

# **Statement of Basis**

**Permit to Construct No. P-2016.0031  
Project ID 61729**

**Woodgrain Millwork Inc Fruitland  
Fruitland, Idaho**

**Facility ID 075-00001**

**Final**

**October 6, 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.

<b>ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE.....</b>	<b>3</b>
<b>FACILITY INFORMATION .....</b>	<b>5</b>
Description .....	5
Permitting History .....	5
Application Scope .....	5
Application Chronology .....	5
<b>TECHNICAL ANALYSIS.....</b>	<b>6</b>
Emissions Units and Control Equipment .....	6
Emissions Inventories .....	6
Ambient Air Quality Impact Analyses.....	6
<b>REGULATORY ANALYSIS.....</b>	<b>6</b>
Attainment Designation (40 CFR 81.313) .....	6
Facility Classification.....	6
Permit to Construct (IDAPA 58.01.01.201).....	7
Visible Emissions (IDAPA 58.01.01.625) .....	7
Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70).....	7
PSD Classification (40 CFR 52.21) .....	8
NSPS Applicability (40 CFR 60).....	8
NESHAP Applicability (40 CFR 61) .....	8
MACT Applicability (40 CFR 63) .....	8
Permit Conditions Review .....	8
<b>PUBLIC REVIEW.....</b>	<b>10</b>
Public Comment Opportunity .....	10
<b>APPENDIX A – PROCESSING FEE .....</b>	<b>11</b>

## 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 <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	CO <sub>2</sub> 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
HHV	higher heating value
HMA	hot mix asphalt
hp	horsepower
hr/yr	hours per consecutive 12 calendar month period
lb/gal	pounds per gallon
ICE	internal combustion engines
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
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 <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides

NSPS	New Source Performance Standards
O&M	operation and maintenance
O <sub>2</sub>	oxygen
PAH	polyaromatic hydrocarbons
PC	permit condition
PCB	polychlorinated biphenyl
PERF	Portable Equipment Relocation Form
PM	particulate matter
PM <sub>2.5</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM <sub>10</sub>	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
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
SDS	safety data sheet
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 <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxides
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
Tier II/PTC	Tier II operating permit and Permit to Construct
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
WMI	Woodgrain Millwork Inc. Fruitland
yd <sup>3</sup>	cubic yards
µg/m <sup>3</sup>	micrograms per cubic meter

## **FACILITY INFORMATION**

### ***Description***

Woodgrain Millwork Inc. Fruitland (WMI) processes dried rough-cut lumber into decorative mouldings and window and door parts for the housing, manufactured housing and recreational vehicle markets. Additionally WMI treats window parts to meet Window and Door Manufacturing Association standards and “prefinishes” mouldings and doors with coatings and wraps simulated finishes on mouldings.

### ***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).

August 6, 1992	Permit to Construct (PTC) No. 075-00001, Millwork Products (S)
November 24, 1993	PTC No. 075-00001, Prefinished Molding and Millwork (S)
July 7, 1995	PTC No. 075-00001, PTC Modification (S)
October 2, 1995	PTC No. 075-00001, PTC Modification - Exemption request (S)
April 24, 1996	PTC No. 075-00001, PTC Amendment (S)
September 5, 1996	PTC No. 075-00001, PTC Amendment of October 2, 1995 PTC (S)
September 20, 1996	PTC No. 075-00001, PTC Modification that superseded the September 5, 1996 PTC (S)
February 20, 1998	Permit No. 075-00001, PTC for dimensional lumber process/wood shavings bagging operation, initial PTC (S).
January 22, 1999	PTC No. 075-00001, a new PTC for millwork coating (prefinish) process (S).
June 19, 2002	PTC No. 075-00001, PTC modification (S).
July 6, 2007	Tier II operating permit and PTC No. T2-020024, issued as required by the compliance schedule found in Tier I operating permit No. 075-00001, issued on December 11, 2002 (A, will be S after the issuance of this permit).
January 28, 2013	Tier I Operating Permit No.T1-2012.0011, Tier I operating permit renewal (A)

### ***Application Scope***

This permitting action is for converting the existing Tier II operating permit and Permit to Construct (Tier II/PTC) to a PTC. It does not change anything to the existing operations and the facility.

### ***Application Chronology***

June 10, 2016	DEQ received an application.
June 13, 2016	DEQ received an application fee.
July 7, 2016	DEQ determined that the application was complete.
August 8, 2016	DEQ made available the draft permit and statement of basis for peer and regional office review.
August 17, 2016	DEQ made available the draft permit and statement of basis for applicant review.
September 30, 2016	DEQ received the permit processing fee.
October 6, 2016	DEQ issued the final permit and statement of basis.

