

Statement of Basis

**Permit to Construct No. P-2011.0135
Project ID 62251**

**IFG Lewiston, LLC
Lewiston, Idaho**

Facility ID 069-00003

Final

September 12, 2019

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Permit Writer

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01. et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

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ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AAC	acceptable ambient concentrations
AACC	acceptable ambient concentrations for carcinogens
CFR	Code of Federal Regulations
DEQ	Department of Environmental Quality
GACT	Generally Available Control Technology
HAP	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pounds per hour
MACT	Maximum Achievable Control Technology
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
NSPS	New Source Performance Standards
PM	particulate matter
PM _{2.5}	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
SM	synthetic minor
SM80	synthetic minor facility with emissions greater than or equal to 80% of a major source threshold
SO ₂	sulfur dioxide
T/yr	tons per consecutive 12 calendar month period
TAP	toxic air pollutants

FACILITY INFORMATION

Description

Debarker

Raw logs are debarked and cut to desired length before entering the main sawmill or small log line. Bark is conveyed to the bark hog to be hogged, and then the hogged fuel is conveyed to off-site fuel pile.

Sawmill

Chips and sawdust from the large log sawmill are transported via conveyor to an offsite location. Negative air systems above the machine centers are used whenever the equipment is operated to collect entrained sawdust and transport it to the sawmill cyclones (CY1, CY2A and CY2B). The materials collected in the three sawmill cyclones are collected within the chip vault and transported to an offsite location.

The small log line allow processing of smaller logs and is housed in a new building or an addition to the existing main sawmill building, which is under negative pressure from the cyclones and/or small log line baghouse (BH-3). The small log line baghouse system transports sawdust and wood residuals from the small log line and is 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.

Drying kilns

The rough cut green lumber is stacked before being dried in the kilns. IFG currently has four double track kilns that are heated via indirect steam heating coils. IFG has proposed to install two additional kilns of similar design to increase production and to improve lumber quality. All kilns operate on steam obtained from the adjacent Clearwater Pulp and Paper facility. The emissions from the kilns are uncontrolled.

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 near 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 (CY5) which is used to pneumatically transfer the hogged fuel to an off-site fuel pile.

Permitting History

This PTC replaces Permit-to-Construct No. P-2011.0135 project 61623 issued on September 15, 2016.

Tier I Operating Permit History

The following information is the permitting history of this Tier I facility from January 17, 2012 to present. Prior to January 17, 2012 the facility belonged to Clearwater Paper Corporation. This information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

January 17, 2012	T1-2008.0183, Change in Ownership, Permit status (S)
July 24, 2013	T1-2012.0038 project 61078, Tier I operating permit renewal (S)
March 26, 2014	T1-2012.0038 project 61338 Administrative amendment to incorporate P-2011.0135 Project 61240
August 24, 2018	T1-2017.0052 Project 61940 Tier I operating permit renewal (A)

Underlying Permit History - Includes every underlying permit issued to this facility

The following information is the comprehensive permitting history of all underlying applicable permits issued to this Tier I facility. This information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

January 17, 2012	P- 2010.0103, Change in Ownership, Permit status (S)
January 17, 2012	P- 2011.0135, Change in Ownership, Permit status (S)
October 25, 2012	P- 2011.0135, Remove Restriction on Pine, Permit status (S)
March 18, 2014	P- 2011.0135 project 61240, to install two new lumber drying kilns and a new saw line, to upgrade equipment, and to increase production, Permit status (A)
September 15, 2016	P-2011.0135 project 61623, for changes to pneumatic material handling systems

Application Scope

This PTC is for a minor modification at an existing major facility.

The applicant has proposed to install and operate two baghouses on the main sawmill to replace three existing dust collection cyclones. Baghouses BH-4 and BH-5 will replace cyclones CY1, CY2A and CY2B as control devices for the main sawmill machine center negative air collection systems.

This permit action serves to allow this proposed change.

