

DE12-091



April 6, 2012

Ms. Debra A. Howland
Executive Director and Secretary
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, New Hampshire 03301-2429



**Re: PUC 2505.02 Application Requirements
Berlin Station, LLC**

Dear Ms. Howland,

As per the requirements set forth in the New Hampshire Electric Renewable Portfolio Standard (PUC 2500), Burgess Biopower respectfully submits for your review this application by Berlin Station, LLC for the qualification of the Berlin Station Biomass Plant as a Class I Renewable Energy Source. Please find included in this application package, one (1) original and seven (7) copies of the "Sample Application Form for Renewable Energy Source Eligibility" as well as the relevant exhibits and appendices.

I would like to thank you in advance for your consideration of this application and please do not hesitate to contact me if you have any questions.

Sincerely,

Robert Desrosiers
Vice President

Enclosures

DISTRIBUTED

(2)

Berlin NH 3570
(City) (State) (Zip code)

9. Latitude: 44.2815 N Longitude: 71.1033 W

10. The name and telephone number of the facility's operator, if different from the owner: Same

(Name) (Telephone number)

11. The ISO-New England asset identification number, if applicable: Resource ID 16653 or N/A:

12. The GIS facility code, if applicable: Lead Part. ID 51176 or N/A:

13. A description of the facility, including fuel type, gross nameplate generation capacity, the initial commercial operation date, and the date it began operation, if different. *See Exhibit 1*

14. If Class I certification is sought for a generation facility that uses biomass, the applicant shall submit:
- (a) quarterly average NOx emission rates over the past rolling year,
 - (b) the most recent average particulate matter emission rates as required by the New Hampshire Department of Environmental Services (NHDES),
 - (c) a description of the pollution control equipment or proposed practices for compliance with such requirements, *See Exhibit 1*
 - (d) proof that a copy of the completed application has been filed with the NHDES, and *See Exhibit 2*
 - (e) conduct a stack test to verify compliance with the emission standard for particulate matter no later than 12 months prior to the end of the subject calendar quarter except as provided for in RSA 362-F:12, II.
 - (f) N/A: Class I certification is NOT being sought for a generation facility that uses biomass.

15. If Class I certification is sought for the incremental new production of electricity by a generation facility that uses biomass, methane or hydroelectric technologies to produce energy, the applicant shall:
- (a) demonstrate that it has made capital investments after January 1, 2006 with the successful purpose of improving the efficiency or increasing the output of renewable energy from the facility, and
 - (b) supply the historical generation baseline as defined in RSA 362-F:2, X.
 - (c) N/A: Class I certification is NOT being sought for the incremental new production of electricity by a generation facility that uses biomass, methane or hydroelectric technologies.

16. If Class I certification is sought for repowered Class III or Class IV sources, the applicant shall:
- (a) demonstrate that it has made new capital investments for the purpose of restoring unusable generation capacity or adding to the existing capacity, in light of the NHDES environmental permitting requirements or otherwise, and

- (b) provide documentation that eighty percent of its tax basis in the resulting plant and equipment of the eligible generation capacity, including the NHDES permitting requirements for new plants, but exclusive of any tax basis in real property and intangible assets, is derived from the new capital investments.
- (c) N/A: Class I certification is NOT being sought for repowered Class III or Class IV sources.
17. If Class I certification is sought for formerly nonrenewable energy electric generation facilities, the applicant shall:
- (a) demonstrate that it has made new capital investments for the purpose of repowering with eligible biomass technologies or methane gas and complies with the certification requirements of Puc 2505.04, if using biomass fuels, and
- (b) provide documentation that eighty percent of its tax basis in the resulting generation unit, including NHDES permitting requirements for new plants, but exclusive of any tax basis in real property and intangible assets, is derived from the new capital investments.
- (c) N/A: Class I certification is NOT being sought for formerly nonrenewable energy electric generation facilities.
18. If Class IV certification is sought for an existing small hydroelectric facility, the applicant shall submit proof that:
- (a) it has installed upstream and downstream diadromous fish passages that have been required and approved under the terms of its license or exemption from the Federal Energy Regulatory Commission, and
- (b) when required, has documented applicable state water quality certification pursuant to section 401 of the Clean Water Act for hydroelectric projects.
- (c) N/A: Class IV certification is NOT being sought for existing small hydroelectric facilities.
19. If the source is located in a control area adjacent to the New England control area, the applicant shall submit proof that the energy is delivered within the New England control area and such delivery is verified using the documentation required in Puc 2504.01(a)(2) a. to e.
20. All other necessary regulatory approvals, including any reviews, approvals or permits required by the NHDES or the environmental protection agency in the facility's state. *See Exhibit 3*
21. Proof that the applicant either has an approved interconnection study on file with the commission, is a party to a currently effective interconnection agreement, or is otherwise not required to undertake an interconnection study. *See Exhibit 4*
22. A description of how the generation facility is connected to the regional power pool of the local electric distribution utility. *See Exhibit A-2 of Exhibit 4 attached*
23. A statement as to whether the facility has been certified under another non-federal jurisdiction's renewable portfolio standard and proof thereof. *It has not.*
24. A statement as to whether the facility's output has been verified by ISO-New England. *It has not - project is in construction*

25. A description of how the facility's output is reported to the GIS if not verified by ISO-New England. *N/A*
26. An affidavit by the owner attesting to the accuracy of the contents of the application. *See Exhibit 5*
27. Such other information as the applicant wishes to provide to assist in classification of the generating facility.
28. This application and all future correspondence should be sent to:
Ms. Debra A. Howland
Executive Director and Secretary
State of New Hampshire
Public Utilities Commission
21 S. Fruit St, Suite 10
Concord, NH 03301-2429

29. Preparer's information:

Name: Robert Desrosiers

Title: VP Compliance

Address: (1) Cate Street Capital Inc.

(2) One Cate Street, Suite 100

(3) _____

Portsmouth

(City)

NH

(State)

03801

(Zip code)

30. Preparer's signature:

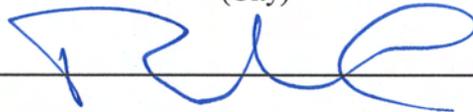


Exhibit 1

Project Description

Berlin Station, LLC is converting and upgrading 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. The facility will be a base loaded electric generating facility located in the City with a nominal gross electrical output of 75 MW. It will utilize only clean biomass as a fuel. Berlin Station will export generated power to Public Service Company of New Hampshire (PSNH) over a 115 kV transmission system. A switchyard will be installed adjacent to the turbine building, which will provide the necessary power isolation systems and a step up transformer to increase the voltage of the power produced by the steam turbine generator to 115kVA, consistent with the PSNH transmission line. From the switchyard, an underground transmission cable will be installed which will transition to an overhead line approximately 0.7 miles south of the site and 0.1 miles northwest of the existing PSNH east side substation. An overhead transmission line approximately 600 feet in length will be installed within the existing cleared corridor between Shelby (Devens) Street and the PSNH substation.

The project consists of a biomass boiler, a steam turbine and generator, pollution control equipment, a cooling tower, a 323 horsepower (hp) fire pump and raw material receiving, storage, and transfer equipment for the biomass boiler.

Construction began at the site on September 21, 2011 and will continue through to the projected commercial operation date of October 17, 2013.

Equipment Description

The biomass boiler is a bubbling fluidized bed (BFB) type boiler with open hopper bottoms for removal of fuel ash, bed sand material and other combustibles. Primary fuel for the facility will be wood fuel, including whole tree chips. An air distribution system consisting of fluidizing air and overfire air will be used to assure efficient fuel combustion. A flue gas recirculation system will be utilized to cool the bed when required. The boiler will be capable of generating up to 600,000 pounds per hour of steam at 825°F and 850 psig. The maximum heat input rate of the boiler will be 1,013 million British Thermal Units per hour (MMBtu/hr) assuming fuel with a moisture content of 50%. The boiler will also be equipped with four oil fired burners for use during startup only. Each oil burner will have a maximum heat input rate of 60 MMBtu/hr. These auxiliary burners will be fired with ultra-low sulfur diesel (ULSD). LBB has also proposed to install a 323 hp fire pump, which will be fired with ULSD. A 50,000 gallon storage tank will be used to store ULSD.

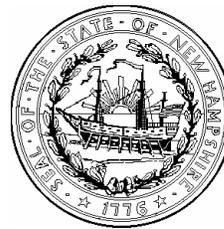
Air pollution control at the facility will include a dry sorbent injection system (as necessary) for the control of sulfur dioxide (SO₂), sulfuric acid mist and hydrochloric acid, a selective catalytic reduction (SCR) system for the control of nitrogen oxides (NO_x) and a fabric filter baghouse for the control of particulate matter (PM). LBB will also operate continuous emission monitors (CEMs) to continuously record NO_x, carbon monoxide (CO), ammonia slip, oxygen, opacity and certain operational parameters. Ammonia for the SCR system will be stored on-site in 19% aqueous solution in a storage tank equipped with secondary containment.

Exhibit 1

Ancillary equipment associated with the biomass boiler will include a 4-cell cooling tower and wood & ash handling systems. The exhaust system of the cooling tower will be equipped with mesh drift eliminators that will control entrained water droplets to less than 0.0005% of the recirculating water flow. Water for cooling and process operations will be provided by the Berlin Water Works municipal supply and distribution system.

Following is the ***State of New Hampshire Department of Environmental Services Air Resources Division, Temporary Permit - Prevention of Significant Deterioration (PSD) And Non-Attainment New Source Review (NSR) Permit***, Permit No: TP-0054 issued on July 26, 2010. This permit describes in detail the pollution control equipment and practices for compliance.

State of New Hampshire
Department of Environmental Services
Air Resources Division



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

Permit No: TP-0054
Date Issued: July 26, 2010

This certifies that:

**Laidlaw Berlin BioPower, LLC
90 John St., 4th Floor
New York, NY 10038**

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:

**Laidlaw Berlin BioPower, LLC
57 Hutchins Street
Berlin, NH**

Facility ID No: **3300790137**
Application No: **09-0285** received December 16, 2009 – Initial Temporary, PSD, and NSR 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, 2012**.


COPY

Director
Air Resources Division

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Laidlaw Berlin BioPower, LLC

Abbreviations and Acronyms			
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 _x	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 ₁₀	Particulate Matter < 10 microns
CO	Carbon Monoxide	PM _{2.5}	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 ³	cubic feet	scf	standard cubic foot
gal	gallon	SIP	State Implementation Plan
HAP	Hazardous Air Pollutant	SO ₂	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

Laidlaw Berlin BioPower, LLC (LBB) 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. LBB (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.

LBB will be a major stationary source of nitrogen oxides (NO_x) emissions, with potential NO_x emissions greater than 100 tons per year. NO_x 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_x emissions.

As a major stationary source located in an attainment area, LBB will also be subject to the applicable Prevention of Significant Deterioration (PSD) of air quality permit requirements for criteria pollutants other than NO_x. 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 (PM₁₀), and Particulate Matter less than 2.5 microns (PM_{2.5})), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfuric acid mist (H₂SO₄), 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).

LBB must also comply with the applicable subparts of the federal New Source Performance Standards (NSPS). LBB 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

Pollutant	Projected Project Emissions (tpy)	PSD Major Source Threshold (tpy)	PSD Significance Threshold (tpy)	NSR Major Source Threshold (tpy)	Triggers NSR/PSD?
PM/PM ₁₀ /PM _{2.5} ¹	43.3/42.7/42.3	250	25/15/10 ²	N/A	PSD
SO ₂	48.7	250	40	N/A	PSD
NO _x	245	250	40 ³	100	NSR/PSD
CO	308	250	100	N/A	PSD
VOCs	41.1	N/A	N/A	50	No ⁴
H ₂ SO ₄	8.1		7		PSD
Lead	0.2		0.6		No
Beryllium	0.0045		0.0004		PSD
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.

¹ All references to “particulate matter” throughout this permit mean filterable portion only, unless otherwise specified.

² The PSD major significance threshold for PM_{2.5} is 10 tpy of direct PM_{2.5} emissions; 40 tpy of SO₂ emissions; or 40 tpy of NO_x emissions unless demonstrated not to be a PM_{2.5} precursor under paragraph (b)(50) of 40 CFR 52.21.

³ The PSD pollutant is NO₂

⁴ While the proposed VOC increase is above the 40 tpy significant modification threshold, LBB 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:

Table 2 - Significant Activity Identification			
Emission Unit ID	Device	Manufacturer, Model, Serial Number	Maximum Design Gross Heat Input Capacity and Permitted Fuel Type(s) ⁵
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:

Table 3 - Stack Criteria				
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

⁵ 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 SO₂ and H₂SO₄ emission limitations.

Table 4 - Pollution Control Equipment Identification			
Pollution Control Equipment ID	Description	Purpose	Emission Unit Controlled
PCE01	Baghouse	Control of particulate matter emissions	EU01
PCE02	Selective Catalytic Reduction (SCR) System (cold side) with ammonia injection	Control of NO _x emissions	EU01
PCE03	Sorbent Injection (as needed)	Control of SO ₂ 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:

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

⁶ Compliance with NO_x, CO, and ammonia slip emission standards will be determined using CEMS. Compliance with other emission standards (PM, PM₁₀, PM_{2.5}, SO₂, Beryllium, HCl, H₂SO₄, 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.

⁷ The emission limitation of 0.060 lb/MMBtu established through LAER review for NO_x also satisfies the BACT limit for NO₂.

Table 5 - Operating and Emission Limitations

Item #	Requirement	Applicable Unit	Regulatory Basis
2	<u>Emission Standard for PM</u> ⁸ PM, PM ₁₀ , PM _{2.5} 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 SO₂</u> SO ₂ emissions shall be limited to 0.012 lb/MMBtu of heat input.	EU01	Env-A 619 (BACT)
5	<u>Emission Standard for H₂SO₄</u> H ₂ SO ₄ 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 ₂) dry volume based on a calendar day average.	EU01/ PCE02	Env-A 1400
10	<u>Operating Mode Limitation</u> ⁹ 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

⁸ See footnote 1.

⁹ 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.

