

Statement of Basis

**Permit to Construct No. P-2016.0026
Project ID 61716**

**Fiber Composites, LLC
Meridian, Idaho**

Facility ID 001-00115

Final

August 3, 2016 
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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
acfm	actual cubic feet per minute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BMP	best management practices
Btu	British thermal units
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS No.	Chemical Abstracts Service registry number
CBP	concrete batch plant
CEMS	continuous emission monitoring systems
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CI	compression ignition
CMS	continuous monitoring systems
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent emissions
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
FEC	Facility Emissions Cap
GHG	greenhouse gases
gph	gallons per hour
gpm	gallons per minute
gr	grains (1 lb = 7,000 grains)
HAP	hazardous air pollutants
HDPE	high density polyethylene
HHV	higher heating value
HMA	hot mix asphalt
hp	horsepower
hr/yr	hours per consecutive 12 calendar month period
ICE	internal combustion engines
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
ID No.	identification number
iwg	inches of water gauge
km	kilometers
lb/hr	pounds per hour
lb/qtr	pound per quarter
m	meters
MACT	Maximum Achievable Control Technology
mg/dscm	milligrams per dry standard cubic meter
MMBtu	million British thermal units
MMscf	million standard cubic feet
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants

NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operation and maintenance
O ₂	oxygen
PAH	polyaromatic hydrocarbons
PC	permit condition
PCB	polychlorinated biphenyl
PERF	Portable Equipment Relocation Form
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
POM	polycyclic organic matter
ppm	parts per million
ppmw	parts per million by weight
PSD	Prevention of Significant Deterioration
psig	pounds per square inch gauge
PTC	permit to construct
PTC/T2	permit to construct and Tier II operating permit
PTE	potential to emit
PW	process weight rate
RAP	recycled asphalt pavement
RFO	reprocessed fuel oil
RICE	reciprocating internal combustion engines
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
scf	standard cubic feet
SCL	significant contribution limits
SIP	State Implementation Plan
SM	synthetic minor
SM80	synthetic minor facility with emissions greater than or equal to 80% of a major source threshold
SO ₂	sulfur dioxide
SO _x	sulfur oxides
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
T2	Tier II operating permit
TAP	toxic air pollutants
TEQ	toxicity equivalent
T-RACT	Toxic Air Pollutant Reasonably Available Control Technology
ULSD	ultra-low sulfur diesel
U.S.C.	United States Code
VOC	volatile organic compounds
yd ³	cubic yards
µg/m ³	micrograms per cubic meter

FACILITY INFORMATION

Description

Fiber Composites, LLC (formerly Louisiana-Pacific Corporation / LP Wood Polymers), Meridian facility, produces composite decking manufactured from wood waste and high density polyethylene (HDPE) resin. The raw materials for this process are locally sourced plastic and wood waste produced in and transferred from off-site locations. The HDPE resin, which is an odorless opaque white pellet, is produced by ExxonMobil Chemical Company in Texas. Both raw materials are transported to the Meridian facility where they are either entered directly into the manufacturing process or are stored for later use.

Permitting History

The following 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).

July 12, 2002	T2-000037 (001-00115) was issued to LP Wood Polymers as part of the Ada County PM ₁₀ maintenance area plan, with specific permit conditions included in the State Implementation Plan (SIP) for Idaho. The permit included the installation of baghouses, receiver filters, and cartridge filter control devices. The facility had been converted from the production of molding to the manufacture of extruded decking. (S), except (A) for Permit Conditions 1.1, 1.3, 3.1, and the Appendix.
April 15, 2004	P-030058 was issued to Louisiana-Pacific Corp. for a plant expansion project including 2 wood dryers (C15, C16), 3 extruders, 2 finishing lines (C12, C13, C21), regrind system (C14), HDPE storage silo (C19), and dry wood bins (C23, C24). (S)
March 7, 2006	P-050039 was issued to Louisiana-Pacific Corp. to remove the regrind system as an emission point (no longer vented externally) and to reflect as-built parameters of existing emission sources. (S)
January 8, 2008	T2-2007.0129 was issued to Fiber Composites, LLC as a permit renewal. Several administrative name changes for emission control devices were also incorporated, with no increase in emissions. (S)
February 15, 2008	T2-2008.0012 was issued to Fiber Composites, LLC to correct typographical errors. This permitting action was initiated by DEQ. (S)
May 7, 2008	P-2008.0001 was issued to add five additional sources to allow for improved control of fugitive dust and to add a wet wood silo with baghouse control. (A, but will become S upon issuance of this permit)

