



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor
Curt Fransen, Director

September 4, 2013

Clark Fairchild, Vice President
North Idaho Energy Logs
P. O. Box 571
Moyie Springs, ID 83845

RE: Facility ID No. 055-00071, North Idaho Energy Logs, Hauser
Final Permit Letter

Dear Mr. Fairchild:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2013.0044 Project 61236 to North Idaho Energy Logs for the wood pellet fuel manufacturing facility located at Hauser. This PTC is issued in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho) and is based on the certified information provided in your PTC application received July 16, 2013.

This permit is effective immediately and replaces PTC No. P-060124, issued on March 8, 2007. This permit does not release North Idaho Energy Logs from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Almer Casile, Air Quality Analyst, at (208) 769-1422 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to contact Carole Zundel at (208) 373-0502 or carole.zundel@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink that reads "Mike Simon".

Mike Simon
Stationary Source Program Manager
Air Quality Division

MSCZ

Permit No. P-2013.0044 PROJ 61236

Enclosures

AIR QUALITY

PERMIT TO CONSTRUCT

Permittee North Idaho Energy Logs
Permit Number P-2013.0044
Project ID 61236
Facility ID 055-00071
Facility Location 16620 W. Prairie Ave.
Hauser, ID 83854

Permit Authority

This permit (a) is issued according to the "Rules for the Control of Air Pollution in Idaho" (Rules), IDAPA 58.01.01.200-228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200-228.

Date Issued September 4, 2013



Carole Zundel, Permit Writer



Mike Simon, Stationary Source Manager

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1. Permit Scope

Purpose

- 1.1 This is revised permit to construct (PTC) P-2013.0044 issued to the new owner (North Idaho Energy Logs) after a multi-year shutdown of the facility that was previously operated by Coeur d'Alene Fiber Fuels.
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin.
- 1.3 This PTC replaces Permit to Construct No. P-060124, issued on March 8, 2007.

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1. Regulated sources.

Permit Section	Source	Control Equipment
2	Wood burner and drum dryer	85% efficient separation cyclone
2	Dust collection system	Cyclone followed by a 99.99% efficient baghouse

2. Wood Pellet Manufacturing

2.1 Process Description

At North Idaho Energy Logs, sawdust containing approximately 45% moisture content is dried, formed into a pellet fuel, bagged, and stacked on pallets for shipping or stored in silos for bulk shipments. A single pass four section rotary drum dryer is used to lower the moisture content of the wood to about 8%. The dried sawdust is passed through a separation cyclone to exhaust the hot moisture laden air and augured to a shaker screen. Oversize material is sent to a hammer mill. The fines and sized material from the hammer mill are sent to a metering bin for the pellet mill where the wood particles are compressed into fuel pellets. Dust generated by the transfer and screening of the sawdust and pellets milling is vented to the dust collection system.

A 23 MMBtu/hr wood fired vertical dry cell suspension burner will provide heat for the rotary drum dryer. Exhaust from the burner is blended with sufficient ambient air to reduce the temperature to approximately 750° Fahrenheit at the dryer inlet. The temperature helps to reduce visible emissions.

2.2 Control Device Descriptions

Combustion emissions from the burners are vented into the drum dryer, which then vent to an 85% efficiency cyclone. Dust generated by the transfer and screening of the sawdust, pellet milling, and pellet cooling is vented to the dust collection system.

Table 2.1. Dryer burner and Dust Collection System Description.

Emissions Units / Processes	Control Devices	Emission Points
Dryer burners	85% efficiency separation cyclone	Dryer stack
Dust collection system	Cyclone followed by a 99.99% efficient baghouse, or equivalent	Baghouse stack

Emission Limits

2.3 Emission Limits

- The PM₁₀ and CO emissions from the dryer stack shall not exceed any corresponding emissions rate limits listed in Table 2.2.
- The PM₁₀ emissions from the dust collection system baghouse stack shall not exceed any emissions rate limits listed in Table 2.2.

Table 2.2. Dryer and Baghouse Emission Limits^(a).

Source Description	PM ₁₀ ^(b) lb/hr ^(c)	CO T/yr ^(d)
Drum dryer stack	10.68	60
Dust collection system baghouse stack	0.7	---

a In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.

b Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.

c Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.

d Tons per any consecutive 12-calendar month period.

2.4 Opacity Limit

Emissions from any stack, vent, or functionally equivalent opening shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625 (Rules for the Control of Air Pollution in Idaho). Opacity shall be determined using the procedures contained in IDAPA 58.01.01.625.

2.5 Visible Emissions Limit

Visible emissions shall not be observed leaving the property boundary at any time. Visible emissions shall be determined by EPA Reference Method 22, as described in 40 CFR 60, Appendix A, or using a DEQ-approved alternative method.

2.6 Odor Limit

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

Operating Requirements

2.7 Allowable Burner Fuel

- The permittee shall use only wood-byproduct (shavings, chips and/or sawdust), as burner fuel.
- The permittee shall use natural gas as an auxiliary fuel for start up.

2.8 Wood Fuel Throughput Limit and Moisture Content Specification

- The permittee shall not combust more than 38 tons of wood-byproduct per day.
- The moisture content of the wood-byproduct fuel shall not exceed 10% by weight.

2.9 Dryer Temperature

The maximum average dryer inlet temperature shall not exceed 750° F in any 60-minute period.

2.10 PM₁₀ Control Devices

- The cyclones shall not operate at less than 85% efficiency for PM₁₀.
- The baghouse shall not operate at less than 99.99% efficiency for PM₁₀.