Laidlaw Berlin BioPower, LLC

Table 5 - Operating and Emission Limitations

Item #	Requirement	Applicable Unit	Regulatory Basis
11	<p><u>Emission Standards for Startup & Shutdown</u> NO_x 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 & 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_x</u> Emissions of NO_x 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 III) <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.¹⁰</p>	EU01	Env-A 619 <i>More stringent than</i> 40 CFR 60.43b(f) (NSPS Subpart Db) & Env-A 2002.02

¹⁰ 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.¹¹</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> <p>1. 100 hours for maintenance and readiness checks during any consecutive 12-month period; and</p> <p>2. 500 hours total during any consecutive 12-month period.</p>	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>

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

Laidlaw Berlin BioPower, LLC

Table 5 - Operating and Emission Limitations

Item #	Requirement	Applicable Unit	Regulatory Basis
24	<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.	PCE01	Env-A 604.01
25	<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: <ol style="list-style-type: none"> There is a revision to the list of RTAPs lowering the AAL for any RTAP emitted from the Facility; 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); 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 Stack conditions (e.g. air flow rate) change. 	Facility-wide	Env-A 1400
26	<u>Revisions of the List of RTAPs</u> In accordance with RSA 125-I:5 IV, if the Division revises the list of RTAPs or their respective AALs or classifications under RSA 125-I:4, II and III, and as a result of such revision the Owner or Operator is required to obtain or modify the permit under the provisions of RSA 125-I or RSA 125-C, the Owner or Operator shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such permit or permit modification.	Facility-wide	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 chemicals¹² 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"> a. Identify potential hazards which result from such releases using appropriate hazard assessment techniques; b. Design and maintain a safe facility; c. Take steps necessary to prevent releases; and d. Minimize the consequences of accidental releases that do occur. 	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.¹³</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"> a. An application for an Acid Rain Permit; and, b. an application for amendment to this permit, if necessary to incorporate Acid Rain requirements. 	EU01	40 CFR 72.30(b)(2)(ii) (Acid Rain)

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

¹³ 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:

Table 6 - Monitoring and Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
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 ₁₀ , PM _{2.5} 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 ¹⁴	EU01	40 CFR 60.46b(d) NSPS Subpart Db & 40 CFR 60.8 Subpart A
3	SO ₂ , H ₂ SO ₄ , Beryllium, HCl, Mercury & VOCs	Conduct stack testing for: a. SO ₂ , H ₂ SO ₄ , 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

¹⁴ 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.

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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> <ul style="list-style-type: none"> 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; 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; 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; 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 	Initial performance test and subsequent testing	Facility-wide	Env-A 802.40 CFR 60.8 & 40 CFR 63 Subpart B (Case-by-Case MACT)
		<ul style="list-style-type: none"> 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. 	Initial performance tests		Env-A 704.02
6	General Stack Testing Requirements	<p><u>Operating Conditions During a Stack Test</u> Compliance testing shall be conducted under one of the following operating conditions:</p> <ul style="list-style-type: none"> a. Between 90 and 100 percent, inclusive, of maximum production rate or rated capacity; b. A production rate at which maximum emissions occur; or c. At such operating conditions agreed upon during a pre-test meeting conducted pursuant to Env-A 802.05. 	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)

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Table 6 - Monitoring and Testing Requirements

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
7	NO _x , CO, and diluent gas CEMS	<p><u>NO_x, CO, and diluent gas Continuous Emission Monitoring System</u> Install, calibrate, operate, and maintain CEMS for NO_x, CO, and diluent gas (oxygen or carbon dioxide), which shall be used to determine compliance with NO_x, 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"> a. Install, calibrate, operate, and maintain each CEMS according to 40 CFR 60 Appendix B, and the CEMS & COMS Monitoring Plan developed in accordance with Table 6 Item 12; d. Operate the CEMS in accordance with the SSMP during periods of startup, shutdown, and malfunction; e. Conduct a performance evaluation for each CEMS in accordance with the requirements of 40 CFR 63.8 and 40 CFR 60 Appendix B f. Each CEMS must complete a minimum of one cycle of operation (sampling, analysis and data recording) for each successive 15-minute period; and g. Reduce the CEMS data in accordance with 40 CFR 63.8(g)(2). 	Continuous	EU01	40 CFR 63 Subpart B (Case-by-Case MACT) 40 CFR 60.8 & Env-A 808
8	Ammonia slip	<p><u>Ammonia Continuous Emission Monitoring System</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"> a. Install, calibrate, operate, and maintain the CEMS according the CEMS & COMS Monitoring Plan developed in accordance with Table 6 Item 12; d. Operate the CEMS in accordance with the SSMP during periods of startup, shutdown, and malfunction; e. Conduct a performance evaluation for the CEMS in accordance with the requirements of Env-A 808.08. 	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"> a. Install, operate, and maintain the COMS according to of 40 CFR 60, Appendix B PS1 and the CEMS & COMS Monitoring Plan developed in accordance with Table 6 Item 12; c. Operate the COMS in accordance with the SSMP during periods of startup, shutdown, and malfunction; d. Conduct a performance evaluation of each COMS according to the requirements of 40 CFR 63.8 and 40 CFR 60, Appendix B PS1; 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 f. Reduce COMS data as specified in 40 CFR 63.8(g)(2). 	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"> a. Each COMS shall average the opacity data to result in consecutive, non-overlapping 6-minute averages; b. Each CEMS average and record the data for each calendar hour; 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 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. 	N/A	EU01	Env-A 808.03

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Table 6 - Monitoring and Testing Requirements

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
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"> 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 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. <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"> a. A complete description of the emission monitoring system including, but not limited to: <ul style="list-style-type: none"> 1. The identity of the CEM system vendor, including the company name, address, and telephone number; 2. The identity of the manufacturer, model number, measurement method employed, and range of each of the major components or analyzers being used; 3. A description of the sample gas conditioning system; 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 5. A description of the data acquisition system, including sampling frequency, and data averaging methods; 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; c. An example of the data reporting format; 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; 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 f. A description of the means used to provide for short-term and long-term emissions data storage. 	Submit ¹⁵ to the Division at least 90 days prior to installation of any CEMS	EU01	Env-A 808.04

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

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Table 6 - Monitoring and Testing Requirements

Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis
13	CEM Performance Specification Testing	Conduct performance specification testing for a CEM system in accordance with the following: <ol style="list-style-type: none"> 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; 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; c. All performance specification testing shall be conducted within 180 days of the CEMS or COMS initial startup; 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 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. 	As specified	EU01	Env-A 808.05
14	CEMS & COMS QA/QC Plan	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: <ol style="list-style-type: none"> a. Review the QA/QC plan and all data generated by its implementation at least once each year; b. Revise or update the QA/QC plan, as necessary, based on the results of the annual review, by: <ol style="list-style-type: none"> 1. Documenting any changes made to the CEM or changes to any information provided in the monitoring plan; 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; 3. Describing how the audits and testing required by Env-A 808 will be performed; and 4. Including examples of the reports that will be used to document the audits and tests required by Env-A 808. 	<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 <u>Annual</u> Submit results of annual review within 30 days of the annual review	EU01	Env-A 808.06

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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"> Required quarterly CEMS audits shall be performed anytime during each calendar quarter, but successive quarterly audits shall occur no more than 4 months apart; Notify the Division at least 30 days prior to the performance of a Relative Accuracy Test Audit (RATA); Provide at least 2 weeks' notice prior to any other planned audit or test procedure; 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"> 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 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". 	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"> 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; The percentage CEMS and COMS data availability shall be maintained at a minimum of 90% on a calendar quarter basis; and The percentage CEMS and COMS data availability shall be maintained at a minimum of 75% for any calendar month. 	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

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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"> Type, manufacturer, model, and serial number; Pollutants controlled; Description of the control device and how it operates in the process; The capture efficiency, control efficiency, and their method of determination; The operational parameters that are monitored (e.g., temperature, pressure drop, flowrate etc.); For each operational parameter in e. above, the range indicative of proper operation of the control device during normal operation, startup, and shutdown; For catalytic control devices: <ol style="list-style-type: none"> Method and frequency of catalyst activity monitoring; and The frequency of catalyst replacement. The methods and frequency of operational parameter data monitoring and recordkeeping; Operational parameter setpoints and alarms; Planned and actual operator responses to malfunctions of the device; Procedures for operation of the device; Frequency and type of scheduled maintenance and calibration; and 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. 	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"> Procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; A program of corrective actions for malfunctioning processes, air pollution control equipment, and monitoring equipment; and NO_x and CO emission limitations for startup and shutdown of the biomass boiler (EU01). 	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)

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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)

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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> <ol style="list-style-type: none"> Type (e.g. diesel fuel oil) and amount of fuel burned; and Hours of operation for maintenance & readiness testing; and Hours of operation for emergency use. 	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> <ol style="list-style-type: none"> The date of delivery; The quantity of delivery; The name, address and telephone number of the company making the delivery; and 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 	<p>For each delivery of fuel oil to the facility</p> <p>Whenever there is a change in fuel supplier but at least annually</p>	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> <ol style="list-style-type: none"> Identification of each VOC-emitting process or device; 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: <ol style="list-style-type: none"> Typical hours of operation per day; and Typical days of operation per calendar month. The following VOC emission data from all VOC-emitting processes or devices identified in Table 7 Item 9.a above, including: <ol style="list-style-type: none"> Actual VOC emissions for: <ol style="list-style-type: none"> The calendar year, in tons; and A typical high ozone season day during that calendar year, in pounds per day; and The emission factors and the origin of the emission factors used to calculate the VOC emissions. 	Maintain up-to-date data	Facility-wide	Env-A 904.02

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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"> a. Identification of each fuel burning device; 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"> 1. Typical hours of operation per day; 2. Typical days of operation per calendar month; 3. Number of weeks of operation; 4. Type and amount of each fuel burned; 5. Heat input rate in MMBtu/hr; 6. Actual NOx emissions for the calendar year and a typical high ozone day during that calendar year; and 7. Emission factors and the origin of the emission factors used to calculate the NOx emissions. 	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"> a. Air pollution control device identification number, type, model number, and manufacturer; b. Installation date; c. Unit(s) controlled; d. Type and location of the capture system, capture efficiency percent, and method of determination; e. Information as to whether the air pollution control device is always in operation when the fuel burning device it is serving is in operation; f. Destruction or removal efficiency of the air pollution control equipment, including the following information: <ol style="list-style-type: none"> 1. Destruction or removal efficiency, in percent; 2. Date tested; 3. Emission test results; and g. Method of determining destruction or removal efficiency, if not tested. 	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"> a. The Pollution Control Equipment Operating Plan required in Table 6 Item 20; and b. Records of all data required to be recorded in accordance with the Pollution Control Equipment Operating Plan. 	Maintain up-to-date plan As specified in the plan	PCE01- PCE04	Env-A 906
13	<p><u>Startup/Shutdown Malfunction Plan</u> Maintain records of the following:</p> <ol style="list-style-type: none"> a. The Startup/Shutdown Malfunction Plan required in Table 6 Item 21; and 	Maintain up-to-date plan	EU01, EU02 & PCE01- PCE04	Env-A 906

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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>CEMS & COMS Monitoring and QA/QC Plan</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>Regulated Toxic Air Pollutants</u> Maintain records documenting compliance with Env-A 1400.	Maintain up-to-date data	Facility-wide	Env-A 902.01
16	<u>Permit Deviation Recordkeeping Requirements</u> Record permit deviations in accordance with Condition XVI.	As noted in Condition XVI	Facility-wide	Env-A 911.03

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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*.

Table 8 - Reporting Requirements				
Item #	Requirement	Frequency	Applicable Unit	Regulatory Basis
1	<p><u>Annual Emissions Report</u> Submit an annual emissions report which shall include the following information:</p> <ul style="list-style-type: none"> a. Actual calendar year emissions from each emission unit of NO_x, CO, SO₂, TSP, PM10, and VOCs, HAPs (speciated by individual HAP), and RTAPs (speciated by individual RTAP); 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 c. All monthly and 12-month rolling information recorded in accordance with Table 7 Items 3 and 6. 	Annually (received by the Division no later than April 15th of the following year)	EU01, EU02 & EU03	Env-A 907.01
2	<p><u>NSPS and MACT Notification Requirements</u> Submit notification of the initial startup, which shall include:</p> <ul style="list-style-type: none"> a. The date construction is commenced, postmarked no later than 30 days after such date; 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"> 1. The design heat input capacity of the boiler; 2. Identification of fuels to be combusted in the boiler; 3. A copy of the federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels; and 4. The annual capacity factor at which the Owner or Operator anticipates operating the facility based on all fuels combined and each individual fuel. 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. 	As specified	EU01	40 CFR 60.7(a) & 40 CFR 60.49b(a) & 40 CFR 63 Subpart B (Case-by-Case MACT

Laidlaw Berlin BioPower, LLC

Table 8 - Reporting Requirements

Item #	Requirement	Frequency	Applicable Unit	Regulatory Basis
3	<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.	Postmarked not less than 30 days prior to the date of the performance test	EU01	40 CFR 60.11(e)(5)
4	<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: a. Facility information, including: 1. Source name; 2. Standard Industrial Classification (SIC) code; 3. North American Industrial Classification System (NAICS) code; 4. Physical and mailing addresses; and b. A breakdown of VOC emissions reported pursuant to Table 8 Item 1 by month; and c. All data recorded pursuant to Table 7 Item 9.	Annually (received by the Division no later than April 15th of the following year)	EU01 & EU03	Env-A 908.03
5	<u>NOx Emission Statements Reporting Requirements</u> If the actual annual NOx 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: a. A breakdown of NO _x emissions reported pursuant to Table 8 Item 1 by month; and b. All data recorded in accordance with Table 7 Item 10.	Annually (received by the Division no later than April 15th of the following year)	EU01 & EU03	Env-A 909.03
6	<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.	Within 60 days of completing the performance tests	EU01	40 CFR 60.49b(b) & 40 CFR 60.8(a)
7	<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%.	Postmarked within 30 days of the end of the 6-month reporting period	EU01	40 CFR 60.49b(h) & (w)

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Table 8 - Reporting Requirements

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

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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"> The particular permit condition or item number that references each requirement, and a brief summary of the requirement; 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; The method(s) used to determine compliance, such as monitoring, record keeping, or test methods; The frequency, either continuous or intermittent, of the method(s) used to determine compliance; If compliance was not continuous, a description of each permit deviation; and Any additional information required in order for the Division to determine the compliance status of the source. 	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"> Summaries of the pertinent data that demonstrate the source's compliance status with all monitoring and testing requirements contained in this permit; Evidence that the required data is being recorded and maintained; and A summary of all permit deviations recorded pursuant to Condition XVI of this Permit that occurred during the reporting period. 	Semi-annually by July 31st and January 31st of each calendar year.	Facility-wide	Env-A 907.04(b) & Env-A 911.05

Laidlaw Berlin BioPower, LLC

Table 8 - Reporting Requirements

Item #	Requirement	Frequency	Applicable Unit	Regulatory Basis
12	<u>CEMS & 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.

