Air Quality

PERMIT TO CONSTRUCT

Permittee	IFG Lewiston, LLC
Permit Number	P-2011.0135
Project ID	61240
Facility ID	069-00003
Facility Location	807 Mill Road Lewiston, ID 83501

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 Draft for Public Comment

Shawnee Chen, P.E., Permit Writer

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1 Permit Scope

Purpose

1.1 This PTC is for a minor modification at an existing Tier I facility.

The permittee has proposed to install two new lumber drying kilns and a new saw line, to upgrade equipment, and to increase production.

[DRAFT]

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-2011.0135 project 61077 issued on October 25, 2012.

[DRAFT]

Regulated Sources

Table lists all sources of regulated emissions in this permit.

Table 1.1 Regulated Sources

Permit Section	Source	Control Equipment
2	4 Double-Track kilns – manufactured by Wellons 2 Double-Track kilns – manufacturer to be determined	None
3	Main sawmill	Cyclones (process equipment)
	Small log line	Sawmill baghouse
	Planer mill	Chips cyclone (process equipment) followed by a chips baghouse
		Shavings cyclone (process equipment) followed by a shavings baghouse
	Fuel hog	Fuel hog cyclone (process equipment)

[DRAFT]

2 Lumber Drying Kilns

2.1 Process Description and Control Device Descriptions

The lumber drying kilns process green rough cut lumber of various wood species and dimensions by reducing the moisture content in the lumber. Process steam is supplied to IFG Lewiston by the Clearwater Paper Corporation Pulp and Paper Division. The steam is supplied to heating coils within the kilns which transfer heat to the stacked lumber to drive off the desired amount of moisture. Fans inside the kilns circulate the heated air inside the kilns, and vents in the roof of each kiln are opened and closed to maintain the desired conditions within the kiln.

Emissions from the lumber drying kilns are uncontrolled.

Table 2.1 Emissions Unit Description

Emissions Units / Processes	Control Devices	Emission Points
4 Double-Track kilns – manufactured by Wellons	None	Each kiln has 20 vents
2 Double-Track kilns – manufacturer to be determined		Multiple vents

[DRAFT]

Emission Limits

2.2 Emission Limits

2.2.1 The combined VOC emissions from the six drying kilns shall not exceed 249 tons per any consecutive 12- calendar month period.

[10/25/12]

2.2.2 The maximum 24-hour averaged emissions from each drying kiln shall not exceed 0.33 lb/hr for $PM_{2.5}$.

[DRAFT]

Operating Requirements

2.3 Throughput Limit

The throughput of lumber for the drying kilns shall not exceed 470,000 thousand board feet (mbf) during any consecutive 12-month period.

[DRAFT]

2.4 Operational Limit on Western Hemlock

The permittee shall not dry Western Hemlock except for Western Hemlock in the Hem-Fir group that consists of Grand Fir, White Fir, Alpine Fir, and 10% or less by volume of Western Hemlock.

[DRAFT]

Monitoring and Recordkeeping Requirements

2.5 Each month, the permittee shall monitor and record the total throughput of all species of lumber processed in the drying kilns in units of thousand board feet (Mbf) for that month and for the most recent consecutive 12-month period.”

2.6 To demonstrate compliance with the VOC emission limit, each month the permittee shall monitor and record the throughput of each of the following types of lumber to the kilns in thousand board feet (mbf/month), and each month the permittee shall record the throughput during the previous consecutive 12 month period (mbf/consecutive 12 month period):

- Ponderosa Pine;
- Englemann Spruce, Lodgepole Pine & other spruce (aggregated);
- Douglas Fir;
- Hem-Fir (Western Hemlock, Grand Fir, White Fir, Alpine Fir-aggregated)
- Cedar and Redwood (aggregated); and
- Any other species dried (aggregated).

[10/25/2012]

2.7 To demonstrate compliance with the VOC emission limit, each month the permittee shall calculate and record the amount of VOC emissions from the drying kilns during the previous consecutive 12-month period using the emission factors listed in Table 2.2 or use a DEQ-approved alternative.

Table 2.2 Emissions Factors

Lumber Type	VOC (lb/mbf)[1]
Ponderosa Pine & other species not listed below	4.43
Engelmann Spruce/Lodgepole Pine & other spruce	2.16
Douglas Fir	1.70
Hem-Fir (Western Hemlock, Grand Fir, White Fir, Alpine Fir)	1.09
Cedar and Redwood	1.15

1) Pounds per thousand board feet.

[DRAFT]

2.8 Each month, the permittee shall record the maximum volume percentage of Western Hemlock in Hem-Fir group and state in the records that the permittee complies with Permit Condition 2.4 Operational Limit on Western Hemlock for that month.

[DRAFT]

3 Materials Handling Cyclones and Baghouses

3.1 Process Description

Sawmill

Through main sawmill or small log line, the debarked logs are cut to maximize the amount of lumber obtained from each log.

The existing main sawmill is under a negative pressure resulting from the sawmill cyclones. Sawdust and wood residuals from the main sawmill are handled by the three sawmill cyclones (CY1, CY2A and CY2B). CY1 exhausts to one stack, and CY2A and CY2B exhaust to another stack.

The materials collected in the three sawmill cyclones are re-entrained and transported either to Bruks chipper cyclone as an intermediate cyclone (CY3) that vents to the chips baghouse (BH-2), or directly to the chips baghouse (BH-2).

The proposed small log line will allow processing of smaller logs and will be housed in a new building or an addition to the existing main sawmill building, which will be under negative pressure from the cyclones and/or small log line baghouse (BH3). The small log line baghouse will transport sawdust and wood residuals from the small log line and will be located on the south side of the sawmill building(s).

Chips from the main sawmill and small log line drop to the Chip Conveyor and are conveyed to an off-site wood pile.

Planer mill

Dried lumber is removed from the kilns and either stored temporarily or sent to the planer mill building where the lumber is trimmed by saws, planed, sorted, stacked, strapped, and stored before shipment.

A new planer shavings material handling cyclone (CY4) will be installed on top of the truck bins at the new location. Emissions from the planer shavings cyclone will be routed to an emissions control baghouse (BH-1.)

Planer chips are transported through Bruks chipper cyclone that vents to the chips baghouse (BH-2). Chips collected by Bruks chipper cyclone (CY3) drop onto chip conveyor and are conveyed to an off-site wood pile.

Fuel Hog

The Fuel Hog is used to chop waste materials (e.g., wood waste) into smaller pieces for use as boiler fuel. The Fuel Hog emission point is a cyclone which is used to pneumatically transfer the hogged fuel to an off-site fuel pile.

[DRAFT]

Table 3.1. Emissions Unit Description

Emissions Units / Processes	Control Devices	Emission Points
Main sawmill	Cyclones	CY1 stack Stack for CY2A and CY2B
Small log line	Sawmill baghouse	BH-3 stack

Emissions Units / Processes	Control Devices	Emission Points
Planer mill	Chips cyclone followed by a chips baghouse	BH-2 stack
	Shavings cyclone followed by a shavings baghouse	BH-1 stack
Fuel hog	Fuel hog cyclone	CY5 stack

[DRAFT]

Operating Requirements

3.2 Main Sawmill

The permittee shall install and operate the cyclones (CY1 and CY2A and CY2B) at all times when the main sawmill is operated to control emissions from the main sawmill as described in Permit Condition 3.1.

[DRAFT]

3.3 Small Log Line

- The permittee shall install and operate a baghouse (BH-3) at all times when the small log line is operated to control $PM_{10}/PM_{2.5}$ emissions from the small log line as described in Permit Condition 3.1.
- The PM_{10} emissions concentration from the small log line baghouse shall not exceed 0.003 grain per cubic feet.

[DRAFT]

3.4 Chips Baghouse

The permittee shall install and operate a baghouse (BH-2) at all times when the planer mill is operated to control $PM_{10}/PM_{2.5}$ emissions from the chips cyclone as described in Permit Condition 3.1.

[DRAFT]

3.5 Shavings Baghouse

The permittee shall install and operate a baghouse (BH-1) at all times when the planer is operated to control $PM_{10}/PM_{2.5}$ emissions from the shavings cyclone as described in Permit Condition 3.1.

[DRAFT]

Monitoring and Recordkeeping Requirements

3.6 Sawmill Cyclones and Fuel Hog Cyclone

The permittee shall inspect each cyclone as listed in Table 3.1 every six months. The inspection shall be to assure that the cyclone is not plugged, eroded or otherwise not functioning as designed. The permittee shall maintain records of the inspections and any maintenance conducted.

[DRAFT]

3.7 Baghouse/Filter System Procedures

For each baghouse (i.e., BH-1, BH-2, and BH-3), within 60 days of initial start-up, the permittee shall have developed a Baghouse System Procedures document for the inspection and operation of the baghouses/filter system which controls emissions from each respective emissions unit. The Baghouse/Filter System Procedures document shall be a permittee developed document independent of the manufacturer supplied operating manual but may include summaries of procedures included in the manufacturer supplied operating manual.

The Baghouse/Filter System Procedures document shall describe the procedures that will be

followed to comply with General Provision 2 and shall contain requirements for monthly see-no-see visible emissions inspections of the baghouse. The inspection shall occur during daylight hours and under normal operating conditions.

The Baghouse/Filter System Procedures document shall also include a schedule and procedures for corrective action that will be taken if visible emissions are present from the baghouse at any time. At a minimum the document shall include:

- Procedures to determine if bags or cartridges are ruptured; and
- Procedures to determine if bags or cartridges are not appropriately secured in place.

The Permittee shall maintain records of the results of each baghouse/filter system inspection in accordance with General Provision 10. The records shall include, but not be limited to, the following:

- Date and time of inspection;
- Equipment inspected (e.g. exterior housing of baghouse, fan motor, auger, inlet air ducting);
- Description of whether visible emissions were present, and if visible emissions were present a description of the corrective action that was taken.
- Date corrective action was taken.

The Baghouse/Filter System Procedures document shall be submitted to DEQ within 60 days of permit issuance for review and comment and shall contain a certification by a responsible official. Any changes to the Baghouse/Filter System Procedures document shall be submitted within 15 days of the change.

The Baghouse/Filter System Procedures document shall also remain on site at all times and shall be made available to DEQ representatives upon request.

The operating, monitoring and recordkeeping requirements specified in the Baghouse/Filter System Procedures document are incorporated by reference to this permit and are enforceable permit conditions.

The permittee shall keep documentation (e.g., manufacturer's specifications) on-site showing that PM_{10} emissions concentration of the small log line baghouse is 0.003 grain per cubic feet or less.

[DRAFT]

3.8 Eliminated Emissions Sources

The following emissions sources shall be eliminated:

- Three existing planer shavings material handling baghouses (IFGBH1, IFGBH2, and IFGBH3.)
- The cyclone (IFGCY1) associated with the #4 splitter with the planer mill
- The truck bin cyclones (IFGCY6, IFGCY7 and IFGCY8) and the truck bin baghouse (IFGBH4.)
- Cedar Products processing

[DRAFT]

4 General Provisions

General Compliance

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.]

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 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

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

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 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

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.

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.

9 Within 30 days, or up to 60 days when requested 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

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

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

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

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

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

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

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]