



October 2, 2017

Tracking Number: 340141  
Authorization Number: 6099

**REGISTERED MAIL**

Northern Engineered Wood Products (2007) Inc.  
PO BOX 2890  
Smithers BC V0J 2N0

Dear Permittee:

Enclosed is Amended Permit 6099 issued under the provisions of the *Environmental Management Act*. Your attention is respectfully directed to the terms and conditions outlined in the permit. An annual fee will be determined according to the Permit Fees Regulation.

This permit does not authorize entry upon, crossing over, or use for any purpose of private or Crown lands or works, unless and except as authorized by the owner of such lands or works. The responsibility for obtaining such authority rests with the permittee. This permit is issued pursuant to the provisions of the *Environmental Management Act* to ensure compliance with Section 120(3) of that statute, which makes it an offence to discharge waste, from a prescribed industry or activity, without proper authorization. It is also the responsibility of the permittee to ensure that all activities conducted under this authorization are carried out with regard to the rights of third parties, and comply with other applicable legislation that may be in force.

This decision may be appealed to the Environmental Appeal Board in accordance with Part 8 of the *Environmental Management Act*. An appeal must be delivered within 30 days from the date that notice of this decision is given. For further information, please contact the Environmental Appeal Board at (250) 387-3464.

Administration of this permit will be carried out by staff from the Environmental Protection Division's Regional Operations Branch. Plans, data and reports pertinent to the permit are to be submitted by email or electronic transfer to the Director, designated Officer, or as further instructed.

Yours truly,

Ed A. Hoffman  
for Director, *Environmental Management Act*  
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Enclosure

cc: Environment Canada



MINISTRY OF ENVIRONMENT

PERMIT

6099

Under the Provisions of the Environmental Management Act

Northern Engineered Wood Products (2007) Inc.

2749 Railway Ave, Smithers BC, V0J 2N4

is authorized to discharge contaminants to air from a wood pellet manufacturing plant located within the municipality of Smithers, British Columbia, subject to the terms and conditions listed below. Contravention of any of these conditions is a violation of the Environmental Management Act and may lead to prosecution.

This permit supersedes and amends all previous versions of Permit PA 6099 issued under Part 2, Section 14 of the Environmental Management Act.

DEFINITIONS

For the purposes of this permit the following definitions apply:

- i. "Biomass" means:
• wood or wood products,
• manufactured wood fuel, or
• logging residue, or
• any biomass based fuels approved by the Director

- " Biomass" does not include any:
• paper or paper product,
• wood or wood products that has been treated with glue, paint or preservative or that contains a foreign substance harmful to humans, animals or plants when combusted, or municipal solid waste or construction debris.

- ii. "Condensable PM" means:
• the particulate matter collected in the impinger portion of a particulate matter sampling train (EPA method 202)

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- iii. **“Manufactured wood fuel”** means:
  - wood pellets or wood pucks.
  
- iv. **“ODt”** means:
  - Oven dried metric tonnes of wood material at 0% moisture content.
  
- v. **“Officer”** means
  - a person or class of persons employed by the government and designated in writing by a Director as an officer,
  - or a conservation officer
  
- v. **“Particulate Matter” (PM)** means:
  - the filterable (front half) particulate matter concentration as sampled according to the British Columbia Field Sampling Manual for Continuous Monitoring and the Collection of Air, Air-Emission, Water, Waste Water, Soil, Sediment, and Biological Samples (EPA method 5 or equivalent method approved by the Director).
  
- vi. **“PM-2.5”** means:
  - particles with a diameter of 2.5 micrometers or less
  
- vii. **“PM-10”** means:
  - particles with a diameter of 10 micrometers or less
  
- viii. **“Total Particulate Matter” (TPM)** means:
  - the particulate and condensable organics matter concentration as sampled according to the British Columbia Field Sampling Manual for Continuous Monitoring and the Collection of Air, Air-Emission, Water, Waste Water, Soil, Sediment, and Biological Samples (EPA Method 202, Oregon Method 7 or equivalent method as approved by the Director).
  
- ix. **“Wood product”** includes:
  - manufactured wood fuel, hog fuel, mill ends, wood chips, bark, shavings, sawdust, wood bark and firewood.