Laidlaw Berlin BioPower, LLC

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

Laidlaw Berlin BioPower, LLC

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>	<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</p>	<p>Env-A 911.04</p>
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"> a. Notify the Division of the permit deviation and excess emissions by e-mail, telephone or fax,; and 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"> 1. Facility name; 2. Facility address; 3. Name of the responsible official employed at the facility; 4. Facility telephone number; 5. Date(s) of the occurrence; 6. Time of the occurrence; 7. Description of the permit deviation; 8. The probable cause of the permit deviation; 9. Corrective action taken to date; 10. Preventative measures taken to prevent future occurrences; and 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; 12. The specific device, process or air pollution control equipment that contributed to the permit deviation; 13. The type and quantity of excess emissions emitted to the atmosphere due to the permit deviation; and 14. The calculation or estimation used to quantify the excess emissions. 	<p><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><i>Written Report:</i> Within ten (10) days of discovery of the permit deviation</p>	<p>Env-A 911.04</p>
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"> a. Notify the Division of the permit deviation by e-mail, telephone or fax,; and b. Report the permit deviation to the Division, as part of the emissions report required pursuant to Table 8 Item 8. 	<p><i>Notification:</i> Within 10 days of discovery of the permit deviation</p> <p><i>Written Report:</i> See Table 8 Item 8</p>	<p>Env-A 911.04(c)</p>

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

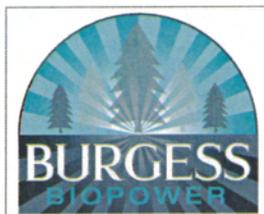
- A. Env-A 705.01, *Emission-based Fees*: The Owner or Operator shall pay to the Division each year an emission-based fee for emissions from the emission units listed in Condition III.
- B. Env-A 705.02, *Determination of Actual Emissions for use in Calculating of Emission-based Fees*: The Owner or Operator 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)¹⁶.
- 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.

¹⁶ 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_x 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.

EXHIBIT 2



April 6, 2012

Thomas Burack, Commissioner
Department of Environmental Services
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095

**Re: PUC 2505.02 Application Requirements
Berlin Station, LLC**

Dear Mr. Burack,

As per the requirements set forth in the New Hampshire Electric Renewable Portfolio Standard (PUC 2500), Burgess BioPower respectfully submits a copy of the application by Berlin Station, LLC for the qualification of the Berlin Station Biomass Plant as a Class I Renewable Energy Source. Please find included in this submittal one copy of the "Sample Application Form for Renewable Energy Source Eligibility" as well as the relevant exhibits and appendices.

In accordance with the Application Requirements (Section 14(d)), we are required to provide one copy of this Application to the New Hampshire Department of Environmental Services.

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

Sincerely,

A handwritten signature in blue ink, appearing to read 'R Desrosiers', is written over the typed name.

Robert Desrosiers
Vice President

Enclosure

EXHIBIT 3

STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE

Docket No. 2011-01

**Re: Joint Motion of Laidlaw Berlin BioPower, LLC and Berlin Station, LLC for
Transfer and Amendment of the Certificate of Site and Facility, and
Notice of Change in Major Contractors**

and

Docket No. 2009-02

**Re: Application of Laidlaw Berlin BioPower, LLC for a Certificate of Site
and Facility for a 70 MW Biomass Fueled Energy Facility in Berlin,
Coos County, New Hampshire**

July 12, 2011

**ORDER AND AMENDED CERTIFICATE OF SITE AND FACILITY
WITH CONDITIONS**

WHEREAS, the Site Evaluation Committee, on November 9, 2010, issued a Decision granting a Certificate of Site and Facility with conditions to Laidlaw Berlin BioPower, LLC for the siting, construction and operation of a 70 MW biomass fueled power facility located in Berlin, Coos County, New Hampshire (Project); and,

Whereas, Laidlaw Berlin BioPower, LLC and Berlin Station, LLC, on March 9, 2011, filed a Joint Motion to Amend the Certificate, to transfer the Certificate to Berlin Station, LLC, and to notify the Site Evaluation Committee of a change in major contractors (Joint Motion); and,

Whereas, the Committee held a public meeting and adjudicatory hearings regarding the Joint Motion and took evidence regarding the Joint Motion on April 22, 2011, May 18, 2011 and June 3, 2011; and,

Whereas, the Committee considered the Joint Motion and determined that the relief requested therein should be granted.

Now therefore, it is ordered that the Joint Motion of Laidlaw Berlin BioPower, LLC and Berlin Station, LLC is approved, subject to the conditions set forth herein and that this Order shall be deemed to be an Amended Certificate of Site and Facility pursuant to RSA 162-H:4; and it is,

Further Ordered that the Site Evaluation Committee's Decision in Docket no. 2009-02, dated November 8, 2010, is amended and replaced by this Order; and it is,

Further Ordered that the term “Applicant” as used throughout this Order and Amended Certificate shall refer to Berlin Station, LLC and that the term “affiliated entities” shall refer to NewCo Energy, LLC and Burgess BioPower, LLC; and it is,

Further Ordered that all references to the Applicant or Laidlaw Berlin BioPower, LLC contained in the Appendices attached hereto shall hereby be interpreted to refer to Berlin Station, LLC; and it is,

Further Ordered that the Site Evaluation Subcommittee’s Decision dated November 8, 2010 in Docket no. 2009-02, and its Decision on July 12, 2011, in Docket no. 2011-01 and any conditions contained therein, are hereby made a part of this Order; and it is,

Further Ordered that to the extent there is any inconsistency between the Decision of November 8, 2010 and the Decision of July 12, 2011, the Decision of July 12, 2011 shall control; and it is,

Further Ordered that the Applicant may site, construct and operate the Project as outlined in the Application, as amended, and subject to the terms and conditions of the Decision and this Order and Amended Certificate; and it is,

Further Ordered that the Decision and this Order and Amended Certificate shall apply to and bind the Applicant and the following Affiliated Entities: NewCo Energy, LLC and Burgess BioPower, LLC (Affiliated Entities). Prior to the commencement of construction, each of the Affiliated Entities shall prepare and file with the Site Evaluation Committee written guarantees reasonably acceptable to the Subcommittee, of all of the obligations and conditions imposed upon the Applicant in the Decision and in the Order and Certificate; and it is

Further Ordered that this Certificate is not transferable to any other person or entity without the prior written approval of the Committee; and it is,

Further Ordered that the Applicant shall provide immediate notice to the Committee in the event that the Applicant or any of its associated companies, including NewCo Energy, LLC and Burgess BioPower, LLC, shall file a bankruptcy or insolvency petition in any jurisdiction, foreign or domestic; or be subject to involuntary bankruptcy or any other proceeding pertaining to debt restructuring or the liquidation of assets; and it is,

Further Ordered that the Applicant shall immediately notify the Committee of any change in ownership or ownership structure of the Applicant or the Affiliated Entities and shall seek approval of the Committee of such change; and it is,

Further Ordered that the Applicant shall notify the Committee of any change in senior management of the Applicant or any of the Affiliated Entities; and it is,

Further Ordered that all permits and/or certificates recommended by the New Hampshire Department of Environmental Services including the Air Permit, the Site Specific Alteration of Terrain Permit, Shoreland Protection Permit, Industrial Wastewater Indirect Discharge Permit and Sewer Connection Permit shall issue and this Certificate is conditioned upon compliance

with all conditions of said permits and/or certificates which are appended hereto as Appendix I; and it is,

Further Ordered that the New Hampshire Department of Environmental Services is authorized to specify the use of any appropriate technique, methodology, practice or procedure associated with the conditions of the Air Permit, the Site Specific Alteration of Terrain Permit, Shoreland Protection Permit, Industrial Wastewater Indirect Discharge Permit and Sewer Connection Permit including the authority to approve modifications or amendments to said permits and certificates; and it is,

Further Ordered that the Applicant's Environmental Monitor shall supervise all excavations, and excavated soils shall be screened for the presence of contamination by hazardous substances in accordance with a work plan approved prior to construction by the Waste Management Division of DES. any contaminated soils discovered during the construction of the Facility shall be reported to DES in accordance with New Hampshire statute and regulatory requirements and shall be managed in accordance with state and federal requirements, subject to approval by DES in accordance with the approved work plan; and it is,

Further Ordered that the Agreement between the City of Berlin and the Applicant, attached as Appendix II (City of Berlin Proposed Certificate Conditions), shall be a part of this Order and the Conditions contained therein shall be conditions of this Amended Certificate. To the extent that any disputes arise under the City of Berlin Proposed Certificate Conditions, the parties shall file a motion for declaratory ruling, a motion for enforcement or such other motion as may be procedurally appropriate with the Committee and the Committee shall make such final interpretations or determinations that may be necessary; and it is,

Further Ordered that the Applicant is further required to develop an informal complaint resolution procedure together with the City of Berlin. The complaint resolution procedure may include the use of an ombudsman or any other process that is satisfactory to the City of Berlin. The complaint resolution procedure shall remain in place for duration of the construction of the Facility and for the first 12 months of operation of the Facility; and it is,

Further Ordered that the Applicant, in consultation with the City of Berlin, shall develop a decommissioning plan. The plan shall include the estimated cost of decommissioning and a method for creating, maintaining and securing funding for the decommissioning of the Facility in a safe and secure manner. The final decommissioning plan must be filed with the Committee prior to the commencement of construction; and it is,

Further Ordered that the Stipulation between the Applicant and Counsel for the Public, attached as Appendix III (Sustainability Conditions), shall be a part of this Order and the conditions contained therein shall be conditions of this Amended Certificate. To the extent that any disputes arise under the Stipulation, the parties shall file a motion for declaratory ruling, a motion for enforcement or such other motion as may be procedurally appropriate with the Committee and the Committee shall make such final interpretations or determinations that may be necessary; and it is,

Further Ordered that the Applicant shall not commence construction, as “commencement of construction” is defined in R.S.A. 162-H:2, III, until such time as construction financing is completely in place. The Applicant shall notify the Committee when construction financing is in place and shall provide its financial closing package to the Committee; and it is,

Further Ordered that the Applicant shall not commence construction until such time as the New Hampshire Public Utilities Commission has approved a Power Purchase Agreement (PPA) between the Applicant and Public Service Company of New Hampshire (PSNH) similar in form and substance to the PPA presented to the Committee as Ex. Laidlaw 39, CONFIDENTIAL. The Applicant shall (i) notify the Committee of the approval or denial of the PPA by the PUC; (ii) if approved, provide a copy of the approved PPA to the Committee; (iii) identify any changes in the PPA made or caused to be made by the PUC; and (iv) provide supplemental documentation demonstrating the Applicant’s financial ability to construct and operate the Facility based upon an approved, but amended, PPA. (If further review is necessary, the Presiding Officer will notify the Applicant); and it is,

Further Ordered that the Applicant shall not commence construction until such time that it has filed, with the Committee, a signed Fuel Supply Agreement with Richard Carrier Trucking, Inc., materially consistent with Ex. Applicant 3, CONFIDENTIAL; and it is,

Further Ordered that the Applicant shall not commence construction until such time that it has filed, with the Committee, a signed EPC Contract with Babcock & Wilcox Construction Co., Inc., that is materially consistent with Ex. Laidlaw 61 CONFIDENTIAL; and it is,

Further Ordered that the Applicant shall not commence construction until such time that it has filed, with the Committee, a signed Operations and Maintenance Contract with DPS Berlin, LLC; and it is,

Further Ordered that the Applicant shall not commence construction until such time that it has filed, with the Committee, a signed Master Services Agreement with Waldron Engineering & Construction, Inc. and a Consulting Contract with Stone & Webster, Inc.; and it is,

Further Ordered that the Applicant continue to cooperate with the requirements of ISO-New England and obtain all ISO approvals necessary to a final interconnection agreement for a gross until rating of up to 75 MW. Said interconnection agreement shall be filed with the Committee prior to the commencement of construction; and it is,

Further Ordered that if during construction or thereafter, any archeological resources are discovered or affected as a result of project planning or implementation, the New Hampshire Division of Historical Resources (NHDHR) shall be notified immediately and NHDHR shall determine the need for appropriate evaluative studies, determinations of National Register eligibility, and mitigation measures (redesign, resource protection, or data recovery) as required by state or federal law and regulations. If construction plans change, notification to and consultation with NHDHR shall be required. If any member of the public raises new concerns about the effect on historic resources, notification to and consultation with NHDHR shall be required. NHDHR is authorized to specify the use of any appropriate technique, methodology,

practice or procedure associated with historical resources at the Site including the authority to approve modifications to such practices and procedures as may become necessary; and it is,

Further Ordered that the Applicant shall not remove any trees within 50 feet of the Androscoggin River; and it is,

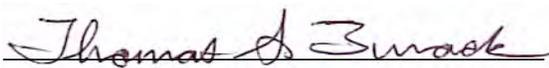
Further Ordered that all fly ash from the Facility shall be containerized in a fly ash silo and shall not be stored outside of said silo. All bottom ash shall be containerized within the boiler building and shall not be stored outside the Facility; and it is,

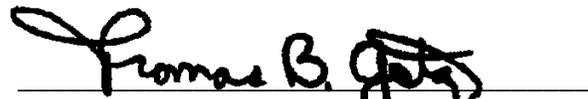
Further Ordered that the quarterly and annual reports required by the Sustainability Conditions contained in Ex. PC 76 (Appendix III) shall be forwarded to the New Hampshire Division of Forests and Lands and the Committee, along with information detailing the total supply of biomass delivered to the Facility on a quarterly and annual basis and the geographical source of the biomass; and it is,

Further Ordered that the Applicant and each of its Affiliated Entities shall provide written assurances and guarantees in form and substance acceptable to the Committee binding the Applicant and each Affiliated Entity to all conditions, requirements, and liabilities expressed in the “brownfield” documents identified as Ex. PC 1 and Ex. PC 2; and it is,

Further Ordered that to the extent that blasting may be necessary in the construction of the Project, the Applicant shall comply with all rules and regulations for blasting and the transportation of explosive materials and use of state and local thoroughfares as promulgated by statute or the regulations of the Department of Safety and the Department of Transportation. The Department of Safety and the Department of Transportation are each delegated the authority to specify the use of any appropriate technique, methodology, practice or procedure associated with blasting, transportation of explosives or other heavy loads which shall occur during the construction of the Project; and it is,

Further Ordered that all Conditions contained in this Order and Amended Certificate and in the Decision shall remain in full force and effect unless otherwise ordered by the Committee.


Thomas Burack, Chairman
Department of Environmental Services

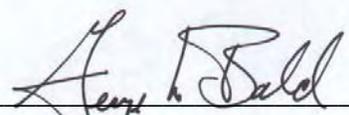

Thomas Getz, Vice Chairman
Public Utilities Commission

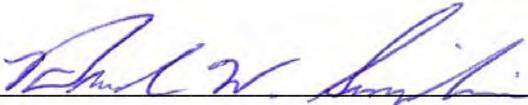

Michael Harrington, Staff Engineer
Public Utilities Commission

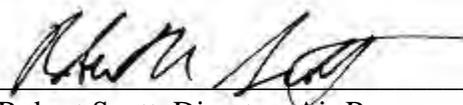

Clifton Below, Commissioner
Public Utilities Commission


Harry Stewart, Director-Water Division
Department of Environmental Services


Amy Ignatius, Commissioner
Public Utilities Commission


George Bald, Commissioner
Dept. of Resources & Economic Dev.


