



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

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

December 13, 2013

Mark Krogh, Plant Superintendent
Tamarack Mills LLC
P.O. Box H
New Meadows, ID 83654

RE: Facility ID No. 003-00001, Tamarack Mills LLC, New Meadows
Final Permit Letter

Dear Mr. Krogh:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2009.0064 Project 61224 to Tamarack Mills LLC located at New Meadows for three new dry kilns. 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 on June 14, 2013 and supplemental information provided on August 14 and October 29, 2013.

This permit is effective immediately and replaces PTC No. P-2009.0064, issued on May 31, 2011. This permit does not release Tamarack Mills LLC from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

As requested, in accordance with IDAPA 58.01.01.209.05.a, the terms of the PTC will be incorporated into the Tier I permit at the time of renewal. Tamarack Mills LLC may operate the source after the PTC is issued so long as it does not violate any terms or conditions of the existing Tier I operating permit.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with J. R. Fuentes, Area Source Specialist, at (208) 373-0550 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, appearing to read "Mike Simon".

Mike Simon
Stationary Source Program Manager
Air Quality Division
MS\CZ

Permit No. P-2009.0064 PROJ 61224

Enclosures

AIR QUALITY

PERMIT TO CONSTRUCT

Permittee Tamarack Mill, LLC dba Evergreen Forest and Tamarack Energy Partnership
Permit Number P-2009.0064
Project ID 61224
Facility ID 003-00001
Facility Location 6 Miles SW of New Meadows on Hwy 95
New Meadows, ID 83654

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 December 13, 2013

Carole Zundel

Carole Zundel, Permit Writer

Mike Simon

Mike Simon, Stationary Source Manager

Contents

- 1. Permit Scope 3
- 2. Riley Boiler Reconstructed by Yanke Energy 4
- 3. Sawdust Target Box and Chip Target Box (ST-3/4) 7
- 4. Emergency Internal Combustion Engine 8
- 5. Lumber Drying Kilns (No. 1, 2, 3, 4, 5, and 6)..... 9
- 6. General Provisions 11

1. Permit Scope

Purpose

- 1.1 This is a modified permit to construct (PTC) three kilns.
- 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-2009.0064, issued on May 31, 2011.

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	<u>Cogeneration Boiler or equivalent</u> Manufacturer: Yanke Energy (Riley on nameplate SN-2772) Steam rated capacity: 72,000 lbs Heat input capacity: 102 MMBtu Model: CG-1 Burner Type: Stoker Fuels: bark, sawdust, and chips Constructed: 1982	<u>Multiclone or Equivalent</u> Manufacturer: Joy Manufacturing Model: 9-inch Joy Pressure Drop: 3 inches of water <u>Wet Scrubber or Equivalent</u> Manufacturer: Yanke Energy Model: CG-1 W.S. Pressure: 5 inches of water Scrubber flow rate: 40 gal/min
3	Sawdust and Chip Bins (vent)	None
4	Emergency Generator	None
5	Lumber Drying Kilns (Nos. 1 through 6)	None

2. Riley Boiler Reconstructed by Yanke Energy

2.1 Process Description

The Tamarack Energy Partnership Cogeneration Unit produces electricity from a steam-powered turbine. Steam is produced in a wood waste-fired boiler. A multiclone and wet scrubber control particulate matter emissions from the boiler. Ash collected from the boiler, multiclone and scrubber is landfilled onsite.

2.2 Control Device Descriptions

Table 2.1. Riley Boiler Description.

Emissions Units / Processes	Control Devices	Emission Points
Riley Boiler	Multiclone, Wet scrubber	Boiler exhaust stack

Emission Limits

2.3 Emission Limits

The PM/PM₁₀ and CO emissions from the boiler stack shall not exceed any emissions rate limit in the following table.

Table 2.2 Boiler Emission Limits^a

Source Description	PM/PM ₁₀		CO	
	lb/day ^b	T/yr ^c	lb/hr ^d	T/yr ^c
Riley Boiler Stack	432	77.4	57.6	242

- a) In absence of any other credible evidence, compliance is assured by complying with permit operating, monitoring, and record keeping requirements.
 b) Pounds per calendar day
 c) Tons per any consecutive 12-calendar month period.
 d) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference method, or DEQ-approved alternative

2.4 Fuel-Burning Equipment PM Standard

In accordance with IDAPA 58.01.01.676, the permittee shall not discharge to the atmosphere from any fuel-burning equipment particulate matter in excess of 0.08 grains per dry standard cubic foot (gr/dscf) of effluent gas corrected to 8% oxygen by volume of wood products.

Operating Requirements

2.5 Fuel Type

The boiler shall be fired with wood waste exclusively.

2.6 Operation Limit

The boiler shall not produce more than 619.2 million pounds of steam per any consecutive 12-calendar month period.

2.7 Control Device Requirements

- The permittee shall install, calibrate, maintain and operate, in accordance with the manufacturer's specifications and recommendations, equipment to continuously measure the pressure drop across the wet scrubber and the scrubbing media flow rate to the wet scrubber.
- The wet scrubber shall operate when the boiler operates.