2.11 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent PM from becoming airborne as required in IDAPA 58.01.01.651. In determining what is reasonable considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, water or suitable chemicals to, or covering of dirt roads, material stockpiles, and other surfaces that can create dust.
- Installation and use, where practical, of hoods, fans and fabric filters, or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
- Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.

- Prompt removal of earth or other stored material from streets, where practical.
- Maintaining material stockpiles below heights of material netting.

2.12 Operations and Maintenance Manual Requirements

Within 60 days after startup, the permittee shall have developed an O&M manual for the 85% efficient cyclone and the 99.99% efficient baghouse for the control of PM₁₀ emissions listed in Permit Condition 2.3 which describes the procedures that will be followed to comply with General Provision 3.2, and the air pollution control device requirements of Permit Condition 2.10 contained in this permit. The manual shall remain onsite at all times and made available to DEQ representatives upon request.

Monitoring and Recordkeeping Requirements

2.13 Wood Fuel Throughput and Moisture Content Monitoring

- The permittee shall monitor and record the moisture content of the wood-byproduct used for fuel once per week to demonstrate compliance with Permit Condition 2.8.
- The permittee shall monitor and record the amount of wood-byproduct used for fuel once per week to demonstrate compliance with Permit Condition 2.8.

2.14 Dryer Temperature Monitoring

- The permittee shall install, calibrate, maintain, and operate a monitoring system for the continuous measurement and recording of the gas temperature at the drum dryer inlet to demonstrate compliance with Permit Condition 2.9.
- The dryer-inlet gas-temperature monitoring system shall be equipped with an alarm to alert the operator if the inlet dryer gas temperature is in excess of that allowed by Permit Condition 2.9.
- The maximum average dryer inlet temperature of 750° F shall not be exceeded more than any accumulative of 10 minutes in a 60 minute period.
- The maximum average dryer inlet temperature of 750° F shall be calculated as the average temperature over a 60 minute period.
- Each exceedance of the maximum average inlet dryer gas temperature allowed by Permit Condition 2.9 shall be addressed using the procedures contained in IDAPA 58.01.01.130-136.

2.15 Opacity Monitoring

The permittee shall conduct a weekly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions to demonstrate compliance with Permit Condition 2.4. The visible emissions inspection shall consist of a see/no see evaluation for each potential source. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

2.16 Fugitive Dust Compliant Records

The permittee shall maintain records of all fugitive dust complaints received. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

2.17 Reasonable Control Measures

The permittee shall monitor and record, during operation, the periodic method(s) used to reasonably control fugitive emissions from this facility. The records shall include the type of control used (e.g., water, environmentally safe chemical dust suppressants, etc.) as well as the circumstances under which no controls are used.

2.18 Odor Complaint Records

The permittee shall maintain records of all odor complaints received from the public. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received, and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Performance Testing Requirements

2.19 Air Pollutant Performance Test

Within 180 days of re-starting the drum dryer after the multi-year shutdown, the permittee shall conduct a performance test on the drum dryer stack to demonstrate compliance with the PM₁₀ emissions limit in Permit Condition 2.3 and opacity limit in Permit Condition 2.4. The permittee is encouraged to submit a source testing protocol for approval 30 days prior to conducting the performance test.

During the performance test, the permittee shall monitor and record the type and amount of fuel used, the moisture content of the wood-byproduct fuel, and the dryer inlet temperature.

The source test shall be conducted under "worst case normal" conditions as required by IDAPA 58.01.01.157 and the performance testing requirement of the General Provisions in this permit. The source test report shall contain documentation that the test was conducted under these conditions.

For the initial test and all subsequent tests, if the test results are below 75% of the PM₁₀ emissions limit listed in Permit Condition 2.3, the permittee shall conduct a PM₁₀ performance test on the drum dryer stack every five (5) years from the issuance date of this permit. If the test results are greater than 90% of the PM₁₀ emissions limit listed in Permit Condition 2.3, the permittee shall conduct a PM₁₀ performance test on the drum dryer stack annually. If the test results are between 75% and 90% of the PM₁₀ emissions limit listed in Permit Condition 2.3, the permittee shall conduct a PM₁₀ performance test on the drum dryer stack every three (3) years from the issuance date of this permit.

[9/4/2013]

Reporting Requirements

2.20 Records Retention and Reporting

Records of any monitoring, reporting, and recordkeeping information required by this permit shall remain on site for the most recent five-year period and shall be made available to DEQ representatives upon request. These records shall be maintained in accordance with General Provision 3.10.

[9/4/2013]

3. General Provisions

General Compliance

- 3.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the "Rules for the Control of Air Pollution in Idaho." The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the "Rules for the Control of Air Pollution in Idaho," and the Environmental Protection and Health Act (Idaho Code §39-101, et seq.)
[Idaho Code §39-101, et seq.]
- 3.2 The permittee shall at all times (except as provided in the "Rules for the Control of Air Pollution in Idaho") maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
[IDAPA 58.01.01.211, 5/1/94]
- 3.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.
[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

- 3.4 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
- Enter upon the permittee's premises where an emissions source is located, emissions-related activity is conducted, or where records are kept under conditions of this permit;
 - Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
 - Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.
- [Idaho Code §39-108]

Construction and Operation Notification

- 3.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.
[IDAPA 58.01.01.211.02, 5/1/94]
- 3.6 The permittee shall furnish DEQ written notifications as follows:
- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
 - A notification of the date of any suspension of construction, if such suspension lasts for one year or more;

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

- 3.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.
- 3.8 All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.
- 3.9 Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00]

Monitoring and Recordkeeping

- 3.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

- 3.11 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

Certification

- 3.12 All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

- 3.13 No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

- 3.14 No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

- 3.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

- 3.16 The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]