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1. **AUTHORIZED DISCHARGES**

- 1.1 This section applies to the discharge of air from a **BAGHOUSE**. The site reference number for this discharge is E234696.
- 1.1.1 The maximum rate of discharge is 30 cubic metres per second.
- 1.1.2 The authorized discharge period is 24 hours/day, 7 days/week.
- 1.1.3 The characteristics of the discharge must be equivalent to or better than:
- |                          |                      |
|--------------------------|----------------------|
| Total Particulate Matter | 15 mg/m <sup>3</sup> |
|--------------------------|----------------------|
- 1.1.4 The characteristics of the discharge include particulate matter and condensable organic compounds.
- 1.1.5 The authorized works are one fabric filter BAGHOUSE, ducts, fans, and related appurtenances approximately located as shown on the attached Site Plan.
- 1.1.6 The authorized works must be complete and in operation while discharging.
- 1.1.7 The location of the facilities from which the discharge originates and the point of discharge is Block 1, Plan 1657, Northwest 1/4 Section 19, Township 4, Range 5, Coast District.
- 1.2 This section applies to the discharge of air from a six stack **BIOMASS BELT DRYER**. The site reference number for this discharge is E304792.
- 1.2.1 The maximum combined rate of discharge is 198 cubic metres per second.
- 1.2.2 The authorized discharge period is 24 hours/day, 7 days/week.
- 1.2.3 The characteristics of the discharge must be equivalent to or better than:
- |                          |                        |
|--------------------------|------------------------|
| Total Particulate Matter | 15.0 mg/m <sup>3</sup> |
|--------------------------|------------------------|
- 1.2.4 The characteristics of the discharge include particulate matter and condensable organic compounds.

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- 1.2.5 The discharge temperature at each stack exit must not exceed 120<sup>0</sup>C.
- 1.2.6 The authorized works are one low temperature BIOMASS BELT DRYER, discharging to the atmosphere through six stacks, ducts, fans, and related appurtenances approximately located as shown on the attached Site Plan.
- 1.2.7 The authorized works must be complete and in operation while discharging.
- 1.2.8 The location of the facilities from which the discharge originates and the point of discharge is Block 1, Plan 1657, Northwest 1/4 Section 19, Township 4, Range 5, Coast District.

## 2. GENERAL REQUIREMENTS

### 2.1 Standard Conditions

For the administration of this permit 6099 all gaseous volumes must be converted to standard conditions of 293.15 K and 101.325 kPa with zero percent moisture.

### 2.2 Maintenance of Works and Emergency Procedures

The Permittee must inspect the authorized works regularly and maintain them in good working order. In the event of an emergency or condition beyond the control of the Permittee which prevents effective operations of the authorized works, the Permittee must take immediate remedial action. The Permittee must notify the Director or designated Environmental Protection Officer by telephone or email within 60 hours of the detection of the malfunction.

The Permittee must submit written documentation of any malfunction or emergency condition that affects the authorized works at the site to the Director within 30 days of the occurrence of the incident. The documentation must include the cause of the incident and the corrective and preventative actions undertaken.

The permittee must undertake all reasonable and practicable measures to minimize impacts from elevated emission levels during upset conditions to the satisfaction of the Director. The Director may reduce or suspend the operation of the permittee to protect the environment until the approved method of pollution control has been restored.

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Despite notification under this section, permitted levels must not be exceeded.

2.3 **Bypasses**

The discharge of contaminants which have bypassed the authorized treatment works is prohibited unless the prior approval of the Director is obtained and confirmed in writing.

2.4 **Future Requirements and Upgrading of Works**

The Director may require monitoring, and may specify procedures for monitoring and analysis, and procedures or requirements respecting the handling, treatment, transportation, discharge or storage of waste. The Director may, in writing, change and amend these requirements.

The Director may require repair, alteration, removal, improvement or addition to works or construction of new or existing works, and submission of plans and specification for works identified in this authorization.

The Director may alter, impose or otherwise amend permitted emission limits based on local air quality concerns and/or studies of air quality impacts.

2.5 **Modification to Processes and Authorized Works**

The Permittee must notify the Director in advance and submit plans for any changes or additional works or prior to implementing changes to the authorized works or any process that may affect the quality and/or quantity of the discharge.

Despite notification under this section, the authorized works must be complete and in operation when discharging and permitted levels must not be exceeded.

2.6 **Baghouse Operations**

The baghouse must be operated and maintained in accordance with the manufacturer's specifications. The Permittee must comply with the manufacturers recommended schedule for inspecting and maintaining the baghouse.

