The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

April 21, 2010

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

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

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 ENGINNERING 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.

George Carlson, PE 4-19-10