Application Scope

This permitting action is for converting the Tier II Operating Permit to a Permit to Construct. In addition, Finishing Line #5 and Finishing Line #6 and their associated control equipment, Line #8 Molder Baghouse and Line #9 Molder Baghouse, are removed from the permit because they are no longer onsite.

Application Chronology

May 3, 2016	DEQ received an application.
May 5, 2016	DEQ received an application fee.

May 13, 2016	DEQ determined that the application was complete.
June 9, 2016	DEQ made available the draft permit and statement of basis for peer and regional office review.
July 5, 2016	DEQ made available the draft permit and statement of basis for applicant review.
July 14, 2016	DEQ received the permit processing fee.
August 3, 2016	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

This permitting action does not change the existing operations and equipment except for removing Finishing Line #5 and Finishing Line #6 and their associated control equipment, Line #8 Molder Baghouse and Line #9 Molder Baghouse from the permit because they are no longer onsite.

The follow table is taken from the statement of basis for PTC No. P-2008.0001 issued on May 7, 2008 except that Finishing Line #5 and Finishing Line #6 and their associated control equipment, Line #8 Molder Baghouse and Line #9 Molder Baghouse are removed from the table.

Table 1 EMISSION UNIT AND CONTROL DEVICE INFORMATION

Emission Unit ID No.	SIP ID No.	Emissions Unit Description	Control Device Description	SIP Description
BH2		Noltec Dryer	Noltec Dryer Baghouse #2	
C1A ¹	--	Storage Silo	Noltec Storage Silo Baghouse	Storage Silo Baghouse Stack
C3 ¹	C3	Primary Hammermill	Donaldson Baghouse	BA Baghouse
C7 ¹	C7	HDPE Storage Silo #4	HDPE Silo Bin Vent #1	HDPE Silo Bin Vent
C12		Finishing Line #1	Line #10 Molder Baghouse	
C13		Finishing Line #2	Line #11 Molder Baghouse	
C15		Wood Dryer #1	Entek Dryer #1 Baghouse	
C16		Wood Dryer #2	Entek Dryer #2 Baghouse	
C17		Trim End Hog	10 RA Baghouse	
C18		Wood Storage Silo	8 RA Baghouse	
C21		Finishing Line #4	Line #12 Molder Baghouse	
C22		Secondary Hammermill	Big Mac Baghouse	
C23		Dry Wood Day Bin #1	Dry Wood Day Bin Filter #1	
C24		Dry Wood Day Bin #2	Dry Wood Day Bin Filter #2	
C25		Truck Dump	Truck Dump Baghouse	
C26 ¹	BH1/E45A	Regrinder	Regrind Baghouse	Grinder / Grinder Baghouse
C29		Entek Dust Collector	Molder Baghouse	
C30		Wet Wood Silo Bin	Wet Wood Silo Bin Vent	

¹ SIP regulated source (permit T2-000037 / 001-00115).

Emissions Inventories

Potential to Emit

IDAPA 58.01.01 defines Potential to Emit as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state or federally enforceable. Secondary

emissions do not count in determining the potential to emit of a facility or stationary source.

Using this definition of Potential to Emit, an emission inventory was developed for the operations at the facility (see Appendix A).