If the inspection frequency is not specified by the manufacturer an inspection and maintenance program must be developed by the permittee that consists of a schedule for periodic inspections that ensures that the baghouse is being

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adequately inspected and maintained and that emissions are not exceeding permit limits.

In addition the Permittee must maintain an operating and maintenance log of all monitoring, inspection and maintenance activities, including:

1. Incidents of malfunction(s) and corrective action(s) taken.
2. Maintenance activities, with inspection schedule, repair actions, and lock out times.
3. A daily log of differential pressure.
4. Opacity. If visible emissions exist, inspect equipment for evidence of malfunction, including broken bags. Also, record any corrective action taken;

The on-site record and/or copy of the above activities must be made immediately available upon request by an Officer or the Director.

#### 2.7 **Air Episode Management Plan**

The Permittee must prepare an Air Episode Management Plan to ensure that there are no extraneous emissions during poor air quality days.

The plan will specify the operational steps to be taken in the event that that an air quality advisory is issued for the local airshed.

The Permittee must immediately provide to a Director or an Officer, upon request, a copy of that Plan.

#### 2.8 **Fugitive Dust Control**

The Permittee must suppress fugitive dust created within the operation area. The Permittee must prepare, within 90 days of this amendment, and maintain a comprehensive Fugitive Dust Control Plan. The Permittee must comply with the Fugitive Dust Control Plan.

The Fugitive Dust Control Plan must define the following:

1. Management practises for all aspects of the facility that are a source of fugitive dust, including but not limited to the storage of wood residue and other pellet feedstock material, assessment and design rationale for control measures, timelines for installation and/or implementation of

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control measures and scheduled reviews of the effectiveness of control measures.

2. Procedures that Permittee personnel will follow to control fugitive emissions.
3. Steps that Permittee will take to demonstrate that corrective procedures are followed and to verify the facility is controlling fugitive emissions.
4. Primary and contingent control measures and practices to control and minimize fugitive dust within the facilities boundaries.
5. Fugitive dust control measures selected are applicable and appropriate for site conditions.
6. Procedures assess the effectiveness of the dust control plan.
7. Fugitive dust control record keeping requirements.
8. Fugitive dust control notification requirements.
9. Fugitive dust control training elements and requirements.

The Fugitive Dust Control Plan must be reviewed and updated annually by the Permittee

If fugitive dust becomes a concern, the Director may require the Permittee to implement additional measures to control, monitor or assess fugitive dust emitting from the facility. A copy of the Fugitive Dust Control Plan must be made immediately available upon request by an Officer or the Director.

### 3. **MONITORING AND REPORTING REQUIREMENTS**

The Director may, in writing, change the monitoring and reporting requirements outlined below. All records required under this section must be maintained for a minimum of five years.

#### 3.1 **Biomass Dryer**

The first test must be carried out within the first 60 calendar days from the date the Dryer has entered into full commercial operation. Once full commercial operation has begun the Permittee must conduct source monitoring of the biomass dryer, authorized in Section 1.2 above, every 3 months. Once four consecutive quarterly tests results satisfy the authorized limits, unless otherwise required in writing by the Director, source monitoring is no longer required.

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Should any source monitoring test result exceed the authorized limits in Section 1.2 then re-testing of the Dryer's stacks according to section 4.1 must be applied.

Unless otherwise specified by the director, sampling must be performed at a throughput that is at or above average for that of the previous calendar month and as close as practicable to the 90th percentile.

The analyses must include the following parameters:

- Average hourly dryer exit gas temperature during testing;
- Average hourly dryer ODT for the biomass dryer system for the previous month;
- 90th percentile hourly ODT throughput for the biomass dryer;
- Average hourly throughput ODT for the biomass dryer system during stack testing;
- Volumetric emission flow rates, m<sup>3</sup>/s;
- TPM, mg/m<sup>3</sup>;
- PM, mg/m<sup>3</sup>; and
- PM<sub>10</sub> & PM<sub>2.5</sub> mg/m<sup>3</sup>.

### 3.2 **Sampling Location and Techniques**

All sampling locations, techniques, and equipment must be acceptable to the Director. Sampling and monitoring data, including the rate of discharge, must be accompanied by process data relevant to the operation of the source of the emissions and the performance of the pollution abatement equipment involved in the testing.