Application Chronology

June 12, 2019	DEQ received an application and an application fee.
July 8, 2019	DEQ determined that the application was complete.
July 24, 2019	DEQ made available the draft permit and statement of basis for peer and regional office review.
August 8, 2019	DEQ made available the draft permit and statement of basis for applicant review.
August 13, 2019	DEQ received the permit processing fee.
September 12, 2019	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION

Source ID No.	Sources	Control Equipment	Emission Point ID No.
BH-4	Main Sawmill	Baghouse	BH-4 Stack
BH-5	Main Sawmill	Baghouse	BH-5 Stack

Emissions Inventories

Pre-Project Potential to Emit

Pre-project Potential to Emit is used to establish the change in emissions at a facility as a result of this project.

The following table presents the pre-project potential to emit for the control devices being modified as submitted by the Applicant and verified by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 2 PRE-PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	PM ₁₀		PM _{2.5}	
	lb/hr ^(a)	T/yr ^(b)	lb/hr ^(a)	T/yr ^(b)
CY1, Sawmill Machine Center Cyclone	0.011	0.033	0.005	0.016
CY2A&B, Sawmill Machine Center Cyclones	0.065	0.196	0.033	0.098
Pre-Project Totals	0.076	0.229	0.038	0.114

a) Controlled average emission rate in pounds per hour is a daily average, based on the proposed daily operating schedule and daily limits.

b) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

Post Project Potential to Emit

Post project Potential to Emit is used to establish the change in emissions at a facility and to determine the facility's classification as a result of this project. Post project Potential to Emit includes all permit limits resulting from this project.

The following table presents the post project Potential to Emit for the control devices being modified as submitted by the Applicant and verified by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 3 POST PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	PM ₁₀		PM _{2.5}	
	lb/hr ^(a)	T/yr ^(b)	lb/hr ^(a)	T/yr ^(b)
BH-4, Sawmill Machine Center Baghouse	0.0026	0.008	0.0013	0.004
BH-5, Sawmill Machine Center Baghouse	0.0034	0.010	0.0017	0.005
Post Project Totals	0.0060	0.018	0.0030	0.009

a) Controlled average emission rate in pounds per hour is a daily average, based on the proposed daily operating schedule and daily limits.

b) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

Change in Potential to Emit

The change in facility-wide potential to emit is used to determine if a public comment period may be required and to determine the processing fee per IDAPA 58.01.01.225. The following table presents the facility-wide change in the potential to emit for criteria pollutants.

Table 4 CHANGES IN POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	PM ₁₀		PM _{2.5}	
	lb/hr	T/yr	lb/hr	T/yr
Pre-Project Potential to Emit	0.076	0.229	0.038	0.114
Post Project Potential to Emit	0.0060	0.018	0.0030	0.009
Changes in Potential to Emit	-0.070	-0.21	-0.04	-0.105

TAP & HAP Emissions

Toxic air pollutant (TAP) and hazardous air pollutant (HAP) emissions from the facility are unchanged as a result of the changes proposed at the facility.

Ambient Air Quality Impact Analyses

The applicant has demonstrated pre-construction compliance to DEQ’s satisfaction that emissions from this facility will not cause or significantly contribute to a violation of any ambient air quality standard. The applicant has also demonstrated pre-construction compliance to DEQ’s satisfaction that the emissions changes due to this permitting action will not exceed any acceptable ambient concentration (AAC) or acceptable ambient concentration for carcinogens (AACC) for toxic air pollutants (TAP).

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Nez Perce County, which is designated as attainment or unclassifiable for PM_{2.5}, PM₁₀, SO₂, NO₂, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

Facility Classification

The AIRS/AFS facility classification codes are as follows:

For HAPs (Hazardous Air Pollutants) Only:

- A = Use when any one HAP has permitted emissions > 10 T/yr or if the aggregate of all HAPS (Total HAPs) has permitted emissions > 25 T/yr.
- SM80 = Use if a synthetic minor (uncontrolled HAPs emissions are > 10 T/yr or if the aggregate of all uncontrolled HAPs (Total HAPs) emissions are > 25 T/yr and permitted emissions fall below applicable major source thresholds) and the permit sets limits > 8 T/yr of a single HAP or ≥ 20 T/yr of Total HAPs.
- SM = Use if a synthetic minor (uncontrolled HAPs emissions are > 10 T/yr or if the aggregate of all uncontrolled HAPs (Total HAPs) emissions are > 25 T/yr and permitted emissions fall below applicable major source thresholds) and the permit sets limits < 8 T/yr of a single HAP and/or < 20 T/yr of Total HAPs.
- B = Use when the potential to emit (i.e. uncontrolled emissions and permitted emissions) are below the 10 and 25 T/yr HAP major source thresholds.
- UNK = Class is unknown.

For All Other Pollutants:

- A = Use when permitted emissions of a pollutant are > 100 T/yr.
- SM80 = Use if a synthetic minor for the applicable pollutant (uncontrolled emissions are > 100 T/yr and permitted emissions fall below 100 T/yr) and permitted emissions of the pollutant are ≥ 80 T/yr.

- SM = Use if a synthetic minor for the applicable pollutant (uncontrolled emissions are > 100 T/yr and permitted emissions fall below 100 T/yr) and permitted emissions of the pollutant are < 80 T/yr.
- B = Use when the potential to emit (i.e. uncontrolled emissions and permitted emissions) are below the 100 T/yr major source threshold.
- UNK = Class is unknown.

Table 5 REGULATED AIR POLLUTANT FACILITY CLASSIFICATION

Pollutant	Uncontrolled PTE (T/yr)	Permitted PTE (T/yr)	Major Source Thresholds (T/yr)	AIRS/AFS Classification
PM ₁₀	>100	12.84	100	SM
PM _{2.5}	>100	10.23	100	SM

The proposed changes result only in a small decrease in PM₁₀ and PM_{2.5} emissions from the main sawmill. The facility classification for these pollutants remains unchanged, as do the classifications for all other regulated pollutants, which are not affected by the proposed changes.

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 Permit to Construct Required

The permittee has requested that a PTC be issued to the facility for the proposed changes. Therefore, a permit to construct is required to be issued in accordance with IDAPA 58.01.01.220. This permitting action was processed in accordance with the procedures of IDAPA 58.01.01.200-228.

Tier II Operating Permit (IDAPA 58.01.01.401)

IDAPA 58.01.01.401 Tier II Operating Permit

The application was submitted for a permit to construct (refer to the Permit to Construct section), and an optional Tier II operating permit has not been requested. Therefore, the procedures of IDAPA 58.01.01.400-410 were not applicable to this permitting action.

Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

IDAPA 58.01.01.301 Requirement to Obtain Tier I Operating Permit

IFG is currently operating with a Tier I operating permit (T1-2017.0052) issued August 24, 2018. The permit-to-construct changes will be incorporated into the Tier I operating permit at the next permit renewal in accordance with IDAPA 58.01.01.209.05.a.

PSD Classification (40 CFR 52.21)

40 CFR 52.21 Prevention of Significant Deterioration of Air Quality

On February 6, 1997, during a time when the sawmill was owned by the same company as the adjacent Pulp Mill/ Consumer Products Divisions, the Idaho Office of Attorney General determined¹ that the Lumber Products Division (sawmill) is a separate facility from the adjacent Pulp Mill/Consumer Products Divisions even though the steam used to dry lumber at the sawmill comes entirely from the pulp mill. The two facilities have different primary SIC codes, and the lumber mill does not serve as a support facility for the Pulp Mill or Consumer Products Divisions.