## TECHNICAL ANALYSIS

### ***Emissions Units and Control Equipment***

This PTC does not change anything to the existing operations and the facility. For the information on the existing emissions units and control equipment, refer to the statement of basis for T2-020024 Tier II/PTC issued July 6, 2007. (2011AAG3550)

### ***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.

No changes are made to the facility through this permitting action. However, the emissions from the recent exemption project (6/10/2016) are added to the old PTE taken from the SOB for Tier I operating permit No. T1-2012.0011 issued 1/28/2013. The newer PTE is listed in the following table.

**Table 1 POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS**

Source Description	PM <sub>10</sub> T/yr	NO <sub>x</sub> T/yr	SO <sub>2</sub> T/yr	CO T/yr	VOC T/yr	HAP T/yr	GHG CO <sub>2</sub> e T/yr
Baghouses and Cyclones	4.9 (4.11+0.79 <sup>1</sup> )	--	--	--	--	--	--
Coating, Gluing, and Printing	--	--	--	--	813.6	< 25	--
Diesel Generator Engine	0.19	2.69	0.18	0.58	0.22	N/A	99.8
<b>Total Emissions</b>	<b>5.09</b>	<b>2.69</b>	<b>0.18</b>	<b>0.58</b>	<b>813.6</b>	<b>&lt; 25</b>	<b>99.8</b>

<sup>1</sup> Emissions from the exemption project (2016AAG966).

#### **TAP Emissions**

No changes are made to the facility through this permitting action. TAP increments are zero.

### ***Ambient Air Quality Impact Analyses***

No changes are made to the facility through this permitting action. Ambient air quality impact analyses are not required.

## REGULATORY ANALYSIS

### ***Attainment Designation (40 CFR 81.313)***

The facility is located in Payette County, which is designated as attainment or unclassifiable for PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, CO, 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  $\geq 10$  T/yr or if the aggregate of all HAPS (Total HAPs) has actual or potential emissions  $\geq 25$  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  $\geq 8$  T/yr of a single HAP or  $\geq 20$  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  $\geq 100$  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  $\geq 80$  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 2 REGULATED AIR POLLUTANT FACILITY CLASSIFICATION**

Pollutant	Uncontrolled PTE (T/yr)	Permitted PTE (T/yr)	Major Source Thresholds (T/yr)	AIRS/AFS Classification
PM	<100	<100	100	B
PM <sub>10</sub> /PM <sub>2.5</sub>	<100	<100	100	B
SO <sub>2</sub>	<100	<100	100	B
NO <sub>x</sub>	<100	<100	100	B
CO	<100	<100	100	B
VOC	> 250	> 250	100	A
HAP (single)	< 10	< 10	10	B
HAP (Total)	< 25	< 25	25	B

**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 to convert the existing Tier II/PTC 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.

**Visible Emissions (IDAPA 58.01.01.625)**

IDAPA 58.01.01.625..... Visible Emissions

The sources of PM emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Conditions in the Tier I operating permit.

**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 have a potential to emit greater than 100 tons per year for VOC as demonstrated previously in the Emissions Inventories Section of this analysis. Therefore, this facility is classified as a major facility, as defined in IDAPA 58.01.01.008.10.

**PSD Classification (40 CFR 52.21)**

40 CFR 52.21 ..... Prevention of Significant Deterioration of Air Quality

The facility is classified as an existing major stationary source, because the estimated emissions of VOC have the potential to exceed major stationary source thresholds. The facility is not a designated facility as defined in 40 CFR 52.21(b)(1)(i)(a).

The following is taken from the SOB for Tier II/PTC No. T2-020024 issued 7/6/2007:

This regulation requires that new major facility’s or major modifications in attainment or unclassifiable areas to comply with PSD permitting requirements. This facility was identified as triggering PSD review for PM<sub>10</sub> and VOC during the completeness review of its 1998 Tier I operating permit application. Based on emissions data provided in the Tier I operating permit application, the facility was identified as triggering PSD review for PM<sub>10</sub> emissions resulting from installation of Cyclones J and L in 1983. Subsequent revised emissions data, as determined by DEQ-required testing of cyclones at the facility, showed that the Cyclones J and L did not trigger the need for PSD review. A review of VOC emissions resulting from the installation of the Wood Treat process in 1989 revealed that VOC emissions exceeded significant levels. A BACT analysis was submitted by the facility and reviewed by DEQ staff. DEQ staff determined that the deluge process and materials formulation currently used by the facility was currently using BACT. Subsequently, DEQ established operating, monitoring and recordkeeping requirements to assure that the facility is operating as described in their BACT submittal.