- The wet scrubber shall be maintained in good working order and operated as efficiently as practicable in the Compliance General Provision and the Operations and Maintenance (O&M) manual requirements permit condition.

Monitoring and Recordkeeping Requirements

2.8 Boiler Steam Production Monitoring

The permittee shall monitor and record the boiler's steam production monthly and annually to demonstrate compliance with the Emissions Limit and Operation Limit permit conditions. Annual boiler steam production shall be determined by summing monthly steam production rates over the previous consecutive 12-calendar month period. Records of this information shall be maintained in accordance with the Recordkeeping General Provision.

2.9 Wet Scrubber Parametric Monitoring

The permittee shall monitor and record daily and while the boiler is operating, the pressure drop across the wet scrubber and the scrubbing media flow rate to the wet scrubber. Records of this information shall be maintained in accordance with the Recordkeeping General Provision.

2.10 Operations and Maintenance Manual Requirements

If any changes to the O&M manual are made, an updated manual shall be submitted to DEQ within 15 days of the change. The O&M manual shall be based on the wet scrubber manufacturer's specifications and recommendations and shall describe the methods and procedures that will be followed to assure the wet scrubber is maintained in good working order and operated as efficiently as practical. The O&M manual shall be updated as necessary and shall include, at a minimum, the recommended pressure drop operating range, the recommended scrubbing media flow rate, startup, shutdown, and maintenance procedures, upset conditions, and corrective action procedures. The O&M manual shall remain on site at all times and shall be made available to DEQ representatives upon request.

[May 31, 2011]

Performance Testing Requirements

2.11 PM₁₀ Performance Test

- A PM₁₀ performance test shall be conducted no later than June 19, 2018, and at least once every five years thereafter, the permittee shall conduct a performance test to measure PM₁₀ emissions from the boiler stack. The test shall be conducted to demonstrate compliance with the emission rate limits specified by Emission Limit and Fuel-burning standard permit conditions. Each performance test conducted to demonstrate compliance shall be performed in accordance with IDAPA 58.01.01.157. Compliance with the daily emissions limit shall be determined by multiplying the average hourly PM₁₀ emissions rate measured during the performance test by 24.
- All performance testing shall be conducted in accordance with the Performance Testing General Provision.
- If the PM₁₀ test results are below 75% of the PM₁₀ emissions limits listed in the Emissions Limit and Fuel-burning standard permit conditions, the permittee shall conduct a PM₁₀ performance test on the boiler stack at least once every five years from June 20, 2013. If the test results are greater than 90% of the PM₁₀ emissions limits listed in the Emission Limit and Fuel-burning standard permit conditions, the permittee shall conduct a PM₁₀ performance test on the boiler stack annually. If the test results are between 75% and 90% of the PM₁₀ emissions limits listed in the Emissions Limit and Fuel-burning standard permit conditions, the permittee

shall conduct a PM₁₀ performance test on the boiler stack at least once every three years from the date of that test.

[December 13, 2013]

Notification Address

2.12 Notification Address

All requests, reports, applications, submittals, certifications, and other communications required by this permit shall be submitted to:

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 N. Orchard St.
Boise, Idaho 83706
Phone: (208) 373-0550
Fax: (208) 373-0287

[May 31, 2011]

3. Sawdust Target Box and Chip Target Box (ST-3/4)

3.1 Process Description

In the sawmill building, the sawdust and wood trimmings are collected and separated by various types of equipment. The collected sawdust is pneumatically transferred to a target box. The collected wood trimmings go through a chipper. The chips are pneumatically transferred to a target box. Each target box has a vent to the atmosphere.

3.2 Control Device Description

Table 3.1 Target Boxes Description

Emissions Units / Processes	Emission Control Devices	Emission Points
Sawdust Target Box	None	Target Vent Box
Chip Target Box	None	Target Vent Box

Emission Limits

3.3 Emissions Limits

The daily PM₁₀ emissions from the target box vents shall not exceed 19.2 pound per calendar day.

The annual PM₁₀ emission from the target box vents shall not exceed 3.36 tons per consecutive 12-calendar month period.

Operating Requirements

3.4 Throughput Limit

The permittee shall not produce more than 76.02 million board-feet of lumber per consecutive 12-calendar month period.

Monitoring and Recordkeeping Requirements

3.5 Monitoring Requirements

The permittee shall monitor and record the annual production of lumber in board-feet at the facility to demonstrate compliance with Throughput Limit permit condition. Records of this information shall be maintained in accordance with the Recordkeeping General Provision.

4. Emergency Internal Combustion Engine

4.1 Process Description

A 150 horsepower diesel-fired internal combustion engine is used to operate a fire pump in case of a fire emergency. The engine is started periodically and run for short periods of time as a general maintenance program.

4.2 Emission Controls Description

Table 4.1 Engine Description

Emissions Units / Processes	Emission Control Devices	Emission Points
Engine for fire pump	None	Exhaust stack

Operating Requirements

4.3 Fuel Sulfur Content Limit

In accordance with IDAPA 58.01.01.728, the permittee shall not sell, distribute, use or make available for use, any distillate fuel oil containing more than 0.5% sulfur by weight.

4.4 Hours of Operation Limit

The permittee shall not operate the generator for more than 500 hours per any consecutive 12-calendar month period.

Monitoring and Recordkeeping Requirements

4.5 Fuel Sulfur Content Monitoring Requirements

The permittee shall maintain documentation of the fuel oil sulfur content from the fuel oil supplier or refinery providing the fuel oil on an as received basis to demonstrate compliance with the Fuel Sulfur Content Limit permit condition. Records of this information shall be maintained in accordance with the Recordkeeping General Provision.

4.6 Hours of Operation Monitoring

The permittee shall monitor and record monthly and annually the operating hours for the engine to demonstrate compliance with the Hours of Operation Limit permit condition. Annual operating hours shall be determined by summing monthly operating hours over the previous consecutive 12-calendar month period. Records of this information shall be maintained in accordance with the Recordkeeping General Provision.

5. Lumber Drying Kilns (No. 1, 2, 3, 4, 5, and 6)

5.1 Process Description

Six Wellons double-track lumber drying kilns (No. 1, 2, 3, 4, 5, and 6) are located at Tamarack Mill, LLC facility for drying of green lumber. After steam from the wood waste-fired boiler passes through the electrical generation process, it will be supplied to the lumber drying kilns (No. 1, 2, 3, 4, 5, and 6).

5.2 Emission Controls Description

The emissions from the lumber drying kilns (No. 1, 2, 3, 4, 5, and 6) are uncontrolled.

Table 5.1 Lumber Drying Kilns Description

Emissions Units / Processes	Emission Control Devices	Emission Points
Lumber Drying Kilns (No. 1, 2, 3, 4, 5, and 6) Manufacturer: Wellons Length: 104 ft Design: double-track Operation: 25.33 million board feet per any consecutive 12-month period (25.33 MMbf/yr) per kiln Max. Hours of Operation: 8,700 hr/yr Date Manufactured: June 2009 (For 1-3) Date Installed: June 2009 (For 1-3)	None	11 exhaust vents per kiln, 11 intake vents per kiln

[December 13, 2013]

Emission Limits

5.3 Criteria Pollutant Emission Limits

The total PM₁₀ and VOC emissions from the six lumber drying kilns (No. 1, 2, 3, 4, 5, and 6) stacks shall not exceed any corresponding emissions rate limits listed in the table below.

Table 5.2 Lumber Drying Kilns Emissions Limits^a

Source Description	PM ₁₀		VOC	
	lb/hr	T/yr ^b	lb/hr	T/yr ^b
Lumber Drying Kilns (No. 1, 2, 3, 4, 5, and 6)	0.62	1.9	N/A	60.4

- a) In absence of any other credible evidence, compliance is assured by complying with permit operating, monitoring, and record keeping requirements.
 b) Tons per consecutive 12-calendar month period.

[December 13, 2013]

5.4 TAPs Emission Limits

The total acetaldehyde emissions from the six lumber drying kilns (No. 1, 2, 3, 4, 5, and 6) stacks shall not exceed 5.5 tons per any consecutive 12-month period (5.5 T/yr).

[December 13, 2013]

Operating Requirements

5.5 Throughput Limit

The total throughput through the lumber drying kilns (No. 1, 2, 3, 4, 5, and 6) shall not exceed 76.0 million board feet per any consecutive 12-month period (76.0 MMbf/yr).

[December 13, 2013]

5.6 Operating Temperatures

The operating temperature (dry bulb temperature) of the six lumber drying kilns (No. 1, 2, 3, 4, 5, and 6) shall not exceed 200 °F.

[December 13, 2013]

5.7 No Hemlock shall be dried in any of the kilns.

[December 13, 2013]

Monitoring and Recordkeeping Requirements

5.8 Throughput Monitoring

The permittee shall monitor and record the throughput through each lumber drying kiln monthly and annually to demonstrate compliance with the throughput limit. Annual throughput shall be determined by summing each monthly throughput over the previous consecutive 12-month period.

5.9 Operating Temperature Monitoring

The permittee shall monitor and record the maximum dry bulb temperature at which the lumber drying kilns (No. 1, 2, 3, 4, 5, and 6) are operated once per kiln charge when the kilns are operating. Records shall show compliance with the operating temperature permit condition.

[December 13, 2013]

5.10 Recordkeeping

The permittee shall comply with the recordkeeping requirements of the Recordkeeping General Provision.

6. General Provisions

General Compliance

- 6.1 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.]
- 6.2 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]
- 6.3 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

- 6.4 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

- 6.5 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]
- 6.6 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

- 6.7 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.
- 6.8 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.
- 6.9 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

- 6.10 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

- 6.11 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

- 6.12 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

- 6.13 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

- 6.14 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

- 6.15 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

- 6.16 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]