The location of the facilities remains the same, but the sawmill is now owned by IFG, a different entity than owns the adjacent Pulp Mill/ Consumer Products Divisions which further supports that the sawmill is not to be grouped with the adjacent Pulp Mill/ Consumer Products Divisions. Additional support for the sawmill being a separate

¹ IDEQ letter to Susan J. Flieder, Environmental Counsel for Potlatch Corporation, February 6, 1997 (IDEQ TRIM record reference # 2010AAG239)

facility from the Pulp Mill/Consumer Products Divisions is published in the Federal Register, August 7, 1980, page 52695, "Where a single unit is used to support two otherwise distinct sets of activities, the unit is to be included within the source which relies most heavily on its support. For example, a boiler might be used to generate process steam for both a commonly controlled and located kraft pulp mill and a plywood manufacturing plant. If the yearly boiler output is used primarily by the pulp mill, then the total emissions of the boiler should be attributed to the mill." None of the boilers at the adjacent but separately owned Pulp Mill/Consumer Products Divisions sends 50% or more of the steam produced to the lumber drying kilns².

The IFG sawmill is not a designated facility, and IFG has requested to limit its potential to emit below 250 tons per year for VOC, therefore it is not a major facility for PSD purposes.

NSPS Applicability (40 CFR 60)

The proposed changes at the facility, which are for wood byproduct handling systems, do not affect any emissions units subject to NSPS.

NESHAP Applicability (40 CFR 61)

The proposed source is not an affected source subject to NESHAP in 40 CFR 61, and this permitting action does not alter the applicability status of existing affected sources at the facility.

MACT/GACT Applicability (40 CFR 63)

The proposed changes at the facility, which are for wood byproduct handling systems, do not affect any emissions units subject to 40 CFR 63.

Permit Conditions Review

This section describes the only those permit conditions that have been added, revised, modified or deleted as a result of this permitting action.

Table 1.1

Table 1.1 was modified to list baghouses as the control equipment for the main sawmill.

Permit Condition 3.1

Permit condition 3.1 was modified to specify baghouses BH-4 and BH-5 as the control equipment associated with the sawmill machine center negative air dust collection systems.

Table 3.1

Table 3.1 was modified to list baghouses as the control devices and the BH-4 and BH- 5 stacks as the emission points for the main sawmill.

Permit Condition 3.2

Permit condition 3.2 was modified as follows:

"The permittee shall install and operate the ~~eyelones (CY 1 and CY2A and CY2B)~~ baghouses (BH-4 and BH-5) at all times when associated sawmill equipment is operating to control emissions from sawmill equipment as described in Permit Condition 3.1."

Permit Condition 3.8

Existing permit condition 3.8 was removed because CY4 has a baghouse for emissions control. The cyclone procedures conditions was no longer necessary.

Permit Condition 3.8

² Email from Susan Somers, Clearwater Paper Corporation, July 18, 2012 - No boiler at Clearwater Paper Corporation sends 50% or more of the steam produced to the IFG lumber drying kilns. (IDEQ TRIM record reference # 2012AAG2902)

Permit condition 3.9 was modified to include BH-4 and BH-5 in the list of baghouses requiring development of a Baghouse System Procedure. Its condition number was reduced to 3.8 to account for the removal of a previous condition.

Permit Condition 3.10

Existing Permit condition 3.10 was removed as it related to a previous permitting action.

APPENDIX A – EMISSIONS INVENTORIES

Sawmill Production Limit 470000 mbdft/yr permit limit
 2106 mbdft/day equipment limit
 24
 0.5
 Ratio of PM10/PM2.5 emission factors
 Sawdust Production Ratio 0.33 GT sawdust/mbdft * GT = green tons

Cyclone Airflow: 26,667 dscfm
 Baghouse Airflow: 40,000 dscfm
 Total Sawdust Production 155,100 GT/yr
 694.98 GT/day

Operating days per year to achieve highest daily emission rate 250.0 days

Source	Annual Throughput (ton sawdust/yr)	Daily Throughput (ton sawdust/day)	Emission Factor (lb/ton)		Emissions				
			PM10	PM2.5	PM10 ton/yr	PM10 lb/hr	PM2.5 ton/yr	PM2.5 lb/hr	
Pre - Project									
CY1, Sawmill Machine Center Cyclone	396	1.58	0.165	0.083	0.033	0.011	0.016	0.005	
CY2 A&B Sawmill Machine Center Cyclone	503	2.01	0.780	0.390	0.196	0.065	0.098	0.033	
				Total:	0.229	0.076	0.114	0.038	
Post-Project									
BH4, Sawmill Machine Center Baghouse	396	1.58	0.04	0.02	0.008	0.0026	0.004	0.0013	
BH5, Sawmill Machine Center Baghouse	503	2.01	0.04	0.02	0.010	0.0034	0.005	0.0017	
				Total:	0.018	0.006	0.009	0.003	
				Change in PM Emission:	-0.211	-0.070	-0.105	-0.035	