Brad Simpkins, Interim Director
Division of Forests & Land, DRED


Robert Scott, Director, Air Resources Div.
Dept. of Environmental Services

APPENDIX I – STATE PERMITS



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

April 21, 2010

RECEIVED

APR 20 2010

BARRY NEEDLEMAN

Thomas S. Burack, Chairman
NH Energy Facilities Site Evaluation Committee
Dept. of Environmental Services
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095

Re: Application of Laidlaw Berlin BioPower, LLC
Site Evaluation Committee No. 2009-02

Dear Chairman Burack:

Please find enclosed the NH Department of Environmental Services proposed findings and conditions for the Alteration of Terrain permit, Shoreland permit, Sewer Connection permit, and the Industrial Wastewater Indirect Discharge Request.

If you have any questions, please contact me at 271-2951 or email at: Rene.Pelletier@des.nh.gov

Sincerely,

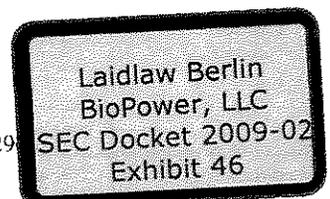
Rene Pelletier, PG
Assistant Director
Water Division

cc: Michael J. Iacopino
Jane Murray, Secretary NHSEC
Barry Needleman, Esq.
ESS Group, Inc.
Michael J. Walls, Asst. Commissioner
Harry T. Stewart, Director, Water Division

DES Web site: www.des.nh.gov

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095

Telephone: (603) 271-2147 • Fax: (603) 271-6588 • TDD Access: Relay NH 1-800-735-29



ALTERATION OF TERRAIN BUREAU
RECOMMENDED PERMIT CONDITIONS

PROJECT DESCRIPTION:

Redevelop the former Fraser Pulp Mill in Berlin to construct a biomass fueled energy generating facility (Laidlaw Berlin BioPower) that will use wood chips and other low-grade clean wood fuels to generate 70 megawatts of electric power. The total area of contiguous disturbance has been calculated to be 37.81 acres (1,646,797 square feet).

PROJECT SPECIFIC CONDITIONS:

1. Activities shall not cause or contribute to any violations of the surface water quality standards established in Administrative Rule Env-Wq 1700.
2. You must submit revised plans for permit amendment prior to any changes in construction details or sequences. You must notify the Department in writing within ten days of a change in ownership.
3. You must notify the Department in writing prior to the start of construction and upon completion of construction. Forms are available at:
<http://des.nh.gov/organization/divisions/water/aot/categories/forms.htm>.
4. The revised plans dated March 19, 2010 and supporting documentation in the permit file are a part of this approval.
5. No construction activities shall occur on the project after expiration of the approval unless the approval has been extended by the New Hampshire Energy Facility Site Evaluation Committee (SEC).
6. This approval does not relieve the applicant from the obligation to obtain other local, state or federal permits that may be required (e.g., from US EPA, US Army Corps of Engineers, etc.). Projects disturbing over 1 acre may require a federal stormwater permit from EPA. Information regarding this permitting process can be obtained at:
<http://des.nh.gov/organization/divisions/water/stormwater/construction.htm>.
7. The smallest practical area shall be disturbed during construction activities.
8. The following construction monitoring conditions shall apply:
 - (a) The permittee shall employ the services of an environmental monitor ("Monitor"). The Monitor shall be a Certified Professional in Erosion and Sediment Control or a Professional Engineer licensed in the State of New Hampshire and shall be employed to inspect the site from the start of alteration of terrain activities until the alteration of terrain activities are completed and the site is considered stable.
 - (b) During this period, the Monitor shall inspect the subject site at least once a week, and if possible, during any ½ inch or greater rain event (i.e. ½ inch of precipitation or more within a 24 hour period). If unable to be present during such a storm, the Monitor shall inspect the site within 24 hours of this event.
 - (c) The inspections shall be for the purposes of determining compliance with the permit. The Monitor shall submit a written report to the Department within 24 hours of the inspections. The reports shall describe, at a minimum, whether the project is being constructed in accordance with the approved sequence, shall identify any deviation

ALTERATION OF TERRAIN PROJECT SPECIFIC CONDITIONS CONTINUED:

Page 2 of 2

from the conditions of this permit and the approved plans, and identify any other noted deficiencies.

- (d) The Monitor shall provide technical assistance and recommendations to the Contractor on the appropriate Best Management Practices for Erosion and Sediment Controls required to meet the requirements of RSA 485-A:17 and all applicable DES permit conditions.
- (e) Within 24 hours of each inspection, the Monitor shall submit a report to DES via email (to Rick Treiss at: Frederick.Treiss@des.nh.gov and Craig Rennie at: Craig.Rennie@des.nh.gov).
- (f) Prior to beginning construction, the contractor's name, address, and phone number shall be submitted to DES via email (see above).

SHORELAND PROGRAM (WETLANDS BUREAU)
RECOMMENDED PERMIT CONDITIONS

PROJECT DESCRIPTION:

Impact 154,714 sq ft for the purpose of converting and upgrading the existing infrastructure of an industrial lot within the protected shoreland.

PROJECT SPECIFIC CONDITIONS:

1. All work shall be in accordance with plans by ESS Group, Inc., dated December 15, 2009 and received by the Department of Environmental Services ("DES") on December 23, 2009.
2. This approval includes a waiver of RSA 483-B:9, V(g)(1) and, therefore, shall not be effective until it has been recorded at the appropriate Registry of Deeds and a copy of the recorded waiver is sent to the department by certified mail, return receipt requested.
3. No more than 38.2% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.
4. All regions of the waterfront and natural woodland buffers proposed to be replanted shall be done so using natural ground covers and native vegetation including 33,891 sq ft of the natural woodland buffer.
5. The project as proposed will leave approximately 8,273 sq ft of the Natural Woodland Buffer beyond the primary building setback in an unaltered state. At least 4,236 sq ft of the Natural Woodland Buffer beyond the primary building setback must remain in an unaltered state in order to remain compliant with RSA 483-B:9, V, (b), (2).
6. The project as proposed will leave approximately 136,536 sq ft of the Natural Woodland Buffer beyond the primary building setback in an unaltered state. At least 80,143 sq ft of the Natural Woodland Buffer beyond the primary building setback must remain in an unaltered state in order to comply with RSA 483-B:9, V, (b), (2).
7. Orange construction fencing shall be placed at the limits of construction to prevent accidental encroachment on areas determined to remain in an unaltered state.
8. All activities conducted in association with the completion of this project shall be conducted in a manner that complies with applicable criteria of Administrative Rules Chapter Env-Wq 1400 and RSA 483-B during and after construction.
9. Erosion and siltation control measures shall be installed prior to the start of work, be maintained throughout the project, and remain in place until all disturbed surfaces are stabilized.
10. Erosion and siltation controls shall be appropriate to the size and nature of the project and to the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to wetlands or surface waters.
11. No person undertaking any activity in the protected shoreland shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards established in Env-Ws 1700 or successor rules in Env-Wq 1700.
12. Any fill used shall be clean sand, gravel, rock, or other suitable material.
13. The contractor responsible for completion of the work shall utilize techniques described in the New Hampshire Stormwater Manual, Volume 3, Erosion and Sediment Controls During Construction (December 2008).
14. Within three days of final grading or temporary suspension of work in an area that is in or adjacent to wetlands or surface waters, all exposed soil areas shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tack or netting and pinning on slopes steeper than 3:1.
15. Silt fencing must be removed once the area is stabilized.

WASTEWATER ENGINEERING BUREAU
SEWER CONNECTION PERMIT CONDITIONS

PROJECT DESCRIPTION:

Redevelop the former Fraser Pulp Mill in Berlin to construct a biomass fueled energy generating facility (Laidlaw Berlin BioPower) that will use wood chips and other low-grade clean wood fuels to generate 70 megawatts of electric power. The estimated proposed wastewater flows from the Laidlaw facility to the Berlin wastewater treatment facility will be approximately 211,036 gallons/day of cooling water and 1,440 gallons/day of domestic wastewater for a total estimated flow of 212,476 gallons/day.

OUTSTANDING PROJECT CONCERNS:

DES WWEB Design Review Engineer, Sharon Nall, issued a design review letter on February 19, 2010 to ESS. ESS responded with revised plans and specifications on April 1, 2010. Most of DES' concerns were addressed with the revised plans, except for the following two items.

1. ESS needs to redesign one section of sewer to eliminate a 1-foot drop into sewer manhole WWMH#2.
2. ESS needs to show areas where insulation will be installed above sewers that do not meet the minimum depth requirements.

PERMIT CONDITIONS:

Once these two concerns are addressed, DES WWEB can issue the Sewer Connection Permit, which will be sent to the City of Berlin with a set of the reviewed plans and specifications. A copy of the permit will be sent to ESS.

The permit requires the project be constructed in accordance with the approved plans and specifications and in accordance with the requirements of Env-Wq 700, Standards of Design and Construction for Sewerage and Wastewater Treatment Facilities. The permitted flows are limited to those flows included in the permit application as described in the first paragraph above. If construction does not start within two years of permit issuance, the permit will be invalid.

WASTEWATER ENGINEERING BUREAU
INDUSTRIAL WASTEWATER INDIRECT DISCHARGE REQUEST
RECOMMENDED PERMIT CONDITIONS

PROJECT DESCRIPTION:

Proposed biomass fueled energy generating facility by Laidlaw Berlin Biopower.

The Application for approval of Indirect Discharge to Berlin Wastewater Facility to NHDES was prepared by ESS Group, Inc. and signed by Patrick MacQueen, City Manager on January 22, 2010.

PROJECT SPECIFIC CONDITIONS:

Approval of the indirect discharge by Laidlaw Berlin Biopower to the City of Berlin Wastewater Treatment Facility is based on the review of the supporting information submitted in the above referenced Application and subject to these conditions and Standard Conditions of Approval indicated below.

Approval is to permit an average daily process flow of 211,036 gallons/day from the Biomass Energy Generating Facility. Maximum daily process flow is 302,534 gallons/day. The City shall issue a discharge permit to the facility before discharge begins. The permit shall require adherence to the Sewer Use Ordinance and specify discharge parameters and monitoring to assure the discharge does not interfere with treatment or pass through the treatment facility.

STANDARD CONDITIONS OF APPROVAL

- (1) The indirect discharger shall fully comply with the applicable sewer use ordinance;
- (2) The indirect discharger shall fully comply with all federal, state and local pretreatment standards and requirements;
- (3) Using additional water to dilute effluent or introducing uncontaminated water to the effluent shall not be allowed as a substitute for any pretreatment necessary to maintain compliance;
- (4) The indirect discharger shall not make changes in the type of production, amount of flow, or pollutant characteristics, or any increase in pollutant concentration, without prior approval by City and NHDES through the submission of a new industrial wastewater discharge request; and
- (5) The approval shall be based on and apply only to the subject discharge request and all associated plans and supporting information as submitted.



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner



RECEIVED

APR 26 2010

BARRY NEEDLEMAN

April 22, 2010

Thomas S. Burack, Chairman
NH Energy Facilities Site Evaluation Committee
NH Department of Environmental Services
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Re: Application of Laidlaw Berlin BioPower, LLC
Site Evaluation Committee No. 2009-02
Indirect Discharge Request No. IDR 10-002

Dear Chairman Burack:

Please find enclosed the Industrial Wastewater Indirect Discharge Request Approval for the above referenced site. DES WWEB has issued this approval to the City of Berlin with the understanding that this project is subject to the Site Evaluation Committee jurisdiction. DES WWEB understands that additional or more stringent conditions may be added to those included in the enclosed approval.

If you have any questions, please contact me at (603) 271-2052

Sincerely,

George F. Carlson, Jr., P.E.
Industrial Pretreatment Supervisor

Enclosure

cc (w/enclosure):

Michael J. Iacopino, Esq
Rene Pelletier, Assistant Director, NHDES Water Division
Harry T. Stewart, Director, NHDES Water Division
Paul L. Heirtzler, Administrator, NHDES WWEB
Michael Walls, Assistant Commissioner, NHDES
Craig Rennie, NHDES AOT/Wetlands
Jane Murray, Secretary, NHSEC
✓ Barry Needleman, Esq.
Dammon M. Frecker, ESS Group, Inc.
Patrick MacQueen, City of Berlin (w/ reviewed plans and specifications in addition to enclosure)

DES Web site: www.des.nh.gov
P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095
Telephone: (603) 271-3503 • Fax: (603) 271-2982 • TDD Access: Relay NH 1-800-735

Laidlaw Berlin
BioPower, LLC
SEC Docket 2009-02
Exhibit 47



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

INDUSTRIAL WASTEWATER INDIRECT DISCHARGE REQUEST (IDR) APPROVAL

APPLICANT

Indirect Discharger **Laidlaw Berlin Biopower**
Address **Hutchins Street**
Authorized Signature **Louis T. Bravakis** **Vice President of Development**
Engineer

MUNICIPALITY

Municipality/POTW **Berlin Pollution Control Facility**
Approval Signature **Patrick MacQueen** **City Manager**
Date of IDR **January 22, 2010**

APPROVAL

PERMIT/REQUEST NUMBER **IDR 10-002**
FLOW **211036** gallons/day DATE: **April 19, 2010**

The Department of Environmental Services has reviewed and hereby approves the request as follows: Approval of the discharge to the applicant's wastewater facilities is based on review of the supporting information submitted and is subject to the conditions indicated below and the standard Conditions of Approval on the second page.

CONDITIONS:

Approval is to permit an average daily process flow of 211,036 gallons/day from the Biomass Energy Generating Facility. Maximum daily process flow is 302,534 gallons/day. The City shall issue a discharge permit to the facility before discharge begins. The permit shall require adherence to the Sewer Use Ordinance and specify discharge parameters and monitoring to assure the discharge does not interfere with treatment or pass through the treatment facility.

George F. Carlson, Jr. P.E.

Telephone (603) 271-2052

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

INDUSTRIAL WASTEWATER INDIRECT DISCHARGE REQUEST

CONDITIONS OF APPROVAL

The department's approval of this discharge request is subject to the following conditions:

- (1) The indirect discharger shall fully comply with the applicable sewer use ordinance;
- (2) The indirect discharger shall fully comply with all federal, state and local pretreatment standards and requirements;
- (3) Using additional water to dilute effluent or introducing uncontaminated water to the effluent shall not be allowed as a substitute for any pretreatment necessary to maintain compliance;
- (4) The indirect discharger shall not make changes in the type of production, amount of flow, or pollutant characteristics, or any increase in pollutant concentration, without prior approval by the department through the submission of a new industrial wastewater discharge request;
- (5) The approval shall be based on and apply only to the subject discharge request and all associated plans and supporting information as submitted and shall be signed by the indirect discharger's authorized representative; and
- (6) The approval shall become void if the discharge approved does not begin within one year from the date of approval.