### 3.3 **Sampling and Analytical Procedures**

Sampling is to be carried out in accordance with the procedures described in the most recent edition of the "British Columbia Field Sampling Manual for Continuous Monitoring Plus the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples", or by suitable alternative procedures as authorized by the Director.

A copy of the above manual may be purchased from the Queen's Printer Publications Centre, P. O. Box 9452, Stn. Prov. Gov't. Victoria, British Columbia, V8W 9V7 (1-800-663-6105 or (250) 387-6409). A copy of the manual may be viewed online at:

[www.env.gov.bc.ca/epd/wamr/labsys/field\\_man\\_03.html](http://www.env.gov.bc.ca/epd/wamr/labsys/field_man_03.html)

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Analyses are to be carried out in accordance with procedures described in the most recent edition of the "British Columbia Laboratory Methods Manual for the Analysis of Water, Wastewater, Sediment, Biological Materials and Discrete Ambient Air Samples", or by suitable alternative procedures as authorized by the Director.

A copy of the above manual may be purchased from the Queen's Printer Publication Centre, P. O. Box 9452, Stn. Prov. Govt. Victoria, British Columbia, V8W 9V7 (1-800-663-6105 or (250) 387-6409). The manual is also available for review at all Environmental Protection offices. A copy of the manual may be viewed online at: [www.env.gov.bc.ca/epd/wamr/labsys/lab\\_meth\\_manual.html](http://www.env.gov.bc.ca/epd/wamr/labsys/lab_meth_manual.html).

### 3.4 **Source Testing Reporting**

The Permittee must submit a copy of all source sampling reports along with a copy of all other data/analysis required by sections 3.8 and 3.9 to the Director within 30 days of the date when the stack test occurred. The report must be in a form acceptable to the Director.

The Permittee must submit all data required to be submitted under this section by email to the Ministry's Routine Environmental Reporting Submission Mailbox (RERSM) at [EnvAuthorizationsReporting@gov.bc.ca](mailto:EnvAuthorizationsReporting@gov.bc.ca) or as otherwise instructed by the Director. For guidelines on how to properly name the files and email subject lines or for more information visit the Ministry website:

<http://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/data-and-report-submissions/routine-environmental-reporting-submission-mailbox>

### 3.5 **Receiving Environment Monitoring**

The Permittee must participate in a joint ambient air quality and meteorological monitoring program in the local area that includes PM2.5/PM10 or related studies as directed in writing by the Director. The permittee may be required to pay for a portion of the program costs.

Based on the results of monitoring, the Director may direct the permittee to conduct additional air quality and meteorological monitoring that may include additional monitoring locations and parameters.

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### 3.6 Non-Compliant Sampling Results

If any sampling event is found to exceed the limits identified in this permit, then the Permittee must immediately notify the Director and re-test the non-compliant emission source with 30 calendar days of receipt of the failed test result.

If the results of the re-test exceed any of the permit limits, then the discharge from the non-compliant emission source must cease until the problem has been corrected, unless authorized in writing by the Director. Upon completion of the corrective action, the Permittee may resume operation of the authorized works. However, a third confirmation test must be conducted as soon as practicable to ensure the works meet the allowable limits. This additional testing and verification does not grant an allowance to exceed permit limits.

The Director may provide additional direction on the timing of the follow-up tests.

### 3.7 Non-compliance Reporting

If the permittee fails to fully comply with the requirements of this authorization, the permittee must, within 30 days of such non-compliance, submit to the Director a written report that is satisfactory to the Director and includes, but is not necessarily be limited to, the following:

- a. all relevant test results obtained by the permittee related to the noncompliance,
- b. an explanation of the most probable cause(s) of the noncompliance, and
- c. a description of remedial action planned and/or taken by the permittee to prevent similar noncompliance(s) in the future.

The permittee must submit all non-compliance reporting required to be submitted under this section by email to the Ministry's Non-Compliance Reporting Submission Mailbox at [EnvironmentalCompliance@gov.bc.ca](mailto:EnvironmentalCompliance@gov.bc.ca), or as otherwise instructed by the Director. For guidelines on how to report a non-compliance or for more information visit the Ministry website:

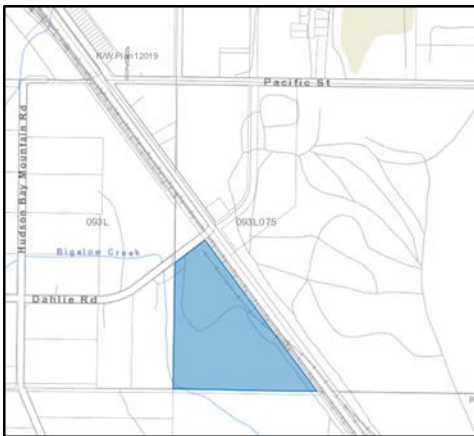
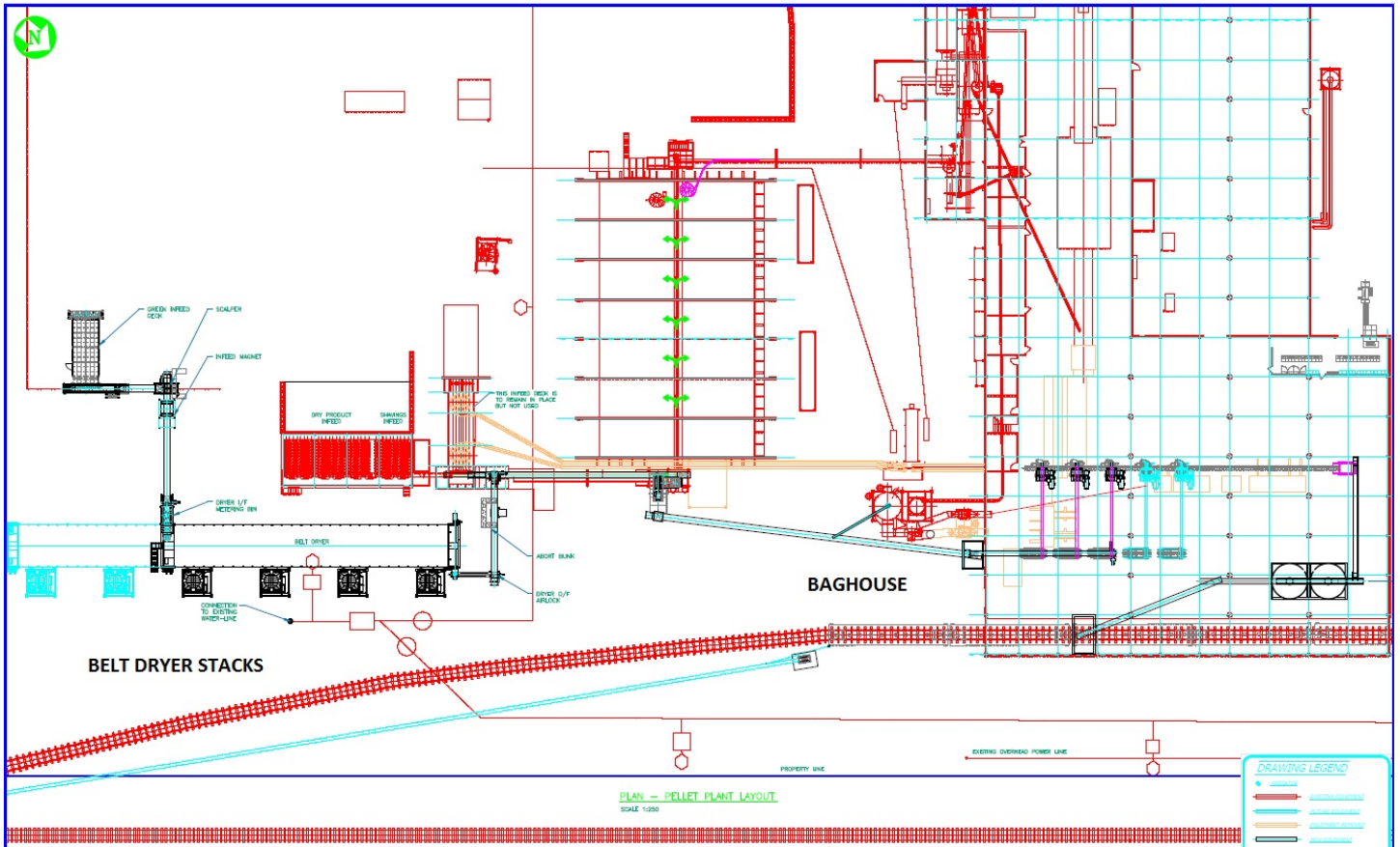
<http://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/data-and-report-submissions/non-compliance-reporting-mailbox>

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SITE PLAN



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