biomass Fuel" shall conform to the following specifications:

Source: Biomass Fuel may include whole tree chips or chipped slabs and edgings from sawmills produced using rotary chipper with knives and any of the following materials: untreated, plant-derived material including brush, stumps, lumber ends and trimmings, wood pallets, wood chips or pellets, and slash. On a daily basis, up to 20% of deliveries to the Facility may include clean wood grindings produced using either a horizontal, tub or hammermill machine.

All Biomass Fuel will comply with quality standards defined in the Rhode Island RES Regulations Section 3.7 as "Eligible Biomass Fuel" which means fuel sources including brush, stumps, lumber ends and trimmings, wood pallets, bark, wood chips, shavings, slash, yard trimmings, site clearing waste, wood packaging, and other clean wood that is not mixed with other unsorted solid wastes; agricultural waste, food and vegetative material; energy crops; landfill methane or biogas, provided that such gas is collected and conveyed directly to the Generation Unit without use of facilities used as common carriers of natural gas; or neat bio-diesel and other neat liquid fuels that are derived from such fuel sources.

Purchaser and Supplier agree that bark shall be the subject of a separate pricing discussion after Purchaser has determined the energy content and handling characteristics of this potentially suitable Biomass Fuel.

Specified Particle Size: Individual pieces of material shall measure a maximum of three inches (3") on any side and a minimum at least one eighth inch (1/8") any side.

Moisture Content: Biomass Fuel shall be a maximum average of forty-five (45%) percent green weight basis over a delivery pay period as tested by Purchaser: in all cases will be as naturally occurring in the wood.

II. **Exclusion Criteria.** "Biomass Fuel" shall not include the following:

Contaminants: The fuel shall not contain any paints, surface treatments~ glues, or other adhesives, plastic laminates, preservatives including but not limited to creosote, pentachlorophenol (penta) or chromated copper arsenate (CCA), or hazardous materials. The term hazardous materials shall mean asbestos, polychlorinated byphenyls (PCBs), petroleum products and any pollutant contaminants, chemical or industrial, toxic, or hazardous substances or wastes, as these terms are defined by federal, state, or local laws, rules, regulations, ordinances, codes, policies or rules of common law now or hereinafter in effect, and any judicial or administrative interpretation.

Limits on Oversize Material: Oversize material shall not exceed 2-1 /2 cubic yards per truck load. Fines (Wood fuel passing 1/4" screen) shall not exceed ten (10%) percent by weight. The presence of excessive unchipped twigs and intertwined sticks, or wood blocks/logs which disrupt Purchaser's fuel handling system is unacceptable regardless of volume.

Noncombustibles including rocks, metal, ice, etc. are unacceptable.

## BIOMASS PROCUREMENT POLICY

### Procurement Standards and Practices.

1. Supplier's procurement personnel shall include a Licensed Forester(s). Supplier's procurement personnel will be responsible for assuring that all wood suppliers, including Supplier, adhere to Purchaser's Biomass Procurement Policy outlined herein, and that its standards are followed. Purchaser shall monitor and enforce Supplier's procurement practices to ensure compliance with this policy.
2. Supplier will not buy wood from suppliers who have been found to be repeat offenders of State or federal law governing timber harvesting, or from foresters that have been disciplined by a Board of Licensure and have had their license revoked.
3. Supplier will incorporate into its Procurement Plan practices that minimize the need to purchase wood during times of the year when timber harvesting may be inappropriate due to wet soils (primarily spring and fall mud seasons). Supplier procurement personnel will conduct periodic inspections of sites being harvested during these sensitive times of year to ensure that material is being harvested according to sound harvesting and erosion control best management practices.
4. Supplier will incorporate into its Procurement Plan a program that will incentivize suppliers who can demonstrate that they have obtained fuel from sources operating under one or more of the programs listed in #6 (below).
5. Supplier will offer long-term contracts which will provide stability to suppliers and encourage long-term forest stewardship. Any supplier that signs a long-term contract with Supplier will be required to adhere to Supplier's Procurement Plan and the Purchaser Biomass Procurement Policy herein.
6. Supplier will incorporate into its Procurement Plan a provision requiring that preference be given to suppliers who can demonstrate that their fuel was sourced under one or more of the following programs or sites:
  - a. Sustainable Forestry Initiative [www.sfiprogram.org](http://www.sfiprogram.org)
  - b. Forest Stewardship Council - [www.fsc.org](http://www.fsc.org);
  - c. American Tree Farm System - [www.treefarmssystem.org](http://www.treefarmssystem.org);
  - d. Green Tag Forestry - [www.greentag.org](http://www.greentag.org).
  - e. Master Logger - [www.masterloggercertification.com](http://www.masterloggercertification.com)
  - f. Any recognized trained logger education program such as the Maine Certified Logger Program, Vermont's Logger Education to Advance Professionalism and the New Hampshire Professional Logger Program.
  - g. Timber harvests that have been conducted under the guidance of a licensed professional forester and/or accordance with a management plan approved by a licensed professional forester.
  - h. Timber harvests that have been conducted consistently with practices specified in: "Good Forestry in the Granite State: Recommended Voluntary Forest Management Practices for New Hampshire", by The New Hampshire Forest Sustainability Standards Work Team, 1997.

- i. Any future programs which are consistent with these programs.
  - j. Timber harvested from State or federal lands.
7. Purchaser with the administrative assistance of the Supplier will establish a fund to provide scholarships to students attending Society of American Foresters accredited forestry schools and, or, programs designed to educate individuals interested in pursuing a career in forestry. The fund shall be named the Purchaser Forestry Scholarship Fund, and will award up to \$5,000 annually to one of more qualified applicants residing in New Hampshire, provided that a preference shall be accorded applicants residing in Coos County. This fund shall be administered and disbursed by the Northeast Loggers Association.
8. Both Purchaser and the Supplier will incorporate into its Procurement Plan a program that encourages supplying contractors to become New Hampshire Professional Loggers or Master Loggers or maintain such qualifications. Purchaser will establish an annual fund to provide financial assistance to suppliers seeking such certifications. The fund shall be called the Purchaser Professional Logger Fund ("LPLF"). Purchaser shall place \$2,500.00 into the LPLF annually. All money placed in the LPLF shall be provided to suppliers seeking such certifications. Supplier will work with Purchaser to administer this program.
9. Supplier will keep records on-site of all deliveries for two (2) years following each delivery. The records shall identify the supplier, the quantity of delivery, the date of delivery, delivery period, accounting period, Town and State of production at which the products covered by the production batch have been produced, and the time period over which the products covered by the production batch have been produced, sold or transferred. Such records are subject to audit by Purchaser.

### **Reporting and Verification**

For each supplier and source combination, an ultimate fuel composition analysis should be on file. This test should be performed at least semi-annually.

It is suggested that each fuel delivery is recorded to include the supplier name and address, the fuel source, amount of fuel (mass basis), description of the composition and physical characteristics and a statement of visual inspection to determine the integrity of the fuel.

Random sampling of deliveries may also be a part of the quality control regime, at least weekly for each supplier. Three fuel samples taken from the core of each third of the shipment is recommended. These samples can be mixed and used to generate a single mixed sample for testing. Weekly random samples may be stored in air tight containers and marked to match the delivery record. It should be clear to suppliers that the facility will be selecting representative samples each month for testing and that the PUC may request a third party to select and test samples from the monthly sample pool at any time during the contract. Weekly Random Samples should be held for a month.

Supplier will conduct quarterly surveys seeking the following information. No later than two months following the close of the calendar year Purchaser and/or Supplier will publish the results of such survey covering:

1. Volume of biomass supplied from certified timberlands/operations.
2. Volume of biomass supplied from timber sales managed by a licensed forester.
3. Volume of biomass supplied by Master or New Hampshire Professional loggers or other state logger certification programs.

4. Number of loggers that enrolled in certification programs as a result of Purchaser's support fund.

**Test Methods for Biomass Power Generation**

The following test method is the widely accepted standard for fuel composition analysis. Advance approval will be sought for use of any alternative testing methods.

Measurement	Test Method	Frequency
Fuel Composition	ASTM Standard E870-82(1998)e1 Standard Test Methods for ANALYSIS of Wood Fuels	Once for each combination of Supplier and Source on a semiannual basis and weekly random sampling for quality control

**Education and Outreach**

Purchaser and the Supplier will work with the New Hampshire Timberland Owners Association, the University of New Hampshire Cooperative Extension Service, and the Society for Protection of New Hampshire Forests to sponsor the establishment of the following:

1. A data base of educational materials pertaining to good forestry practices that will be available to supplying landowners, foresters and loggers.
2. The creation of an intern program for students to learn about biomass production from Northeast forests.
3. Educational programs to promote good forestry stewardship.
4. Tours of timberlands that have been harvested and supplied biomass to the project.

Purchaser and/or Supplier will maintain a dedicated web site that posts the annual reports along with the aforementioned educational information.

# RENEWABLE ENERGY RESOURCE ELIGIBILITY FORM

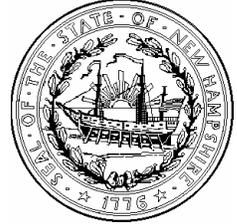
STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

Appendix F-8

**BURGESS BIOPower**

**Copy of New Hampshire's Temporary Air Permit**

**Permit No.: TP-0054**



# Temporary Permit Prevention of Significant Deterioration (PSD) And Non-Attainment New Source Review (NSR) Permit

**Permit No:** TP-0054  
**Date Issued:** July 26, 2010  
**Date Reissued:** November 18, 2011 & November 30, 2012

This certifies that:

**Berlin Station, LLC**  
**One Cate Street**  
**Portsmouth, NH 03801**

has been granted a Temporary Permit, PSD Permit, and NSR Permit for a:

**70 Megawatt Biomass-fired Electric Generating Facility**

at the following facility and location:

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

Facility ID No: **3300790137**  
Application No: **09-0285** received December 16, 2009 - Initial Temporary, PSD, and NSR Permit  
Application No: **11-0151** received October 28, 2011 - Request to change ownership and reissue  
Temporary Permit  
Application No: **12-0175** received October 2, 2012 - Request to reissue Temporary Permit

which includes devices that emit air pollutants into the ambient air as set forth in the permit application referenced above which was filed with the New Hampshire Department of Environmental Services, Air Resources Division (Division) in accordance with RSA 125-C of the New Hampshire Laws. Request for permit reissuance is due to the Division at least 90 days prior to expiration of this permit and must be accompanied by the appropriate permit application forms.

This permit is valid upon issuance and expires on **January 31, 2014**.

A handwritten signature in blue ink, followed by a blue circular stamp containing the word "COPY".

Acting Director  
Air Resources Division

**TABLE OF CONTENTS**

I.	Facility Description .....	4
II.	Permitted Activities.....	5
III.	Significant Activities Identification .....	6
IV.	Stack Criteria.....	6
V.	Pollution Control Equipment/Method Identification .....	7
VI.	Operating and Emission Limitations.....	7
VII.	Monitoring and Testing Requirements.....	13
VIII.	Recordkeeping Requirements .....	23
IX.	Reporting Requirements.....	27
X.	Temporary Permit Reissuance Procedures.....	32
XI.	Timely Application .....	32
XII.	Permit Expiration .....	32
XIII.	Application Shield.....	32
XIV.	Permit Amendments.....	33
XV.	Temporary/NSR/PSD Permit Suspension, Revocation or Nullification.....	34
XVI.	Permit Deviation Recordkeeping and Reporting Requirements .....	34
XVII.	Inspection and Entry.....	36
XVIII.	Reports .....	36
XIX.	Emission-Based Fee Requirements.....	36
XX.	Emission Offset Requirements.....	37

<b>Abbreviations and Acronyms</b>			
AAL	Ambient Air Limit	lb	pound
acf	actual cubic foot	MACT	Maximum Achievable Control Technology
ags	above ground surface	MM	million
ASTM	American Society of Testing and Materials	MW	megawatt
BACT	Best Available Control Technology	NAAQS	National Ambient Air Quality Standard
Btu	British thermal units	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAA	Clean Air Act	NG	Natural Gas
CAM	Compliance Assurance Monitoring	NHDES	New Hampshire Department of Environmental Services
CEMS	Continuous Emission Monitoring System	NO <sub>x</sub>	Oxides of Nitrogen
COMS	Continuous Opacity Monitoring System	NSPS	New Source Performance Standard
cfm	cubic feet per minute	NSR	New Source Review
CFR	Code of Federal Regulations	PM <sub>10</sub>	Particulate Matter < 10 microns
CO	Carbon Monoxide	PM <sub>2.5</sub>	Particulate Matter < 2.5 microns
DER	Discrete Emission Reduction	ppm	parts per million
dscf	dry standard cubic feet	PSD	Prevention of Significant Deterioration
dscm	dry standard cubic meters	psi	pounds per square inch
Env-A	New Hampshire Code of Administrative Rules – Air Resources Division	PTE	Potential to Emit
ERC	Emission Reduction Credit	RACT	Reasonably Available Control Technology
EG	Emergency Generator	RSA	New Hampshire Revised Statutes Annotated
ft	foot or feet	RTAP	Regulated Toxic Air Pollutant
ft <sup>3</sup>	cubic feet	scf	standard cubic foot
gal	gallon	SIP	State Implementation Plan
HAP	Hazardous Air Pollutant	SO <sub>2</sub>	Sulfur Dioxide
HCL	Hydrochloric Acid	SSMP	Startup, Shutdown, and Malfunction Plan
Hp	horsepower	TSP	Total Suspended Particulate
hr	hour	tpy	tons per consecutive 12-month period
kW	kilowatt	USEPA	United States Environmental Protection Agency
LAER	Lowest Achievable Emission Rate	VOC	Volatile Organic Compound

## I. Facility Description

Burgess BioPower (Burgess) is proposing to convert and upgrade the existing facility equipment and infrastructure located at the former Fraser Pulp Mill in Berlin, New Hampshire in order to develop a biomass-fueled, energy generating facility. This project is considered new construction, not a modification or reconstruction of the former Fraser Pulp Mill. Burgess (the Facility) will use whole tree wood chips and other low-grade clean wood as fuel, and will be capable of generating nominally 70 megawatts (MW) of electric power (gross output).

The primary emission unit will be a bubbling fluidized bed boiler rated at 1,013 million British thermal units per hour (MMBtu/hr), which is capable of generating up to 600,000 pounds per hour of steam at 825°F and 850 psig. The proposed facility also includes a new wet cooling tower, two wood fuel off-loading and storage areas and a 323 hp diesel fire pump.

Burgess will be a major stationary source of nitrogen oxides (NO<sub>x</sub>) emissions, with potential NO<sub>x</sub> emissions greater than 100 tons per year. NO<sub>x</sub> is a precursor of ozone, and Coos County is designated as being in attainment for ozone; however, Coos County is within the New Hampshire portion of the Northeast Ozone Transport Region. Therefore, the proposed facility will be subject to state non-attainment New Source Review (NSR) (Env-A 618) for ozone, which requires the implementation of the Lowest Achievable Emission Rate (LAER) and offsets for its NO<sub>x</sub> emissions.

As a major stationary source located in an attainment area, Burgess will also be subject to the applicable Prevention of Significant Deterioration (PSD) of air quality permit requirements for criteria pollutants other than NO<sub>x</sub>. The Division has implemented the PSD Program permitting requirements (Env-A 619) to determine if a new major stationary source will cause or contribute to significant deterioration of air quality in the state. The PSD requirements include the completion of an air dispersion modeling analysis to demonstrate that the Project will not cause or contribute to an exceedance of the National Ambient Air Quality Standards (NAAQS), and that the maximum increases in pollutant concentrations over the existing baseline do not exceed the allowable PSD increments. The PSD program requires the implementation of Best Available Control Technology (BACT) for each regulated pollutant with potential emissions above the significance thresholds. The PSD pollutants for this facility are particulate matter (including Total Suspended Particulate (TSP), Particulate Matter less than 10 microns (PM<sub>10</sub>), and Particulate Matter less than 2.5 microns (PM<sub>2.5</sub>)), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>), and beryllium.

The PSD program also requires additional impact analyses including:

1. Analysis of impacts on soils and vegetation, local visibility and commercial/residential/industrial growth and construction associated with the source; and
2. Analysis of impacts on Class I areas (the Great Gulf Wilderness Area approximately 18 kilometers to the south, and the Presidential Range Dry River Wilderness Area approximately 26 kilometers to the south).

Burgess must also comply with the applicable subparts of the federal New Source Performance Standards (NSPS). Burgess will be a major source of hazardous air pollutant (HAP) emissions and, therefore, will require application of Maximum Available Control Technology (MACT) for HAPs pursuant to the federal National Emission Standards for Hazardous Air Pollutants (NESHAPS).

Table 1 below shows the major source applicability determination for the NSR and PSD programs for the proposed facility:

**Table 1 – PSD and NSR Applicability**

<b>Pollutant</b>	<b>Projected Project Emissions (tpy)</b>	<b>PSD Major Source Threshold (tpy)</b>	<b>PSD Significance Threshold (tpy)</b>	<b>NSR Major Source Threshold (tpy)</b>	<b>Triggers NSR/PSD?</b>
PM/PM <sub>10</sub> /PM <sub>2.5</sub> <sup>1</sup>	43.3/42.7/42.3	250	25/15/10 <sup>2</sup>	N/A	<b>PSD</b>
SO <sub>2</sub>	48.7	250	40	N/A	<b>PSD</b>
NO <sub>x</sub>	245	250	40 <sup>3</sup>	100	<b>NSR/PSD</b>
CO	308	250	100	N/A	<b>PSD</b>
VOCs	41.1	N/A	N/A	50	No <sup>4</sup>
H <sub>2</sub> SO <sub>4</sub>	8.1		7		<b>PSD</b>
Lead	0.2		0.6		No
Beryllium	0.0045		0.0004		<b>PSD</b>
Mercury	0.012		0.1		No
Vinyl Chloride	0.08		1		No

## II. Permitted Activities

The Owner or Operator is authorized to construct and operate a 70 MW biomass power plant comprised of the devices identified in Table 2, pollution control equipment identified in Table 4, and all associated ancillary equipment within the terms and conditions of this Permit.

---

<sup>1</sup> All references to “particulate matter” throughout this permit mean filterable portion only, unless otherwise specified.  
<sup>2</sup> The PSD major significance threshold for PM<sub>2.5</sub> is 10 tpy of direct PM<sub>2.5</sub> emissions; 40 tpy of SO<sub>2</sub> emissions; or 40 tpy of NO<sub>x</sub> emissions unless demonstrated not to be a PM<sub>2.5</sub> precursor under paragraph (b)(50) of 40 CFR 52.21.  
<sup>3</sup> The PSD pollutant is NO<sub>2</sub>  
<sup>4</sup> While the proposed VOC increase is above the 40 tpy significant modification threshold, Burgess is a minor source of VOCs under the NSR program (VOC emissions are less than 50 tpy) and, therefore, does not trigger NSR for this project.

### III. Significant Activities Identification

The activities identified in Table 2 are subject to and regulated by this Permit:

<b>Table 2 - Significant Activity Identification</b>			
Emission Unit ID	Device	Manufacturer, Model, Serial Number	Maximum Design Gross Heat Input Capacity and Permitted Fuel Type(s) <sup>5</sup>
EU01	Boiler #1	Babcock and Wilcox Model # Custom, N/A One Primary Combustion Chamber - Bubbling Fluidized Bed Four Startup Burners - Air atomized distillate oil Serial # TBD	<u>Primary Combustion Chamber</u> 1,013 MMBtu/hr – Clean wood chips Approximately equivalent to 113 ton/hr <u>Four Startup Burners (each)</u> 60 MMBtu/hr – No. 2 fuel oil Approximately equivalent to 430 gal/hr
EU02	4-Cell Wet Cooling Tower	SPX Cooling Technologies Model #: F499-4.0-4 Serial #: TBD	Nominal circulation rate = 60,000 gal/minute
EU03	Fire Pump Engine	Cummins Model # CFP9E-F30 or equivalent Serial # TBD	2.27 MMBtu/hr – Diesel fuel oil Approximately equivalent to 16.2 gal/hr

### IV. Stack Criteria

The following devices at the Facility shall have exhaust stacks that discharge vertically, without obstruction, and meet the criteria in Table 3 below:

<b>Table 3 - Stack Criteria</b>				
Stack ID	Emission Unit ID	Emission Unit Description	Minimum Stack Height Above Ground Level (ft)	Maximum Inside Stack Diameter (ft)
ST01	EU01	Boiler	320	11.25
ST02	EU02	Cooling Tower	48 (each cell)	31.6 (each cell)
ST03	EU03	Fire Pump Engine	25	0.5

<sup>5</sup> The hourly fuel rates presented in Table 2 are calculated assuming a heat content of 4,500 Btu/lb for wood at 50% moisture and 140,000 Btu/gal for No.2 and diesel fuel oil.

**V. Pollution Control Equipment/Method Identification**

With the exception of PCE03, sorbent injection, air pollution control equipment listed in Table 4 shall be operated at all times that the associated devices are operating in order to meet permit conditions. Sorbent injection is only required as necessary to meet SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> emission limitations.

<b>Table 4 - Pollution Control Equipment Identification</b>			
<b>Pollution Control Equipment ID</b>	<b>Description</b>	<b>Purpose</b>	<b>Emission Unit Controlled</b>
PCE01	Baghouse	Control of particulate matter emissions	EU01
PCE02	Selective Catalytic Reduction (SCR) System (cold side) with ammonia injection	Control of NO <sub>x</sub> emissions	EU01
PCE03	Sorbent Injection (as needed)	Control of SO <sub>2</sub> emissions	EU01
PCE04	Drift Eliminators	Control of particulate matter emissions	EU02

**VI. Operating and Emission Limitations**

The Owner or Operator shall be subject to the operating and emission limitations identified in Table 5:

<b>Table 5 - Operating and Emission Limitations</b>			
<b>Item #</b>	<b>Requirement</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1	<u>Emission Standard for NO<sub>x</sub></u> NO <sub>x</sub> emissions shall be limited to 0.060 lb/MMBtu of heat input based on a 30-day rolling average <sup>6</sup> .	EU01	Env-A 618 (LAER) Env-A 619 (BACT) <sup>7</sup>  <i>More Stringent than</i> Env-A 1211.03

<sup>6</sup> Compliance with NO<sub>x</sub>, CO, and ammonia slip emission standards will be determined using CEMS. Compliance with other emission standards (PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, Beryllium, HCl, H<sub>2</sub>SO<sub>4</sub>, Mercury, and cooling tower drift (PM)) shall be determined using stack testing. The averaging time for pollutants for which compliance is determined using stack testing shall be determined by the approved test method.

<sup>7</sup> The emission limitation of 0.060 lb/MMBtu established through LAER review for NO<sub>x</sub> also satisfies the BACT limit for NO<sub>2</sub>.

**Table 5 - Operating and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
2	<u>Emission Standard for PM</u> <sup>8</sup> PM, PM <sub>10</sub> , PM <sub>2.5</sub> emissions shall each be limited to 0.010 lb/MMBtu of heat input.	EU01	Env-A 619 (BACT) & 40 CFR 63 Subpart B (Case-by-Case MACT)  <i>More Stringent than</i> 40 CFR 60.43b(h)(1) & Env-A 2002.08
3	<u>Emission Standard for CO</u> CO emissions shall be limited to 0.075 lb/MMBtu of heat input based on a calendar day average.	EU01	Env-A 619 (BACT) & 40 CFR 63 Subpart B (Case-by-Case MACT)
4	<u>Emission Standard for SO<sub>2</sub></u> SO <sub>2</sub> emissions shall be limited to 0.012 lb/MMBtu of heat input.	EU01	Env-A 619 (BACT)
5	<u>Emission Standard for H<sub>2</sub>SO<sub>4</sub></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 (BACT)
6	<u>Emission Standard for Beryllium</u> Beryllium emissions shall be limited to 0.0000011 lb/MMBtu of heat input.	EU01	Env-A 619 (BACT)
7	<u>Emission Standard for Hydrogen Chloride</u> HCl emissions shall be limited to 0.000834 lb/MMBtu of heat input.	EU01	40 CFR 63 Subpart B (Case-by-Case MACT)
8	<u>Emission Standard for Mercury</u> Mercury emissions shall be limited to 0.000003 lb/MMBtu of heat input.	EU01	40 CFR 63 Subpart B (Case-by-Case MACT)
9	<u>Emission Standard for Ammonia Slip</u> Ammonia slip emissions shall be limited to 10 ppmvd @ 6% oxygen (O <sub>2</sub> ) dry volume based on a calendar day average.	EU01/ PCE02	Env-A 1400
10	<u>Operating Mode Limitation</u> <sup>9</sup> The boiler shall be operated in normal mode at all times, except during periods of startup or shutdown. Normal mode shall be defined as operating at a heat input capacity of 654 MMBtu/hr or greater (~70% of its average maximum heat input capacity of 932 MMBtu/hr).	EU01	Env-A 618 & Env-A 619

<sup>8</sup> See footnote 1.

<sup>9</sup> Emission standards in Table 5 Items 1 through 9 apply during normal operation only. They do not apply during startup or shutdown. Startup and shutdown emission standards are addressed in Table 5 Item 11.

**Table 5 - Operating and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
11	<p><u>Emission Standards for Startup &amp; Shutdown</u> NO<sub>x</sub> and CO emissions shall be limited to 244.5 tpy and 307.3 tpy, respectively. This emission standard shall apply at all times, which includes normal operation, startup and shutdown.</p> <p>These emission standards shall remain in effect until startup &amp; shutdown specific limits are established and incorporated into this permit pursuant to Table 6 Item 21.</p>	EU01	Env-A 618 & Env-A 619
12	<p><u>Fuel Oil Annual Capacity Factor</u> The boiler shall operate at an annual capacity factor for fuel oil of 5 percent or less.</p>	EU01	Env-A 4602.42  <i>More stringent than</i> 40 CFR 60.44b(1)(1)
13	<p><u>Fuel Oil Startup Limitation</u> Fuel oil shall only be burned in the boiler during startup.</p>	EU01	Env-A 619
14	<p><u>Facility-wide annual Emission Standard for NO<sub>x</sub></u> Emissions of NO<sub>x</sub> from the facility shall be limited to 245 tpy.</p>	Facility-wide	Env-A 618
15	<p><u>Emission Standard for Particulate Drift</u> Emissions of PM from the cooling tower shall be limited to 0.0005% by weight of the cooling water flow rate.</p>	EU02	Env-A 619
16	<p><u>Maximum Sulfur Content in Fuel Oil</u> The sulfur content of No. 2 fuel oil or diesel fuel oil burned in the boiler and fire pump shall not exceed 0.0015 percent sulfur by weight.</p>	EU01 & EU03	Env-A 619 & 40 CFR 60.4207 (NSPS Subpart IIII)  <i>More stringent than</i> Env-A 1604.01(a)
17	<p><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.<sup>10</sup></p>	EU01	Env-A 619  <i>More stringent than</i> 40 CFR 60.43b(f) (NSPS Subpart Db) & Env-A 2002.02

<sup>10</sup> Compliance with the visible emission standard for EU01 shall be determined using a COMS.

**Table 5 - Operating and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
18	<p><u>Activities Exempt from Visible Emission Standards</u> No more than one of the following two exemptions shall be taken at a time:</p> <p>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</p> <p>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.</p>	EU01	Env-A 2002.04(a)
19	<p><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>11</sup></p>	EU03	Env-A 2002.02
20	<p><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 (Table 5 Item 19) for one period of 6 continuous minutes in any 60-minute period during startup, shutdown, or malfunction.</p>	EU03	Env-A 2002.04(c)
21	<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>	EU03	Env-A 2002.08
22	<p><u>Fire Pump Operation</u> The 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; or</p> <p>c. During periods in which ISO New England (ISO-NE) declares the implementation of Action 12 of ISO-NE Operating Procedure 4, <i>Action During a Capacity Deficiency</i>.</p>	EU03	Env-A 101.661
23	<p><u>Fire Pump Operation</u> Fire pump operation shall be limited to:</p> <ol style="list-style-type: none"> <li>1. 100 hours for maintenance and readiness checks during any consecutive 12-month period; and</li> <li>2. 500 hours total during any consecutive 12-month period.</li> </ol>	EU03	<p>Env-A 618 Env-A 619 40 CFR 60.4211(e) (NSPS Subpart IIII)</p> <p><i>More stringent than Env-A 1211.01(j)(1)</i></p>

<sup>11</sup> Compliance with the visible emission standard for EU03 shall be determined using 40 CFR 60, Appendix A, Method 9, upon request by the Division.

**Table 5 - Operating and Emission Limitations**

Item #	Requirement	Applicable Unit	Regulatory Basis
24	<p><u>Pollution Control Equipment Operation</u> Operate all pollution control equipment in accordance with the Pollution Control Equipment Operating Plan required in Table 6 Item 20.</p>	PCE01	Env-A 604.01
25	<p><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>. Compliance was demonstrated at the time of permit issuance as described in the Division’s Preliminary Determination for application #09-0285. 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>a. There is a revision to the list of RTAPs lowering the AAL 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 cooling water treatment chemical will increase);</li> <li>c. An RTAP that was not evaluated in the Preliminary Determination will be emitted (e.g., a new cooling water treatment chemical will be used); or</li> <li>d. Stack conditions (e.g. air flow rate) change.</li> </ol>	Facility-wide	Env-A 1400
26	<p><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.</p>	Facility-wide	Env-A 1404.02

Table 5 - Operating and Emission Limitations			
Item #	Requirement	Applicable Unit	Regulatory Basis
27	<p><u>Relaxation of PSD Opt-Out Requirements</u> At such time that a particular source or modification becomes a major PSD source or major modification solely by virtue of a relaxation in any enforceable limitation on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of 40 CFR 52.21 (j) through (s) shall apply to the source or modification as though construction had not yet commenced on the source or modification.</p>	Facility-wide	40 CFR 52.21(r)(4)
28	<p><u>Accidental Release Program Requirements</u> The quantities of regulated chemicals<sup>12</sup> 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> <ol style="list-style-type: none"> <li>Identify potential hazards which result from such releases using appropriate hazard assessment techniques;</li> <li>Design and maintain a safe facility;</li> <li>Take steps necessary to prevent releases; and</li> <li>Minimize the consequences of accidental releases that do occur.</li> </ol>	Facility-wide	CAAA 112(r)(1)
29	<p><u>Title V Permit Application</u> Submit an application for a Title V Permit to Operate to the Division within 12 months of commencing operation.<sup>13</sup></p>	Facility-wide	Env-A 609.07(a)(2)
30	<p><u>Acid Rain Permit Application</u> Submit to the Division at least 12 months prior to commencing operation:</p> <ol style="list-style-type: none"> <li>An application for an Acid Rain Permit; and,</li> <li>an application for amendment to this permit, if necessary to incorporate Acid Rain requirements.</li> </ol>	EU01	40 CFR 72.30(b)(2)(ii) (Acid Rain)

<sup>12</sup> Burgess will use 19% aqueous ammonia solution in the SCR system. Section 112(r) applies only if the concentration of ammonia is 20% or greater.

<sup>13</sup> Commencing operation shall be same as "initial startup" as defined in the document *Instruction Manual for Clarification of Startup in Source Categories Affected by New Source Performance Standards* (EPA-68-01-4143), where "initial startup" is the first time steam is produced by the boiler and used to produce heat or hot water, to run process equipment, or to produce electricity, defined as the first time that the facility transmits electricity onto the grid for sale.

**VII. Monitoring and Testing Requirements**

The Owner or Operator shall be subject to the monitoring and testing requirements as contained in Table 6:

<b>Table 6 - Monitoring and 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	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	Particulate Matter & Opacity	Conduct stack testing for: a. PM, PM <sub>10</sub> , PM <sub>2.5</sub> and opacity to determine compliance with the PM and opacity emission limits in Table 5 Items 2 and 17; and b. Condensable PM to confirm emission rates evaluated during review of application 09-0285	Within 60 days after achieving the maximum production rate and not later than 180 days after initial startup <sup>14</sup>	EU01	40 CFR 60.46b(d) NSPS Subpart Db & 40 CFR 60.8 Subpart A
3	SO <sub>2</sub> , H <sub>2</sub> SO <sub>4</sub> , Beryllium, HCl, Mercury & VOCs	Conduct stack testing for: a. SO <sub>2</sub> , H <sub>2</sub> SO <sub>4</sub> , beryllium, HCl, and mercury to determine compliance with the emission limitations in Table 5 Items 4 through 8; and b. VOCs to confirm emission rates evaluated during review of application 09-0285.	Within 60 days after achieving the maximum production rate and not later than 180 days after initial startup	EU01	RSA 125-C:6, XI & 40 CFR 63 Subpart B (Case-by-Case MACT)
4	PM	Conduct stack testing for PM to determine compliance with the emission limits in Table 5 Item 15.	Within 60 days after achieving the maximum production rate and not later than 180 days after initial startup	EU02	RSA 125-C:6, XI

<sup>14</sup> As defined in the document *Instruction Manual for Clarification of Startup in Source Categories Affected by New Source Performance Standards* (EPA-68-01-4143), "initial startup" is the first time steam is produced by the boiler and used to produce heat or hot water, to run process equipment, or to produce electricity.

**Table 6 - Monitoring and Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
5	General Stack Testing Requirements	<p>Compliance testing shall be planned and carried out in accordance with the following schedule:</p> <p>a. A pre-test protocol shall be submitted to the Division at least 30 days prior to the commencement of testing. The pre-test protocol shall contain the information specified in Env-A 802.04;</p> <p>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, the Owner or Operator shall notify the Division and USEPA at least 7 days prior to the originally scheduled test;</p> <p>c. The Owner or Operator and any contractor retained by the Owner or Operator to conduct the test shall meet with a Division representative at least 15 days prior to the test date to finalize the details of the testing;</p> <p>d. A 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); and</p>	Initial performance test and subsequent testing	Facility-wide	Env-A 802.40 CFR 60.8 & 40 CFR 63 Subpart B (Case-by-Case MACT)
		<p>e. The Owner or Operator shall be subject to fees for any initial performance testing and monitoring required by this permit which is observed by the Division and for its review of any subsequent compliance test reports.</p>	Initial performance tests		Env-A 704.02
6	General Stack Testing Requirements	<p><u>Operating Conditions During a Stack Test</u></p> <p>Compliance testing shall be conducted under one of the following operating conditions:</p> <p>a. Between 90 and 100 percent, inclusive, of maximum production rate or rated capacity;</p> <p>b. A production rate at which maximum emissions occur; or</p> <p>c. At such operating conditions agreed upon during a pre-test meeting conducted pursuant to Env-A 802.05.</p>	Initial performance test and subsequent testing	Facility-wide	Env-A 802.10 40 CFR 60.8 & 40 CFR 63 Subpart B (Case-by-Case MACT)

**Table 6 - Monitoring and Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
7	NO <sub>x</sub> , CO, and diluent gas CEMS	<p><u><i>NO<sub>x</sub>, CO, and diluent gas Continuous Emission Monitoring System</i></u>                      Install, calibrate, operate, and maintain CEMS for NO<sub>x</sub>, CO, and diluent gas (oxygen or carbon dioxide), which shall be used to determine compliance with NO<sub>x</sub>, CO, and emission limits established in Table 5 Items 1, 3, and 11, in accordance with the following:</p> <ul style="list-style-type: none"> <li>a. Install, calibrate, operate, and maintain each CEMS according to 40 CFR 60 Appendix B, and the CEMS &amp; COMS Monitoring Plan developed in accordance with Table 6 Item 12;</li> <li>d. Operate the CEMS in accordance with the SSMP during periods of startup, shutdown, and malfunction;</li> <li>e. Conduct a performance evaluation for each CEMS in accordance with the requirements of 40 CFR 63.8 and 40 CFR 60 Appendix B</li> <li>f. Each CEMS must complete a minimum of one cycle of operation (sampling, analysis and data recording) for each successive 15-minute period; and</li> <li>g. Reduce the CEMS data in accordance with 40 CFR 63.8(g)(2).</li> </ul>	Continuous	EU01	40 CFR 63 Subpart B (Case-by-Case MACT) 40 CFR 60.8 & Env-A 808
8	Ammonia slip	<p><u><i>Ammonia Continuous Emission Monitoring System</i></u>                      Install, calibrate, operate, and maintain CEMS for ammonia which shall be used to determine compliance with ammonia slip emission limitation in Table 5 Item 9, in accordance with the following:</p> <ul style="list-style-type: none"> <li>a. Install, calibrate, operate, and maintain the CEMS according the CEMS &amp; COMS Monitoring Plan developed in accordance with Table 6 Item 12;</li> <li>d. Operate the CEMS in accordance with the SSMP during periods of startup, shutdown, and malfunction;</li> <li>e. Conduct a performance evaluation for the CEMS in accordance with the requirements of Env-A 808.08.</li> </ul>	Continuous	EU01/ PCE02	Env-A 808

**Table 6 - Monitoring and Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
9	Opacity COMS	<p><u>Continuous Opacity Monitoring System</u> Install, calibrate, maintain, and operate a COMS, which shall be used to demonstrate compliance with the opacity limitation in Table 5 Item 17, in accordance with the following:</p> <ul style="list-style-type: none"> <li>a. Install, operate, and maintain the COMS according to of 40 CFR 60, Appendix B PS1 and the CEMS &amp; COMS Monitoring Plan developed in accordance with Table 6 Item 12;</li> <li>c. Operate the COMS in accordance with the SSMP during periods of startup, shutdown, and malfunction;</li> <li>d. Conduct a performance evaluation of each COMS according to the requirements of 40 CFR 63.8 and 40 CFR 60, Appendix B PS1;</li> <li>e. Each COMS must complete 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; and</li> <li>f. Reduce COMS data as specified in 40 CFR 63.8(g)(2).</li> </ul>	Continuously	EU01	40 CFR 60.48b(a) Appendix B & 40 CFR 63 Subpart B (Case-by-Case MACT)
10	Minimum Specifications for CEMS and COMS	<p>The Owner or Operator shall ensure that each CEMS and COMS meets the following operating requirements:</p> <ul style="list-style-type: none"> <li>a. Each COMS shall average the opacity data to result in consecutive, non-overlapping 6-minute averages;</li> <li>b. Each CEMS average and record the data for each calendar hour;</li> <li>c. All CEMS and COMS 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 measurement, 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 means a minimum of 42 minutes of CEMS readings taken in any calendar hour, during which the CEMS is not in an out of control period and the facility is in operation.</li> </ul>	N/A	EU01	Env-A 808.03

**Table 6 - Monitoring and Testing Requirements**

<b>Item #</b>	<b>Parameter</b>	<b>Method of Compliance</b>	<b>Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
11	Stack Volumetric Flow	<p>a. Install, calibrate, and maintain a stack volumetric flow measuring device according to the following requirements:</p> <ol style="list-style-type: none"> <li>1. All differential pressure flow monitors shall have an automatic blow-back purge system installed, and in wet stack conditions, shall have the capability of drainage of the sensing lines; and</li> <li>2. 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> <p>b. Alternatives to in-stack flow monitoring devices for determination of stack volumetric flow rate may be used if the Owner or Operator provides the Division with technical justification that the alternative can meet the same requirements for data availability, data accuracy, and quality assurance as an in-stack device.</p>	Continuously	EU01	Env-A 808.03(d)

**Table 6 - Monitoring and Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
12	CEMS & COMS Monitoring Plan	<p>Prepare and submit to the Division a CEMS and COMS Monitoring Plan which includes the following:</p> <ul style="list-style-type: none"> <li>a. A complete description of the emission monitoring system including, but not limited to:                             <ul style="list-style-type: none"> <li>1. The identity of the CEM system vendor, including the company name, address, and telephone number;</li> <li>2. The identity of the manufacturer, model number, measurement method employed, and range of each of the major components or analyzers being used;</li> <li>3. A description of the sample gas conditioning system;</li> <li>4. A description and diagram showing the location of the monitoring system, including sampling probes, sample lines, conditioning system, analyzers, and data acquisition system; and</li> <li>5. A description of the data acquisition system, including sampling frequency, and data averaging methods;</li> </ul> </li> <li>b. The mathematical equations used by the data acquisition system, including the value and derivation of any constants, to calculate the emissions in terms of the applicable emission standards;</li> <li>c. An example of the data reporting format;</li> <li>d. A description of the instrument calibration methods, including the frequency of calibration checks and manual calibrations, and path of the sample gas through the system;</li> <li>e. The means used by the data acquisition system of determining and reporting periods of excess emissions, monitor downtime, and out-of-control periods; and</li> <li>f. A description of the means used to provide for short-term and long-term emissions data storage.</li> </ul>	Submit <sup>15</sup> to the Division at least 90 days prior to installation of any CEMS	EU01	Env-A 808.04

---

<sup>15</sup> Unless otherwise specified, all due dates listed in the permit mean that the required submittal must be received at the Division by the deadline.

**Table 6 - Monitoring and Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
13	CEM Performance Specification Testing	<p>Conduct performance specification testing for a CEM system in accordance with the following:</p> <ul style="list-style-type: none"> <li>a. The performance specification requirements of 40 CFR 60, Appendix B or Division-approved requirements for units not covered by Appendix B (e.g., ammonia CEM) for each CEMS and COMS;</li> <li>b. For each COMS, the calibration error test specified in 40 CFR 60, Appendix B, Performance Specification 1, paragraph 7.1.4, shall be performed with the monitor installed on the stack or duct that is to be the permanent location for the monitor;</li> <li>c. All performance specification testing shall be conducted within 180 days of the CEMS or COMS initial startup;</li> <li>d. The Division shall be notified of the date or dates of the performance specification testing at least 30 days prior to the scheduled dates; and</li> <li>e. A written report summarizing the results of the testing shall be submitted to the Division within 30 days of the completion of the test.</li> </ul>	As specified	EU01	Env-A 808.05
14	CEMS & COMS QA/QC Plan	<p>Prepare and maintain a Quality Assurance/Quality Control (QA/QC) plan which covers each CEMS and COMS at the facility in accordance with the following:</p> <ul style="list-style-type: none"> <li>a. Review the QA/QC plan and all data generated by its implementation at least once each year;</li> <li>b. 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. Documenting any changes made to the CEM or changes to any information provided in the monitoring plan;</li> <li>2. 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>3. Describing how the audits and testing required by Env-A 808 will be performed; and</li> <li>4. Including examples of the reports that will be used to document the audits and tests required by Env-A 808.</li> </ul> </li> </ul>	<p style="text-align: center;"><u>Initial</u> Submit to the Division within 30 days of completion of the CEMS/COMS Performance Specification testing required in Table 6 Item 13</p> <p style="text-align: center;"><u>Annual</u> Submit results of annual review within 30 days of the annual review</p>	EU01	Env-A 808.06

**Table 6 - Monitoring and Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
15	General Audit Requirements for all CEM Systems	<p>Audit each CEMS in accordance with the following:</p> <ol style="list-style-type: none"> <li>a. Required quarterly CEMS audits shall be performed anytime during each calendar quarter, but successive quarterly audits shall occur no more than 4 months apart;</li> <li>b. Notify the Division at least 30 days prior to the performance of a Relative Accuracy Test Audit (RATA);</li> <li>c. Provide at least 2 weeks' notice prior to any other planned audit or test procedure;</li> <li>d. Submit to the Division a written summary report of the results of all required audits that were performed in that quarter within 30 calendar days following the end of each quarter, in accordance with the following:               <ol style="list-style-type: none"> <li>1. For gaseous CEMS audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1, section 7, or Division approved alternatives for units not covered by Appendix F (e.g., ammonia); and</li> <li>2. For COMS 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> </li> </ol>	Quarterly	EU01	Env-A 808.07
16	CEMS Audit Requirements	Perform audits for CEMS in accordance with procedures described in 40 CFR 60, Appendix F or Division approved alternatives for units not covered by Appendix F (e.g., ammonia), and Env-A 808.08.	Quarterly	EU01	Env-A 808.08
17	COMS Audit Requirements	Perform audits for COMS in accordance with procedures described in Env-A 808.09 and 40 CFR 60, Appendix B, Specification 1.	Quarterly	EU01	Env-A 808.09
18	CEMS & COMS Data Availability Requirements	<ol style="list-style-type: none"> <li>a. Each CEMS shall operate at all times during the operation of the source, except for periods of CEMS breakdown, repairs, calibration checks, preventive maintenance, and zero/span adjustments;</li> <li>b. The percentage CEMS and COMS data availability shall be maintained at a minimum of 90% on a calendar quarter basis; and</li> <li>c. The percentage CEMS and COMS data availability shall be maintained at a minimum of 75% for any calendar month.</li> </ol>	N/A	EU01	Env-A 808.10

**Table 6 - Monitoring and Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
19	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 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;</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 or Env-A 808.09, as applicable, require that the CEM be taken out of service in order to conduct the audit.</p>	As specified	EU01	Env-A 808.10

**Table 6 - Monitoring and Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
20	Pollution Control Equipment Operating Plan	<p>Develop and submit to the Division for review and approval a Pollution Control Equipment Operating Plan which contains the following elements, at a minimum for each control device:</p> <ol style="list-style-type: none"> <li>a. Type, manufacturer, model, and serial number;</li> <li>b. Pollutants controlled;</li> <li>c. Description of the control device and how it operates in the process;</li> <li>d. The capture efficiency, control efficiency, and their method of determination;</li> <li>e. The operational parameters that are monitored (e.g., temperature, pressure drop, flowrate etc.);</li> <li>f. For each operational parameter in e. above, the range indicative of proper operation of the control device during normal operation, startup, and shutdown;</li> <li>g. For catalytic control devices:               <ol style="list-style-type: none"> <li>1. Method and frequency of catalyst activity monitoring; and</li> <li>2. The frequency of catalyst replacement.</li> </ol> </li> <li>h. The methods and frequency of operational parameter data monitoring and recordkeeping;</li> <li>i. Operational parameter setpoints and alarms;</li> <li>j. Planned and actual operator responses to malfunctions of the device;</li> <li>k. Procedures for operation of the device;</li> <li>l. Frequency and type of scheduled maintenance and calibration; and</li> <li>m. Data sufficient to demonstrate the actual performance of the device that will be periodically submitted to the Division in the Pollution Control Equipment Operation Report required in Table 8 Item 14.</li> </ol>	Submit to the Division at least 90 days prior to operation of any control device	PCE01 – PCE04	RSA 125-C:6, XI & 40 CFR 63 Subpart B (Case-by-Case MACT)
21	Startup/Shutdown Malfunction Plan	<p>Develop and submit to the Division for review and approval a Startup/Shutdown Malfunction Plan which contains the following elements, at a minimum:</p> <ol style="list-style-type: none"> <li>a. Procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction;</li> <li>b. A program of corrective actions for malfunctioning processes, air pollution control equipment, and monitoring equipment; and</li> <li>c. NO<sub>x</sub> and CO emission limitations for startup and shutdown of the biomass boiler (EU01).</li> </ol>	Submit to the Division within 12 months of commencing operation	EU01, EU02 & PCE01-PCE04	Env-A 618 Env-A 619 & 40 CFR 63 Subpart B (Case-by-Case MACT)

**Table 6 - Monitoring and Testing Requirements**

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
22	Hours of Operation	The fire pump shall be equipped with a non-resettable hour meter.	Continuous	EU03	40 CFR 60.4209(a) (Subpart III)
23	Sulfur Content of Liquid Fuels	Conduct testing in accordance with appropriate ASTM test methods or retain delivery tickets in accordance with Table 7 Item 8 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

**VIII. Recordkeeping Requirements**

The Owner or Operator shall be subject to the recordkeeping requirements identified in Table 7:

**Table 7 - Recordkeeping Requirements**

Item #	Requirement	Duration/Frequency	Applicable Unit	Regulatory Basis
1	<u>Record Retention and Availability</u> Maintain all 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	Facility-wide	40 CFR 60.7 (f), 40 CFR 60.49b(o), Env-A 902.01(a) & Env-A 903.04
2	<u>NSPS Startup, Shutdown, Malfunction Records</u> Maintain records of the occurrence and duration of any: a. Startup, shutdown, or malfunction in the operation of the affected facility; b. Any malfunction of the air pollution control equipment; and c. Any periods during which a continuous monitoring system or monitoring device is inoperative.	Each occurrence	EU01	40 CFR 60.7 (b)
3	<u>General Recordkeeping Requirements for Combustion Devices</u> Maintain the following records of fuel characteristics and utilization for the fuel used in the each combustion device: a. Type (e.g. wood chips, No. 2 fuel oil) and amount of fuel burned; and b. Hours of operation.	Daily, Monthly, & 12-month rolling	EU01 & EU03	Env-A 903.03 & 40 CFR 60.49b(d)
4	<u>Fuel Annual Capacity Factors</u> Maintain records of the annual capacity factor individually for fuel oil and wood.	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)

**Table 7 - Recordkeeping Requirements**

Item #	Requirement	Duration/ Frequency	Applicable Unit	Regulatory Basis
6	<p><u>Fire Pump</u> Maintain the following records of fuel characteristics and utilization for the fuel used in the each combustion device:</p> <ul style="list-style-type: none"> <li>a. Type (e.g. diesel fuel oil) and amount of fuel burned; and</li> <li>b. Hours of operation for maintenance &amp; readiness testing; and</li> <li>c. Hours of operation for emergency use.</li> </ul>	Monthly	EU03	Env-A 903.03 & 40 CFR 60.4211(e) NSPS Subpart III
7	<p><u>NSPS 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>	Maintain up-to-date data	EU03	40 CFR 60.4211 (Subpart III)
8	<p><u>Liquid Fuel Oil Recordkeeping Requirements</u> Maintain fuel delivery tickets that contain the following information:</p> <ul style="list-style-type: none"> <li>a. The date of delivery;</li> <li>b. The quantity of delivery;</li> <li>c. The name, address and telephone number of the company making the delivery; and</li> <li>d. The maximum weight percentage of sulfur or a written statement from the fuel supplier that the sulfur content of the fuel as delivered does not exceed standards listed in this permit for that fuel</li> </ul>	For each delivery of fuel oil to the facility	EU01 & EU03	Env-A 806.05
9	<p><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 maintain records of 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 (June 1 through August 31) 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.</li> </ul> </li> <li>c. The following VOC emission data from all VOC-emitting processes or devices identified in Table 7 Item 9.a above, including: <ul style="list-style-type: none"> <li>1. Actual VOC emissions for:</li> <li>2. The calendar year, in tons; and</li> <li>3. A typical high ozone season day during that calendar year, in pounds per day; and</li> </ul> </li> <li>d. The emission factors and the origin of the emission factors used to calculate the VOC emissions.</li> </ul>	Maintain up-to-date data	Facility-wide	Env-A 904.02

**Table 7 - Recordkeeping Requirements**

Item #	Requirement	Duration/ Frequency	Applicable Unit	Regulatory Basis
10	<p><u>General NOx Recordkeeping Requirements</u> Maintain records of 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 10.a, 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. Number of weeks of operation;</li> <li>4. Type and amount of each fuel burned;</li> <li>5. Heat input rate in MMBtu/hr;</li> <li>6. Actual NOx emissions for the calendar year and a typical high ozone day during that calendar year; and</li> <li>7. Emission factors and the origin of the emission factors used to calculate the NOx emissions.</li> </ol> </li> </ol>	Maintain up-to-date data	EU01 & EU03	Env-A 905.02
11	<p><u>Recordkeeping Requirements for Add-On NOx Control Equipment</u> Maintain records of the following information:</p> <ol 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:                             <ol 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> </ol> </li> <li>g. Method of determining destruction or removal efficiency, if not tested.</li> </ol>	Maintain up-to-date data	PCE02	Env-A 905.03
12	<p><u>Pollution Control Equipment Operating Plan</u> Maintain the following:</p> <ol style="list-style-type: none"> <li>a. The Pollution Control Equipment Operating Plan required in Table 6 Item 20; and</li> <li>b. Records of all data required to be recorded in accordance with the Pollution Control Equipment Operating Plan.</li> </ol>	Maintain up-to-date plan	PCE01- PCE04	Env-A 906
		As specified in the plan		
13	<p><u>Startup/Shutdown Malfunction Plan</u> Maintain records of the following:</p> <ol style="list-style-type: none"> <li>a. The Startup/Shutdown Malfunction Plan required in Table 6 Item 21; and</li> </ol>	Maintain up-to-date plan	EU01, EU02 & PCE01- PCE04	Env-A 906

**Table 7 - Recordkeeping Requirements**

Item #	Requirement	Duration/ Frequency	Applicable Unit	Regulatory Basis
	b. Records of all data required to be recorded in accordance with the Startup/Shutdown Malfunction Plan.	As specified in the plan		
14	<u><i>CEMS &amp; COMS Monitoring and QA/QC Plan</i></u> Maintain the CEMS & COMS Monitoring and QA/QC Plan as required in Table 6 Items 12 and 14, including all data required to be recorded in accordance with the plan.	Maintain up-to-date plans	Facility-wide	Env-A 808
15	<u><i>Regulated Toxic Air Pollutants</i></u> Maintain records documenting compliance with Env-A 1400.	Maintain up-to-date data	Facility-wide	Env-A 902.01
16	<u><i>Permit Deviation Recordkeeping Requirements</i></u> Record permit deviations in accordance with Condition XVI.	As noted in Condition XVI	Facility-wide	Env-A 911.03

**IX. Reporting Requirements**

The Owner or Operator shall be subject to the reporting requirements identified in Table 8 below. 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*.

<b>Table 8 - Reporting Requirements</b>				
<b>Item #</b>	<b>Requirement</b>	<b>Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>
1	<p><u><i>Annual Emissions Report</i></u> Submit an annual emissions report which shall include the following information:</p> <ul 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>, TSP, PM10, and VOCs, HAPs (speciated by individual HAP), and RTAPs (speciated by individual RTAP);</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>; and</li> <li>c. All monthly and 12-month rolling information recorded in accordance with Table 7 Items 3 and 6.</li> </ul>	Annually (received by the Division no later than April 15th of the following year)	EU01, EU02 & EU03	Env-A 907.01
2	<p><u><i>NSPS and MACT Notification Requirements</i></u> Submit notification of the initial startup, which shall include:</p> <ul style="list-style-type: none"> <li>a. The date construction is commenced, postmarked no later than 30 days after such date;</li> <li>b. The actual date of initial startup postmarked within 15 days of such date, which shall also include the following information: <ul style="list-style-type: none"> <li>1. The design heat input capacity of the boiler;</li> <li>2. Identification of fuels to be combusted in the boiler;</li> <li>3. A copy of the federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels; and</li> <li>4. The annual capacity factor at which the Owner or Operator anticipates operating the facility based on all fuels combined and each individual fuel.</li> </ul> </li> <li>c. Notification of the date upon which demonstration of the continuous monitoring systems performance commences in accordance with 40 CFR 60.13(c), postmarked not less than 30 days prior to such date.</li> </ul>	As specified	EU01	40 CFR 60.7(a) & 40 CFR 60.49b(a) & 40 CFR 63 Subpart B (Case-by-Case MACT)

**Table 8 - Reporting Requirements**

Item #	Requirement	Frequency	Applicable Unit	Regulatory Basis
3	<p><u>Opacity Compliance Determination During Performance Tests</u> If applicable, submit a notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 CFR 60.8 instead of Method 9 observation data for the Boiler.</p>	Postmarked not less than 30 days prior to the date of the performance test	EU01	40 CFR 60.11(e)(5)
4	<p><u>VOC Emission Statements 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 following information with the annual emission report:</p> <ol style="list-style-type: none"> <li>a. Facility information, including: <ol style="list-style-type: none"> <li>1. Source name;</li> <li>2. Standard Industrial Classification (SIC) code;</li> <li>3. North American Industrial Classification System (NAICS) code;</li> <li>4. Physical and mailing addresses; and</li> </ol> </li> <li>b. A breakdown of VOC emissions reported pursuant to Table 8 Item 1 by month; and</li> <li>c. All data recorded pursuant to Table 7 Item 9.</li> </ol>	Annually (received by the Division no later than April 15th of the following year)	EU01 & EU03	Env-A 908.03
5	<p><u>NO<sub>x</sub> Emission Statements Reporting 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 include the following information with the annual emission report:</p> <ol style="list-style-type: none"> <li>a. A breakdown of NO<sub>x</sub> emissions reported pursuant to Table 8 Item 1 by month; and</li> <li>b. All data recorded in accordance with Table 7 Item 10.</li> </ol>	Annually (received by the Division no later than April 15th of the following year)	EU01 & EU03	Env-A 909.03
6	<p><u>NSPS Performance Test Results for PM</u> The Owner or Operator shall submit the PM emissions test data from the initial performance test and from the performance evaluation of the COMS using the applicable performance specifications in 40 CFR 60 Appendix B to EPA and the Division.</p>	Within 60 days of completing the performance tests	EU01	40 CFR 60.49b(b) & 40 CFR 60.8(a)
7	<p><u>NSPS Semi-annual Excess Emissions Reports for Opacity</u> Submit excess emissions reports 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>	Postmarked within 30 days of the end of the 6-month reporting period	EU01	40 CFR 60.49b(h) & (w)

**Table 8 - Reporting Requirements**

Item #	Requirement	Frequency	Applicable Unit	Regulatory Basis
8	<p><u>Quarterly Emission Reports</u></p> <p>The Owner or Operator shall submit to the Division quarterly reports containing the following information:</p> <ol style="list-style-type: none"> <li>a. The information specified in 40 CFR 60.7(c);</li> <li>b. Excess emission data recorded by the CEM system, including the following:               <ol style="list-style-type: none"> <li>1. The date and time of the beginning and ending of each of excess emissions;</li> <li>2. The magnitude of each excess emission;</li> <li>3. The specific cause of the excess emission; and</li> <li>4. The corrective action taken;</li> </ol> </li> <li>c. If no excess emissions have occurred, a statement to that effect;</li> <li>d. For gaseous emission monitoring systems, the daily averages of the measurements made and emissions 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 not operating;</li> <li>3. The corrective action taken; and</li> <li>4. The percent data availability calculated in accordance with Env-A 808.10 for each flow, diluent, or pollutant analyzer in the CEM system;</li> </ol> </li> <li>g. For all “out of control periods” as defined in Env-A 808.01(g) and 40 CFR 60, Appendix F, the following information:               <ol style="list-style-type: none"> <li>1. The times beginning and ending 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> </li> <li>h. The date and time beginning and ending each period when the source of emissions which the CEM system is monitoring was not operating;</li> <li>i. When calibration gas is used, the following information:               <ol style="list-style-type: none"> <li>1. 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> </li> </ol>	Within 30 calendar days after the end of the calendar quarter	EU01	Env-A 808.11, Env-A 808.12

**Table 8 - Reporting Requirements**

Item #	Requirement	Frequency	Applicable Unit	Regulatory Basis
9	<p><u>Option to Use Electronic Reporting for NSPS Subpart Db</u> The Owner or Operator of an affected facility may submit electronic quarterly reports for opacity in lieu of submitting the written reports required under 40 CFR 60.49b(h) (i.e., Table 8 Item 7 above). The format of each quarterly electronic report shall be coordinated with the Division. The electronic report(s) shall be accompanied by a certification statement from the Owner or Operator, indicating whether compliance with the applicable emission standards and minimum data requirements specified in this permit was achieved during the reporting period.</p>	Within 30 days of the end of the calendar quarter	EU01	40 CFR 60.49b(v)
10	<p><u>Annual Compliance Certification</u> Submit an annual compliance certification to the Division and USEPA which includes the following information for each and every requirement and condition of the facilities effective permit(s):</p> <ol style="list-style-type: none"> <li>a. The particular permit condition or item number that references each requirement, and a brief summary of the requirement;</li> <li>b. The compliance status with respect to the requirement and whether during the year compliance with the requirement was continuous, intermittent, not achieved, or not applicable;</li> <li>c. The method(s) used to determine compliance, such as monitoring, record keeping, or test methods;</li> <li>d. The frequency, either continuous or intermittent, of the method(s) used to determine compliance;</li> <li>e. If compliance was not continuous, a description of each permit deviation; and</li> <li>f. Any additional information required in order for the Division to determine the compliance status of the source.</li> </ol>	No later than April 15 of the year following the calendar year covered by the report	Facility-wide	Env-A 907.04(a)
11	<p><u>Semi-annual Permit Deviation and Monitoring Report</u> Submit a semi-annual permit deviation and monitoring report, which contains:</p> <ol style="list-style-type: none"> <li>a. Summaries of the pertinent data that demonstrate the source's compliance status with all monitoring and testing requirements contained in this permit;</li> <li>b. Evidence that the required data is being recorded and maintained; and</li> <li>c. A summary of all permit deviations recorded pursuant to Condition XVI of this Permit that occurred during the reporting period.</li> </ol>	Semi-annually by July 31st and January 31st of each calendar year.	Facility-wide	Env-A 907.04(b) & Env-A 911.05

**Table 8 - Reporting Requirements**

Item #	Requirement	Frequency	Applicable Unit	Regulatory Basis
12	<u>CEMS &amp; COMS Monitoring and QA/QC Plan Updates</u> Submit either a: a. Written certification that the Owner or Operator will continue to implement the existing QA/QC plan; or b. Written description of any changes to the plan, including the reason for the changes.	Annually	EU01	Env-A 808.06(a)(6)
13	<u>Pollution Control Equipment Operating Plan Updates</u> Submit either a: a. Written certification that the Owner or Operator will continue to implement the existing Pollution Control Equipment Operating Plan; or b. Written description of any changes to the plan, including the reason for the changes.	Annually	EU01, EU02 & PCE01-PCE04	Env-A 910
14	<u>Pollution Control Equipment Operation Report</u> Submit a report of data required to be reported by the Pollution Control Equipment Operating Plan in accordance with Table 6 Item 20.m.	Annually	EU01, EU02 & PCE01-PCE04	Env-A 910
15	<u>Startup/Shutdown Malfunction Plan Updates</u> Submit either a: a. Written certification that the Owner or Operator will continue to implement the existing Startup/Shutdown Malfunction Plan; or b. Written description of any changes to the plan, including the reason for the changes.	Annually	EU01, EU02 & PCE01-PCE04	Env-A 618 Env-A 619 & 40 CFR 63 Subpart B (Case-by-Case MACT)
16	<u>Permit Deviation Reporting Requirements</u> Report permit deviations in accordance with Condition XVI.	As noted in Condition XVI	Facility-wide	Env-A 911.04
17	<u>Emission Based Fees</u> Pay emission-based fees in accordance with Condition XIX.	Annually (received by the Division no later than April 15th of the following year)	EU01, EU02 & EU03	Env-A 700

## **General Temporary/NSR/PSD Permit Conditions**

### **X. Temporary Permit Reissuance Procedures**

Pursuant to Env-A 607.02(b), for the reissuance of a temporary permit, an application shall be considered timely if it is received by the Division at least 90 days prior to the designated expiration date of the temporary permit.

### **XI. Timely Application**

Pursuant to Env-A 609.07(a)(2), for an initial Title V Operating Permit, an application shall be considered timely if it is received at the Division within 12 months of commencing operation.

### **XII. Permit Expiration**

Pursuant to Env-A 607.08(c), the expiration of a temporary permit shall terminate the Owner or Operator's right to construct or operate a new or modified source or device pursuant to the permit, unless a timely and complete application for a state permit to operate, title V operating permit, or an amendment thereto, has been received by the Division. Upon the submittal of a timely and complete application for any of the foregoing permits, the right to construct shall continue, under the terms and conditions of the expired temporary permit, pending the Division's decision on the application.

### **XIII. Application Shield**

- A. Pursuant to Env-A 607.10(a), if an applicant submits a timely application that has been deemed complete by the Division for the reissuance of a temporary permit or the issuance of an initial state permit to operate, the failure to have a current and valid temporary permit shall not be considered a violation of RSA 125-C:11,I or Env-A 607.01 unless and until the Division takes final action on the application by denying the requested reissuance of a temporary permit or issuance of a state permit to operate.
- B. Pursuant to Env-A 607.10(b), if the Division deems an application complete, but requests additional information pursuant to Env-A 607.06(b), the protection granted in Env-A 607.10(a) shall cease to apply when the applicant fails to submit in writing such additional requested information by the deadline specified in the request.

#### XIV. Permit Amendments

A. Env-A 612.01, *Administrative Permit Amendments:*

1. An administrative permit amendment includes the following:
  - a. Corrects typographical errors;
  - b. Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - c. Requires more frequent monitoring or reporting; or
  - d. Allows for a change in ownership or operational control of a source provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the Division.
2. The Owner or Operator may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.

B. Env-A 612.03, *Minor Permit Amendments: Temporary Permits and State Permits to Operate:*

1. The Owner or Operator shall submit to the Division a request for a minor permit amendment for any proposed change to any of the conditions contained in this permit which will not result in an increase in the amount of a specific air pollutant currently emitted by the emission units listed in Condition III and will not result in the emission of any air pollutant not emitted by the emission unit.
2. The request for a minor permit amendment shall be in the form of a letter to the Division and shall include the following:
  - a. A description of the proposed change; and
  - b. A description of any new applicable requirements that will apply if the change occurs.
3. The Owner or Operator may implement the proposed change immediately upon filing a request for the minor permit amendment.

C. Env-A 612.04, *Significant Permit Amendments: Temporary Permits and State Permits to Operate:*

1. The Owner or Operator shall submit a written request for a permit amendment to the Division at least 90 days prior to the implementation of any proposed change to the physical structure or operation of the emission units covered by this permit which increases the amount of a specific air pollutant currently emitted by such emission unit or which results in the emission of any regulated air pollutant currently not emitted by such emission unit.
2. A request for a significant permit amendment shall include the following:
  - a. A complete application form, as described in Env-A 1703 through Env-A 1708, as applicable;
  - b. A description of:
    - i. The proposed change;
    - ii. The emissions resulting from the change; and
    - iii. Any new applicable requirements that will apply if the change occurs; and
    - iv. Where air pollution dispersion modeling is required for a device pursuant to Env-A 606.02, the information required pursuant to Env-A 606.03.
3. The Owner or Operator shall not implement the proposed change until the Division issues the amended permit.

**XV. Temporary/NSR/PSD Permit Suspension, Revocation or Nullification**

- A. Pursuant to RSA 125-C:13, the NHDES Commissioner may suspend or revoke any final permit issued hereunder if, following a hearing, the Commissioner 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 Commissioner 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.

**XVI. Permit Deviation Recordkeeping and Reporting Requirements**

- A. The Owner or Operator shall be subject to the permit deviation recordkeeping and reporting requirements in Table 9 below, where permit deviation and excess emission are defined as follows:

Env-A 101, *Definitions*:

1. A *permit deviation* is any occurrence that results in an excursion from any emission limitation, operating condition, or work practice standard as specified in either a Title V permit, state permit to operate, temporary permit or general state permit issued by the Division.
2. An *excess emission* is an air emission rate that exceeds any applicable emission limitation.

**Table 9 - Permit Deviation Recordkeeping and Reporting Requirements**

Item #	Requirement	Frequency	Regulatory Basis
1	<p><u><i>Permit Deviation Recordkeeping</i></u>                      In the event of a permit deviation, the Owner or Operator shall:</p> <ol style="list-style-type: none"> <li>a.. 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</li> <li>b. Record the following information:                             <ol style="list-style-type: none"> <li>1. The permit deviation;</li> <li>2. The probable cause of the permit deviation;</li> <li>3. The date of the occurrence;</li> <li>4. The duration;</li> <li>5. The specific device that contributed to the permit deviation; and</li> <li>6. Any corrective or preventative measures taken.</li> </ol> </li> </ol>	Each permit deviation	Env-A 911.03

**Table 9 - Permit Deviation Recordkeeping and Reporting Requirements**

Item #	Requirement	Frequency	Regulatory Basis
2	<p><u>Permit Deviation Reporting – No Excess Emissions</u> If the permit deviation does not cause excess emissions, but continues for a period greater than nine consecutive days, notify the Division by e-mail (pdeviations@des.nh.gov), telephone (603-271-1370) or fax (603-271-1381), of the subsequent corrective actions to be taken.</p>	On the tenth day of the permit deviation, unless it is a Saturday, Sunday, or state or federal legal holiday, in which event, the Division shall be notified on the next day which is not a Saturday, Sunday, or state or federal legal holiday	Env-A 911.04
3	<p><u>Permit Deviation Reporting – Excess Emissions</u> In the event of a permit deviation that causes excess emissions:</p> <ol style="list-style-type: none"> <li>a. Notify the Division of the permit deviation and excess emissions by e-mail, telephone or fax,; and</li> <li>b. Submit a written report to the Division reported in Item a, above. The written report shall include the following information: <ol style="list-style-type: none"> <li>1. Facility name;</li> <li>2. Facility address;</li> <li>3. Name of the responsible official employed at the facility;</li> <li>4. Facility telephone number;</li> <li>5. Date(s) of the occurrence;</li> <li>6. Time of the occurrence;</li> <li>7. Description of the permit deviation;</li> <li>8. The probable cause of the permit deviation;</li> <li>9. Corrective action taken to date;</li> <li>10. Preventative measures taken to prevent future occurrences; and</li> <li>11. 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>12. The specific device, process or air pollution control equipment that contributed to the permit deviation;</li> <li>13. The type and quantity of excess emissions emitted to the atmosphere due to the permit deviation; and</li> <li>14. The calculation or estimation used to quantify the excess emissions.</li> </ol> </li> </ol>	<p style="text-align: center;"><i>Notification:</i> Within twenty-four (24) hours of discovery of the permit deviation, unless it is a Saturday, Sunday, or state or federal legal holiday, in which event, the Division shall be notified on the next day which is not a Saturday, Sunday, or state or federal legal holiday</p> <p style="text-align: center;"><i>Written Report:</i> Within ten (10) days of discovery of the permit deviation</p>	Env-A 911.04
4	<p><u>Data Availability Permit Deviations</u> In the event of a permit deviation caused by a failure to comply with the data availability requirements of Env-A 800:</p> <ol style="list-style-type: none"> <li>a. Notify the Division of the permit deviation by e-mail, telephone or fax,; and</li> <li>b. Report the permit deviation to the Division, as part of the emissions report required pursuant to Table 8 Item 8.</li> </ol>	<p style="text-align: center;"><i>Notification:</i> Within 10 days of discovery of the permit deviation</p> <p style="text-align: center;"><i>Written Report:</i> See Table 8 Item 8</p>	Env-A 911.04(c)

## XVII. Inspection and Entry

EPA and Division 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 NH Rules Governing the Control of Air Pollution and/or conditions of any permit issued pursuant to Env-A 600.

## XVIII. Reports

All reports submitted to the Division (except those submitted as emission-based fees as outlined in Section XIX 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: Administrator, 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 OEP05-2  
Boston, MA 02109-3912

## XIX. 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 emission units listed in Condition III.
- 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 emission units listed in Condition III for each calendar year in accordance with the methods specified in Env-A 616, *Determination of Actual Emissions*..
- 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 XIX.B.; and  
DPT = The dollar per ton fee the Division has specified in Env-A 705.03(e)<sup>16</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 by April 15th for emissions during the previous calendar year. For example, the fees for calendar year 2010 shall be submitted on or before April 15, 2011.

---

<sup>16</sup> For additional information on emission-based fees, visit the NHDES website at <http://des.nh.gov/ard/whatfees.htm>.

**XX. Emission Offset Requirements**

The Owner or Operator shall prior to commencing operation demonstrate that NO<sub>x</sub> offsets have been obtained in a ratio of 1.15 to 1.0. Such emission offsets shall be real, surplus, quantifiable, permanent and federally enforceable and shall be certified by the Division in accordance with all applicable state and federal regulations.