Upon receipt of notification from the department that the discharge request is approved, the municipality shall issue a discharge permit to the indirect discharger.

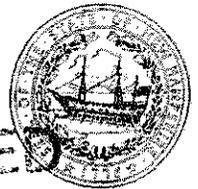
If there are any question or comments concerning this approval, please contact the Industrial Pretreatment Section Supervisor, at the Water Division, telephone 271-2052.



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

RECEIVED



APR 26 2010

BARRY NEEDLEMAN

April 21, 2010

Thomas S. Burack, Chairman
NH Energy Facilities Site Evaluation Committee
NH Department of Environmental Services
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Re: Application of Laidlaw Berlin BioPower, LLC
Site Evaluation Committee No. 2009-02
Sewer Connection Permit No. D2010-0109

Dear Chairman Burack:

Please find enclosed the Sewer Connection Permit for the above referenced site. DES WWEB has issued this permit to the City of Berlin with the understanding that this project is subject to the Site Evaluation Committee jurisdiction. DES WWEB understands that additional or more stringent permit conditions may be added to those included in the enclosed permit.

If you have any questions, please contact me at (603) 271-2508.

Sincerely,

Sharon L. Nall, P.E.
Design Review Engineer

Enclosure

cc (w/enclosure):

Michael J. Iacopino, Esq
Rene Pelletier, Assistant Director, NHDES Water Division
Harry T. Stewart, Director, NHDES Water Division
Paul L. Heirtzler, Administrator, NHDES WWEB
Michael Walls, Assistant Commissioner, NHDES
Craig Rennie, NHDES AOT/Wetlands
Jape Murray, Secretary, NHSEC
✓ Barry Needleman, Esq.
Dammon M. Frecker, ESS Group, Inc.
Patrick MacQueen, City of Berlin (w/ reviewed plans and specifications in addition to enclosure)



WASTEWATER CONNECTION PERMIT

Project Name: Laidlaw Berlin Biopower
Location: Former Fraser Pulp Mill Property
Engineer: ESS Group, Inc.

Municipality/POTW: Berlin
Official Signature: Patrick MacQueen
Date of Request: 12/15/2009

PERMIT/REQUEST NUMBER

D2010-0109

FLOW: **214,476** gallons/day

APPROVED DATE **4/21/2010**

The Department of Environmental Services has reviewed and hereby approves the request as follows:
Approval of the connection to the municipality's wastewater facilities is based on a review of the supporting information submitted and is subject to the conditions indicated below.

CONDITIONS:

Approval applies only to the sewerage plans and sewer connection request.

This approval will become void if the sewerage construction or discharge has not begun within two years of the approved date.

All sewerage construction must comply with the requirements of Chapter Env-Wq 700, the Standards of Design and Construction for Sewerage and Wastewater Treatment Facilities

DES-reviewed plans/specs for sewers connecting the Laidlaw biopower facility to the City's sewers are enclosed. This permit is under the SEC jurisdiction and, as such, additional or more stringent permit conditions may be added to these conditions.

Issued by:

Sharon L. Nall, P.E.

WATER DIVISION - WASTEWATER ENGINEERING BUREAU - DESIGN REVIEW SECTION

cc: ESS Group, Inc.

APPENDIX II – CITY OF BERLIN AGREEMENT

**STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE
Docket No. 2009-02**

**Application of Laidlaw Berlin BioPower, LLC, for a Certificate of Site and Facility for a
70MW Biomass Fueled Energy Facility in Berlin, Coos County, New Hampshire**

CITY OF BERLIN EXHIBIT 1

CITY OF BERLIN PROPOSED CERTIFICATE CONDITIONS

I. APPEARANCE ISSUES

1. Upon completion of the biomass plant, the physical appearance of the project, including buildings and landscaping (including deciduous and evergreen trees), shall be reasonably consistent with both the conceptual landscaping plan and supporting narrative provided by John Wacker (the "Conceptual Landscaping Plan") (Exhibit 1A), and the preliminary landscaping scope provide by Laidlaw (the "Laidlaw Scope") (Exhibits 1B and 1C). Laidlaw, at its sole expense, shall develop a full landscaping plan for review and comment by the City of Berlin, New Hampshire ("the City"). Laidlaw understands that it is the City's intent that the full landscaping plan meet the City's expectations before it satisfies this condition, and Laidlaw therefore agrees to work in good faith with the City to accommodate any comments or modifications of the full landscaping plan suggested by the City. In the event that the full landscaping plan developed by Laidlaw does not meet the City's expectations, and Laidlaw does not wish to make further modifications, the parties agree to submit the dispute to private resolution process. The parties recognize that the final landscaping plan must harmonize, to the greatest extent possible, the City's aesthetic wishes and the practical requirements of the infrastructure and equipment required for the generation of electricity. Laidlaw agrees to file the full landscaping plan with the Committee prior to the commencement of construction under the certificate of site and facility ("the Certificate") issued pursuant to RSA 162-H. The landscaping plan shall expressly provide that the City will have the right to review and comment upon the species mix, height, and size of trees selected for planting, and shall further provide that Laidlaw will, at its sole expense, maintain all plantings and replace any dead or diseased plantings as soon as seasonably possible. Laidlaw understands that it is the City's intent that the species mix, height, and size of trees selected for planting meet the City's expectations before it satisfies this condition, and Laidlaw therefore agrees to work in good faith with the City to accommodate any comments or modifications of the full landscaping plan suggested by the City. In the event that the species mix, height, and size of trees selected for planting identified by Laidlaw does not meet the City's expectations, and Laidlaw does not wish to make further modifications, the parties agree to submit the dispute to private resolution process. It should be understood that it may take more than one growing season for new plantings to become established and reach their intended

level of appearance. Facades and structures at the facility shall be painted and/or surfaced in neutral or naturally occurring colors.

2. Laidlaw has agreed to place all newly constructed electrical/transmission lines partially underground and out of sight as follows: Laidlaw has agreed to place the main transmission line from the facility and down Shelby Street underground. At the end of its southerly run down Shelby Street the line shall emerge and be above ground prior to entering PSNH property where the East Side SubStation is located. Prior to the issuance of the Certificate, Laidlaw agrees to provide updated drawings depicting the emergence of the lines from the ground and onto a supporting structure at Shelby Street.

II. NOISE, AIR AND WATER QUALITY ISSUES

1. With respect to air quality, odor and water quality, Laidlaw shall adhere to all applicable New Hampshire and federal standards. With respect to noise, Laidlaw shall keep noise levels during the Project's operation at or below 60dB at the facility's property line from 10 p.m. to 6 a.m., Monday through Saturday, and 10 p.m. to 8 a.m. on Sunday morning. Noise levels shall not exceed 70 dB at the facility's property line at all other times. Laidlaw agrees to be solely responsible for monitoring noise levels at the facility's property line, according to a schedule to be developed with the City, and to take necessary steps to correct any deviations from stipulated dB levels. If such post-operation noise testing demonstrates that the facility is not meeting the stipulated dB levels at the property line, and at the City's election additional mitigation is required, Laidlaw shall implement supplemental sound barriers or such other noise mitigation measures as shall be necessary to comply with the stipulated dB standard at the property line. Laidlaw further agrees to conduct additional noise monitoring for informational purposes at designated monitoring stations at Notre Dame High School and the Lancaster Street Water Tank, and to provide the results of such informational monitoring to the City. In the event that such informational monitoring indicates that dB levels at the designated monitoring stations are exceeding the levels shown in figure (h)(3)(ii)-1 of Laidlaw's application, and that such excesses are clearly attributable to the operation of the facility, Laidlaw agrees to work in good faith with the City to identify the sources of such excesses and explore appropriate mitigation strategies.
2. Laidlaw shall assure that backup safety warning systems used in nighttime operation of yard equipment are of suitable design and operation to minimize noise in the surrounding community. This may include the use of alternative technologies to traditional tonal alarms such as broadband, photocell or radar warning systems, or adjustments to the frequency and loudness of tonal alarms, in addition to the beeper back up signals for daytime operation. Beeper back up signals shall not be used between the hours of 9:00 pm and 6:00 am. Laidlaw's will seek the City's input in selecting between OSHA-approved alternative technologies, and will work in good faith to honor the City's preferences consistent with the need for worker safety. Nothing in this paragraph shall be interpreted to restrict the operation of emergency vehicles or safety equipment required by law.

3. The noise impact of on-site chipping and/or debarking operations shall be mitigated by having the equipment enclosed and operated in a sound protecting enclosed building. The equipment shall be powered by an electric motor rather than a combustion engine.
4. All sounds generated by the facility equipment and operations shall be mitigated to the extent possible so as to be consistent with the limits contained in Laidlaw's SEC Application, and shall otherwise conform to the noise standards in Paragraph II.1, above.
5. The biomass facility shall only be allowed to burn "biomass" as defined by the NH Renewable Portfolio Standard (RSA 362-F:2(II)): "Biomass fuels" means plant-derived fuel including clean and untreated wood such as brush, stumps, lumber ends and trimmings, wood pallets, bark, wood chips or pellets, shavings, sawdust and slash, agricultural crops, biogas, or liquid biofuels, but shall exclude any materials derived in whole or in part from construction and demolition debris.
6. The site shall be designed to minimize truck queuing on the street, provide for smooth flow of on-site traffic, and efficient off loading of trucks (multiple truck dumpers). In addition to this basic design concept, the facility shall post and communicate the State of New Hampshire idling practices to all truck drivers servicing the facility as follows:

New Hampshire rules (Env-A 1101.05 and En v-A 1101.06) prohibit idling of any diesel-powered motor vehicle for more than five minutes when the temperature is above 32°F, or for no more than 15 minutes when the temperature is between 32°F and -10°F. There are no restrictions when the temperature is below -10°F.

In addition, there are no restrictions on idling at any temperature under the following conditions:

- When a diesel-powered motor vehicle is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;
- When a diesel-powered motor vehicle is being used as an emergency motor vehicle;
- When a diesel engine is providing power takeoff for refrigeration, lift gate pumps or other auxiliary uses, or supplying heat or air conditioning necessary for passenger comfort in those vehicles intended for commercial passenger transportation;
- When a diesel-powered motor vehicle is being operated by a mechanic for maintenance or diagnostic purposes; or
- When a diesel-powered motor vehicle is being operated solely to defrost a windshield.

Laidlaw agrees that when the facility is made aware that any driver is found to have violated the State of New Hampshire idling practices three (3) times within any twelve (12) month period while at the site shall be prohibited from making deliveries to the site for six (6) months from the date of the third violation.

Laidlaw further acknowledges the City's interest in and right to prevent truck queuing on Hutchins Street and to cite drivers for violating any applicable municipal law or ordinance relating thereto, and agrees to prohibit any driver found to have received three (3) citations for queuing on Hutchins Street within any twelve (12) month period from making deliveries to the site for six (6) months from the date of the third citation. Laidlaw also agrees to work with drivers in order to prevent queuing on Hutchins Street by opening the facility's interior gate in the event that more than 16 trucks are waiting to unload at any time during which the interior gate would normally be closed, and to otherwise assist drivers in complying with idling and queuing regulations and ordinances.

Laidlaw recognizes the potential impacts on neighborhoods near the facility, both in terms of noise and odor, of deliveries by rail. Laidlaw agrees to use reasonable efforts to mitigate noise and odor impacts associated with rail deliveries to the facility, including but not limited to scheduling such deliveries, to the extent that such scheduling is within Laidlaw's control, for the hours at which the maximum permitted noise level at the facility's property line is 70dB, as described at Part II.1.

7. The biomass facility shall manage and mitigate dust created from its operations by adhering to the following "Best Management Practices for Fugitive Dust":

Best Management Practices to Prevent Fugitive Dust

The primary potential sources of fugitive dust from biomass facilities fall into the following categories:

- Dust generated by the rotating tires of vehicles traveling on facility roadways and material handling areas.
- Dust generated by high wind conditions from surface 'fines' on storage piles and elevated conveyors;
- Dust generated from open air transfer points of materials between processing locations (e.g. off-loading of wood chips, front end loader drops, conveyor transfer points).
- Laidlaw is integrating design elements into the project and operating procedures that shall minimize fugitive dust emissions using a plan of "Best Management Practices" (BMP). Brief descriptions of the measures that shall be implemented are below.

Dust from Roadways and Other Driving Surfaces

- All facility roadways shall be paved.
- Vehicle speed limits shall be limited and enforced to reduce dust generation from vehicle travel on the paved surfaces within the site.
- Periodic cleaning of site roadways by mechanical sweeping or functionally equivalent methods.

Dust from Wood Chip Handling and Transfer Points

- All vehicles delivering wood chips to the facility shall have loads covered until the time of actual off-loading.
- All off-loading of delivery trucks shall be onto a paved area
- Fuel processing such as chipping, screening and grinding (hogging) shall be performed within enclosed buildings.
- All conveyors shall be covered to prevent exposure of material to wind.
- Water sprays shall be available at transfer points in the event that fuel conditions become overly dry or climate conditions warrant further dust suppression.

Dust from Wood Fuel Storage Piles

- The facility shall minimize the 'fines' content of the fuel by proper specifications developed for acceptable fuel deliveries by fuel suppliers. No large quantities of dry sawdust or other dry fines shall be accepted.
- Water sprays shall be available in the vicinity of the wood chip piles to dampen the surface of the pile, if needed should a condition of dry, windy weather cause the generation of fugitive dust.

Ash Disposal

No waste ash shall be piled or stored outdoors at the facility. All waste ash shall be disposed of at permitted land fill facilities or used as, or integrated into permitted composting or other recycling materials for re-use/re-sale.

III. TRUCK TRAFFIC ISSUES

1. Laidlaw shall not allow wood fuel deliveries between the hours of 9:00 pm to 5:00 am weekdays. Laidlaw shall not allow wood fuel deliveries before 8:00 am or after 6:00 pm on Saturdays. All deliveries are expressly subject to the noise levels specified in Part II.1, and Laidlaw agrees to monitor noise levels at the property line on weekdays between 5:00 am and 6:00 am. In the event that noise levels at the property line on weekdays between 5:00 am and 6:00 am exceed 60dB, and such excesses are clearly attributable to fuel deliveries, then Laidlaw shall not allow wood deliveries before 6:00 am on

weekdays. No wood fuel deliveries shall be allowed on Sundays. Laidlaw shall keep the facility's delivery gate locked during all prohibited hours and shall post a sign on the delivery gate detailing the allowed delivery times. However, Laidlaw shall be allowed deliveries to the facility Saturdays starting at 5:00 am instead of 8:00 am only during the approximate six week period when road bans are in effect which bans require truckers to drive on frozen roads. (This ban on certain roads results in loggers having to work night shifts and to deliver their loads before the sun starts melting roadways in early morning.)

2. Laidlaw shall work with the City to develop truck traffic safety and routing procedures and policies to establish the most appropriate routing for trucks traveling to and from the plant while in the City of Berlin. Laidlaw acknowledges the City's interest in and right to establish mandatory municipal truck traffic safety and routing ordinances within City limits. Laidlaw further agrees, once it has been made aware of a violation, to prohibit any driver found to have received three (3) citations for violating applicable truck traffic safety and routing ordinances within any twelve (12) month period from making deliveries to the site for six (6) months from the date of the third citation.
3. Laidlaw shall develop a truck delivery policy which shall be communicated to all truck drivers for the safe and environmentally conscious truck operation in the City of Berlin. This delivery policy shall include a provision which shall clearly state that enforcement action will be taken by Laidlaw against any trucks that repeatedly violate any safety, noise, air quality or dust related requirements (including all applicable provisions contained in Article II: NOISE, AIR AND WATER QUALITY).

IV. COMMUNITY BENEFITS

1. Laidlaw shall fund the design, development, and construction of a "River Walk" along the east bank of the Androscoggin River, in the vicinity of the facility. Laidlaw shall be solely responsible, either itself or through a contractor of its own selection, for the arrangement for and execution of all construction work necessary to complete the River Walk. The City will contract with a party of its selection for the design of the River Walk which shall resemble, to the greatest extent possible, the Conceptual Landscaping Plan and the Laidlaw Scope, with the understanding that the final River Walk design must harmonize, to the greatest extent possible, the City's aesthetic wishes and the practical requirements of the infrastructure and equipment required for the generation of electricity. The City will provide Laidlaw with an opportunity to review and comment upon the final River Walk design, and agrees to work in good faith to accommodate any comments or suggestions that Laidlaw may provide. In the event that the River Walk design developed by the City does not meet Laidlaw's expectations, and the City does not wish to make further modifications, the parties agree to submit the dispute to private resolution process. Laidlaw shall provide to the City a permanent easement for the River Walk, the size and location of which shall be specified in the final design and which will not interfere with the construction or operation of the facility. The River Walk shall include three (3) interpretive signs depicting specific cultural and historical aspects of the City and region, the content of which shall be determined by the City. Laidlaw will integrate the City's River Walk design into the full landscaping plan described in Part I.1, which shall be subject to the comment and review provisions set forth therein. The City

shall be responsible for permitting the River Walk consistent with all applicable state and local requirements. Following the completion of construction, Laidlaw shall pay to have a professional engineer selected by the City certify that the River Walk meets all applicable safety and construction criteria. Laidlaw shall also require the contractor who builds the River Walk to provide a commercially reasonable, industry-standard general warranty to the City against any material construction defects in the River Walk, which general warranty shall expressly state that it is directly enforceable by the City. Laidlaw's funding responsibilities for the River Walk shall be as follows: Laidlaw shall bear all construction costs for the River Walk. Additionally, Laidlaw shall provide \$325,000 from which all costs incurred by the City in connection with the River Walk or other aspects of the site evaluation process, including but not limited to design costs and permitting costs, shall be repaid. Laidlaw shall then place whatever remains of the \$325,000 after payment of all the City's expenses incurred in connection with the River Walk into a maintenance fund accessible to the City for use in the maintenance of the River Walk. Once the professional engineer has certified that the River Walk meets all applicable safety and construction criteria, the responsible contractor has provided the requisite warranty, the City's expenses are paid, and Laidlaw has fully funded the maintenance fund, the City shall assume all maintenance obligations with regard to the River Walk going forward. The City will assume premises liability associated with the River Walk, except that the City shall not assume any liability for existing or future environmental conditions at or in the vicinity of the River Walk or on the eastern bank of the Androscoggin River.

2. Laidlaw shall work in good faith with the City, the New Hampshire State Bureau of Trails and the local snowmobile and ATV clubs to develop an ATV/Snowmobile trail along the Hutchins/Coos street site boundary. The final design will resemble, to the greatest extent possible, the relevant portions of the Conceptual Landscaping Plan and the Laidlaw Scope. Construction of the ATV/Snowmobile trail shall be the responsibility of the relevant ATV/Snowmobile club. The relevant ATV/Snowmobile clubs and/or other third parties shall assume maintenance obligations and premises liability. Laidlaw will provide a permanent easement for the trail, the size and location to be determined after the final design is completed.
3. Laidlaw, at its expense shall remove the old barb wire fence and erect a new black, vinyl coated, chain link fence without barbed wire along the entire perimeter of the site inside of the River Walk along the Androscoggin River and inside of the ATV and Snowmobile trail. There shall be no barbed wire along the facility's exterior boundaries.
4. Laidlaw agrees to sponsor local events and social activities for the benefit of the community. The amount of such sponsorships and donations as well as the receiving party shall be determined by and its affiliates in the ownership and operation of the facility. Laidlaw has already sponsored events and donated to youth hockey. Laidlaw shall continue to be a community sponsor before, during and after construction of the energy facility.
5. Laidlaw shall facilitate plant and site tours in order to help educate the general public and to foster an understanding of the benefits of green alternative biomass energy.

6. To the greatest extent possible and if technically and economically feasible, Laidlaw shall offer low-cost thermal energy to businesses that wish to co-locate on the site. Laidlaw has entered into an agreement to provide hot water generated from waste heat to the Gorham paper mill. To the extent possible, Laidlaw further agrees to make excess hot water available to co-located businesses on as favorable terms as possible, with the understanding that additional potential users beyond the Gorham mill shall be subject to the availability of excess energy as determined by engineering studies.
7. To the extent that qualified help is available locally, Laidlaw shall work with its contractors to prioritize the hiring of local workers, both for the construction phase of the project as well as for the operating phase after construction has been completed. During the construction phase, Laidlaw shall request construction contractors to list job openings with the NHWORKS office for recruiting purposes. Laidlaw shall work with the local New Hampshire Works office, the White Mountains Community College, and/or other applicable local organizations to achieve as much local hiring and recruiting as possible consistent with the needs of the facility's operation.
8. To the extent feasible and economically reasonable, Laidlaw shall use its best efforts to prioritize the purchase of wood fuel from local owner/operators, so long as the fuel is procured from timber harvests that adhere to Laidlaw's Sustainability and Procurement Policies.
9. Laidlaw, at its sole cost and expense, shall build a paved, seventeen space community parking lot on Community Street near the intersection with Coos Street and provide an easement for same to the City of Berlin provided that the City assumes the cost of maintenance and liability associated with such parking lot.
10. Laidlaw, working with local educational institutions, shall help establish an ongoing student intern program where students interested in alternative energy would have an opportunity to work and learn about the biomass energy facility.
11. Whether or not a Payment In Lieu of Taxes is negotiated with Laidlaw is the exclusive right and responsibility of Laidlaw and the City.
12. Laidlaw shall manage all excavations and excavated materials in accordance with New Hampshire DES standards, including, without limitation, a Soils Materials and Management Plan as reviewed and approved by New Hampshire DES.
13. Laidlaw agrees to fully fund the Scope of Work for Phase II Environmental Site Characterization dated August 10, 2010/File No. 10007A00 by New England EnviroStrategies, Inc. (the "Scope of Work") (Exhibit 1D) in order to investigate subsurface conditions at the Site and evaluate possibilities for its redevelopment. Laidlaw, at its sole expense, will fund the Stage 1 Source Area Investigations, the Stage 2 Expanded Mill Yard Investigations, and the Stage 3 Periphery Investigations, as fully described in the Scope of Work, with Laidlaw's expenditures thereon not to exceed \$125,000. Performance of the Scope of Work shall be conducted, to the greatest extent possible, so as not to interfere with construction of the facility, and the parties will work

in good faith to complete the performance of the Scope of Work prior to the commencement of construction under this Certificate. Laidlaw agrees to provide full access to the site to the City and its representatives and to New England EnviroStrategies, Inc. for the performance of the Scope of Work, with the understanding that such access must not interfere with construction of the facility and subject to New England EnviroStrategies, Inc.'s providing Laidlaw proof of insurance coverage satisfactory to Laidlaw for its presence and activities at the site. In the event that the implementation of the Scope of Work requires participation in public or regulatory meetings or the preparation of Agency approved Work Plans or Quality Assurance Project Plans, as fully described in the Scope of Work, Laidlaw shall participate and support the City in such meetings and/or applications. Nothing in this paragraph 15 shall waive or compromise the Covenant Not To Sue In re: Acquisition of Berlin/Gorham Mills; The Mt. Carbury Landfill; and Certain Hydroelectric Assets dated May 30, 2002, as the same shall be amended or modified from time to time (the "Covenant Not To Sue"). Subject to Laidlaw's full funding and upon the full performance of the Scope of Work in accordance with this paragraph, the City agrees to waive any right it may have to sue or otherwise impose liability upon Laidlaw for subsurface conditions existing at the site prior to and as of the date of this Certificate, including but not limited to the City's Notice of Intent to Sue under the federal Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq., dated January 13, 2010 and addressed to PJPD Holdings, LLC. Nothing in this paragraph or in these stipulations as a whole shall be construed to waive any right of the City to seek to impose liability upon Laidlaw or any other party for any new release or contamination arising after the date of this Certificate, or for any conditions existing at the site prior to and as of the date of this Certificate that are altered or otherwise affected by actions taken after the date of this Certificate, which rights are expressly reserved. This paragraph is intended to extend to Laidlaw from the City the same protections as afforded by Part 2 of the Covenant Not To Sue, and to Reserve for the City rights no less than those reserved in Part 4 of the Covenant Not To Sue, and shall be interpreted accordingly.

14. Laidlaw shall regularly consult with and inform the City Fire Department on its emergency and safety procedures and shall maintain and submit to the City's Emergency Planning Committee and Fire Department material safety data sheets (MSDS) for any hazardous chemicals used or stored at the facility.
15. These stipulations shall be binding on both the City as well as Laidlaw and its successors and assigns.

A

CONCEPTUAL LANDSCAPING PLAN: SUPPORTING NARRATIVE

Landscaping at the proposed Laidlaw Berlin BioPower facility in Berlin, New Hampshire (“the facility”) shall resemble, to the greatest extent possible, the conceptual landscaping plan provided to the City of Berlin by landscape architect John Wacker on July 7, 2010 (the “Conceptual Landscaping Plan”).

Overall Landscaping: Plantings around the facility will be a mix of evergreens and native deciduous species, as illustrated in the Conceptual Landscaping Plan. Evergreen plantings will be of White Pine, and deciduous plantings will be a mix of Yellow, White, and River Birch (nonflowering) and Shubert Cherry (flowering), as well as other selected deciduous species. Species groupings and planting dimensions are indicated by numbers that correspond to lists on the Conceptual Landscaping Plan. Plantings will be in at least double-staggered rows on straight runs, and will be in more informal, naturalized groupings where indicated. Plantings will range between 15’-40’ on center, and will be of mixed height and caliper.

River Walk: Plantings along the River Walk will be a mix of evergreen and native deciduous species, and will be of sufficient height and density to provide a visual and aural buffer for persons on the River Walk. The cross-section of plantings along the River Walk will conform as closely as possible to the illustration in the upper left-hand quadrant of the Conceptual Landscaping Plan. The usable surface of the River Walk will be 10’ wide, so as to simultaneously permit multi-directional travel by a variety of users, with a minimum of 5’-6’ of additional graded surface on either side. The River Walk will be constructed on a 25’-wide easement from Laidlaw to the City, and will be of a permeable surface as required by NH DES shoreland protection regulations. Boardwalks and/or retaining walls will be included in the River Walk so far as necessary for compliance with the federal Americans With Disabilities Act. A black, vinyl-coated chain link fence, of minimum height 42”, will run along the boundary between the facility and the easement boundary.

ATV/Snowmobile Trail: Plantings along the ATV/Snowmobile Trail will be a mix of evergreen and native deciduous species, as indicated in the Conceptual Landscaping Plan, and will be of sufficient height and density to create a landscape-buffered corridor surrounding the trail. The usable surface of the trail will be 20’ feet wide, so as to accommodate multi-directional use and necessary trail-grooming equipment, and will be constructed consistent with the illustration in the bottom right-hand quadrant of the Conceptual Landscaping Plan. The ATV/Snowmobile Trail will be constructed on a 50’ easement from Laidlaw to the City.

B

5/10/10

DRAFT

Laidlaw Berlin BioPower, LLC

LIDLAW BERLIN BIOPOWER, LLC

DESIGN DOCUMENT

LBB/DD/001

LANDSCAPING SCOPE

- 1 PURPOSE
- 2 SCOPE
- 3 DESIGN
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1. PURPOSE

Laidlaw Berlin BioPower LLC (“LBB”) is developing a nominal 70 MW gross output power plant, fired on woody biomass (the “Project”) to be located on a site in Berlin, New Hampshire.

The Site (approximately 62 acres) for the Project, formerly occupied by the Fraser Pulp Mill (also known as the Burgess Mill), is bounded to the north and northwest by the Androscoggin River, to the south and southeast by Community Street, Coos Street and Hutchins Street and to the northeast by the remaining portion of the former pulp mill parcel, this property being currently vacant and zoned Industrial/Business.

The purpose of this Design Document is to describe the landscaping work required to provide community access along the northern and southern boundaries, as detailed further below. It is not the purpose of this document to detail all the landscaping to be provided on the Site, except in so far as required to clarify the scope of requirements for the community access. This document also clarifies the responsibilities between the various parties.

2. SCOPE

2.1 Conceptual Landscaping Plan

A conceptual landscaping plan (Ref 1) has been prepared by the ESS Group, Inc., the Project’s environmental consultants, following discussions between the Project and the City as represented by the EFSEC Advisory Committee. This plan should be read in conjunction with this document and both will be updated as required to reflect the final landscaping requirements to provide the agreed community access.

2.2 Community Access

Community access is to be provided in three ways, namely:

- A riverside walk along the northern/northwestern boundary to the Site
- A snowmobile/all terrain vehicle (ATV) trail along the southern/southeastern boundary to the Site
- A community parking lot on the southwestern corner of the Site

Each of these is described further below.

2.2.1 Riverside Walk

It is intended to provide a riverside walk within the Site’s current property boundary along the whole of the northern/northwestern boundary to the Site. The riverside walk is expected to be designated as a trail for ‘pedestrian recreational use’. This walk will terminate at the Site boundary in the southwestern corner of the Site at the end of Community Street and at the northwestern corner it will terminate at the Site boundary with the adjacent property to the northeast. Any extension of

the walk beyond the Project Site's southwestern or northern/northeastern property boundaries will be the responsibility of the City.

Near the southwestern corner the path will pass very close by the Project's cooling towers which may, due to the path being within the property boundary, subject walkers to higher levels of noise than will be experienced at the receptor points identified in the noise modeling studies carried out for the Project (see Section h(3)(ii) of Ref 2). While it is not expected that these noise levels will be harmful to anyone walking by, LBB is not responsible for implementing any additional measures beyond those already identified in Ref 2, which are intended to make sure the plant is in compliance with its obligations at the property boundary and/or relevant receptor points. As part of its planned noise mitigation measures LBB expects to provide a noise barrier alongside the cooling towers and this will provide some mitigation also to walkers.

The riverside path will pass very close to the former Riverside Newsprint Shipping Department, or "newsprint building". LBB expects to stabilize the building, clean it out, repair the roof as necessary and seal up the building in order to protect it pending possible future restoration by others. It will be necessary to provide a fence around this building to prevent unauthorized access. LBB will provide the surfaced path and any steps, according to the design requirements laid out in Section 3.1 below.

Any signage required along, or at the ends of, the path will be the responsibility of the City to provide. LBB is willing to cooperate with the Plymouth State University to provide two information signs depicting Brown Company history at suitable points along the path.

The riverside walk will be fenced by LBB immediately adjacent to the Project's side of the walkway to prevent unauthorized access to the Project Site. Any old fencing along the line of the path will be removed by LBB.

2.2.2 Snowmobile/ATV Trail

The snowmobile/ATV trail will go from the corner of Community Street and Coos Street in the southwest of the property to the northern/northeastern property boundary along Hutchins Street. The detail arrangement near the truck entrance is yet to be resolved; LBB will discuss this with the local snowmobile/ATV club to clarify. Any extension of the trail beyond the Project Site's southwestern or northern/northeastern property boundaries will be the responsibility of the City.

LBB will construct the trail, according to the design requirements laid out in Section 3.2 below.

The trail will be fenced by LBB immediately adjacent to the Project's side of the trail to prevent unauthorized access to the Project Site. No fencing is to be provided between the snowmobile/ATV trail and Hutchins Street or Coos Street. Any old fencing along the line of the trail will be removed by LBB.

2.2.3 Community Parking Lot

A parking lot will be provided on the corner of Community Street and Coos Street to serve the nearby ballfield. Access to the parking lot will be from Community Street.

LBB will construct the parking lot, according to the design requirements laid out in Section 3.3 below.

Parking orientation and traffic flow will be the sole responsibility of the City.

The parking lot will be fenced by LLB immediately adjacent to the Project's side of the parking lot to prevent unauthorized access to the Project Site. No fencing is to be provided between the community parking lot and Community Street or Coos Street. Any old fencing in the area of the parking lot will be removed by LBB.

Lighting will be provided in accordance with the Site Lighting Plan, drawing number 193.01-E71A-A, provided with the Laidlaw EFSEC Application (Ref 2).

2.2.4 Landscaping Within Project Fenceline

The landscaping plan shows various areas of planting within the Project fenceline. Three broad areas of planting are proposed; alongside the riverside walk (apart from anything around stormwater ponds); a buffer of planting of 5 feet in width or greater is proposed alongside the snowmobile/ATV trail vegetation alongside; and a narrow planted screen alongside the North of Community Street opposite the ballfield is planned as depicted in the Photo Simulation entitled "View from Community Street Ballfield" Figure (h)(3)(iv)-2 Laidlaw EFSEC Application (Ref 2). [Some planting to the Project side of the perimeter fenceline may be appropriate, but this has not yet been addressed. Do we need to consider more extensive planting along side the riverwalk or is what is shown on the current landscaping plan sufficient?]

LBB will generally provide the landscaping and planting, according to the design requirements laid out in Section 3.4 below.

It has been suggested that a community effort be planned to plant any trees provided by LBB.

No sprinkler system will be provided.

Landscaping of the various stormwater ponds is not addressed in this note, but this will be completed by LBB.

3. DESIGN

3.1 Riverside Walk

The surfaced part of the riverside walk provided by LBB will be generally no more than 4-6 feet in width, although it is intended to provide an overall right of way of 10 feet, subject to the topography

of the riverside allowing, so that mechanical brush clearance can take place if desired. The surface of the path is expected to be generally of gravel / grass and rock

Where the gradient requires it, steps will be provided by LBB; it is anticipated that this will be required in the vicinity of the cooling towers.

The current landscaping plan also shows the riverside path running along the riverside of the fence around the T-1 Transformer Site. However field observations indicate that the land drops off too severely outside that fenceline to construct the path there without major grading changes and installation of a retaining wall. The preferred solution is to move the riverside T-1 perimeter fenceline to the south several feet and hence allow the path to be constructed along the crest of the paved berm that surrounds the area (the entire T-1 Site area is paved to provide a cap over the PCB contaminated soils). Such a move of the fence will require agency approvals.

Simple railings will be provided where necessary by LBB on the riverside of the path. However such railings are unlikely to deter a deliberate attempt to exit the walkway and approach the riverbank. LBB will work with the City to determine the locations of the railings. LBB will not be able to take any responsibility for the consequences of people leaving the path on the riverside, no matter how this may occur.

LBB proposes that the scenic viewing area be provided with two picnic benches.

Fencing provided by LBB will be of the standard 6 ft chain-link type fence, finished in black, in common with other security fencing planned to be used around the Site.

3.2 Snowmobile/ATV Trail

The snowmobile/ATV trail will be 15 feet wide and rough graded, but not surfaced.

Fencing provided by LBB will be of the standard 6 ft chain-link type fence, finished in black, in common with other security fencing planned to be used around the Site.

3.3 Community Parking Lot

The parking lot will be surfaced with gravel suitable for cars and light vehicles and is intended solely for summer use.

Fencing provided by LBB will be of the standard 6 ft chain-link type fence, finished in black, in common with other security fencing planned to be used around the Site.

3.4 Landscaping Within Project Fenceline

The type and density of planting to be provided needs to be agreed with the City, but is expected to be of a type naturally found in the area. Fast growing white pine trees where a significant barrier is required is proposed rather than hardwood trees which will take much longer to reach maturity; otherwise a mixture of white pine and native mixed wild grass seed is proposed.

Landscaping and planting of the stormwater ponds will be carried out in accordance with the requirements of the stormwater permit.

4. PERMITTING

The City will be responsible for obtaining any permits required for the riverside walk, snowmobile/ATV trail and the community parking lot. The City will provide LBB with a copy of all permit applications made and responses received and give LBB opportunity to comment as appropriate. Copies of approvals received will also be given to LBB, together with full details of any conditions imposed.

It needs to be confirmed that the granting of an easement(s) to the City for the riverside path, for the snowmobile/ATV trail and for the community parking lot, can provide the necessary assurances concerning liability that LBB will require. Currently LLB anticipates that granting of an easement(s) is preferred rather than deeding the strips of land back to the City.

Due to the challenging topography on the river side of the T-1 Transformer Site it will be desirable to move the T-1 perimeter fence that runs along the river side south by several feet to better accommodate the riverside path. ESS carried out a Phase I environmental assessment (Ref 3) which noted that "A deed restriction has been or will be placed on the T-1 Site that will restrict future use of this area" and "The asphalt/clean soil cap must be maintained and the T-1 area must remain undisturbed in accordance with deed restrictions" and that both EPA and NHDES are involved with this site. Moving the fence will require agency approval(s). The City will need to address this in gaining the relevant approvals for the riverside walk.

LBB notes that the riverside walk is in various parts located within the 50 foot waterfront buffer and the City will need to obtain a permit from NHDES. In particular the impact on the design of the walk from protecting endangered species which normally are expected to benefit from the setback having natural vegetation needs to be considered.

The easement for the snowmobile/ATV trail will need to take into account the requirement for future access to the property at various points along the trail for future potential tenants of the site. Approximate expected locations for such access are shown on the landscaping plan.

5. MAINTENANCE

5.1 Riverside Walk

Maintenance of the riverside walk will be the sole responsibility of the City. It is expected that every year the riverside walk will be closed off by the City, with a suitable barrier and signage, from November 1st until April 15th.

5.2 Snowmobile/ATV Trail

Maintenance of the snowmobile/ATV trail will be the responsibility of the local snowmobile/ATV club.

5.3 Community Parking Lot

Maintenance of the community parking lot, including the lighting, will be the sole responsibility of the City.

5.4 Landscaping Within LBB Fenceline

Maintenance of the landscaping and planting within the Project Site's security fence will be the responsibility of LBB.

6. SCHEDULE**6.1 Permitting**

All easements required to be granted by LBB and all permits required to construct the riverside path, snowmobile/ATV trail and community parking lot will need to be in place prior to the issuance of the Certificate of Site and Facility expected to occur before Oct 1, 2010.

6.2 Construction

LBB expects to carry out construction of the various facilities as part of its overall project construction activities to allow it to be completed in the most economic manner. Landscaping and planting is usually carried out towards the end of such a project, and the timing of planting itself is also subject to seasonal considerations.

7. REFERENCES

Ref #	Document #	Title	Date
1	LL-B DRAFT	Biomass Energy Facility, Berlin NH, Conceptual Landscape Plan*	2 nd February 2010

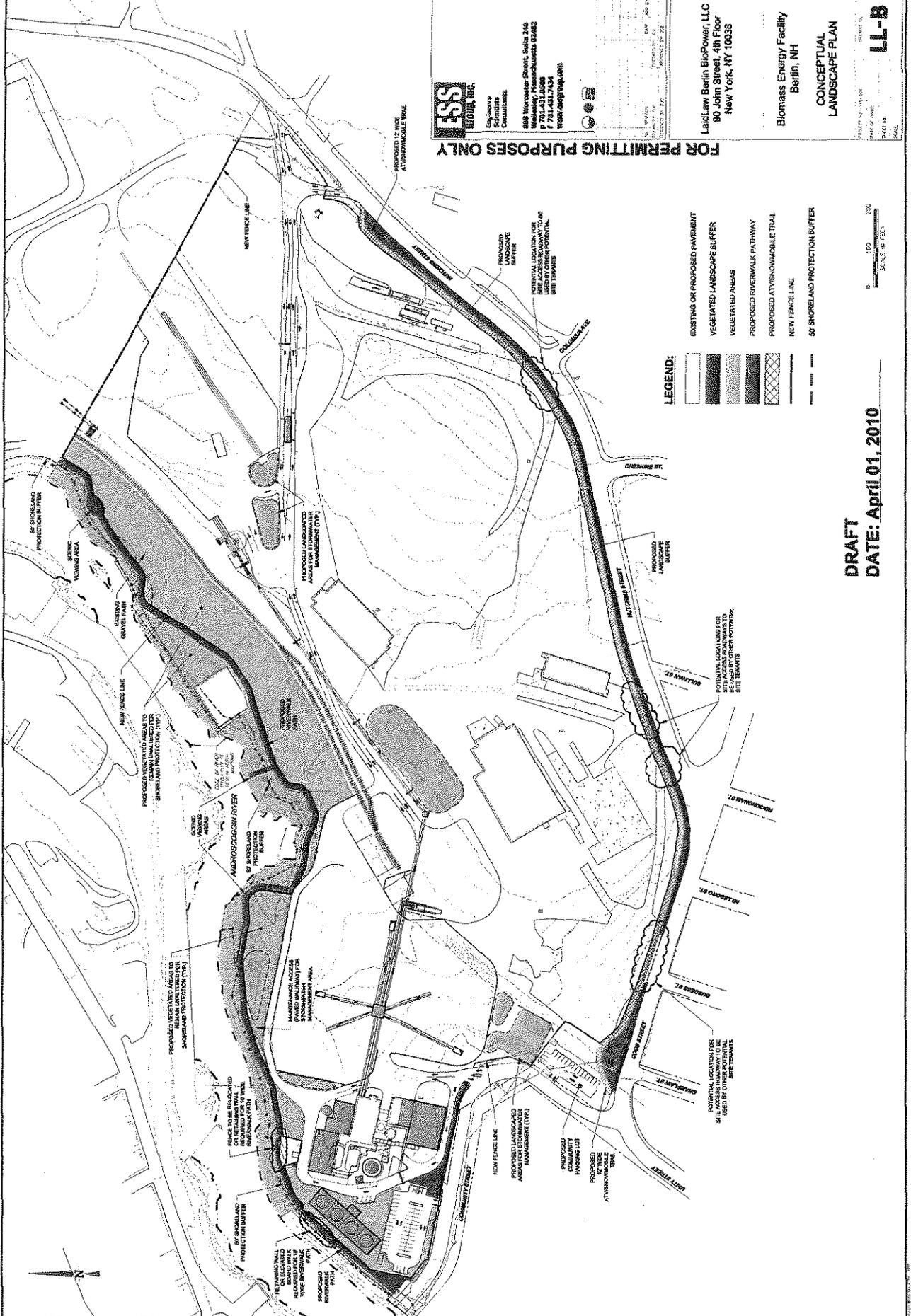
*To be revised as per final document.

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DATE: 10/11/10	SCALE: 1" = 100'
PROJECT NO: 10-11-10	DATE: 10/11/10
PROJECT NAME: BIOSCIENCE ENERGY FACILITY	DATE: 10/11/10
PROJECT LOCATION: 445 NEWMARKET STREET, PORTSMOUTH, NH	DATE: 10/11/10
PROJECT DRAWN BY: JRB	DATE: 10/11/10
PROJECT CHECKED BY: JRB	DATE: 10/11/10
PROJECT APPROVED BY: JRB	DATE: 10/11/10

Laidlaw Berlin BioPower, LLC
 80 John Street, 4th Floor
 New York, NY 10038

Biomass Energy Facility
 Berlin, NH

CONCEPTUAL
 LANDSCAPE PLAN

DATE: 10/11/10
 SCALE: 1" = 100'

LL-B

FOR PERMITTING PURPOSES ONLY

LEGEND:

- EXISTING OR PROPOSED PAVEMENT
- VEGETATED LANDSCAPE BUFFER
- VEGETATED AREAS
- PROPOSED REVERWALK PATHWAY
- PROPOSED ATYRNOMOBILE TRAIL
- NEW FENCE LINE
- 50' SHORELAND PROTECTION BUFFER

DRAFT
 DATE: April 01, 2010



D

August 10, 2010
File: 10007A00

Downs Rachlin Martin PLLC
8 South Park Street, PO Box 191
Lebanon, New Hampshire 03766

Attention: Peter D. Van Oot, Esq.

Subject: Scope of Work for Phase II Environmental Site Characterization
Former Burgess Mill Brownfields Site
Berlin, New Hampshire

Dear Attorney Van Oot:

New England EnviroStrategies, Inc. (NE2S) is pleased to submit this scope and budget estimate for Phase II site characterization services in support of the Burgess Mill Brownfields redevelopment project, located in the City of Berlin New Hampshire. This scope of work is based upon our meeting with you and the City, our site visit, and knowledge of the area from our previous work.

BACKGROUND

The City of Berlin is interested in exploring potential redevelopment options for an approximate 60 acre area located along the eastern side of the Androscoggin River. Portions of this site have historically been utilized for manufacturing of wood pulp for use in papermaking. The City of Berlin currently lacks sufficient information regarding the nature and extent of contamination at the site which may affect potential re-use scenarios. Several Phase I Environmental Site Assessments (Phase I ESAs) have been conducted at the site, but these have generally focused on building structures of the former mill complex. Many of these structures no longer exist as a result of demolition and removal during the past 18 months.

Of greater concern to the City of Berlin is the potential for subsurface contamination from the 100+ years of mill operations for which little information is available. The series of Phase I's from past years were not followed up with invasive Phase II studies which would have quantified the Recognized Environmental Conditions (RECs) at the site. Before redevelopment of this brownfields site can move forward under the auspices of the State Brownfields Program, additional information will be required.

Before embarking on investigation and characterization efforts, the City of Berlin requires some understanding of the magnitude of cost it will likely face to facilitate redevelopment. In view of these concerns, New England EnviroStrategies, Inc. (NE2S) is providing a cost estimate for Phase II work at the Berlin site, structured in three stages which are outlined as follows:

- Stage 1: Source area investigations (approx. 10A)
- Stage 2: Expanded mill yard investigations (approx. 20-30A)
- Stage 3: Periphery investigations (approx. 20-30A)



Please see **Figure 1** (attached), showing approximate Stage areas for this Scope of Work in the context of historic (1998) and current (2009) site conditions.

SCOPE OF SERVICES

STAGE 1: SOURCE AREA INVESTIGATION

Background data compilation and evaluation

Historic background data will be reviewed and compiled into a site-specific geospatial database. Historic site surveys, aerial photos, Sanborn Fire Insurance Maps, USGS topographic maps, and other sources of historic land use information will be digitized and georeferenced for input into a spatial database for use in a Geographical Information System (GIS). Using a database oriented approach, NE2S staff is able to efficiently review and evaluate information from widely varying sources within a common geographic datum and present all site data in a useful platform for City planning purposes.

Development of initial conceptual site model

Once data have been compiled and evaluated, NE2S will develop an initial conceptual site model which will be used to guide environmental investigations at the site. The conceptual site model will be continually evaluated and revised as new data are developed or become available.

Subsurface Investigations (MIP/MWP)

NE2S proposes to use an adaptive site characterization method to collect real-time soil and groundwater characterization data in targeted areas of concern (to be identified in the background data evaluation). The collection of real-time data using a Membrane Interface Probe (MIP) and Modified Waterloo Groundwater Profiler (MWP) will facilitate the identification of environmental subsurface conditions in soil and groundwater (respectively). By using this technology, NE2S will be able to characterize subsurface conditions with fewer field mobilizations and adapt the sampling strategy based on real-time data collection. Due to the size of the area to be characterized, traditional exploration techniques could potentially require significantly greater number of borings and several rounds of field mobilization, data collection, and evaluation.

Soil Boring and Monitoring Well Installation

NE2S proposes to advance up to 20 Geoprobe soil borings at locations to be determined based on the findings of background data evaluation and the MIP/MWP investigation. Up to 10 borings will be completed as 1" diameter monitoring wells. Borings will be advanced down to a maximum depth of 20 feet. Soil borings will be sampled continuously and field screened with a photoionization detector (PID).

(STAGE 2: EXPANDED MILL YARD INVESTIGATION)

The second stage of investigation will seek to address any data gaps identified as part of Stage 1 characterization efforts, with expanded focus to include the northerly mill yard area. The focus of investigation will be derived from review of historical information, site observations, interviews with former employees regarding site usage and areas of interest



for redevelopment by the City, (e.g. location; presence of infrastructure; topography) Once key areas are identified, NE2S will advance 10-15 additional Geoprobe soil borings in these areas. Up to 10 borings will be completed as 1" diameter monitoring wells. Borings will be advanced down to a maximum depth of 20 feet. Up to 10 additional shallow (~2 ft) borings will be advanced via Geoprobe and/or hand auger. Soil borings will be sampled continuously and field screened with a PID. Select soil samples will be collected and submitted for laboratory characterization of RCRA 8 metals, PAHs, and VOCs Based on the findings of observation and/or field screening. Up to 10 soil samples will be submitted for laboratory analysis of PCBs, as deemed necessary.

(STAGE 3: PERIPHERY INVESTIGATIONS)

Additional subsurface exploration will be conducted in periphery areas generally north and east of the former mill facility. NE2S will advance up to 10 additional Geoprobe soil borings completed as 1" diameter monitoring wells, at locations of interest. Borings will be advanced down to a maximum depth of 20 feet. Soil borings will be sampled continuously and field screened with a PID. Select soil samples will be collected and submitted for laboratory characterization of RCRA 8 metals, PAHs, and VOCs Based on the findings of observation and/or field screening. As part of the periphery investigations, NE2S will also conduct a review of regulatory documentation for the Dummer Landfill (NHDES #198704035) and provide a written summary of environmental conditions within the context of potential re-use scenarios for this property.

Groundwater Sampling

NE2S will collect groundwater samples using low flow sampling methodologies from all newly installed monitoring wells following adequate well development and stabilization. The number of groundwater samples to be collected and parameters to be analyzed by laboratory characterization will depend on the results of background data evaluation and field investigations. Groundwater samples will likely be submitted for laboratory analysis of PAHs, RCRA metals and VOCs based on historic industrial operations.

Report Preparation

NE2S will summarize the findings of background data evaluation and site investigations in the form of technical Phase II report(s) for the site, depending on the sequencing of the field efforts. Each report will be structured such that it may be submitted to project stakeholders and NHDES for review. NE2S will prepare a separate letter report with discussion of these findings within the context of potential re-use scenarios for the City's considerations.

COSTS

This scope of work is based upon a preliminary review of historic site information. A range of costs associated with this work is presented below, as actual costs will vary depending on the number of borings advanced and the number of samples submitted for laboratory analysis.

- Stage 1: Source area investigations - \$55-65K
- Stage 2: Expanded Mill yard investigations - \$25-30K
- Stage 3: Periphery investigations - \$15-20K



Each stage is additive and dependent upon the previous work. This scope does not assume time and costs for public or regulatory meetings, or for preparation of Agency approved Work Plans or Quality Assurance Project Plans (QAPP). If the Work Plan and QAPP step is necessary, then that scope would need to be added to the Stage 1 costs (approximately \$7.5K), and then the work plan and QAPP updated for the subsequent stages (approximately \$3K for each stage).

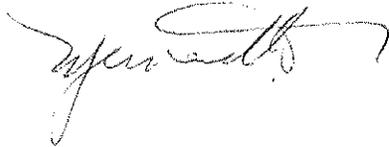
In summary, to provide a sufficiently detailed environmental evaluation of the 60 acres former mill area and Dummer Landfill, for the purposes of identifying redevelopment costs, the scope will cost in the range of \$95K to \$130K.

SCHEDULE

We anticipate that the Stage 1 investigation, evaluation, and reporting will take roughly 8-10 weeks, assuming that we use standard laboratory analytical turnaround times. Expedited laboratory turnaround can be requested for a surcharge in order to facilitate more timely completion of this work, as necessary. Additional stages of work would take approximately 4 to 6 weeks each, if done sequentially. Or, if desired, all three stages can be done roughly in parallel over an approximately 14 week timeframe resulting in one comprehensive report, rather than three deliverables.

If you would like to receive a proposal specifically for execution of any or all of the above scope of work, we would be happy to provide that. We appreciate the opportunity to submit this scope of work and we look forward to our further association with you on this when the City decides what it wants to have performed. Please don't hesitate to call at 603.856.8815 if you wish to discuss this scope of work.

Sincerely yours,
NEW ENGLAND ENVIROSTRATEGIES, INC.



Muriel S. Robinette
President

Attachment



1998 AERIAL PHOTO

2009 AERIAL PHOTO



NE2S Proposed Scope of Work Area

- Stage 1
- Stage 2
- Stage 3

0 200 400 800 Feet

DATA SOURCES:
Aerial photos obtained from NH GRANIT

New England
ENVIROSTRATEGIES, INC.

PROPOSED SCOPE OF WORK
PHASE II ESA
BERLIN, NEW HAMPSHIRE

Site Figure

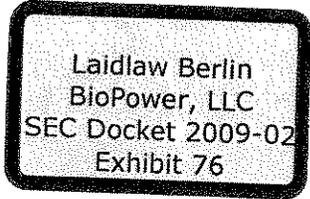
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Figure 1

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APPENDIX III – SUSTAINABILITY CONDITIONS

All References contained herein to the document entitled “*Good Forestry in the Granite State: recommended Voluntary Forest Management Practices for New Hampshire*” are to the 1997 version and include all subsequent amendments, editions and re-publications.



STATE OF NEW HAMPSHIRE
BEFORE THE
ENERGY FACILITY SITE EVALUATION COMMITTEE

APPLICATION OF LAIDLAW BERLIN BIOPOWER, LLC FOR A CERTIFICATE OF SITE
AND FACILITY

DOCKET NO. SEC 2009-02

**STIPULATION OF LAIDLAW BERLIN BIOPOWER, LLC
AND COUNSEL FOR THE PUBLIC**

Applicant Laidlaw Berlin BioPower, LLC and Counsel for the Public stipulate that the Proposed Sustainability Conditions attached as Exhibit A may be included as conditions of a Certificate of Site and Facility issued to the Applicant.

Barry Needleman
Counsel for Laidlaw Berlin BioPower, LLC

K. Allen Brooks
Peter Roth
Counsel for the Public

LIDLAW BERLIN BIOPOWER, LLC SUSTAINABILITY CONDITIONS

Laidlaw Berlin Biopower, LLC (LBB) proposes these sustainability conditions be attached to its Certificate of Site and Facility.

Procurement Standards and Practices.

1. LBB's procurement personnel shall be Licensed Forester(s). Laidlaw's procurement personnel will be responsible for assuring that all wood suppliers adhere to Laidlaw's Procurement Plan, and that its standards are followed.
2. LBB 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 or have had their license revoked.
3. LBB 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). LBB 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. LBB 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. LBB 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 LBB will be required to adhere to LBB's Procurement Plan.
6. LBB 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 programs or sites listed below. Such provisions regarding preference shall be at least as protective to the environment as those found within the Draft Biomass Fuel Supply Agreement, which has been made part of the record before the SEC.
 - a. Sustainable Forestry Initiative www.sfiprogram.org
 - b. Forest Stewardship Council - www.fsc.org;
 - c. American Tree Farm System - www.treefarmssystem.org;
 - d. Green Tag Forestry - www.greentag.org.
 - e. Master Logger - 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. LBB 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 Laidlaw 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. LBB 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. Laidlaw will establish an annual fund to provide financial assistance to suppliers seeking such certifications. The fund shall be called the Laidlaw Professional Logger Fund ("LPLF"). LBB shall place \$2,500.00 into the LPLF annually. All money placed in the LPLF shall be provided to suppliers seeking such certifications.
9. LBB 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.
10. LBB shall ensure that this Sustainability Condition is binding on any and all future fuel suppliers.

Reporting and Verification

1. LBB will conduct quarterly surveys seeking the following information. No later than two months following the close of the calendar year LBB will publish the results of such survey covering:
 - a. Volume of biomass supplied from certified timberlands/operations.
 - b. Volume of biomass supplied from timber sales managed by a licensed forester.
 - c. Volume of biomass supplied by Master or New Hampshire Professional loggers or other state logger certification programs.
 - d. Number of loggers that enrolled in certification programs as a result of Laidlaw's support fund.

Education and Outreach

LBB 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.

LBB will maintain a dedicated web site that posts the annual reports along with the aforementioned educational information.

Appeals Process

Any person or party aggrieved by this decision or order may appeal this decision or order to the New Hampshire Supreme Court by complying with the following provisions of RSA 541

R.S.A. 162-H: 11 Judicial Review. – Decisions made pursuant to this chapter shall be reviewable in accordance with RSA 541.

R.S.A. 541:3 Motion for Rehearing. - Within 30 days after any order or decision has been made by the commission, any party to the action or proceeding before the commission, or any person directly affected thereby, may apply for a rehearing in respect to any matter determined in action or proceeding, or covered or included in the order, specifying in the motion all grounds for rehearing, and the commission may grant such rehearing if in its opinion good reason for the rehearing is stated in the motion.

R.S.A. 541:4 Specifications. - Such motion shall set forth fully every ground upon which it is claimed that the decision or order complained of is unlawful or unreasonable. No appeal from any order or decision of the commission shall be taken unless the appellant shall have made application for rehearing as herein provided, and when such application shall have been made, no ground not set forth therein shall be urged, relied on, or given any consideration by the court, unless the court for good cause shown shall allow the appellant to specify additional grounds.

R.S.A. 541:5 Action on Motion. – Upon the filing of such motion for rehearing, the commission shall within ten days either grant or deny the same, or suspend the order or decision complained of pending further consideration, and any order of suspension may be upon such terms and conditions as the commission may prescribe.

R.S.A. 541:6 Appeal. Within thirty days after the application for a rehearing is denied, or, if the application is granted, then within thirty days after the decision on such rehearing, the applicant may appeal by petition to the supreme court.

EXHIBIT 5

Exhibit 5

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 Source Eligibility Sample Application Form. The Renewable Energy Source Eligibility Sample Application Form includes the Sample Application Form and all required 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:

Berlin Station, LLC

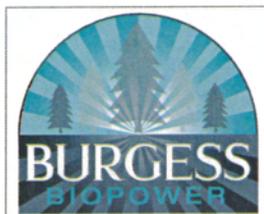


By: Robert Desrosiers

Title: Director

DATE:





April 6, 2012

Thomas Burack, Commissioner
Department of Environmental Services
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095

**Re: PUC 2505.02 Application Requirements
Berlin Station, LLC**

Dear Mr. Burack,

As per the requirements set forth in the New Hampshire Electric Renewable Portfolio Standard (PUC 2500), Burgess Biopower respectfully submits a copy of the application by Berlin Station, LLC for the qualification of the Berlin Station Biomass Plant as a Class I Renewable Energy Source. Please find included in this submittal one copy of the "Sample Application Form for Renewable Energy Source Eligibility" as well as the relevant exhibits and appendices.

In accordance with the Application Requirements (Section 14(d)), we are required to provide one copy of this Application to the New Hampshire Department of Environmental Services.

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

Sincerely,

Robert Desrosiers
Vice President

Enclosure