**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 proposed source is not an affected source subject to NESHAP in 40 CFR 61.

**MACT Applicability (40 CFR 63)**

No changes are made to the facility through this permitting action. This permitting action does not alter the applicability status of existing affected sources at the facility.

40 CFR 63, Subpart QQQQ ..... National Emission Standards for Hazardous Air Pollutants: Surface Coating of Building Products

The facility is subject to this subpart. The detailed analysis can be found in the SOB for Tier II/PTC No. T2-020024 issued 7/6/2007. DEQ has been delegated this subpart.

40 CFR 63, Subpart KK ..... National Emission Standards for Hazardous Air Pollutants for the Printing and Publishing Industry

The facility is subject to this subpart. The detailed analysis can be found in the SOB for Tier II/PTC No. T2-020024 issued 7/6/2007. DEQ has been delegated this subpart.

**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. New text is in bold.

PERMIT SCOPE

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 that the new PTC will replace Tier II/PTC No. T2-020024, issued July 6, 2007.

### FACILITY-WIDE CONDITIONS

#### Permit Condition 2.1

Permit Condition 2.1 is revised to identify the related Tier I operating permit. It reads as follows:

**“The permittee shall comply with the facility-wide conditions of the Tier I operating permit No. T1-2012.0011 issued on January 28, 2013 or its subsequent revisions or renewals.”**

### WOOD PROCESSING AND HANDLING

#### Old Permit Conditions 3.2 and 3.4

Old PCs 3.2 and 3.4 regarding 20% visible emissions are removed because they duplicate the visible emission facility-wide permit conditions in the facility’s Tier I operating permit.

### COATING AND GLUING

#### Permit Condition 4.5 and Old Permit Conditions 4.5 through 4.7 and 4.14

Old Permit Conditions 4.5 through 4.7 and Permit Condition 4.14 are the requirements taken from 40 CFR 63 Subpart QQQQ. They duplicate the applicable requirements of 40 CFR 63 Subpart QQQQ in the Tier I operating permit and are removed. PC 4.5 is replaced with the following permit condition:

**“4.5 The permittee shall comply with the applicable requirements in 40 CFR 63, Subpart QQQQ. Refer to Tier I Operating Permit No. T1 2012.0011 issued on January 28, 2013 or its subsequent revisions or renewals to the permit for details.”**

#### Permit Conditions 4.6 through 4.10 and Old Permit Conditions 4.9 through 4.13

Old PCs 4.9 through 4.13 are re-numbered as PCs 4.6 through 4.10. “Two years” in these permit conditions are replaced with “five years” to be consistent with the requirements in General Provisions of the permit.

### PRINTING

#### Permit Condition 5.5 and Old Permit Conditions 5.5, 5.6, and 5.13

Old Permit Conditions 5.5, 5.6, and 5.13 are the requirements taken from 40 CFR 63 Subpart KK. They duplicate the applicable requirements of 40 CFR 63 Subpart KK in the Tier I operating permit and are removed. PC 5.5 is replaced with the following permit condition:

**“5.5 The permittee shall comply with the applicable requirements in 40 CFR 63, Subpart KK. Refer to Tier I Operating Permit No. T1 2012.0011 issued on January 28, 2013 or its subsequent revisions or renewals for details.”**

#### Permit Conditions 5.6 through 5.11 and Old Permit Conditions 5.7 through 5.12

For clarification purpose, the language in PC 5.6 regarding Material Purchase Records is replaced with the language taken from PC 4.6.

Old PCs 5.7 through 5.12 are re-numbered as PCs 5.6 through 5.11. “Two years” in these permit conditions are replaced with “five years” to be consistent with the requirements in General Provisions of the permit.

### GENERAL PROVISIONS

General Provisions are replaced with the ones taken from 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 – PROCESSING FEE

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

<b>Emissions Inventory</b>			
Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO <sub>x</sub>	0.0	0	0.0
SO <sub>2</sub>	0.0	0	0.0
CO	0.0	0	0.0
PM10	0.0	0	0.0
VOC	0.0	0	0.0
TAPS/HAPS	0.0	0	0.0
Total:	0.0	0	<b>0.0</b>
Fee Due	<b>\$ 250.00</b>		