Post Project Potential to Emit

The following table presents the post project Potential to Emit for criteria and GHG pollutants from all emissions units at the facility as provided by the applicant and reviewed by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 2 POST PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Emissions Unit	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	CO _{2e}
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Noltec Storage Silo Baghouse (C1A)	0.06	0.06	0.06					
Donaldson Baghouse (C3)	1.22	1.22	1.22					
10 RA Baghouse (C17)	3.80	3.80	3.80					
8 RA Baghouse (C18)	1.73	1.73	1.73					
Big Mac Baghouse (C22)	2.09	2.09	2.09					
Truck Dump Baghouse (C25) (BH2D)	3.45	3.45	3.45					
Regrind Baghouse (C26) (E45A)	0.36	0.36	0.36					
Entek Dryer #1 Baghouse (C15)	1.73	1.73	1.73	0.013	2.15	0.118	1.80	2592
Entek Dryer #2 Baghouse (C16)	1.73	1.73	1.73	0.013	2.15	0.118	1.80	2592
Noltec Dryer Baghouse #2 (BH2)	0.18	0.18	0.18					
Line #10 Molder Baghouse (C12)	1.13	1.13	1.13					
Line #11 Molder Baghouse (C13)	1.19	1.19	1.19					
Line #12 Molder Baghouse (C21)	1.10	1.10	1.10					
Molder Baghouse (C29) (WVAC)	1.07	1.07	1.07					
HDPE Silo Bin Vent #1 (C7)	0.15	0.15	0.15					
Dry Wood Day Bin Filter #1 (C23)	0.09	0.09	0.09					
Dry Wood Day Bin Filter #2(C24)	0.09	0.09	0.09					
Wet Wood Silo Bin Vent (C30)(BVWS)	0.92	0.92	0.92					
Totals	22.09	22.09	22.09	0.03	4.29	0.24	3.61	5,183.56

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.

This permit does not change any existing operations or equipment except for removing Finishing Line #5 and Finishing Line #6 and their associated control equipment, Line #8 Molder Baghouse and Line #9 Molder Baghouse from the permit as they are no longer onsite. The total PM emissions are reduced by 4.31 T/yr based on the emissions information in Table 3.1 of the statement of basis for PTC No. P-2008.0001 issued on May 7, 2008.

TAP Emissions

This permit does not change emissions of toxic air pollutants (TAP).

Post Project HAP Emissions

The following table presents the post project potential to emit for HAP pollutants from all emissions units at the facility 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 HAZARDOUS AIR POLLUTANTS EMISSIONS POTENTIAL TO EMIT SUMMARY

HAP Pollutants	PTE (T/yr)
Chromium	6.01E-05
Cobalt	3.61E-06
Hexane	7.73E-02
Manganese	1.63E-05
Mercury	1.12E-05
Naphthalene	2.62E-05
Selenium	1.03E-06
Toluene	1.46E-04
Arsenic	8.59E-06
Benzene	9.02E-05
Beryllium	5.15E-07
Cadmium	4.72E-05
Formaldehyde	3.22E-03
Nickel	9.02E-05
Total POM (7-PAH)	4.90E-07
Total	8.10E-02

Ambient Air Quality Impact Analysis

Modeling is not required as emissions do not increase for this project.

REGULATORY REVIEW

Attainment Designation (40 CFR 81.313)

The facility is located in Ada County, which is designated as an attainment/maintenance area for PM₁₀ and CO and unclassifiable for PM_{2.5}, NO₂, SO_x, and ozone. Refer to 40 CFR 81.313 for additional information.

Facility Classification

The AIRS/AFS facility classification codes are as follows:

For THAPs (Total Hazardous Air Pollutants) Only:

- A = Use when any one HAP has actual or potential emissions ≥ 10 T/yr or if the aggregate of all HAPS (Total HAPs) has actual or potential emissions ≥ 25 T/yr.
- SM80 = Use if a synthetic minor (potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable limitations) and the permit sets limits ≥ 8 T/yr of a

single HAP or ≥ 20 T/yr of THAP.

SM = Use if a synthetic minor (potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable limitations) and the potential HAP emissions are limited to < 8 T/yr of a single HAP and/or < 20 T/yr of THAP.

B = Use when the potential to emit without permit restrictions is below the 10 and 25 T/yr major source threshold

UNK = Class is unknown

For All Other Pollutants:

A = Actual or potential emissions of a pollutant are ≥ 100 T/yr.

SM80 = Use if a synthetic minor for the applicable pollutant (potential emissions fall below 100 T/yr if and only if the source complies with federally enforceable limitations) and potential emissions of the pollutant are ≥ 80 T/yr.

SM = Use if a synthetic minor for the applicable pollutant (potential emissions fall below 100 T/yr if and only if the source complies with federally enforceable limitations) and potential emissions of the pollutant are < 80 T/yr.

B = Actual and potential emissions are < 100 T/yr without permit restrictions.

UNK = Class is unknown.

Table 4 REGULATED AIR POLLUTANT FACILITY CLASSIFICATION

Pollutant	Uncontrolled PTE ¹ (T/yr)	Permitted PTE (T/yr)	Major Source Thresholds (T/yr)	AIRS/AFS Classification
PM	>100	<80	100	SM
PM ₁₀ /PM _{2.5}	>100	<80	100	SM
SO ₂	<100	<100	100	B
NO _x	<100	<100	100	B
CO	<100	<100	100	B
VOC	<100	<100	100	B
HAP (single)	<10	<10	10	B
HAP (Total)	<25	<25	25	B

¹ Information is taken from Appendix A of the statement of basis for PTC No. P-2008.0001 issued on May 7, 2008

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 Permit to Construct Required

The applicant has requested to convert the Tier II operating permit to a PTC. 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 applicant has requested to convert the Tier II operating permit to a PTC. Therefore, the procedures of IDAPA 58.01.01.400–410 were not applicable to this permitting action.

Idaho SIP - Northern Ada County (Boise), Idaho, PM-10 Maintenance Plan

<https://yosemite.epa.gov/r10/airpage.nsf/283d45bd5bb068e68825650f0064cdc2/a12c8ea43bfb9ef88256f3f0081c72c?OpenDocument>

The facility is subject to Northern Ada County (Boise), Idaho, PM-10 Maintenance Plan, specifically, subject to some requirements in the Tier II operating permit issued to the facility on 7/12/2002. These permit conditions are noted as SIP conditions in the PTC.

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

IDAPA 58.01.01.301 Requirement to Obtain Tier I Operating Permit

Post project facility-wide emissions from this facility do not have a potential to emit greater than 100 tons per year for any criteria pollutants or 10 tons per year for any one HAP or 25 tons per year for all HAP combined as demonstrated previously in the Emissions Inventories Section of this analysis. Therefore, the facility is not a Tier I source in accordance with IDAPA 58.01.01.006 and the requirements of IDAPA 58.01.01.301 do not apply.

The facility is defined as a synthetic minor facility because without limits on the potential to emit, PM₁₀ emissions have the potential to exceed major source thresholds. The use of add-on baghouse control devices are considered synthetic minor limits used to demonstrate compliance with the major source threshold of PM₁₀.

PSD Classification (40 CFR 52.21)

40 CFR 52.21 Prevention of Significant Deterioration of Air Quality

The facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change at a stationary source not otherwise qualifying under paragraph 40 CFR 52.21(b)(1) as a major stationary source, that would constitute a major stationary source by itself as defined in 40 CFR 52. Therefore in accordance with 40 CFR 52.21(a)(2), PSD requirements are not applicable to this permitting action. The facility is not a designated facility as defined in 40 CFR 52.21(b)(1)(i)(a), and does not have facility-wide emissions of any criteria pollutant that exceed 250 T/yr.

NSPS Applicability (40 CFR 60)

The facility is not subject to any NSPS requirements in 40 CFR Part 60.

NESHAP Applicability (40 CFR 61)

The facility is not subject to any NESHAP requirements in 40 CFR 61.

MACT Applicability (40 CFR 63)

The facility is not subject to any MACT standards in 40 CFR Part 63.

Permit Conditions Review

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

Permit Condition 1.1

Permit Condition 1.1 states the purpose of this permitting action.

Permit Condition 1.2

Permit Condition 1.2 states that 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.

Permit Condition 1.3

Permit Condition 1.3 states which permit is to be replaced by the newer issued PTC.

Permit Condition 2.12

Permit Condition 2.12 is revised. "Tier II operating permit" is replaced with "PTC"

Tables 1.1, 5.1, 5.2, and 7.1

Finishing Line #5 and Finishing Line #6 and their associated control equipment, Line #8 Molder Baghouse and Line #9 Molder Baghouse are removed from Tables 1.1, 5.1, 5.2, and 7.1 because they are sold and are no longer

onsite.

Permit Condition 2.9

“Except for sources with visible emissions inspection frequency specified elsewhere in the permit,” is added to the beginning of PC 2.9 because for baghouses, weekly see-no-see visible emissions inspections are required.

Table 3.2

The applicant has requested to correct an error for Big Mac Baghouse hourly emissions limit in Table 3.2. It is corrected from 0.24 lb/hr to 0.48 lb/hr. 0.48 lb/hr was the emissions rate in the EI and was modeled for the PTC No. P-2008.0001 issued May 7, 2008.

Permit Conditions 3.5 and 3.6

The requirements in old PCs 3.5 through 3.8 regarding monitoring pressure drops across baghouses are removed and are replaced with standard languages taken from DEQ’s internal guidance for the baghouses operation and monitoring (2008AAF202).

Though old PC 3.7 regarding weekly baghouse pressure drop monitoring is a SIP condition, DEQ staff determined that the weekly see-no-see visible emissions monitoring as specified in DEQ’s internal guidance is more effective, therefore, the standard languages in DEQ’s internal guidance are used.

Permit Conditions 4.5 and 4.6

The requirements in old PCs 4.5 through 4.8 regarding monitoring pressure drops across baghouses are removed and are replaced with standard languages taken from DEQ’s internal guidance for the baghouses operation and monitoring (2008AAF202).

Permit Condition 5.1

Process description in PC 5.1 is revised as requested by the applicant and read as follows:

“5.1 Process Description

Finished boards are conveyed directly from the extruders into three combination molders ~~and then embossed~~. There are three in-line systems, each consisting of a heavy duty, six spindle molder configured with a bottom, top, bottom, top, side, side, configuration and a minimum of 25 hp motors on the horizontal spindles. These machines feed at a rate of up to 80 feet per minute ~~and are connected to a heated roll embossing machine~~. The molders are used to cut a variety of openings or channels in the finished boards to meet varying customer demands. After the boards exit the molder, they right angle transfer and are automatically stacked. Once a unit is completely stacked, it is indexed out on a roll case for final banding and wrapping. Finished goods are stored in existing shed structures. This description is for informational purposes only.

Permit Condition 5.4

Permit Condition 5.4 is revised to remove the requirements related to Finishing Line #5 and Finishing Line #6 because they are sold and no longer onsite.

“5.4 Grain Loading Limits

The PM₁₀ emissions from the Line #10 molder baghouse stack, Line #11 molder baghouse stack, and Line #12 molder baghouse stack shall not exceed 0.005 grains per dry standard cubic foot (gr/dscf).

The PM₁₀ emissions from ~~the Finishing Line Baghouse #5 stack, the Finishing Line Baghouse #6 stack, and the Entek Dust Collector Baghouse stack~~ shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf).”

Permit Conditions 5.5 and 5.6

The requirements in old PCs 5.5, 5.6, 5.8, and 5.9 regarding monitoring pressure drops across baghouses are removed and are replaced with standard languages taken from DEQ’s internal guidance for the baghouses operation and monitoring (2008AAF202).

Permit Condition 6.5

“Within 60 days of permit issuance” is removed as the O&M manual should have already been developed and submitted to DEQ.

General Provisions

General Provisions are updated with the ones in the current PTC template.

PUBLIC REVIEW

Public Comment Opportunity

Because this permitting action does not authorize an increase in emissions, an opportunity for public comment period was not required or provided in accordance with IDAPA 58.01.01.209.04.

APPENDIX A – EMISSIONS INVENTORIES

Table 1. EQUIPMENT LIST

Source	Control Device	Hours of Operation		
		hr/day	day/week	hr/year
Existing Equipment				
Storage Silo	Noltec Storage Silo Baghouse (C1A)	24	7	8760
Primary Hammermill	Donaldson Baghouse (C3)	24	7	8760
Trim End Hog	10 RA Baghouse (C17)	24	7	8760
Wood Storage Silo	8 RA Baghouse (C18)	24	7	8760
Secondary Hammermill	Big Mac Baghouse (C22)	24	7	8760
Truck Dump	Truck Dump Baghouse (C25) (BHTD)	24	7	8760
Regrinder	Regrind Baghouse (C26) (E45A)	24	7	8760
Wood Dryer #1	Entek Dryer #1 Baghouse (C15)	24	7	8760
Wood Dryer #2	Entek Dryer #2 Baghouse (C16)	24	7	8760
Noltec Dryer	Noltec Dryer Baghouse #2 (BH2)	24	7	8760
Finishing Line #1	Line #10 Molder Baghouse (C12)	24	7	8760
Finishing Line #2	Line #11 Molder Baghouse (C13)	24	7	8760
Finishing Line #4	Line #12 Molder Baghouse (C21)	24	7	8760
Entek Dust Collector	Molder Baghouse (C29) (WVAC)	24	7	8760
HDPE Storage Silo #4	HDPE Silo Bin Vent #1 (C7)	24	7	8760
Dry Wood Day Bin #1	Dry Wood Day Bin Filter #1 (C23)	24	7	8760
Dry Wood Day Bin #2	Dry Wood Day Bin Filter #2 (C24)	24	7	8760
Wet Wood Silo Bin	Wet Wood Silo Bin Vent (C30)(BVWWS)	24	7	8760
Out-of-Service/Removed Equipment (to be removed from permit)				
Finishing Line #5	Line #8 Molder Baghouse (C27)(BHMB1)	24	7	8760
Finishing Line #6	Line #9 Molder Baghouse (C28)(BHFL1)	24	7	8760

Table 2. PM₁₀ EMISSIONS

Source	Control Device	Hours of Operation		Flow Rate	Emission Factor	Emissions	
		hr/day	hr/year	(dscfm)	PM ₁₀ (gr/dscf)	PM ₁₀ (lb/hr)	PM ₁₀ (tpy)
Existing Equipment							
Storage Silo	Noltec Storage Silo Baghouse (C1A)	24	8760	675	0.0025	0.014	0.06
Primary Hammermill	Donaldson Baghouse (C3)	24	8760	13000	0.0025	0.28	1.22
Trim End Hog	10 RA Baghouse (C17)	24	8760	20240	0.005	0.87	3.80
Wood Storage Silo	8 RA Baghouse (C18)	24	8760	9200	0.005	0.39	1.73
Secondary Hammermill	Big Mac Baghouse (C22)	24	8760	11156	0.005	0.48	2.09
Truck Dump	Truck Dump Baghouse (C25) (BHTD)	24	8760	9200	0.01	0.79	3.45
Regrinder	Regrind Baghouse (C26) (E45A)	24	8760	3864	0.0025	0.083	0.363
Wood Dryer #1	Entek Dryer #1 Baghouse (C15)	24	8760	9235	0.005	0.40	1.73
Wood Dryer #2	Entek Dryer #2 Baghouse (C16)	24	8760	9235	0.005	0.40	1.73
Noltec Dryer	Noltec Dryer Baghouse #2 (BH2)	24	8760	1928	0.0025	0.04	0.18
Finishing Line #1	Line #10 Molder Baghouse (C12)	24	8760	6004	0.005	0.26	1.13
Finishing Line #2	Line #11 Molder Baghouse (C13)	24	8760	6320	0.005	0.27	1.19
Finishing Line #4	Line #12 Molder Baghouse (C21)	24	8760	5846	0.005	0.25	1.10
Entek Dust Collector	Molder Baghouse (C29) (WVAC)	24	8760	2850	0.01	0.24	1.07
HDPE Storage Silo #4	HDPE Silo Bin Vent #1 (C7)	24	8760	1600	0.0025	0.03	0.15
Dry Wood Day Bin #1	Dry Wood Day Bin Filter #1 (C23)	24	8760	915	0.0025	0.02	0.09
Dry Wood Day Bin #2	Dry Wood Day Bin Filter #2(C24)	24	8760	915	0.0025	0.02	0.09
Wet Wood Silo Bin	Wet Wood Silo Bin Vent (C30)(BVWWS)	24	8760	2447	0.01	0.21	0.92
TOTAL						5.04	22.1
Out-of-Service/Removed Equipment (to be removed from permit)							
Finishing Line #5	Line #8 Molder Baghouse (C27)(BHMB1)	24	8760	5700	0.01	0.49	2.14
Finishing Line #6	Line #9 Molder Baghouse (C28)(BHFL1)	24	8760	5746	0.01	0.49	2.16
TOTAL						0.98	4.30

Table 4. NATURAL GAS COMBUSTION TAP EMISSIONS

Emission Unit	Size/Capacity (MMBtu/hr)
Wood Dryer #1	5.00
Wood Dryer #2	5.00

NON-CARCINOGENS (POUNDS PER HOUR)

Pollutant ^a	CAS #	EF for NG Combustion (lb/10 ⁶ scf) ^b	TAP Emissions (lb/hr)
Barium	7440-39-3	4.4E-03	4.31E-05
Chromium	7440-47-3	1.4E-03	1.37E-05
Cobalt	7440-48-4	8.4E-05	8.24E-07
Copper	7440-50-8	8.5E-04	8.33E-06
Hexane	110-54-3	1.8E+00	1.76E-02
Manganese	7439-96-5	3.8E-04	3.73E-06
Mercury ^c	7439-97-6	2.6E-04	2.55E-06
Molybdenum	7439-98-7	1.1E-03	1.08E-05
Naphthalene ^d	91-20-3	6.1E-04	5.98E-06
Pentane	109-66-0	2.6E+00	2.55E-02
Selenium	7782-49-2	2.4E-05	2.35E-07
Toluene	108-88-3	3.4E-03	3.33E-05
Zinc	7440-66-6	2.9E-02	2.84E-04

^a HAPs shown in bold type.

^b EFs from AP-42, Tables 1.4-3 and 1.4-4, 7/98

^c Mercury is not listed under IDAPA 58.01.01 Section 585 as a TAP. However, it is listed here to show compliance with the MBACT rule under Section 215

^d Although listed as a noncarcinogen in the Rules, DEQ has determined that naphthalene is a possible/probable carcinogen. Compliance for naphthalene emissions should be based on the EL or AACC listed in Section 586 for PAH.

CARCINOGENS (POUNDS PER HOUR)

Pollutant ^a	CAS #	EF for Natural Gas Combustion (lb/10 ⁶ scf) ^b	TAP Emissions (lb/hr)
Acenaphthene	83-32-9	1.80E-06	1.76E-08
Acenaphthylene	203-96-8	1.80E-06	1.76E-08
Anthracene	120-12-7	2.40E-06	2.35E-08
Arsenic	7440-38-2	2.0E-04	1.96E-06
Benzene	71-43-2	2.1E-03	2.06E-05
Benzo(g,h,i)perylene	191-24-2	1.2E-06	1.18E-08
Beryllium	7440-41-7	1.2E-05	1.18E-07
Cadmium	7440-43-9	1.1E-03	1.08E-05
Dichlorobenzene	25321-22-6	1.2E-03	1.18E-05
Fluoranthene	206-44-0	3.0E-06	2.94E-08
Fluorene	86-73-7	2.8E-06	2.75E-08
Formaldehyde	50-00-0	7.5E-02	7.35E-04
2-Methylnaphthalene	91-57-6	2.4E-05	2.35E-07
3-Methylchloranthene	56-49-5	1.8E-06	1.76E-08
Nickel	7440-02-0	2.1E-03	2.06E-05
Phenanthrene	85-01-8	1.7E-05	1.67E-07
Pyrene	129-00-0	5.0E-06	4.9E-08
Benzo(a)pyrene	50-32-8	1.2E-06	1.18E-08
Benz(a)anthracene	56-55-3	1.8E-06	1.76E-08
Benzo(b)fluoranthene	205-82-3	1.8E-06	1.76E-08
Benzo(k)fluoranthene	205-99-2	1.8E-06	1.76E-08
Chrysene	218-01-9	1.8E-06	1.76E-08
Dibenzo(a,h)anthracene	53-70-3	1.2E-06	1.18E-08
Indeno(1,2,3-cd)pyrene	193-39-5	1.8E-06	1.8E-08
Total POM (7-PAH)		1.1E-05	1.12E-07

^a HAPs shown in bold type.

^b EFs from AP-42, Tables 1.4-3 and 1.4-4, 7/98

Table 5. POTENTIAL TO EMIT FOR NSR REGULATED POLLUTANTS

Emissions Unit	PM	PM10	PM2.5	SO2	NOx	VOC	CO	CO2	N2O	CH4	CO2e
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Point Sources											
Noltec Storage Silo Baghouse (C1A)	0.06	0.06	0.06								
Donaldson Baghouse (C3)	1.22	1.22	1.22								
10 RA Baghouse (C17)	3.80	3.80	3.80								
8 RA Baghouse (C18)	1.73	1.73	1.73								
Big Mac Baghouse (C22)	2.09	2.09	2.09								
Truck Dump Baghouse (C25) (BH7D)	3.45	3.45	3.45								
Regrind Baghouse (C26) (E45A)	0.36	0.36	0.36								
Entek Dryer #1 Baghouse (C15)	1.73	1.73	1.73	0.013	2.15	0.118	1.80	2576	0.047	0.049	2592
Entek Dryer #2 Baghouse (C16)	1.73	1.73	1.73	0.013	2.15	0.118	1.80	2576	0.047	0.049	2592
Noltec Dryer Baghouse #2 (BH2)	0.18	0.18	0.18								
Line #10 Molder Baghouse (C12)	1.13	1.13	1.13								
Line #11 Molder Baghouse (C13)	1.19	1.19	1.19								
Line #12 Molder Baghouse (C21)	1.10	1.10	1.10								
Molder Baghouse (C29) (WVAC)	1.07	1.07	1.07								
HDPE Silo Bin Vent #1 (C7)	0.15	0.15	0.15								
Dry Wood Day Bin Filter #1 (C23)	0.09	0.09	0.09								
Dry Wood Day Bin Filter #2(C24)	0.09	0.09	0.09								
Wet Wood Silo Bin Vent (C30)(BVWWS)	0.92	0.92	0.92								
Totals	22.09	22.09	22.09	0.03	4.29	0.24	3.61	5152.94	0.09	0.10	5183.56

a) NSR Regulated air Pollutants are defined⁽¹⁾ as: Particulate Matter (PM, PM-10, PM-2.5), Carbon Monoxide, Lead, Nitrogen Dioxide, Ozone (VOC), Sulfur Dioxide, CO₂⁽²⁾, Green House Gases (GHG) mass, all pollutants regulated by NSPS (40 CFR 60)(i.e. TRS, fluoride, sulfuric acid mist) & Class I & Class II Ozone Depleting Substances (40 CFR 82)(i.e. CFC, HCFC, Halon, etc.)

Table 6. HAP POTENTIAL TO EMIT EMISSIONS SUMMARY

HAP Pollutants	PTE (T/yr)
Chromium	6.01E-05
Cobalt	3.61E-06
<i>Hexane</i>	<i>7.73E-02</i>
Manganese	1.63E-05
Mercury	1.12E-05
Naphthalene	2.62E-05
Selenium	1.03E-06
Toluene	1.46E-04
Arsenic	8.59E-06
Benzene	9.02E-05
Beryllium	5.15E-07
Cadmium	4.72E-05
Formaldehyde	3.22E-03
Nickel	9.02E-05
Total POM (7-PAH)	4.90E-07
Total	8.10E-02

Maximum Individual HAP

APPENDIX B – FACILITY DRAFT COMMENTS

The following comments were received from the facility on July 22, 2016:

Facility Comment: we have one minor comment on the draft permit. In Table 7-1, the Re grind Baghouse had footnotes b, c, and d. The Re grind baghouse is operational; I believe the 'c' footnote was included inadvertently. The table should read Re grind Baghouse (C26) b,d.

DEQ Response: The requested change is made.

APPENDIX C – PROCESSING FEE

The following table lists the processing fee associated with this permitting action. The permittee is subject to a processing fee of \$1,000 in accordance with IDAPA 58.01.01.225 because the permitted emissions increase as a result of this modification is less than one ton per year. Refer to the chronology for fee receipt dates.

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	4.31	-4.3
VOC	0.0	0	0.0
TAPS/HAPS	0.0	0	0.0
Total:	0.0	4.31	-4.3
Fee Due	\$ 1,000.00		