0.04 from AQ-EF02 using baghouse control of sanderdust

APPENDIX B – FACILITY DRAFT COMMENTS

The following comments were received from the facility on August 9, 2019:

Facility Comment 1:

Facility Location: The mill address has changed since this PTC was written.

DEQ Response:

The facility location information was updated to reflect this change.

Facility Comment 2:

Table 1.1: The two new kilns hadn't been specified when this PTC was written in 2014. The new kilns are also Wellons kilns. The fuel hog cyclone (CY-5) has been out of use for more than 3 years and IFG has no plans to use it in the future. The vacuum cleanup system (BH-1B) for the shavings bin area was permitted in 2014 but has not been installed.

DEQ Response:

Table 1.1 was modified as follows:

Permit Section	Source	Control Equipment	
Error! Reference source not found.	4 Double-Track kilns – manufactured by Wellons 2 Double-Track kilns – manufacturer to be determined manufactured by Wellons	None	
3	Main sawmill	Baghouses (process equipment)	
	Small log line sawmill	Sawmill baghouse	
	Planer mill		Chips baghouse or a cyclone integrated with a baghouse
			Shavings cyclone (process equipment) followed by a shavings baghouse
	Fuel hog	Fuel hog cyclone (process equipment)	
	Vacuum Cleanup System	Baghouse	
Shavings Bin Vent	Baghouse		

Facility Comment 3:

Table 2.1: Kilns are Wellons.

DEQ Response:

Table 2.2 was modified as follows :

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

Facility Comment 4:

Table 3.3 should be Table 2.2, we think

DEQ Response:

Table 3.3 should be Table 2.2. It has been changed along with the corresponding textual reference.

Facility Comment 5:

Permit Condition 3.1: IFG has recommended wording changes to make the language consistent with current mill configuration.

DEQ Response:

The recommended wording changes have been incorporated as provided by the facility and the description of the fuel hog has been removed. These changes were also incorporated to the process description section of the SOB.

Facility Comment 6:

Table 3.1: Remove CY-5 and BH-1B.

DEQ Response:

These equipment were removed from Table 3.1.

Facility Comment 7:

Condition 3.4 is reworded because the controls are a combined cyclone/baghouse unit.

DEQ Response:

Permit condition 3.4 has been reworded as recommended by the facility.

Facility Comment 8:

Condition 3.8 is renamed.

DEQ Response:

Permit Condition 3.8 was renamed to remove reference to the fuel hog.

Facility Comment 9:

Condition 3.9: BH-1B is removed.

DEQ Response:

Reference to BH-1B has been removed from permit condition 3.9.

APPENDIX C – PROCESSING FEE

PTC Processing Fee Calculation Worksheet

Instructions:

Fill in the following information and answer the following questions with a Y or N. Enter the emissions increases and decreases for each pollutant in the table.

Company: IFG Lewiston, LLC
Address: 280 Sycamore Drive
City: Lewiston
State: Idaho
Zip Code: 83501
Facility Contact: Jesse Short
Title: Regional Manager
AIRS No.:

- N** Does this facility qualify for a general permit (i.e. concrete batch plant, hot-mix asphalt plant)? Y/N
- Y** Did this permit require engineering analysis? Y/N
- N** Is this a PSD permit Y/N (IDAPA 58.01.01.205.04)

Emissions Inventory			
Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO _x	0.0	0	0.0
SO ₂	0.0	0	0.0
CO	0.0	0	0.0
PM10	0.0	-0.21	0.2
VOC	0.0	0	0.0
Total:	0.0	-0.21	0.2
Fee Due	\$ 1,000.00		

Comments: