

Public Notice

DEQ Requests Comments on Woodgrain Millwork's Proposed Air Quality Permit

The Oregon Department of Environmental Quality invites the public to submit written comments on the conditions of Woodgrain Millwork, Inc., dba Pilot Rock Lumber's, proposed air quality permit, known officially as a Title V Operating Permit.

Summary

The proposed permit is a renewal to the air permit for Woodgrain Millwork, Inc., dba Pilot Rock Lumber. The current permit was issued on 9/15/2014 and expired on 9/1/2019. The emissions limits for volatile organic compounds and greenhouse gas (including biomass) is slightly increased.

How do I participate?

To submit your comments for the public record, send them by mail, fax or email:

Nancy Swofford, Air Quality Permit Coordinator
475 NE Bellevue Dr., Suite 110
Bend, OR 97701
Fax: 541-388-8283
Email: eraqpermits@deq.state.or.us

Written comments are due by 5 p.m. **Friday, October 30, 2020**

About the facility

This permit renewal is for Pilot Rock Lumber located at 600 NW Cedar Street in Pilot Rock.

Facilities at the site include a sawmill, a planer mill, lumber drying kilns, chipper facilities, log storage decks, shipping and receiving facilities, maintenance facilities and administrative offices.

What air pollutants would the permit regulate?

This permit regulates emissions of the pollutants listed in the table at the end of this document.

How does DEQ determine permit requirements?

DEQ evaluates types and amounts of pollutants and the facility's location, and determines permit requirements according to state and federal regulations.

How does DEQ monitor compliance with the permit requirements?

This permit would require the facility to monitor pollutants using federally-approved monitoring practices and standards.

Formulas to calculate emissions are contained in the permit. The permittee is required to calculate facility-wide emissions and submit an emissions report to DEQ semi-annually. DEQ will conduct onsite inspections to ensure compliance with emission limitations.

What happens after the public comment period ends?

DEQ will consider and provide responses to all comments received at the close of the comment period. DEQ will hold a public hearing if requested by 10 or more individuals or one person representing a group of 10 or more individuals. DEQ may modify provisions in the proposed permit, but the permit writers can only modify conditions of the permit in accordance with the rules and statutes under the authority of DEQ. Participation in the rulemaking or the legislative process is the only way to change the rules or statutes. Ultimately, if a facility meets all legal requirements, DEQ will issue the facility's air quality permit.

Where can I get more information?

Find out more and view the draft documents online at DEQ's "[Public Notices](#)" page or contact Nancy Swofford, Air Permit Coordinator:

Phone: 541-633-2021 or 866-863-6668
Fax: 541-388-8283
Email: eraqpermits@deq.state.or.us

View the draft permit and related documents in person at the Pilot Rock Public Library at 144 N Alder Place, or at the DEQ office in Pendleton. For a review appointment, call Bobbi De Mauro at 541-278-4614

Alternative Formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.



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Quality

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www.oregon.gov/DEQ

DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

Notice Issued: 9/25/2020
By: Nancy Swofford
Permit Number: 30-0016

Emissions Limits

Criteria Pollutants: Table 1 below presents maximum allowable emissions of criteria pollutants for the facility. The current emission limit reflects maximum emissions the facility can emit under the existing permit. The proposed emission limit reflects maximum emissions the facility would be able to emit under the proposed permit. Typically, a facility's actual emissions are less than maximum limits established in a permit; however, actual emissions can increase up to the permitted limit.

Table 1

Criteria Pollutant	Current Limit (tons/yr)	Proposed Limit (tons/yr)
Particulate matter	180	177
Small particulate matter	97	95
Fine particulate matter	82	80
Nitrogen oxides	111	111
Sulfur dioxide	39	39
Carbon monoxide	99	99
Volatile organic compounds	106	118
Greenhouse Gas (including biomass CO ₂)	110,770	113,236

For more information about criteria pollutants, go to: [Criteria Air Pollutants](#)

Hazardous Air Pollutants: Woodgrain Millwork, Inc., Pilot Rock Lumber is not a major source of hazardous air pollutants, however EPA has determined that businesses similar to this facility, as a group, emit enough hazardous air pollutants to warrant regulation. Therefore, this source is subject to the following National Emission Standard for Hazardous Air Pollutants: 40 CFR Part 63, Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines) and Subpart JJJJJ (Industrial, Commercial and Institutional Boilers Area Sources). Table 2 summarizes the hazardous air pollutants that trigger the NESHAP. More detailed information can be found in the review report.

Table 2

Hazardous Air Pollutants	Potential Emissions (tons/yr)
Manganese	6.73
Hydrogen Chloride	4.20
Methanol	2.48
Acetaldehyde	2.18
Various Other HAPs	6.98
Total HAPs	22.57

For more information about hazardous air pollutants, go to: [Health Effects Notebook for Hazardous Air Pollutants](#)



OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
OREGON TITLE V OPERATING PERMIT

Eastern Region
475 NE Bellevue Drive, Suite 110
Bend, OR 97701

Issued in accordance with provisions of ORS 468A.040
and based on land use compatibility findings included in the permit record.

ISSUED TO:

Woodgrain Millwork, Inc.
1917 Jackson Avenue
La Grande, OR 97850

INFORMATION RELIED UPON:

Application Number: 30245
Received: 8/23/2018

PLANT SITE LOCATION:

Pilot Rock Lumber
600 NW Cedar St.
Pilot Rock, OR 97868

LAND USE COMPATIBILITY STATEMENT:

Issued by: City of Pilot Rock
Dated: 10/06/1992

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY

Mark W. Bailey, Eastern Region Air Quality Manager

Date

Nature of Business

Sawmill and Planing Mill
Fuel Buning Equipment

Primary
Secondary

SIC

2421
4961

NAICS

321113
221330

RESPONSIBLE OFFICIAL

Title: Vice President
Lumber and Composites Division

FACILITY CONTACT PERSON

Name: Lindsay Warness
Title: Safety & Environmental Manager
Phone: 541-962-2066

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LIST OF ABBREVIATIONS THAT MAY BE USED IN THIS PERMIT

ACDP	Air Contaminant Discharge Permit	NO _x	Nitrogen Oxides
ASTM	American Society for Testing and Materials	NSPS	New Source Performance Standard
Btu	Brittish thermal unit	O ₂	Oxygen
calendar year	The 12-month period beginning January 1st and ending December 31 st	OAR	Oregon Administrative Rules
CAO	Cleaner Air Oregon	ORS	Oregon Revised Statutes
CFR	Code of Federal Regulations	O&M	Operation and Maintenance
CO	Carbon Monoxide	PCD	Pollution Control Device
CO _{2e}	Carbon Dioxide Equivalent	PM	Particulate Matter
DEQ	Oregon Department of Environmental Quality	PM ₁₀	Particulate Matter less than 10 microns in size
dscf	dry standard cubic foot	PM _{2.5}	Particulate Matter less than 2.5 microns in size
EF	Emission Factor	ppm	parts per million
EPA	US Environmental Protection Agency	ppmvd	parts per million by volume dry
EU	Emissions Unit	PSD	Prevention of Significant Deterioration
FCAA	Federal Clean Air Act	PSEL	Plant Site Emission Limit
Gal	Gallon(s)	PTE	Potential to Emit
GHG	Greenhouse Gas	RACT	Reasonably Available Control Technology
gr/dscf	grains per dry standard cubic foot	scf	standard cubic foot
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040	SER	Significant Emission Rate
HCFC	Halogenated Chloro-Fluoro-Carbon	SIC	Standard Industrial Classification
ID	Identification Number	SIP	State Implementation Plan
I&M	Inspection and Maintenance	SO ₂	Sulfur Dioxide
lb	Pound(s)	ST	Source Test
MBF	1000 Board Feet	TACT	Typically Achievable Control Technology
MMBtu	Million British thermal units	VE	Visible Emissions
NA	Not Applicable	VOC	Volatile Organic Compound
NESHAP	National Emissions Standards for Hazardous Air Pollutants	year	A period consisting of any 12-consecutive calendar months

PERMITTED ACTIVITIES

1. Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air contaminants from those processes and activities directly related to or associated with air contaminant source(s) in accordance with the requirements, limitations and conditions of this permit. [OAR 340-218-0010 and 340-218-0120(2)]
2. All conditions in this permit are federally enforceable, meaning that they are enforceable by DEQ, EPA and citizens under the Clean Air Act, except Conditions 7, 8, 9, G5 and G9 (OAR 340-248-0005 through 340-248-0180) are enforceable by only the state. [OAR 340-218-0060]

EMISSIONS UNIT (EU) AND POLLUTION CONTROL DEVICE (PCD) IDENTIFICATION

3. The emissions units regulated by this permit are the following: [OAR 340-218-0040(3)]

Emission Unit Description	EU ID	Process Description	Pollution Control Device	
			Description	PCD ID
Boiler #1	B1/PS-1	Biomass (Wood/bark) fired boiler	None	NA
Boiler #3	B3/PS-3			
Boiler #4	B4/PS-4			
Boiler #2	B2/PS-2	Natural gas-fired boiler	None	NA
Kilns	Kilns/ PS-5	Wood drying kilns, steam heated	None	NA
Material Handling Group	GS-1	Cyclone A, hogged trim cyclone	None	NA
	GS-1	Cyclone B, dryer shavings cyclone		
	GS-1	Bin vent C, green sawdust		
Whole Log Chipping	WLC/ GS-2	Chipping of whole logs; not related to lumber throughput	None	NA
Debarking	FS-1	Debarking and transfer of green bark and green chips to storage bins	None	NA
Unpaved Roads	FS-2, UPR	Unpaved roads	Watering	NA
Aggregate Insignificant	FS-3, AI	PM/PM ₁₀ emissions from building vents and filing room cyclone. Fire pump.	None	NA

EMISSION LIMITS AND STANDARDS, TESTING, MONITORING AND RECORDKEEPING REQUIREMENTS

The following tables and conditions contain the applicable requirements along with testing, monitoring and recordkeeping requirements for the emissions units to which those requirements apply.

Facility-Wide Requirements

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirement	Monitoring Condition
340-208-0210(1)	0	Fugitive Emissions	Minimize	Fugitive Dust Control Plan	5
				Complaint investigation	9
340-208-0300	7	Air Contaminants	Not cause a nuisance	Complaint investigation	9
340-208-0450	8	PM >250µ	No observable deposition off site	Complaint investigation	9
40 CFR Part 68	10	Risk Management	Risk management plan	NA	10

4. Applicable Requirement: The permittee must not cause or permit any materials to be handled, transported or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne.
 - a. Such reasonable precautions must include, but not be limited to the following: [OAR 340-208-0210(1)]
 - i. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
 - ii. Application of water, or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;
 - iii. Full or partial enclosure of materials stockpiles in cases where application of water or chemicals are not sufficient to prevent particulate matter from becoming airborne;
 - iv. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials;
 - v. Adequate containment during sandblasting or other similar operations;
 - vi. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; and
 - vii. Prompt removal from paved streets of earth or other material that does or may become airborne.

- b. Upon request by DEQ, the permittee must develop a fugitive emission control plan for approval by DEQ if the above precautions are not adequate, and implement the plan whenever fugitive emissions leave the property for more than 18 seconds in a six-minute period.
5. Monitoring Requirement: At least once every two weeks for a minimum period of 30 minutes, the permittee must visually survey the plant for any sources of excess fugitive emissions. For the purpose of this survey, excess fugitive emissions are considered to be any visible emissions that leave the plant site boundaries for more than 18 seconds in a six-minute period. The person conducting the observation must follow the procedures of EPA Method 22. If sources of visible emissions are identified, the permittee must:
 - a. Immediately take corrective action to minimize the fugitive emissions, including but not limited to those actions identified in Condition 0; or
 - b. Develop a DEQ approved fugitive emission control plan upon request by DEQ, in accordance with Condition 4.b. [OAR 340-218-0050(3)(a)]
6. Recordkeeping: The permittee must maintain records of the fugitive emissions surveys, corrective actions (if necessary), and/or the results of any EPA Method 22 tests.

Nuisance Conditions

7. Applicable Requirement: The permittee must not cause or allow air contaminants from any source to cause a nuisance. Nuisance conditions will be verified by DEQ personnel. [OAR 340-208-0300] This condition is enforceable only by the State.
8. Applicable Requirement: The permittee must not cause or permit the deposition of any particulate matter larger than 250 microns in size at sufficient duration or quantity, as to create an observable deposition upon the real property of another person. [OAR 340-208-0450] This condition is enforceable only by the State.
9. Monitoring Requirement: The permittee must maintain a log of each nuisance complaint received by the permittee during the operation of the facility. Documentation must include date of contact, time of observed nuisance condition, description of nuisance condition, location of receptor, status of plant operation during the observed period, and time of response to complainant. A plant representative must immediately investigate the condition following the receipt of the nuisance complaint and a plant representative must provide a response to the complainant within 24 hours, if possible. This condition is only enforceable by the state. [OAR 340-218-0050(3)(a)]

Accidental Release Prevention/Risk Management Plan

10. Applicable Requirement: Should this stationary source become subject to the accidental release prevention regulations in 40 CFR Part 68, then the permittee must submit a risk management plan (RMP) by the date specified in 40 CFR 68.10 and comply with the plan and all other applicable Part 68 requirements. [40 CFR Part 68]

Emissions Unit Specific Requirements

Emissions Unit ID	Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirement	Monitoring Condition
Boilers 1 & 3 (B1 & B3)	340-208-0110(5)	11	Visible emissions	20% opacity, 6-minute block average	VE periodic monitoring	12, 14
	340-228-0210(2)(a)	15	PM	0.15 gr/dscf @ 12% CO ₂	O ₂ Monitoring	16, 17
	40 CFR 63.11201(b)	18	Tune-up	biennial	Record-keeping	47.a.vi
Boiler 2 (B2)	340-208-0110(4)	19	Visible emissions	20% opacity	Use natural gas fuel	22
	340-228-0210(2)(b)	20	PM	0.14 gr/dscf @ 50% excess air	Use natural gas fuel	
Boiler 4 (B4)	340-208-0110(5)	11	Visible emissions	20% opacity, 6-minute block average	VE periodic monitoring	12, 14
	340-228-0210(2)(a)	15	PM	0.15 gr/dscf @ 12% CO ₂	O ₂ Monitoring	16, 17
	40 CFR 63.11201(b)	18	Tune-up	biennial	Record-keeping	47.a.vi
Kilns	340-208-0110(4)	25	Visible emissions	20% opacity	VE periodic monitoring	30
	340-226-0210(2)(b)	26	PM	0.14 gr/dscf		
Cyclones A & B, Bin Vent C (Material Handling)	340-208-0110(3)	25	Visible emissions	20% opacity	VE periodic monitoring, Inspections	30, 31
	340-226-0210(2)(a)	27	PM	0.15 gr/dscf		
	340-226-0310	28		See Table 1 in Division 226		
AI – Fire Pump Engine	40 CFR 63.6603(a)	35	HAP	Required maintenance	Record-keeping	48.f
	40 CFR 63.6640(f)	35	Operational hours	Non-emergency hours limited		

Biomass Boilers B1, B3 and B4

11. Applicable Requirement: The permittee must comply with the following visible emission limits for Boilers B1, B3 and B4: [OAR 340-208-0110(5)]
- a. Any visible emissions may not equal or exceed an average of 20 percent opacity with one or more of the following exceptions:
 - i. Visible emissions may equal or exceed an average of 20 percent opacity for up to two independent six-minute blocks in any hour, as long as the average opacity during each of these two six-minute blocks is less than 40 percent;
 - ii. Visible emissions may equal or exceed an average of 20 percent opacity but may not equal or exceed 40 percent opacity, as the average of all six-minute blocks during grate cleaning operations provided the grate cleaning is performed in accordance with a grate cleaning plan approved by DEQ; or
 - iii. DEQ may approve, at the owner's or operator's request, a boiler specific limit greater than an average of 20 percent opacity, but not to equal or exceed an average of 40 percent opacity, based on the opacity measured during a source test that demonstrates compliance with OAR-340-228-210(2)(d) as provided in OAR 340-208-0110(5)(b)(C).
 - b. The visible emissions standards in this condition are based on the average of 24 consecutive observations recorded at 15-second intervals, or more frequently as allowed under Condition 11.ii, which comprise a six-minute block. Six-minute blocks need not be consecutive in time and in no case may two blocks overlap. For each set of 24 observations, the six-minute block average is calculated by summing the opacity of the 24 observations and dividing the sum by 24. Six-minute block averages are measured by: [OAR 340-208-0110(2)]
 - i. EPA Method 9; or
 - ii. A continuous opacity monitoring system (COMS) installed and operated in accordance with the DEQ Continuous Monitoring Manual or 40 CFR Part 60; or
 - iii. An alternative monitoring method approved by DEQ that is equivalent to EPA Method 9.
 - c. The visible emission standards do not apply to fugitive emissions from a source or part of a source. [OAR 340-208-0110(1)]
12. Monitoring Requirement: The permittee must monitor visible emissions from the stack of Boilers B1, B3 and B4 by conducting an EPA Method 9 test. Each EPA Method 9 test must be a minimum of 6 minutes long unless any one reading is greater than 20% opacity, then the observation period must be 60 minutes or until a violation of the applicable standard in Condition 11 is documented, whichever period is shorter.

- a. All EPA Method 9 tests in this permit condition must be performed during periods that Boiler B1, B3 or B4 are in operation. On days that a boiler is not operating, Method 9 testing is not required for that boiler.
 - b. The EPA Method 9 tests must be conducted at least once each day, excluding weekends and holidays.
 - c. If 10 consecutive days of EPA Method 9 test results are less than the standard in Condition 11, the test frequency may be weekly.
 - d. If 10 consecutive weeks of EPA Method 9 test results are less than the standard in Condition 11, the test frequency may be monthly.
 - e. If any test result exceeds the applicable standard in Condition 11, the test frequency must be daily for 5 consecutive days following the exceedance. If the results of the daily tests are all less than the applicable standard in Condition 11, the test frequency must be the same as before the exceedance occurred.
 - f. If the visible emissions are greater than the 20% opacity action level as a six-minute average, the permittee shall investigate the cause of the higher than normal emissions and take corrective action to reduce the emissions. Corrective action must be initiated within 24 hours or the permittee shall notify DEQ why corrective action cannot be performed. The permittee must keep records of the corrective actions.
 - g. If, on a regularly scheduled test day, it is not possible to conduct an EPA Method 9 test due to inclement weather conditions or interference from other fugitive sources, the permittee must make three attempts during the day at approximately 2-hour intervals. If it is still not possible to conduct the test, the permittee must perform the test the following day. The permittee must record in a log the reason for not conducting the test on a regularly scheduled test day.
13. The permittee must submit a grate cleaning plan for wood or biomass-fired boilers to DEQ by no later than 30 days prior to startup of the boiler. The plan must be kept onsite and be made available upon request. The plan must include the following: [OAR 340-208-0110(5)(b)(B)]
- a. Expected frequency of grate cleaning;
 - b. Frequency of EPA Method 9 tests during grate cleaning;
 - c. Expected length of grate cleaning period; and
 - d. Methods to minimize emissions during grate cleaning.
 - e. The plan must be kept on site and be made available upon request.
14. Monitoring and Recordkeeping Requirement(s): The permittee must maintain a log of grate cleaning for wood or biomass-fired boilers that includes the date and length of time of grate cleaning. The log must be kept onsite and be made available upon request. [OAR 340-218-0050(3)(a)]

15. Applicable Requirement: The permittee may not emit particulate matter emissions from emission units B1, B3 and B4 in excess of 0.15 grains per dry standard cubic foot (gr/dscf), corrected to 12% CO₂. Compliance with the emissions standard in this condition is determined using DEQ Method 5, or an alternative method approved by DEQ. [OAR 340-228-0210(2)(a) and -210(3)(a)]

16. Testing Requirement: Oregon Method 5, or an alternative method approved by DEQ, must be used for measuring particulate matter emissions from the hog fuel boilers (B1, B3 and B4). Each test run must be a minimum of 60 minutes long with a minimum sample volume of 31.8 dscf. Test results must be reported as grains per dry standard cubic feet (gr/dscf) corrected to 12% CO₂, pounds per hour, and pounds per thousand pounds of steam.
 - a. Testing must be conducted once each year that the boilers are operated. If two consecutive test results are each less than 75% of the standard (0.15 gr/dscf corrected to 12% CO₂), no further testing is required for that boiler during the term of the permit. Consecutive annual tests must be separated by at least 6 months.
 - b. Unless otherwise specified by permit condition or DEQ approved source test plan, biomass boiler compliance source tests must be performed as follows:
 - i. At least 90% of the design capacity for new or modified equipment;
 - ii. At least 90% of the maximum production capacity for existing equipment;
or
 - iii. At 90 to 110% of the normal maximum operating rate for existing equipment. For purposes of this permit, the normal maximum operating rate is defined as the 90th percentile of the average hourly operating rates during a 12 month period immediately preceding the source test. Data supporting the normal maximum operating rate must be included with the source test report.
 - iv. If the process rate during the test is determined by Condition 16.b.iii, the permittee must maintain production records on an hourly basis in addition to any other records that may be required by this permit or an applicable requirement.
 - c. During each test run, the permittee must record the following information:
 - i. As fired fuel characteristics including moisture content, approximate percentage of bark, species, and percent by weight less than 1/8 inch;
 - ii. Visible emissions as measured by EPA Method 9 for a minimum of 6 minutes during or within 30 minutes before or after each Oregon Method 5 test run;
 - iii. Boiler steaming rate (lbs/hr);
 - iv. Boiler excess oxygen (%); and
 - v. Control device operating parameters.

17. Monitoring Requirement: When the biomass boilers are operated, the permittee shall calibrate, maintain, operate and record the output of a continuous monitoring system for measuring the residual oxygen of each biomass boiler (B1, B3, B4) in accordance with the manufacturer's written instructions.
- a. The permittee must take corrective action if residual oxygen from Boiler 1 is less than 8.0% other than during startup, shutdown and cleaning activities. [OAR 340-218-0050]
 - b. The permittee must take corrective action if residual oxygen from Boiler 3 is less than 7.0% other than during startup, shutdown and cleaning activities. [OAR 340-218-0050]
 - c. The permittee must take corrective action if residual oxygen from Boiler 4 is less than 8.5% other than during startup, shutdown and cleaning activities. [OAR 340-218-0050]
 - d. Real time data shall be displayed at least once every minute that the boiler is in operation.
 - e. Running three clock-hour averages of the data shall be recorded at the end of each clock hour that the boilers are in operation. Minimum data availability shall be 90% of the total operating hours during any calendar year. Data availability shall be determined excluding periods of calibrations and routine maintenance.
 - f. All excursions of the residual oxygen action levels and corrective action taken to return the boilers to highest and best practical treatment and control shall be recorded in a boiler operating log.
 - g. An exceedance of the residual oxygen parameter operating ranges is not necessarily a violation of the particulate matter emission standard. [OAR 340-212-0200 through OAR 340-212-0280]
18. Applicable Requirement: The permittee must conduct a tune-up of the biomass boilers (B1, B3, B4) biennially as specified in 40 CFR 63.11223(b). [§63.11201(b), §63.11223(b)] Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. If a boiler is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. [40 CFR 63.11223(b)(7)]

Natural Gas-fired Boiler, B2

19. Applicable Requirement: Visible emissions from the stack of Boiler B2 may not equal or exceed an average of 20 percent opacity. [OAR 340-208-0110(4)]

The visible emissions standards in this condition are based on the average of 24 consecutive observations recorded at 15-second intervals which comprise a six-minute block. Six-minute blocks need not be consecutive in time and in no case may two blocks overlap. For each set of 24 observations, the six-minute block average is calculated by summing the opacity of the 24 observations and dividing the sum by 24. Six-minute block averages are measured by EPA Method 9, or by another method included in OAR 340-208-0110(2)].

20. Applicable Requirement: The permittee may not emit particulate matter emissions from Boiler B2 in excess of 0.14 grains per dry standard cubic foot, corrected to 50% excess air. Compliance with the emissions standard in this condition is determined using DEQ Method 5, or an alternative method approved by DEQ. [OAR 340-228-0210(2)(b)(B) and 0210(3)]
21. Testing Requirement: Source testing is not required for emission unit B2 during this permit term. But if testing were performed to determine compliance with the emission limits in Conditions 19 and 20, the test methods in EPA Method 9 and Oregon Method 5, or an alternative method approved by DEQ, must be used to measure the emissions.
22. Monitoring Requirement: The permittee shall maintain monthly and annual records of natural gas usage in Boiler 2 (B2). [40 CFR 60.48c(g)(2), OAR 340-218-0050(3)(a)]
23. Monitoring Requirement: At least one per calendar year, or as approved by DEQ in writing, the permittee must perform a tune-up and adjust the burner system of Boiler B2 to maintain efficient combustion. Records shall be maintained for each boiler tune-up, including the date the tuning was conducted and a description of the adjustments made to the boiler to maintain combustion efficiency.

Kilns, Cyclone A, Cyclone B and Bin Vent C

24. Applicable Requirement: Visible emissions from Cyclone A, Cyclone B, Bin Vent C and the Kilns may not equal or exceed an average of 20 percent opacity. The standard applies to the exhaust point of each unit and does not apply to fugitive emissions from the source. [OAR 340-208-0110(3) and (4)].

The visible emissions standards in this condition are based on the average of 24 consecutive observations recorded at 15-second intervals which comprise a six-minute block. Six-minute blocks need not be consecutive in time and in no case may two blocks overlap. For each set of 24 observations, the six-minute block average is calculated by summing the opacity of the 24 observations and dividing the sum by 24. Six-minute block averages are measured by EPA Method 9, or by another method included in OAR 340-208-0110(2)].

25. Applicable Requirement: The permittee must not cause or allow the emission of particulate matter in excess of 0.14 grains per dry standard cubic foot from the Kilns. [OAR 340-226-0210(2)(b)(B)]
26. Applicable Requirement: The permittee must not cause or allow the emission of particulate matter in excess of 0.15 grains per dry standard cubic foot from Cyclone A, Cyclone B and Bin Vent C. [OAR 340-226-0210(2)(a)(B)]
27. Applicable Requirement: The permittee must not cause or allow the emission of particulate matter in any one hour from Cyclone A, Cyclone B and Bin Vent C in excess of the amount shown in OAR 340-226-8010, for the process weight allocated to that process. [OAR 340-226-0310]

28. Testing Requirement: Source testing is not required for emission units Kilns, Cyclone A, Cyclone B and Bin Vent C during this permit term. But if testing were performed to determine compliance with the emission limits in Conditions 24 through 27, the following test methods, or an alternative method approved by DEQ, must be used to measure the emissions:

Emission Unit	Pollutant	Test Method
Kilns	PM, Opacity	Oregon Method 5, EPA Method 9
Cyclone A	PM, Opacity	Oregon Method 5 or 8, EPA Method 9
Cyclone B	PM, Opacity	Oregon Method 5 or 8, EPA Method 9
Bin Vent C	PM, Opacity	Oregon Method 5 or 8, EPA Method 9

29. Monitoring Requirement: One time each quarter of operation the permittee must conduct a ten minute visible emission survey of Cyclone A, Cyclone B, Bin Vent C and the Kilns using EPA Method 22.
- a. All visible emissions observations must be conducted during normal operation of the emission device.
 - b. If visible emissions, excluding condensed water vapor, from an individual monitoring point are detected for more than 5% (30 seconds) of the survey time, an EPA Method 9 shall be conducted on that monitoring point within 24 hours.
 - c. Each EPA Method 9 test must be conducted for a minimum period of 6 minutes. If any of the observations exceed the applicable opacity limit for the unit, the observations shall continue until 60 minutes of observations have been completed or until an exceedance of Condition 24 has been documented, whichever period is shorter.
 - d. If the visible emissions are greater than the applicable opacity limit for the unit as a six-minute average, the permittee shall investigate the cause of the higher than normal emissions and take corrective action to reduce the emissions. Corrective action must be initiated within 24 hours or the permittee shall notify DEQ why corrective action cannot be performed. The permittee must keep records of the corrective actions.
 - e. If the observer is unable to conduct the survey and/or EPA Method 9 test due to visual interferences caused by other visible emission sources (e.g. fugitive emissions during high wind conditions) or due to weather conditions such as fog, heavy rain or snow, the observer shall note such conditions on the data observation sheet and make at least three attempts to conduct the surveys and/or tests at approximately 2 hour intervals. If no observations are made for that day, the observer must continue to attempt to conduct the survey and/or EPA Method 9 test daily until a valid observation is possible.
30. Monitoring Requirement: In addition to the visible emission monitoring required by Condition 29, the permittee must inspect the cyclones at least once each semi-annual certification period for structural damage. If damage is detected that could affect the performance of the cyclone, the permittee must initiate repairs as soon as possible.

31. Monitoring Requirement: The Kiln operating temperatures must not exceed 200 degrees Fahrenheit (dry bulb) when drying lumber, when using the Kiln VOC emission factor listed in Condition 37. The permittee must measure and maintain records of the temperature in the Kilns sufficient to demonstrate that the temperature does not exceed the temperature limit for this emission factor.
32. Recordkeeping Requirement: The permittee must record the monthly and annual lumber dried in the Kilns by species in units of 1000 board feet (MBF).

Insignificant Activities Requirements

33. Applicable Requirement: DEQ acknowledges that insignificant emissions units (IEUs) identified by rule as either categorically insignificant activities or aggregate insignificant emissions as defined in OAR 340-200-0020 exist at facilities required to obtain an Oregon Title V Operating Permit. IEUs must comply with all applicable requirements. In general, the requirements that could apply to IEUs are incorporated as follows:
 - a. OAR 340-208-0110 (20% opacity)
 - b. OAR 340-228-0210 (0.10 gr/dscf corrected to 12% CO₂ or 50% excess air for fuel burning equipment)
 - c. OAR 340-226-0210 (0.10 gr/dscf for non-fugitive, non-fuel burning equipment)
 - d. OAR 340-226-0310 (process weight limit for non-fugitive, non-fuel burning process equipment)
34. Applicable Requirement: The Fire Pump engine is an emergency stationary reciprocating internal combustion engine (RICE). RICE are subject to the following requirements: [40 63.6640(f)]
 - a. For each emergency stationary RICE, the permittee must:
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first; [40 CFR 63. 6603(a), Table 2d(4)(a)]
 - ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; [40 CFR 63. 6603(a), Table 2d(4)(b)]
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and [40 CFR 63. 6603(a), Table 2d(4)(c)]
 - iv. During periods of startup, minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply; [40 CFR 63. 6603(a), Table 2d]
 - b. The permittee must install a non-resettable hour meter on each emergency stationary RICE, if one is not already installed. [40 CFR 63.6625(f)]
 - c. The permittee must operate and maintain the stationary RICE according to the manufacturer's emission related operation and maintenance instructions. [40 CFR 63.6640(a), Table 6(9)]

- d. Operating conditions: [40 CFR 63.6640(f)(2)]
 - i. There is no time limit on the use of emergency stationary RICE in emergency situations.
 - ii. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance.
 - iii. Emergency stationary RICE may be operated for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another utility.
 - e. The permittee must keep records of the hours of operation of each emergency stationary RICE that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the permittee must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR 63.6655(f)]
35. Unless otherwise specified in this permit or an applicable requirement, DEQ is not requiring any testing, monitoring, recordkeeping or reporting for the applicable emissions limits and standards that apply to IEUs. However, if testing were performed for compliance purposes, the permittee would be required to use the test methods identified in and perform the testing in accordance with DEQ's Source Sampling Manual.

PLANT SITE EMISSION LIMITS

36. The permittee must not cause or allow plant site emissions to exceed the following limits for any 12 consecutive calendar month period: [OAR 340-222-0035 through OAR 340-222-0041]

PM (ton/yr)	PM ₁₀ (ton/yr)	PM _{2.5} (ton/yr)	SO ₂ (ton/yr)	NO _x (ton/yr)	CO (ton/yr)	VOC (ton/yr)	GHG (ton CO _{2e} /yr)
177	95	80	39	111	99	118	113,236

Plant Site Emissions Monitoring [OAR 340-222-0080, 340-218-0050(3)]

37. The permittee must determine compliance with the Plant Site Emission Limits established in Condition 36 of this permit by conducting monitoring and calculations for each 12-month period in accordance with the following procedures, test methods and frequencies except for GHGs:

a. The permittee must calculate emissions using the following formula, process parameters and emission factors:

$$E = \sum P_{eu} \times EF_{eu} \times K$$

Where:

- E = Pollutant emissions in tons/year.
- \sum = Symbol representing “summation of”;
- P_{eu} = Process parameter (throughput) identified in the table below;
- EF_{eu} = Emission factor identified for each emissions unit and pollutant in the table below;
- K = Conversion constant: 1 ton/2,000 lbs for annual emissions calculations.

Emission Source Description	Throughput Type [Units]	Emission Factors (lb/throughput unit)						
		PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
Boiler 1 (B1)	Steam production [1,000 pounds]	0.68	0.34	0.34	0.014	0.43	0.25	0.13
Boiler 2 (B2)	Natural gas [million cubic feet]	2.5	2.5	2.5	1.7	100	84	5.5
Boiler 3 (B3)	Steam production [1,000 pounds]	0.64	0.32	0.32	0.014	0.35	0.14	0.13
Boiler 4 (B4)	Steam production [1,000 pounds]	0.29	0.15	0.15	0.014	0.34	0.08	0.13
Kilns	Pine [1,000 board feet]	0.02	0.02	0.02	--	--	--	1.96 ¹
Cyclones/Bin Vent	Throughput [bone dry tons]	0.5	0.43	0.25	--	--	--	--
Whole Log Chip	Throughput [bone dry tons]	0.07	0.06	0.04	--	--	--	--
Debarking	Finished product [1,000 board feet]	0.13	0.11	0.07	--	--	--	--
Unpaved Roads	Finished product [1,000 board feet]	0.45	0.11	0.01	--	--	--	--
Aggregate Insignificant	Constant time (fugitives) [year]	2000	2000	2000	2000	2000	2000	2000

1. If the kiln temperature measured during a drying cycle exceeds 200°F, then a Kiln VOC emission factor of 2.345 lb/MBF must be used for Ponderosa Pine, for that load.

- b. The emissions factors listed in Condition 37.a are not enforceable limits unless otherwise specified in this permit. Compliance with PSELs must only be determined by the calculations contained in this condition.
- c. Testing Requirement: Emission factor verification testing. The permittee must conduct emission factor verification tests in accordance with DEQ's Source Sampling Manual for the pollutants and emission units listed below using the following test methods, or an alternative method approved by DEQ, and minimum test frequencies:

EU ID	Pollutant	Test Method	Minimum Frequency
B1, B3, B4	PM	Oregon Method 5	Once per permit term if the boiler operates during permit term
	NO _x	EPA Method 7E	
	CO	EPA Method 10	

- i. The permittee must notify DEQ at least 15 days prior to conducting any emission factor verification tests by submitting a source test plan in accordance with DEQ's Source Sampling Manual.
- ii. The permittee must submit a summary of all emission factor verification tests to DEQ in accordance with Condition 39.e. The summary shall include the following information:
 - A. Emission unit identification;
 - B. Process parameters during the test (steam production in lbs steam/hr, etc.);
 - C. Emission results in ppmvd, pounds per hour and pounds pollutant per 1,000 lb steam.

EMISSION FEES

38. Emission fees will be based on the Plant Site Emissions Limits, unless permittee elects to report actual emissions for one or more permitted processes/pollutants. [OAR 340-220-0090]

GENERAL TESTING REQUIREMENTS

39. Unless otherwise specified in this permit, the permittee must conduct all testing in accordance with DEQ's Source Sampling Manual. [OAR 340-212-0120]
 - a. Unless otherwise specified by a state or federal regulation, the permittee must submit a source test plan to DEQ at least 30 days prior to the date of the test. The test plan must be prepared in accordance with DEQ's Source Sampling Manual and address any planned variations or alternatives to prescribed test methods. Permittee should be aware, if significant variations are requested, it may require more than 30 days for DEQ to grant approval and may require EPA approval in addition to approval by DEQ.
 - b. Only regular operating staff may adjust the processes or emission control device parameters during a compliance source test and within two (2) hours prior to the tests. Any operating adjustments made during a compliance source test, which are a result of consultation during the tests with source testing personnel, equipment vendors, or consultants, may render the source test invalid.
 - c. Unless otherwise specified by permit condition or DEQ approved source test plan, all compliance source tests must be performed as follows:
 - i. At least 90% of the design capacity for new or modified equipment;
 - ii. At least 90% of the maximum operating rate for existing equipment; or

- iii. At 90 to 110% of the normal maximum operating rate for existing equipment. For purposes of this permit, the normal maximum operating rate is defined as the 90th percentile of the average hourly operating rates during a 12 month period immediately preceding the source test. Data supporting the normal maximum operating rate must be included with the source test report.
- d. Each source test must consist of at least three (3) test runs and the emissions results must be reported as the arithmetic average of all valid test runs. If for reasons beyond the control of the permittee a test run is invalid, DEQ may accept two (2) test runs for demonstrating compliance with the emission limit or standard.
- e. Source test reports prepared in accordance with DEQ's Source Sampling Manual must be submitted to DEQ within 45 days of completing any required source test, unless a different time period is approved in the source test plan submitted prior to the source test.

GENERAL MONITORING AND RECORDKEEPING REQUIREMENTS

General Monitoring Requirements

Monitoring conditions are based on OAR 340-218-0050(3)(a); unless otherwise specified.

- 40. The permittee must not knowingly render inaccurate any required monitoring device or method. [OAR 340-218-0050(3)(a)(E)]
- 41. The permittee must use the same methods to determine compliance as those used to determine actual emissions for fee purposes and can be no less rigorous than the requirements of OAR 340-218-0080. [OAR 340-218-0050(3)(a)(F)]
- 42. The permittee must comply with the monitoring requirements on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(a)(G)]

General Recordkeeping Requirements

Recordkeeping conditions are based on OAR 340-218-0050(3)(b); unless otherwise specified.

- 43. The permittee must maintain the following general records of testing and monitoring required by this permit: [OAR 340-218-0050(3)(b)(A)]
 - a. The date, place as defined in the permit, and time of sampling or measurements;
 - b. The date(s) 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;
 - f. The operating conditions as existing at the time of sampling or measurement; and

- g. The records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibration drift checks).
44. Unless otherwise specified by permit condition, the permittee must make every effort to maintain 100 percent of the records required by the permit. If information is not obtained or recorded for legitimate reasons (e.g., the monitor or data acquisition system malfunctions due to a power outage), the missing record(s) will not be considered a permit deviation provided the amount of data lost does not exceed 10% of the averaging periods in a reporting period or 10% of the total operating hours in a reporting period, if no averaging time is specified. Upon discovering a required record is missing, the permittee must document the reason for the missing record. In addition, any missing record that can be recovered from other available information will not be considered a missing record. [OAR 340-214-0110, 340-214-0114, and 340-218-0050(3)(b)]
45. The permittee must comply with the recordkeeping requirements on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(b)(C)]
46. Unless otherwise specified, the permittee must retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings (or other original data) for continuous monitoring instrumentation, and copies of all reports required by the permit. All existing records required by the previous Air Contaminant Discharge Permit or Oregon Title V Operating Permit must also be retained for five (5) years from the date of the monitoring sample, measurement, report or application. [OAR 340-218-0050(3)(b)(B)]

Source Specific Recordkeeping Requirements

47. The permittee must maintain the following specific records of required monitoring information:
- a. Biomass Boilers (B1, B3 and B4):
 - i. Visible emissions observation reports and corrective action log (Condition 12), when operating;
 - ii. Records for grate cleaning log (Condition 14), when operating;
 - iii. Three clock-hour averages of residual oxygen for each boiler (Condition 17), when operating;
 - iv. Monthly and annual steam produced by each boiler, B1, B3 and B4 (Condition 37.a);
 - v. A copy of each notification and report submitted to comply with the Boiler NESHAP and all documentation supporting initial notifications and notifications of compliance status; [40 CFR 63.11225(c)(1)]

- vi. Records of boiler tune-ups including identity of each boiler, date of the tune-up, procedures followed for the tune-up, and the manufacturer's specification to which the boiler was tuned; [40 CFR 63.11225(c)(2)(i)]
- vii. A copy of each energy assessment report; [40 CFR 63.11225(c)(2)(iii)]
- viii. Records of the occurrence and duration of each boiler malfunction and monitoring equipment and actions taken during periods of malfunction to minimize emissions, when operating. [40 CFR 63.11225(c)(4) and (5)]
- b. Boiler 2 (B2):
 - i. Monthly and annual natural gas combusted in million cubic feet (Condition 22);
 - ii. Boiler tune-up and adjustment reports.
- c. Kilns:
 - i. Visible emissions observation reports and corrective action log (Condition 29);
 - ii. Kiln operating temperatures; (Condition 31)
 - iii. Monthly and annual lumber dried by species in 1,000 board feet; (Conditions 32 and 37.a).
- d. Material Handling (Cyclone A, Cyclone B, Bin Vent C):
 - i. Visible emissions observation reports and corrective action log; (Condition 29);
 - ii. Material handling inspections including corrective actions; (Condition 30);
 - iii. Monthly and annual records of material throughput (BDT) for each of the following: Cyclone A, Cyclone B and Bin Vent C (Condition 37.a).
- e. Whole Log Chipping: Monthly and annual records of material throughput (BDT) for whole log chipping using on-site equipment and contracted/portable equipment used on-site; (Condition 37.a).
- f. Fire Pump Engine: (Condition 34)
 - i. Records of the maintenance conducted on the fire pump engine; [40 CFR 63.6655(e)]
 - ii. Records of the hours of engine operation that is recorded by a non-resettable hour-meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 63.6655(f)]
- g. Bi-weekly facility excess fugitive emissions inspections, corrective actions (if necessary), and/or the results of any EPA Method 22 tests.; (Condition 6);
- h. Nuisance complaint and corrective action log; (Condition 9)
- i. Source test and emission factor verification test reports; (Conditions 16, 37.c)
- j. Excess emission log; (Condition 48)
- k. Permit deviations; (Condition 49)
- l. Plant site emissions calculated monthly for the previous 12-month period. (Condition 37)

REPORTING REQUIREMENTS

General Reporting Requirements

Recordkeeping conditions are based on OAR 340-218-0050(3)(c); unless otherwise specified.

48. Excess Emissions Reporting: The permittee must report all excess emissions as follows. [OAR 340-214-0300 through 340-214-0360]
- a. Immediately (within 1 hour of the event) notify DEQ of an excess emission event by phone, email or facsimile; and
 - b. Within 15 days of the excess emissions event, submit a written report that contains the following information: [OAR 340-214-0340(1)]
 - i. The date and time of the beginning of the excess emissions event and the duration or best estimate of the time until return to normal operation;
 - ii. The date and time the permittee notified DEQ of the event;
 - iii. The equipment involved;
 - iv. Whether the event occurred during startup, shutdown, maintenance or as a result of a breakdown, malfunction or emergency;
 - v. Steps taken to mitigate emissions and corrective action taken, including whether the approved procedures for a planned startup, shutdown or maintenance activity were followed;
 - vi. The magnitude and duration of each occurrence of excess emissions during the course of an event and the increase over normal rates or concentrations as determined by continuous monitoring or best estimate (supported by operating data and calculations);
 - vii. The final resolution of the cause of the excess emissions; and
 - viii. Where applicable, evidence supporting any claim that emissions in excess of technology-based limits were due to any emergency pursuant to OAR 340-214-0360.
 - c. In the event of any excess emissions which are of a nature that could endanger public health and occur during non-business hours, weekends or holidays, the permittee must immediately notify DEQ by calling the Oregon Emergency Response System (OERS). The current number is 1-800-452-0311.
 - d. If startups, shutdowns or scheduled maintenance may result in excess emissions, the permittee must submit startup, shutdown or scheduled maintenance procedures used to minimize excess emissions to DEQ for prior authorization, as required in OAR 340-214-0310 and 340-214-0320. New or modified procedures must be received by DEQ in writing at least 72 hours prior to the first occurrence of the excess emission event. The permittee must abide by the approved procedures and have a copy available at all times.
 - e. Once DEQ approves startup/shutdown procedures, the permittee must notify DEQ of planned startup/shutdown or scheduled maintenance events only if required by permit condition or if it results in excess emissions. When notice is required by this condition, it must be made in accordance with Condition 48.a.

- f. The permittee must continue to maintain a log of all excess emissions in accordance with OAR 340-214-0340(3). However, the permittee is not required to submit the detailed log with the semi-annual and annual monitoring reports. The permittee is only required to submit a brief summary listing the date, time and the affected emissions units for each excess emission that occurred during the reporting period. [OAR 340-218-0050(3)(c)]
49. Permit Deviations Reporting: The permittee must promptly report deviations from permit requirements that do not cause excess emissions, including those attributable to upset conditions, as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. “Prompt” means within 15 days of the deviation. Deviations that cause excess emissions, as specified in OAR 340-214-0300 through 340-214-0360 must be reported in accordance with Condition 48. [OAR 340-218-0050(3)(c)(B)]
50. All required reports must be certified by a responsible official consistent with OAR 340-218-0040(5). [OAR 340-218-0050(3)(c)(D)]
51. Reporting requirements must commence on the date of permit issuance unless otherwise specified in the permit. [OAR 340-218-0050(3)(c)(E)]

Addresses of regulatory agencies are the following, unless otherwise instructed:

Submit all Notices and applications that do not include payment to the Eastern Region’s Permit Coordinator.

Submit all reports (annual reports, source test plans and reports, etc.) to DEQ’s Eastern Region. If you know the name of the Air Quality staff member responsible for your permit, please include it.

DEQ – Eastern Region
475 NE Bellevue Dr, Suite 110
Bend, OR 97701
541-633-2021

Submit payments for invoices, applications to modify the permit, and any other payments to DEQ’s Business Office:

DEQ – Air Quality Division
700 NE Multnomah St.,
Suite 600
Portland, OR 97232
503-229-5359

Submit all reports for EPA requirements to:

US Environmental Protection Agency Enforcement and Compliance Assurance Division
Region 10 (20-C04)
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

Biennial NESHAP Report

52. The permittee must prepare and submit a biennial report by March 1 of every other year a compliance certification report for the previous two years containing the following information: [40 CFR 63.11225(b)]
- a. Company name and address;
 - b. A statement by the responsible official with the official's name, title, phone number, email address and signature certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant NESHAP standards and requirements as required in 40 CFR 63.11225(b)(2).

Semi-Annual and Annual Reports

53. The permittee must submit three (3) copies of reports of any required monitoring at least every 6 months, completed on forms approved by DEQ. Six month periods are January 1 to June 30, and July 1 to December 31. One paper copy of the report must be submitted to the EPA and two copies (one paper copy and one electronic copy) to the DEQ regional office. All instances of deviations from permit requirements must be clearly identified in such reports: [OAR 340-218-0050(3)(c)(A) and 340-218-0080(6)(d)]
- a. The first semi-annual report is due on **July 30** and must include the semi-annual compliance certification; [OAR 340-218-0080]
 - b. The annual report is due on **March 1** and must consist of the following:
 - i. The emission fee report; [OAR 340-220-0100]
 - ii. A summary of the excess emissions upset log; [OAR 340-214-0340]
 - iii. The second semi-annual compliance certification; and [OAR 340-218-0080]
 - iv. Annual records of steam produced in Boilers 1, 3 and 4 as required in Condition 47.a.iv.
 - v. Annual records of natural gas burned in Boiler 2 as required in Condition 47.b;
 - vi. Annual records of total lumber dried in the kilns as required in Condition 47.c.iii
 - vii. Annual records of total material throughput for Cyclone 1, Cyclone 2 and Bin Vent 3 as required in Condition 47.d.iii;
 - viii. Annual records of whole logs chipped as required in Condition 47.e;
 - ix. Annual emissions for the year and for a total rolling 12-month period for each criteria pollutant as calculated according to Condition 37.a.
54. The semi-annual compliance certification must include the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable): [OAR 340-218-0080(6)(c)]

- a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The identification of the method(s) or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means must include, at a minimum, the methods and means required under OAR 340-218-0050(3). *Note: Certification of compliance with the monitoring conditions in the permit is sufficient to meet this requirement, except when the permittee must certify compliance with new applicable requirements that are incorporated by reference into the permit. When certifying compliance with new applicable requirements that are not yet in the permit, the permittee must provide the information required by this condition.* If necessary, the permittee must identify any other material information that must be included in the certification to comply with section 113(c)(2) of the FCAA, which prohibits knowingly making a false certification or omitting material information;
 - c. The status of compliance with terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification must be based on the method or means designated in Condition 54.b. The certification must identify each deviation and take it into account in the compliance certification. The certification must also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance, as defined under OAR 340-200-0020, occurred; and
 - d. Such other facts as DEQ may require to determine the compliance status of the source.
55. Greenhouse Gas Registration and Reporting: If the calendar year emission rate of greenhouse gases (CO₂e) is greater than or equal to 2,756 tons (2,500 metric tons), the permittee must register and report its greenhouse gas emissions with DEQ in accordance with OAR 340-215. The greenhouse gas report must be certified by the responsible official consistent with OAR 340-218-0040(5).
56. Notwithstanding any other provision contained in any applicable requirement, the permittee may use monitoring as required under OAR 340-218-0050(3) and incorporated into the permit, in addition to any specified compliance methods, for the purpose of submitting compliance certifications. [OAR 340-218-0080(6)(e)]

NON-APPLICABLE REQUIREMENTS

57. The following State and Federal air quality requirements are not applicable to this facility

Rule Citation	Summary	Reason for Not Being Applicable
OAR 340-212-0210 through 0270	Compliance Assurance Monitoring	Add-on control devices are not used to achieve compliance with the standards
40 CFR 63, Subpart DDDD	Plywood and Composite Wood Products NESHAP	Facility is an area source of HAP emissions
40 CFR 63, Subpart DDDDD	Industrial, Commercial and Institutional Boilers and Process Heaters NESHAP	Facility is an area source of HAP emissions

GENERAL CONDITIONS

G1. General Provision

Terms not otherwise defined in this permit have the meaning assigned to such terms in the referenced regulation.

G2. Reference Materials

Where referenced in this permit, the versions of the following materials are effective as of the dates noted unless otherwise specified in this permit:

- a. Source Sampling Manual; November 15, 2018.
- b. Continuous Monitoring Manual; April 16, 2015 - State Implementation Plan Volume 3, Appendix A6; and
- c. All state and federal regulations as in effect on the date of issuance of this permit.

G3. Applicable Requirements

Oregon Title V Operating Permits do not replace requirements in Air Contaminant Discharge Permits (ACDP) issued to the source even if the ACDP(s) have expired. For a source operating under a Title V permit, requirements established in an earlier ACDP remain in effect notwithstanding expiration of the ACDP or Title V permit, unless a provision expires by its terms or unless a provision is modified or terminated following the procedures used to establish the requirement initially. Source specific requirements, including, but not limited to TACT, RACT, BACT, and LAER requirements, established in an ACDP must be incorporated into the Oregon Title V Operating Permit and any revisions to those requirements must follow the procedures used to establish the requirement initially.

G4. Compliance [OAR 340-218-0040(3)(n)(C), 340-218-0050(6), and 340-218-0080(4)]

- a. The permittee must comply with all conditions of this permit. Any permit condition noncompliance constitutes a violation of the Federal Clean Air Act and/or state rules and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application. Any noncompliance with a permit condition specifically designated as enforceable only by the state constitutes a violation of state rules only and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.
- b. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of permit issuance is supplemental to, and does not sanction noncompliance with the applicable requirements on which it is based.
- c. For applicable requirements that will become effective during the permit term, the source must meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.

G5. Masking Emissions

The permittee must not install or use any device or other means designed to mask the emission of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement. [OAR 340-208-0400] This condition is enforceable only by the State.

G6. Credible Evidence

Notwithstanding any other provisions contained in any applicable requirement, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any such applicable requirements. [OAR 340-214-0120]

G7. Certification [OAR 340-214-0110, 340-218-0040(5), 340-218-0050(3)(c)(D), and 340-218-0080(2)]

Any document submitted to DEQ or EPA pursuant to this permit must contain certification by a responsible official of truth, accuracy and completeness. All certifications must state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and, complete. The permittee must promptly, upon discovery, report to DEQ a material error or omission in these records, reports, plans, or other documents.

G8. Open Burning [OAR Chapter 340, Division 264]

The permittee is prohibited from conducting open burning, except as may be allowed by OAR 340-264-0020 through 340-264-0200.

- G9. Asbestos [40 CFR Part 61, Subpart M (federally enforceable), OAR Chapter 340-248-0005 through 340-248-0180 (state-only enforceable) and 340-248-0205 through 340-248-0280]

The permittee must comply with OAR Chapter 340, Division 248, and 40 CFR Part 61, Subpart M when conducting any renovation or demolition activities at the facility.

- G10. Stratospheric Ozone and Climate Protection [40 CFR 82 Subpart F, OAR 340-260-0040]

The permittee must comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

- G11. Permit Shield [OAR 340-218-0110]

- a. Compliance with the conditions of the permit is deemed compliance with any applicable requirements as of the date of permit issuance provided that:
 - i. Such applicable requirements are included and are specifically identified in the permit, or
 - ii. DEQ, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- b. Nothing in this rule or in any federal operating permit alters or affects the following:
 - i. The provisions of ORS 468.115 (enforcement in cases of emergency) and ORS 468.035 (function of department);
 - ii. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - iii. The applicable requirements of the national acid rain program, consistent with section 408(a) of the FCAA; or
 - iv. The ability of DEQ to obtain information from a source pursuant to ORS 468.095 (investigatory authority, entry on premises, status of records).
- c. Sources are not shielded from applicable requirements that are enacted during the permit term, unless such applicable requirements are incorporated into the permit by administrative amendment, as provided in OAR 340-218-0150(1)(h), significant permit modification, or reopening for cause by DEQ.

- G12. Inspection and Entry [OAR 340-218-0080(3)]

Upon presentation of credentials and other documents as may be required by law, the permittee must allow DEQ, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), to perform the following:

- a. Enter upon the permittee's premises where an Oregon Title V Operating Permit program source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. As authorized by the FCAA or state rules, sample or monitor, at reasonable times, substances or parameters, for the purposes of assuring compliance with the permit or applicable requirements.

G13. Fee Payment [OAR 340-220-0010, and 340-220-0030 through 340-220-0190]

The permittee must pay an annual base fee and an annual emission fee for particulates, sulfur dioxide, nitrogen oxides, and volatile organic compounds. The permittee must submit payment to the Department of Environmental Quality, Financial Services, 700 NE Multnomah Street, Suite #600, Portland, OR 97232, within 30 days of date DEQ mails the fee invoice or August 1 of the year following the calendar year for which emission fees are paid, whichever is later. Disputes must be submitted in writing to DEQ. Payment must be made regardless of the dispute. User-based fees will be charged for specific activities (e.g., computer modeling review, ambient monitoring review, etc.) requested by the permittee.

G14. Off-Permit Changes to the Source [OAR 340-218-0140(2)]

- a. The permittee must monitor for, and record, any off-permit change to the source that:
 - i. Is not addressed or prohibited by the permit;
 - ii. Is not a Title I modification;
 - iii. Is not subject to any requirements under Title IV of the FCAA;
 - iv. Meets all applicable requirements;
 - v. Does not violate any existing permit term or condition; and
 - vi. May result in emissions of regulated air pollutants subject to an applicable requirement but not otherwise regulated under this permit or may result in insignificant changes as defined in OAR 340-200-0020.
- b. A contemporaneous notification, if required under OAR 340-218-0140(2)(b), must be submitted to DEQ and the EPA.
- c. The permittee must keep a record describing off-permit changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.
- d. The permit shield of Condition G11 does not extend to off-permit changes.

G15. Section 502(b)(10) Changes to the Source [OAR 340-218-0140(3)]

- a. The permittee must monitor for, and record, any section 502(b)(10) change to the source, which is defined as a change that would contravene an express permit term but would not:
 - i. Violate an applicable requirement;
 - ii. Contravene a federally enforceable permit term or condition that is a monitoring, recordkeeping, reporting, or compliance certification requirement; or
 - iii. Be a Title I modification.
- b. A minimum 7-day advance notification must be submitted to DEQ and the EPA in accordance with OAR 340-218-0140(3)(b).
- c. The permit shield of Condition G11 does not extend to section 502(b)(10) changes.
- d.

G16. Administrative Amendment [OAR 340-218-0150]

Administrative amendments to this permit must be requested and granted in accordance with OAR 340-218-0150. The permittee must promptly submit an application for the following types of administrative amendments upon becoming aware of the need for one, but no later than 60 days of such event:

- a. Legal change of the registered name of the company with the Corporations Division of the State of Oregon, or
- b. Sale or exchange of the activity or facility.

G17. Minor Permit Modification [OAR 340-218-0170]

The permittee must submit an application for a minor permit modification in accordance with OAR 340-218-0170.

G18. Significant Permit Modification [OAR 340-218-0180]

The permittee must submit an application for a significant permit modification in accordance with OAR 340-218-0180

G19. Staying Permit Conditions [OAR 340-218-0050(6)(c)]

Notwithstanding Conditions G16 and G17, the filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G20. Construction/Operation Modification [OAR 340-218-0190]

The permittee must obtain approval from DEQ prior to construction or modification of any stationary source or air pollution control equipment in accordance with OAR 340-210-0205 through OAR 340-210-0250.

G21. New Source Review Modification [OAR 340-224-0010]

The permittee may not begin construction of a major source or a major modification of any stationary source without having received an Air Contaminant Discharge Permit (ACDP) from DEQ and having satisfied the requirements of OAR 340, Division 224.

G22. Need to Halt or Reduce Activity Not a Defense [OAR 340-218-0050(6)(b)]

The need to halt or reduce activity will not be a defense. It will not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

G23. Duty to Provide Information [OAR 340-218-0050(6)(e) and OAR 340-214-0110]

The permittee must furnish to DEQ, within a reasonable time, any information that DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee must also furnish to DEQ copies of records required to be retained by the permit or, for information claimed to be confidential, the permittee may furnish such records to DEQ along with a claim of confidentiality.

G24. Reopening for Cause [OAR 340-218-0050(6)(c) and 340-218-0200]

- a. The permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by DEQ.
- b. A permit must be reopened and revised under any of the circumstances listed in OAR 340-218-0200(1)(a).
- c. Proceedings to reopen and reissue a permit must follow the same procedures as apply to initial permit issuance and affect only those parts of the permit for which cause to reopen exists.

G25. Severability Clause [OAR 340-218-0050(5)]

Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, recordkeeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with.

G26. Permit Renewal and Expiration [OAR 340-218-0040(1)(a)(D) and 340-218-0130]

- a. This permit expires at the end of its term, unless a timely and complete renewal application is submitted as described below. Permit expiration terminates the permittee's right to operate.
- b. Applications for renewal must be submitted at least 12 months before the expiration of this permit, unless DEQ requests an earlier submittal. If more than 12 months is required to process a permit renewal application, DEQ must provide no less than six (6) months for the owner or operator to prepare an application.
- c. Provided the permittee submits a timely and complete renewal application, this permit will remain in effect until final action has been taken on the renewal application to issue or deny the permit.

G27. Permit Transference [OAR 340-218-0150(1)(d)]

The permit is not transferable to any person except as provided in OAR 340-218-0150(1)(d).

G28. Property Rights [OAR 340-200-0020 and 340-218-0050(6)(d)]

The permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations, except as provided in OAR 340-218-0110.

G29. Permit Availability [OAR 340-200-0020 and 340-218-0120(2)]

The permittee must have available at facility at all times a copy of the Oregon Title V Operating Permit and must provide a copy of the permit to DEQ or an authorized representative upon request.

All inquiries should be directed to:
DEQ Eastern Region
475 NE Bellevue Dr., Suite 110
Bend, OR 97701
541-388-6146



TITLE V OPERATING PERMIT REVIEW REPORT

Woodgrain Millwork Pilot Rock Lumber
600 NW Cedar Street
Pilot Rock, OR 97868

SIC	2421, 4961
NAICS	321113, 221330

Source Categories (Part and code)	Part B: 13, 71
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Compliance and Emissions Monitoring Requirements:

Unassigned emissions	
Emission credits	
Compliance schedule	
Source test [date(s)]	Annual, depending on boiler operation

COMS	
CEMS	
PEMS	
Ambient monitoring	

Reporting Requirements

Annual report (due date)	3/01
Emission fee report (due date)	3/01
SACC (due date)	3/01, 7/30
Quarterly report (due dates)	

Monthly report (due dates)	
Excess emissions report	X
Other reports (type)	

Air Programs

NSPS (list subparts)	Dc
NESHAP (list subparts)	ZZZZ,JJJJJ
CAM	
Regional Haze (RH)	
Synthetic Minor (SM)	
Part 68 Risk Management	
CFC	
RACT	

TACT	
Title V	X
ACDP (SIP)	
Major HAP source	
Federal major source	
NSR	
PSD	
Acid Rain	

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LIST OF ABBREVIATIONS USED IN THIS REVIEW REPORT

AQMA	Air Quality Management Area	N ₂ O	Nitrous Oxide (greenhouse gas)
ASTM	American Society of Testing and Materials	NA	Not Applicable
BDT	Bone Dry Ton	NESHAP	National Emission Standard for Hazardous Air Pollutants
CEMS	Continuous Emissions Monitoring System	NO _x	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standard
CH ₄	Methane (greenhouse gas)	NSR	New Source Review
CO	Carbon Monoxide	O ₂	Oxygen
CO _{2e}	Carbon Dioxide Equivalent	OAR	Oregon Administrative Rules
COMS	Continuous Opacity Monitoring System	ORS	Oregon Revised Statutes
DEQ	Oregon Department of Environmental Quality	O&M	Operation and Maintenance
dscf	dry standard cubic feet	PCD	Pollution Control Device
EF	Emission Factor	PEMS	Predictive Emissions Monitoring System
EPA	United States Environmental Protection Agency	PM	Particulate Matter
EU	Emissions Unit	PM ₁₀	Particulate Matter less than 10 microns in size
FCAA	Federal Clean Air Act	PM _{2.5}	Particulate Matter less than 2.5 microns in size
GHG	Greenhouse Gas	PSD	Prevention of Significant Deterioration
gr/dscf	grains per dry standard cubic feet	PSEL	Plant Site Emission Limit
HAP	Hazardous Air Pollutant	SO ₂	Sulfur Dioxide
ID	Identification Code	ST	Source Test
I&M	Inspection and Maintenance	VE	Visible Emissions
MB	Material Balance	VMT	Vehicle Mile Traveled
Mlb	1000 Pounds	VOC	Volatile Organic Compound
MM	Million		

INTRODUCTION

1. This is a renewal of an Oregon Title V Operating Permit issued to Woodgrain Millwork, Inc. for the Pilot Rock Lumber facility. The previous permit was issued on September 15, 2014 and is due to expire on September 1, 2019.
2. Woodgrain Millwork, Pilot Rock Lumber has been determined to be an existing source for the purposes of Cleaner Air Oregon in accordance with OAR 340-245-0020 because the air quality permit application was submitted and deemed complete, or construction had commenced on this facility prior to November 16, 2018. As an existing source the permittee is required to perform a risk assessment in accordance with OAR 340-245-0050, and demonstrate compliance with the Risk Action Levels for an “Existing Source” in OAR 340-245-8010 Table 1 when called in by DEQ. The permittee has not been called in and therefore, has not performed a risk assessment.
3. In accordance with OAR 340-218-0120(1)(f), this Review Report is intended to provide the legal and factual basis for the draft permit conditions. In most cases, the legal basis for a permit condition is included in the permit by citing the applicable regulation. In addition, the factual basis for the requirement may be the same as the legal basis. However, when the regulation is not specific and only provides general requirements, this Review Report is used to provide a more thorough explanation of the factual basis for the draft permit conditions.
4. The following administrative amendments were made to this permit during the previous permit period.

Date	Permit Revision or Notification	Brief Explanation
1/11/2019	Administrative Amendment	Permit was transferred to Woodgrain Millwork, Inc.
5/8/2019	Administrative Amendment	Responsible official designation was changed

5. Changes to the previous permit are summarized below:

New Permit Condition Number	Old Permit Condition Number	Description of Change	Reason for Change
--	--	“Modified Method 9” description just below acronym list was removed	This no longer applies. EPA Method 9 now applies instead
3	3	Chip Rail Loadout was removed as a specific emissions unit at this facility. Chip handling is regulated as a minor fugitive dust source.	This specific fugitive emissions source has not operated for many years.
4	4	Rule reference was changed from OAR 340-208-210(2) to -210(1)	This is the current rule that applies for fugitive dust emissions
4.a.ii	4.b	Use of asphalt and oil were removed as methods to control fugitive dust	Use of these materials has been discouraged due to negative environmental effects on other media

New Permit Condition Number	Old Permit Condition Number	Description of Change	Reason for Change
4.a.vii	--	Prompt removal from paved streets of material tracked out from the facility by vehicles is added	This is a standard measure added to all currently issued permits for the control of fugitive dust
4.b	--	Requirements for a fugitive emissions control plan, if requested by DEQ, were added to the permit	This is a standard measure added to all currently issued permits for the control of fugitive dust
5	29	The basis for excess fugitive emissions is clarified to be an event of 18 seconds in a 6 minute period. The observation method is changed to be EPA Method 22	These are requirements from the current rules. These are standard requirements added to all currently issued permits.
11	8	The currently effective visible emissions standard is specified	The rules changed since the previous permit was issued
12, 28, 29	25, 31, 33, 35	Opacity measurement method is changed from "modified" Method 9 to Method 9	The method changed during the previous permit period
13, 14	--	Grate cleaning requirements added as part of the revised opacity rule	These new opacity requirements apply
15	9	The PM grain loading standard changed from 0.2 to 0.15 gr/dscf	The rules changed since the previous permit was issued
15, 16, 20, 21, 28, 37.c	9, 23, 13, 25, 24	For source test methods, the provision "or an alternative method approved by DEQ" was added.	This provision provides flexibility with regard to source testing, when appropriate.
--	11	The requirement for a one time energy assessment was removed	This requirement was complied with during the previous permit period
--	12	The opacity requirement for Whole Log Chipping, Debarking, and Unpaved Roads was removed	These are fugitive dust sources. The opacity rules have been revised and no longer apply to these sources.
19, 24	8, 12	The currently applicable visible emission requirements are shown	The rules changed since the previous permit was issued
20	13	The PM grain loading standard changed from 0.1 to 0.14 gr/dscf	The rules changed since the previous permit was issued
--	14	NSPS opacity requirement was removed	This requirement does not apply to Boiler B2 since it uses natural gas fuel
25	--	The PM grain loading standard was added for the Kilns	This was added to be consistent with other similar permits
26	15	The PM grain loading standard changed from 0.2 to 0.15 gr/dscf	The rules changed since the previous permit was issued
29	33	Kilns have been included. Modified Method 9 was changed to Method 9. Condition 27.d was added to initiate corrective action when necessary.	The method change is included in recent rule revisions, and corrective action was added for consistency with similar Condition 12.f.
--	35, 42.e.i, 42.f.i	The conditions were removed for periodic visual emissions monitoring for Whole Log Chipping, Debarking and Unpaved Roads. Change is consistent with request in permit application.	Whole Log Chipping, Debarking and Unpaved Roads are fugitive dust sources; the facility-wide fugitive dust monitoring requirement applies instead. Condition 29 now includes the Kilns.

New Permit Condition Number	Old Permit Condition Number	Description of Change	Reason for Change
31, 32, 47.c.ii	--	A temperature condition and monitoring were added for the Kilns	The current DEQ kiln VOC and HAP emission factors are dependent on temperature, therefore, a condition is needed to assure emissions are consistent with estimates.
36	20	PSELS are updated	PSELS are updated based on most current emissions information
37	37	Emission factors changed: Kiln VOC is 1.96 lb/1000 board feet and Whole Log Chip PM is 0.07lb/BDT	Kiln VOC factor is updated to match current DEQ emission factor; Whole Log Chip factor matches factor used historically for this source (without rounding)
38	21	Emission Fees table was removed	This is a change included with currently issued permits
numerous	23-37	Various testing and monitoring requirements were moved into facility specific sections, toward the front of the permit	This is a change being made with currently issued permits to group applicable requirements and monitoring in one place.
12, 17, 47.a.i, iii, viii	31, 36, 42.a.i, ii, vii	Added phrase, "when operating" for recordkeeping for biomass boilers	Clarification was requested in permit application
47.a.ii	--	Included records for grate cleaning in list of records (when operating)	This record was not included in list or records to be maintained
47.d.ii	42.d.ii	Removed reference to "log book"	Clarification was requested in permit application
47.e	42.e.ii	Changed material throughput monitoring to be based on BDT for Whole Log Chip	These throughput "units" match the PSEL monitoring requirement
--	42.f.ii	Removed throughput monitoring for Debarking and Unpaved Roads	Material throughput monitoring per Condition 47.c.iii is sufficient for PSEL calculations.
51, G13	46, G13	Mailing addresses were corrected	The addresses changed
53	48	Instead of 2 paper copies, submit one paper and one electronic copy of Semi-Annual and Annual Reports	This is a change included with currently issued permits
53.b.viii	48.b.iv.E	Annual records of logs debarked was removed	This data is not needed. Records of lumber dried in Kilns is already provided and can be used for PSEL calculations
54.b	49.b	With regard to "methods", added "whether such methods or other means provide continuous or intermittent data"	The EPA revised the rule, therefore, it is added to the Title V permits
G2	G2	List of reference materials was updated	Changed to include current information
After G29	After G29	DEQ Eastern Region phone number changed	Changed to reflect current information

PERMITTEE IDENTIFICATION

- Woodgrain Millwork, Inc. operates a sawmill with natural gas and hogged fuel boilers located in Pilot Rock, Oregon.

FACILITY DESCRIPTION

7. The Woodgrain Millwork Pilot Rock Lumber sawmill is in the northern part of Pilot Rock. The property includes an area of approximately 95 acres, which is subdivided by Birch Creek, a tributary of the Umatilla River. Facilities at the site include a sawmill, a planer mill, lumber drying kilns, chipper facilities, log storage decks, shipping and receiving facilities, maintenance facilities, and administrative offices. Mill operations have been conducted at the site since approximately 1940.

EMISSIONS UNIT AND POLLUTION CONTROL DEVICE IDENTIFICATION

8. The emissions units at this facility are the following:
 - a. **Emission Units B1, B3** - Dutch oven hogged fuel boilers manufactured by Babcock & Wilcox in the early 1940s. The rated capacity of each boiler is approximately 20,000 lb steam/hr.
 - b. **Emission Unit B2** - A natural gas-fired water tube boiler manufactured by Keeler and installed in 1998. The rated capacity of the boiler is 79.5 MMBtu/hr and the maximum steaming rate is 40,000 lb/hr. Emissions are uncontrolled.
 - c. **Emission Unit B4** - Dutch oven hogged fuel boiler manufactured by Babcock & Wilcox in the early 1940s. The rated capacity of the boiler is approximately 8,000 lb steam/hr.
 - d. **Emission Unit Kilns** - Seven steam heated lumber drying kilns. Four of the kilns were manufactured by Lumber Systems, Inc. and were installed in 1987. Three of the kilns were manufactured by Wellons and were installed in 2004. All kilns vent directly to the atmosphere.
 - e. **Emission Unit Material Handling** - Four units consisting of:
 - i. **Cyclone A** - Dry shavings cyclone installed around 1960. The cyclone is 20 ft. long and 15 ft. in diameter, with a design gas flowrate of 42,000 acfm and a pressure drop of 14 in. w.c.
 - ii. **Cyclone B** - Hogged trim cyclone installed around 1960. The cyclone is 10 ft. long and 5 ft. in diameter, with a design gas flowrate of 16,000 acfm and a pressure drop of 14 in. w.c.
 - iii. **Bin Vent C** - Green sawdust bin vent.
 - f. **Emission Unit Whole Log Chipping** – Fugitive PM emissions from chipping whole logs independent of sawmill throughput. Chipping may occur using on-site equipment or contracted/portable equipment that's used on-site. Throughput monitoring encompasses the sum of both on-site and portable equipment.
 - g. **Emission Unit Debarking** – Fugitive PM emissions from debarking and transfer of green bark and green chips to storage bins.
 - h. **Emission Unit UPR** - Fugitive PM emissions from unpaved roads, controlled by a watering program.

- i. **Aggregate Insignificant Emissions** - Sources which are insignificant in aggregate including a diesel-fired fire pump rated at 255 hp which was manufactured in July 1974 is used for emergency purposes to drive a fire pump. This unit is subject to a NESHAP but emissions are included in the aggregate insignificant emission unit. Emissions from a small used oil space heater in the truck shop are also insignificant.

9. Categorically insignificant activities include the following:

- a. Constituents of a chemical mixture present at less than 1% by weight of any chemical or compound regulated under OAR Chapter 340, Divisions 200 through 268, excluding Divisions 248 and 262, or less than 0.1% by weight of any carcinogen listed in the U.S. Department of Health and Human Service's Annual Report on Carcinogens when usage of the chemical mixture is less than 100,000 pounds/year
- b. Evaporative and tail pipe emissions from on-site motor vehicle operation
- c. Distillate oil, kerosene and gasoline fuel burning equipment rated at less than or equal to 0.4 million Btu/hr
- d. Natural gas and propane burning equipment rated at less than or equal to 2.0 million Btu/hr
- e. Office activities
- f. Janitorial activities
- g. Personal care activities
- h. Groundskeeping activities including, but not limited to building painting and road and parking lot maintenance
- i. Instrument calibration
- j. Maintenance and repair shop
- k. Automotive repair shops or storage garages
- l. Air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment
- m. Refrigeration systems with less than 50 pounds of charge of ozone depleting substances regulated under Title VI, including pressure tanks used in refrigeration systems but excluding any combustion equipment associated with such systems
- n. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated vacuum producing devices but excluding research and development facilities
- o. Temporary construction activities
- p. Warehouse activities
- q. Accidental fires
- r. Air vents from air compressors
- s. Air purification systems
- t. Demineralized water tanks
- u. Electrical charging stations
- v. Fire brigade training
- w. Instrument air dryers and distribution
- x. Process raw water filtration systems

- y. Fire suppression
- z. Routine maintenance, repair and replacement such as anticipated activities most often associated with and performed during regularly scheduled equipment outages to maintain a plant and its equipment in good operating condition, including but not limited to steam cleaning, abrasive use and woodworking
- aa. Electric motors
- bb. Storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants and hydraulic fluids
- cc. On-site storage tanks not subject to any New Source Performance Standards (NSPS), including underground storage tanks (UST), storing gasoline or diesel used exclusively for fueling of the facility's fleet of vehicles
- dd. Natural gas, propane and liquefied petroleum gas (LPG) storage tanks and transfer equipment
- ee. Pressurized tanks containing gaseous compounds
- ff. Emissions from wastewater discharges to publicly owned treatment works (POTW) provided the source is authorized to discharge to the POTW, not including on-site wastewater treatment and/or holding facilities
- gg. Log ponds
- hh. Storm water settling basins
- ii. Health, safety and emergency response activities
- jj. Emergency generators and pumps used only during loss of primary equipment or utility service due to circumstances beyond the reasonable control of the owner or operator, or to address a power emergency as determined by DEQ
- kk. Non-contact steam vents and leaks and safety and relief valves for boiler steam distribution systems
- ll. Non-contact steam condensate flash tanks
- mm. Non-contact steam vents on condensate receivers, deaerators and similar equipment
- nn. Boiler blowdown tanks
- oo. Ash piles maintained in a wetted condition and associated handling systems and activities
- pp. Oil/water separators in effluent treatment systems
- qq. Combustion source flame safety purging on startup

EMISSION LIMITS AND STANDARDS, TESTING, MONITORING AND RECORDKEEPING

FACILITY-WIDE REQUIREMENTS

10. Fugitive emissions (OAR 340-208-0210(1)): This requirement is a good housekeeping requirement to prevent fugitive emissions from leaving the plant site. This includes fugitive dust emissions from sources like whole log chipping, debarking, unpaved roads (UPR), material transfer points and others. By definition it is not possible to perform emission tests on fugitive emission sources. Therefore, the permit does not include any

testing requirements. Monitoring includes a survey of the plant site every two weeks for evidence of fugitive emissions.

11. Nuisance: These requirements prohibit nuisances (OAR 340-208-0300) and particulate fallout (OAR 340-208-0450). These requirements are not part of the State Implementation Plan (SIP) so they are only enforceable by the State. Nuisance conditions must be verified by DEQ. In order to determine whether a nuisance condition may exist, the permittee is required to keep a log of any complaints received and respond to the complainant within 24 hours, if possible.
12. Accidental release provisions (40 CFR Part 68): The facility is not currently subject to this rule, but should the source become subject, a risk management plan will be required.

EMISSION UNIT SPECIFIC REQUIREMENTS

13. **Hogged Fuel Boilers (Emission Units B1, B3, B4)** As described in the permit application, the three biomass boilers have been mothballed since 10/30/2011. These boilers have been curtailed indefinitely and are presently retained intact onsite. The permit continues to contain requirements for these boilers in the event that the permittee brings them back into operation at some future date. There will be no emissions from these three boilers until a restart occurs.
 - a. The opacity standards have changed since the previous permit was issued. Boilers B1, B3 and B4 are wood-fired boilers installed prior to 1970. Therefore, these boilers are subject to the opacity limits in OAR 340-208-0110(5). The opacity standards do not apply to fugitive emissions from the source or part of the source (OAR 340-208-0110(1)) and the basis for the visible emissions standard is given in OAR 340-208-0110(2).
 - b. The grain loading standards have changed since the previous permit was issued. Boilers B1, B3 and B4 were constructed prior to 1970 and representative PM source tests conducted before April 16, 2005 demonstrated emissions greater than 0.080 grains per dry standard cubic foot (gr/dscf). Therefore, the grain loading standards under OAR 340-228-0210(2)(a) apply. A particulate emission limit of 0.15 gr/dscf corrected to 12% CO₂ now applies.
 - c. The boilers were constructed prior to the applicable date for any New Source Performance Standard (NSPS). Therefore, there are no NSPS regulations applicable to these boilers.
 - d. The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources, Industrial, Commercial and Institutional Boilers and Process Heaters (Subpart DDDDD) does not apply since the facility is not a major source of hazardous air pollutant (HAP) emissions. [40 CFR 63.7485]
 - e. The NESHAP for Industrial, Commercial and Institutional Boilers Area Sources (Subpart JJJJJ) applies since the facility is an area source of hazardous air pollutant (HAP) emissions. The boilers are determined to be an existing source since construction commenced prior to 6/04/2010. [§63.11194(b)] The standard does not

have an emission limit for these boilers. However, the permittee is required to conduct a tune-up on each boiler biennially, when in operation. [§63.11201(b), Table 2(6)] An initial tune-up was conducted on 9/19/2011 through 9/22/2011. A notification of compliance status documenting the tune-up occurred was submitted on 1/17/2012, and this satisfied the compliance date requirement under §63.11196(a)(1). The permit includes requirements to conduct future tune-ups if a boiler is restarted. The permittee is also required to perform a one-time energy assessment on each boiler. The one-time energy assessment was completed on 3/5/2014, and this satisfied requirements under 63.11196(a)(3) and 63.11201(b), Table 2(16). The condition for the energy assessment was removed from the permit since this one-time requirement has been fulfilled. It is important that the permittee maintain a copy of this report as shown in Condition 47.a.ii.

- f. Testing Requirements: When the biomass boilers are operated, in accordance with DEQ guidance on testing, these boilers will be tested for particulate matter emissions each year they are in operation. If two consecutive tests are less than 75% of the standard, the frequency will be reduced to once every 5 years. When a biomass boiler is restarted, the testing frequency will resume as “annual” since the particulate standards have been revised. The test frequency may be adjusted as described above after two tests are performed.
- g. Monitoring Requirements: When the biomass boilers are operated, periodic observations using EPA Method 9 will be used to monitor compliance with the opacity limit. Corrective action will be taken if the opacity exceeds 20% as a 6-minute average. These boilers do not have add-on controls, so the Compliance Assurance Monitoring (CAM) rules do not apply and the general periodic monitoring requirements of OAR 340-218-0050(3) apply instead. Residual oxygen in the furnace will be monitored once a minute, and corrective action taken when the residual oxygen exceeds the permitted action levels. The permitted action levels for residual oxygen were established based on levels measured during stack testing in a previous permit cycle. Monitoring of residual oxygen ensures that the boilers are operating within a combustion range which promotes good combustion and minimizes particulate emissions.

14. Natural Gas Boiler Requirements (Emission Unit B2)

- a. This boiler is considered to be a post-1970 source (installed after 1970). The opacity standards have changed since the previous permit was issued. The applicable requirements are a 20% opacity limit (OAR 340-208-0110(4)). Under this revised opacity standard compliance is based on the average of 24 consecutive observations recorded at 15-second intervals which comprise a six-minute block. Refer to OAR 340-208-0110(2) for details.
- b. The grain loading standards have changed since the previous permit was issued. The applicable standard is now 0.14 grains per dry standard cubic foot, corrected to 50% excess air. The standard under OAR 340-228-0210(2)(b)(B) applies since there are no compliance source test results available for this natural gas fired boiler.

- c. Boiler B2 is a 79.5 MMBtu/hr natural gas fired boiler installed in 1998. It is an “affected facility” subject to the New Source Performance Standard (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units (Subpart Dc) since construction commenced after 6/9/1989 and the rated capacity is between 10 MMBtu/hr and 100 MMBtu/hr. (40 CFR 60.40c(a)) There are no applicable emission standards in the NSPS (SO₂, PM, opacity) when the boiler combusts natural gas. Under 40 CFR 60.48c(g)(2) for an affected facility, records of the amount of natural gas fuel combusted are required to be recorded, and may be recorded on a monthly basis. The general NSPS requirements are listed below.

Section	Requirement	Permit Action
60.7(a)	Notifications	All notifications were received in 1998
60.7(b)	Records of Startup, Shutdown, Malfunction	Permittee will be required to maintain records of startup, shutdown and malfunction
60.7(c), (d) and (e)	Excess Emissions Reporting	Not applicable. Continuous monitoring is not required by the regulation
60.7(f)	Maintenance Records	Records required to be maintained
60.8	Performance Tests	Fuel sulfur certificate meets the testing requirement for this regulation
60.11(b) and (e)	Opacity Observations	Initial opacity observation occurred previously. Method for on-going opacity compliance stated in permit
60.11(d)	Operate Equipment with Good Air Pollution Control Practices	Permit contains conditions on operating equipment with good air pollution control practices
60.11(g)	Credible Evidence	Applicable
60.12	Circumvention	Applicable
60.13	Monitoring Requirements	Continuous monitoring not required

- d. Subpart DDDDD of 40 CFR 63 does not apply since the facility is not a major source of HAP emissions. Although the facility is an area source of HAP emissions, Subpart JJJJJ does not apply to Boiler B2 since it is a gas-fired boiler which is exempted in accordance with 40 CFR 63.11195(e).
- e. Testing Requirement: Particulate emissions from this natural gas fired boiler are less than 1 ton/yr. In accordance with DEQ's testing and monitoring guidance, particulate emissions testing is not required for this boiler. However, the permit will identify appropriate test methods should testing be required. Testing was also not added to the permit for NO_x and CO per the Title V Monitoring and Testing Guidance currently posted on the DEQ website. As described in the guidance, it is recognized that an emission unit can change over time, and this boiler has a high utilization rate. Therefore, in lieu of testing, a requirement was added to the permit to perform a periodic tune-up and adjustments to maintain good combustion control and for assurance that the boiler emissions continue to be consistent with the permit application materials.
- f. Monitoring Requirements: The permittee is not required to conduct any visible emissions or particulate matter monitoring for Boiler B2 because it is very unlikely that these standards could be violated while burning natural gas. The permittee must

maintain records of the type of fuels being burned on an hourly basis. If visible emissions are to be measured for any reason, the visible emissions must be measured as described in the permit.

15. **Kilns** Steam-heated lumber drying kilns were installed after 1970 and emit volatile organic compounds (VOC) and a small amount of particulate matter (less than 1 ton/yr). There are no standards for VOC, other than the PSEL, which is addressed separately. The opacity standards have changed since the previous permit was issued. The current applicable requirement is a 20% opacity limit given by OAR 340-208-0110(4). The particulate matter emission limit that applies is 0.14 gr/dscf under OAR 340-226-0210(b)(B).
- a. Kiln emission estimates are based on emission factors that are dependent upon the upper temperature level used for wood drying in the kilns. To improve certainty that actual emissions remain consistent with emission estimates for the kilns, a reference to this temperature (dry bulb) that corresponds to the emission factor used for PSEL compliance has been added to the permit as a monitoring requirement, similar to other sawmill permits. Improving the certainty of the kiln emission estimates is important with regard to determining major source status for programs such as Title V and new source review (NSR) (OAR 340-200-0020(90) and (91)), and in the future the estimates will be important for meeting Cleaner Air Oregon (CAO) requirements.

Monitoring Requirements: The kilns do not have any add-on emissions controls so the Compliance Assurance Monitoring rules do not apply. Opacity monitoring will consist of periodic visual emissions surveys. If visual emissions are observed for more than 30 seconds during the 10-minute observation period, an EPA Method 9 test will be required. Kiln temperature monitoring is included to demonstrate that actual emissions are consistent with the emission estimates. Kiln throughput monitoring in units of 1000 board feet (MBF) is required to determine emissions for PSEL compliance and for annual reports.

16. **Cyclone A, Cyclone B and Bin Vent C** All of the cyclones are considered to be pre-1970 sources (installed prior to 1970), therefore, the revised standards that apply are 20% opacity under OAR 340-208-0110(3) and a particulate emission limit of 0.15 gr/dscf (under OAR 340-226-0210(2)(a)(B)). In addition, all of the cyclones are subject to the process weight limits in OAR 340-226-310.
- a. Testing Requirements: Emissions are less than 10 tons/yr. In accordance with DEQ's testing and monitoring guidance, particulate emission testing is not required for the cyclones. However, the permit will identify appropriate test methods should testing be required.
- b. Monitoring Requirements: Excess emissions from cyclones are typically caused by cyclone plugging, structural damage to the system (i.e., holes in the duct work or hopper area), or an improper size for the type and amount of material being handled. As such, a routine inspection program can be useful in preventing emissions and a

routine visible emission survey can be used to verify that the preventative maintenance is effective. Therefore, the permittee is being required to inspect the cyclones at least once each semi-annual certification period and perform any necessary maintenance. In addition, the permittee is required to perform visible emission monitoring once each quarter. This monitoring consists of surveying the units for visible emissions. If there are no visible emissions, then no further testing is required. However, if visible emissions are observed for more than 30 seconds during the 10-minute observation period, then an EPA Method 9 test is required to measure the visible emissions.

FEDERAL REQUIREMENTS

17. New Source Performance Standards (NSPS): As mentioned in item 14 the natural gas boiler (Emission Unit B2) is subject to 40 CFR 60, Subpart Dc. However, since the boiler burns only natural gas there are no applicable emission standards in the NSPS. Applicable requirements for this standard are shown in item 14. There is a 225 hp fire pump engine at the facility, but this engine is not subject to the NSPS for Stationary Compression Ignition Internal Combustion Engines (Subpart IIII) since the model year (1974) is prior to the applicability date of 7/01/2006. (40 CFR 60.4200(a)(2)(ii))

National Emission Standards for Hazardous Air Pollutants (NESHAP): The facility is not a major source of Hazardous Air Pollutant (HAP) emissions (emissions less than 10 ton/yr of any single HAP and less than 25 ton/yr of all HAP combined). The NESHAP for Plywood and Composite Wood Products (Subpart DDDD), which applies to facilities that produce kiln-dried lumber, does not apply to this facility because it is not a major source of HAP emissions. (40 CFR 63.2231(b)) The NESHAP for Major Source Industrial, Commercial and Institutional Boilers and Process Heaters (Subpart DDDDD) does not apply, again because the facility is not a major source of HAP emissions. As mentioned in item 13 the NESHAP for area source Industrial, Commercial and Institutional Boilers (Subpart JJJJJ) applies to the hogged fuel boilers (Emission Units B1, B3, B4) and required biennial tune-ups and a one-time energy assessment. The NESHAP for Stationary Reciprocating Internal Combustion Engines (Subpart ZZZZ) applies to the fire pump engine on-site. The engine is considered to be an existing source since it commenced construction prior to 6/12/2006. The standard prescribes maintenance on the engine including an oil and filter change annually or every 500 hours of operation, whichever comes first, inspect air cleaner annually or every 1000 hours of operation, whichever comes first, and inspect all hoses and belts annually or every 500 operating hours, whichever comes first.

18. Compliance Assurance Monitoring (40 CFR 64): None of the emission units at this facility are subject to the Compliance Assurance Monitoring (CAM) regulations for the following reasons:
 - a. CAM is not applicable to the boilers because add-on control devices are not used to achieve compliance with the standards;

- b. CAM is not applicable to the fugitive emissions and nuisance requirements because add-on control devices are not used to achieve compliance with the standards;
 - c. CAM is not applicable to the cyclones because pre-controlled emissions for the units are less than 100 ton/yr.
19. Accidental Release Prevention (40 CFR 68): The facility is not currently subject to the Accidental Release Prevention rules.
20. **Insignificant Emission Units** As identified earlier in this Review Report, this facility has insignificant emissions units (IEUs) that include categorically insignificant activities and aggregate insignificant emissions, as defined in OAR 340-200-0020. For the most part, the standards that apply to IEUs are for opacity (20% limit) and particulate matter (0.1 gr/dscf limit). DEQ does not consider it likely that IEUs could exceed an applicable emissions limit or standard because IEUs are generally equipment or activities that do not have any emission controls (e.g., small natural gas fired space heaters) and do not typically have visible emissions. Since there are no controls, no visible emissions, and the emissions are less than one ton per year, DEQ does not believe monitoring, recordkeeping or reporting is necessary for assuring compliance with the standards.

PLANT SITE EMISSION LIMITS

21. Provided below is a summary of the baseline emissions rate, netting basis, plant site emission limits, and emissions capacity.

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM	181	181	181	180	177	-3
PM ₁₀	95	95	95	97	95	-2
PM _{2.5}	NA	79	79	82	80	-2
CO	21	21	21	99	99	0
NO _x	47	47	47	111	111	0
SO ₂	2.7	2.7	2.7	39	39	0
VOC	62	57	62	106	118	+12
GHG (CO ₂ e) (including biomass CO ₂)	42,610	42,610	42,610	110,770	113,236	+2466

22. The baseline emission rate is the actual emissions during 1977 for all pollutants except GHG. The emission factors used to calculate the baseline emissions are the same as used during the previous permit renewal, except for VOC; for VOC the current DEQ factor for pine in the kilns was used. Production values during the baseline period have not been

modified. A baseline emission rate was not established for PM_{2.5} per OAR 340-200-0020(13)(a). The baseline emissions for GHG are based on a consecutive 12-month period running from August 2004 to July 2005 in accordance with OAR 340-200-0020(14)(b).

23. The previous netting basis is the netting basis listed in the previous permit. The proposed netting basis is the same as the baseline emissions rate since there have been no adjustments due to rule or PSD permitting actions.
24. The previous PSEL is the PSEL in the previous permit and the proposed PSEL is the PSEL contained in this renewal. The PSEL for CO and SO₂ is set at the generic level in accordance with OAR 340-222-0040(2). Potential emissions of these pollutants are actually less than the PSEL. The proposed PSEL for PM, PM₁₀ and PM_{2.5} changed for the following reasons: the Chip Rail Loadout is no longer a source at this facility; and the PM emission factor for Whole Log Chipping was clarified to be 0.07. Previously this emission factor appeared as “0.1” due to rounding, however the underlying factor used in the existing permit’s emission data sheets is 0.07 so that is how the factor is presented in this renewal permit. The proposed PSEL for VOC changed as a result of updating the VOC emission factor for the Kilns. The current DEQ factor is used. The proposed PSEL for GHG changed as a result of using the current GHG calculation method. For this permit renewal, DEQ’s current online GHG Calculator is used. The steaming rates and production throughputs have not changed from the previous permit.

SIGNIFICANT EMISSION RATE

25. The proposed PSEL is compared to the netting basis below. The PSEL increase for SO₂ and CO is mainly due to establishing the PSEL at the generic PSEL level. Potential emissions of these pollutants are actually lower than the PSEL. The PSEL for PM, PM₁₀ and PM_{2.5} changed since the Chip Rail Loadout source was removed and the Whole Log Chip emission factor was restored to its original value (not rounded). The PSEL increase for GHG is a result of using the current DEQ emission estimating method. The PSEL increase for NO_x and VOC is greater than the significant emission rate (SER). PSEL increases greater than the SER and located in an attainment area must demonstrate compliance with the NAAQS and PSD increments. (OAR 340-222-0014(3)(b)(C)) In 2004 an ambient air quality analysis indicated that the increase in NO_x emissions does not cause an exceedance of the National Ambient Air Quality Standard (NAAQS) or Prevention of Significant Deterioration (PSD) increment. This analysis was discussed in a previous permit action and will not be repeated here. There are no NAAQS or PSD increments for VOC emissions. The facility is more than 100 km from any ozone non-attainment or maintenance area and will not have a significant effect on the Portland maintenance area. No further analysis is required for NO_x or VOC emissions.

Pollutant	SER	Requested Increase Over Previous Netting Basis	Increase Due to Utilizing Capacity that Existed in the Baseline Period	Increase Due to Physical Changes or Changes in the Method of Operation
PM	25	-4	0	-4
PM ₁₀	15	0	0	0
PM _{2.5}	10	1	0	1
CO	100	78	78	0
NO _x	40	64	64	0
SO ₂	40	36	36	0
VOC	40	56	56	0
GHG (CO ₂ e) including biofuel	75,000	70,626	70,626	0
GHG (CO ₂ e) excluding biofuel	75,000	28,544	28544	0

HAZARDOUS AIR POLLUTANTS

26. A major source of Hazardous Air Pollutants (HAP) is a facility that has the potential to emit (PTE) more than 10 tons/yr of any single HAP or 25 tons/yr of combined HAPs. HAP emissions at this facility are summarized in the table below. Only compounds with emissions greater than 20 lbs/yr (0.01 ton/yr) are listed. This facility is not considered a major source of HAP emissions.

Compound	Potential To Emit (tons/yr)*	2016 Actual Emissions (lbs/yr)**
1,1,1-Trichloroethane	0.01	
1,2-Dichloroethane	0.01	
1,2-Dichloropropane	0.01	
Acetaldehyde	2.18	1708
Acrolein	1.48	70
Arsenic	0.04	
Benzene	1.47	
Carbon tetrachloride	0.02	
Chlorine	0.28	
Chlorobenzene	0.01	
Chloroform	0.01	
Chloromethane	0.01	
Chromium (total)	0.02	
Dichloromethane	0.10	
Ethylbenzene	0.01	

Compound	Potential To Emit (tons/yr)*	2016 Actual Emissions (lbs/yr)**
Formaldehyde	1.69	130
Hexane	0.53	397
Hydrogen chloride	4.20	
Lead	0.02	
Manganese	6.73	
Methanol	2.48	2236
Naphthalene	0.03	
Nickel	0.01	
Phenol	0.02	
Phosphorus	0.01	
Propionaldehyde	0.11	77
Selenium	0.04	
Styrene	0.67	
Tetrachloroethylene	0.01	
Toluene	0.33	
Trichloroethylene	0.01	
Vinyl chloride	0.01	
Xylenes	0.01	
Total HAP (tons/yr)	22.6	

* Kiln estimates included in the PTE are based on DEQ emission factors

** Emissions of 1 pound or more are listed as reported in the 2016 Cleaner Air Oregon emissions inventory

CLEANER AIR OREGON

27. The Cleaner Air Oregon Toxic Air Contaminant emissions inventory for 2016 can be found on this website:
https://www.deq.state.or.us/AQPermitsonline/30-0016-TV-01_ATEI_2016.PDF
28. Woodgrain Millwork, Pilot Rock Lumber has not been called in and therefore, has not performed a risk assessment.

TOXICS RELEASE INVENTORY

29. The Toxics Release Inventory (TRI) is a federal program that tracks the management of certain toxic chemicals that may pose a threat to human health and the environment, over which DEQ has no regulatory authority. It is a resource for learning about toxic chemical releases and pollution prevention activities reported by certain industrial facilities. Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) created the TRI Program. In general, [chemicals covered by the TRI Program](#) are those that cause:

- a. Cancer or other chronic human health effects;
 - b. Significant adverse acute human health effects; or
 - c. Significant adverse environmental effects.
30. There are currently over 650 chemicals covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual TRI reports on each chemical.
31. Woodgrain Millwork, Pilot Rock Lumber is not covered by the TRI program because it does not manufacture, process or use TRI-listed chemicals in quantities above threshold levels in a given year.

GENERAL BACKGROUND INFORMATION

32. Other permits issued or required by DEQ for this facility includes a Water Pollution Control Facility Permit (WPCF #101465).
33. The facility is located in an area that is in attainment for all pollutants.
34. The facility is located within 200 kilometers of three Class I air quality protection areas: (Eagle Cap Wilderness Area, Strawberry Mountain Wilderness Area, and Hells Canyon Wilderness Area).

COMPLIANCE HISTORY

35. Since the last permit was issued, the facility was inspected on November 26, 2014, June 28, 2017 and June 21, 2019 and found to be in compliance during each inspection.

SOURCE TEST RESULTS

36. The results of the most recent source tests are listed below:

Emission Unit	Test Date	Pollutant	Results
Boiler #1	10/25/11	PM	0.14 gr/dscf @ 12 CO ₂ 0.824 lb/1000 lb steam
		NO _x	0.494 lb/1000 lb steam
		CO	1.63 lb/1000 lb steam
	11/20/08	PM	0.10 gr/dscf @ 12 CO ₂ 0.434 lb/1000 lb steam
		NO _x	0.344 lb/1000 lb steam
		CO	0.236 lb/1000 lb steam

Emission Unit	Test Date	Pollutant	Results	
	11/8/07	PM	0.13 gr/dscf @ 12 CO ₂ 0.548 lb/1000 lb steam	
		NO _x	0.378 lb/1000 lb steam	
		CO	0.295 lb/1000 lb steam	
	9/26/06	PM	0.17 gr/dscf @ 12 CO ₂ 0.863 lb/1000 lb steam	
		NO _x	0.446 lb/1000 lb steam	
		CO	0.213 lb/1000 lb steam	
	7/12/05-7/13/05	PM	0.14 gr/dscf @ 12 CO ₂ 0.721 lb/1000 lb steam	
		NO _x	0.495 lb/1000 lb steam	
		CO	0.350 lb/1000 lb steam	
Boiler #3	10/24/11	PM	0.17 gr/dscf @ 12 CO ₂ 0.79 lb/1000 lb steam	
		NO _x	0.41 lb/1000 lb steam	
		CO	0.156 lb/1000 lb steam	
	12/1/10	PM	0.19 gr/dscf @ 12 CO ₂ 0.65 lb/1000 lb steam	
		NO _x	0.32 lb/1000 lb steam	
		CO	0.099 lb/1000 lb steam	
	12/15/09	PM	0.15 gr/dscf @ 12 CO ₂ 0.59 lb/1000 lb steam	
	11/20/08	PM	0.16 gr/dscf @ 12 CO ₂ 0.489 lb/1000 lb steam	
		NO _x	0.247 lb/1000 lb steam	
		CO	0.118 lb/1000 lb steam	
	11/8/07-11/9/07	PM	0.14 gr/dscf @ 12 CO ₂ 0.542 lb/1000 lb steam	
		NO _x	0.331 lb/1000 lb steam	
		CO	0.17 lb/1000 lb steam	
	9/27/09-9/28/06	PM	0.16 gr/dscf @ 12 CO ₂ 0.594 lb/1000 lb steam	
		NO _x	0.370 lb/1000 lb steam	
		CO	0.103 lb/1000 lb steam	
	7/13/05	PM	0.18 gr/dscf @ 12 CO ₂ 0.805 lb/1000 lb steam	
		NO _x	0.426 lb/1000 lb steam	
		CO	0.189 lb/1000 lb steam	
	Boiler #4	10/25/11	PM	0.063 gr/dscf @ 12 CO ₂ 0.228 lb/1000 lb steam
			NO _x	0.282 lb/1000 lb steam
CO			0.168 lb/1000 lb steam	
9/27/06		PM	0.10 gr/dscf @ 12 CO ₂ 0.410 lb/1000 lb steam	
		NO _x	0.343 lb/1000 lb steam	
		CO	<0.018 lb/1000 lb steam	
7/12/05		PM	0.06 gr/dscf @ 12 CO ₂ 0.238 lb/1000 lb steam	
		NO _x	0.404 lb/1000 lb steam	
		CO	<0.061 lb/1000 lb steam	

PUBLIC NOTICE

37. This permit will be placed on public notice from **Sept. 25, 2020** to **Oct. 30, 2020**. Comments may be submitted in writing during the comment period. DEQ will hold a public hearing if requested by 10 or more individuals or one person representing a group of 10 or more individuals. After the comment period and hearing, if requested, DEQ will review the comments and modify the permit as may be appropriate. A proposed permit will be sent to EPA for a 45 day review period. DEQ may request and EPA may agree to an expedited review of 5 days if there were no substantive or adverse comments during the comment period.

38. If EPA does not object in writing, any person may petition the EPA within 60 days after the expiration of EPA's 45-day review period to make such objection. Any such petition must be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided for in OAR 340-218-0210, unless the petitioner demonstrates it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period.

KH:dw

ATTACHMENT 1: EMISSIONS DETAIL SHEETS

Particulate

Emission Point	Operating Parameters	Emission Factor (EF)		Emissions ton/yr
		Rate	Reference	
Boiler #1, hogged fuel	175,200,000 lb steam/yr	0.68 lb/1000 lb steam	ST average '05-'11	59.4
Boiler #2, natural gas	588 MMft3/yr	2.5 lb/MMft3	DEQ Factor	0.7
Boiler #3, hogged fuel	175,200,000 lb steam/yr	0.64 lb/1000 lb steam	ST average '05-'11	55.8
Boiler #4, hogged fuel	70,080,000 lb steam/yr	0.29 lb/1000 lb steam	ST average '05-'11	10.2
Kilns				
- ponderosa pine	90,000,000 board ft/yr	0.02 lb/1000 board ft	DEQ Factor	0.9
Cyclone A, shavings	38,940 BDT/yr	0.50 lb/BDT	DEQ Factor	9.7
Cyclone B, trim ends	10,874 BDT/yr	0.50 lb/BDT	DEQ Factor	2.7
Bin Vent C, green sawdust	24,466 BDT/yr	0.50 lb/BDT	Source Estimate	6.1
Whole Log Chip	115,000 BDT/yr	0.07 lb/BDT	Source Estimate	4.0
Debarking	504,000 ton/yr	0.024 lb/ton	Source Estimate	6.0
Unpaved Road	26,156 VMT/yr	1.54 lb/VMT	AP-42 Section 13.2.2	20.1
Aggregate Insignificant				1.0
Total Particulate Emissions				177

The Whole Log Chip EF used in the previous permit analysis is 0.07 lb/BDT (not rounded to 0.1), and this remains unchanged.

The throughput is based on the sum for on-site equipment and contracted/portable equipment.

Debarking EF (PSEL) = (6 tons/yr)/(90,000 MBF/yr)*(2000 lb/ton) = 0.13 lb-PM/MBF, derived for permit monitoring

Unpaved Roads EF (PSEL) = (20.1 tons/yr)/(90,000 MBF/yr)*(2000 lb/ton) = 0.45 lb-PM/MBF

PM₁₀

Emission Point	Operating Parameters	Emission Factor		Emissions ton/yr
		Rate	Reference	
Boiler #1, hogged fuel	175,200,000 lb steam/yr	0.34 lb/1000 lb steam	50% of PM	29.7
Boiler #2, natural gas	588 MMft3/yr	2.5 lb/MMft3	DEQ Factor	0.7
Boiler #3, hogged fuel	175,200,000 lb steam/yr	0.32 lb/1000 lb steam	50% of PM	27.9
Boiler #4, hogged fuel	70,080,000 lb steam/yr	0.15 lb/1000 lb steam	50% of PM	5.1
Kilns				
- ponderosa pine	90,000,000 board ft/yr	0.02 lb/1000 board ft	DEQ Factor	0.9
Cyclone A, shavings	38,940 BDT/yr	0.43 lb/BDT	85% of PM	8.3
Cyclone B, trim ends	10,874 BDT/yr	0.43 lb/BDT	85% of PM	2.3
Bin Vent C, green sawdust	24,466 BDT/yr	0.43 lb/BDT	85% of PM	5.2
Whole Log Chip	115,000 BDT/yr	0.060 lb/BDT	85% of PM	3.4
Debarking	504,000 ton/yr	0.020 lb/ton	85% of PM	5.1
Unpaved Road	26,156 VMT/yr	0.39 lb/VMT	AP-42 Section 13.2.2.	5.1
Aggregate Insignificant				1.0
Total PM₁₀ Emissions				94.8

Debarking EF (PSEL) = (5.1 tons/yr)/(90,000 MBF/yr)*(2000 lb/ton) = 0.11 lb-PM/MBF, derived for permit monitoring

Unpaved Roads EF (PSEL) = (5.1 tons/yr)/(90,000 MBF/yr)*(2000 lb/ton) = 0.11 lb-PM/MBF

PM_{2.5}

Emission Point	Operating Parameters	Emission Factor		Emissions ton/yr
		Rate	Reference	
Boiler #1, hogged fuel	175,200,000 lb steam/yr	0.34 lb/1000 lb steam	50% of PM DEQ Factor	29.7
Boiler #2, natural gas	588 MMft ³ /yr	2.5 lb/MMft ³		0.7
Boiler #3, hogged fuel	175,200,000 lb steam/yr	0.32 lb/1000 lb steam		27.9
Boiler #4, hogged fuel	70,080,000 lb steam/yr	0.15 lb/1000 lb steam		5.1
Kilns			DEQ Factor	0.9
- ponderosa pine	90,000,000 board ft/yr	0.02 lb/1000 board ft		
Cyclone A, shavings	38,940 BDT/yr	0.25 lb/BDT	50% of PM	4.9
Cyclone B, trim ends	10,874 BDT/yr	0.25 lb/BDT	50% of PM	1.4
Bin Vent C, green sawdust	24,466 BDT/yr	0.25 lb/BDT	50% of PM	3.1
Whole Log Chip	115,000 BDT/yr	0.04 lb/BDT	50% of PM	2.0
Debarking	504,000 ton/yr	0.012 lb/ton	50% of PM	3.0
Unpaved Road	26,156 VMT/yr	0.039 lb/VMT	AP-42	0.5
Aggregate Insignificant				1.0
Total PM_{2.5} Emissions				80.2

Debarking EF (PSEL) = (3.0 tons/yr)/(90,000 MBF/yr)*(2000 lb/ton) = 0.07 lb-PM/MBF , derived for permit monitoring
Unpaved Roads EF (PSEL) = (0.5 tons/yr)/(90,000 MBF/yr)*(2000 lb/ton) = 0.01 lb-PM/MBF

SO₂

Emission Point	Operating Parameters	Emission Factor		Emissions ton/yr
		Rate	Reference	
Boiler #1, hogged fuel	175,200,000 lb steam/yr	0.014 lb/1000 lb steam	DEQ Factor	1.2
Boiler #2, natural gas	588 MMft ³ /yr	1.7 lb/MMft ³		0.5
Boiler #3, hogged fuel	175,200,000 lb steam/yr	0.014 lb/1000 lb steam		1.2
Boiler #4, hogged fuel	70,080,000 lb steam/yr	0.014 lb/1000 lb steam		0.5
Aggregate Insignificant				1.0
Total SO₂ Emissions				4.4

NO_x

Emission Point	Operating Parameters	Emission Factor		Emissions ton/yr
		Rate	Reference	
Boiler #1, hogged fuel	175,200,000 lb steam/yr	0.43 lb/1000 lb steam	ST average '05-'11	37.8
Boiler #2, natural gas	588 MMft ³ /yr	100 lb/MMft ³		29.4
Boiler #3, hogged fuel	175,200,000 lb steam/yr	0.35 lb/1000 lb steam	ST average '05-'11	30.7
Boiler #4, hogged fuel	70,080,000 lb steam/yr	0.34 lb/1000 lb steam	ST average '05-'11	12.0
Aggregate Insignificant				1.0
Total NO_x Emissions				111

CO

Emission Point	Operating Parameters	Emission Factor		Emissions ton/yr
		Rate	Reference	
Boiler #1, hogged fuel	175,200,000 lb steam/yr	0.25 lb/1000 lb steam	ST average '05-'11	22.0
Boiler #2, natural gas	588 MMft3/yr	84 lb/MMft3	DEQ Factor	24.7
Boiler #3, hogged fuel	175,200,000 lb steam/yr	0.14 lb/1000 lb steam	ST average '05-'11	12.2
Boiler #4, hogged fuel	70,080,000 lb steam/yr	0.08 lb/1000 lb steam	ST average '05-'11	2.9
Aggregate Insignificant				1.0
Total CO Emissions				62.8

VOC

Emission Point	Operating Parameters	Emission Factor		Emissions ton/yr
		Rate	Reference	
Boiler #1, hogged fuel	175,200,000 lb steam/yr	0.13 lb/1000 lb steam	DEQ Factor	11.4
Boiler #2, natural gas	588 MMft3/yr	5.5 lb/MMft3	DEQ Factor	1.6
Boiler #3, hogged fuel	175,200,000 lb steam/yr	0.13 lb/1000 lb steam	DEQ Factor	11.4
Boiler #4, hogged fuel	70,080,000 lb steam/yr	0.13 lb/1000 lb steam	DEQ Factor	4.6
Kilns				
- ponderosa pine	90,000,000 board ft/yr	1.96 ¹ lb/1000 board ft. temp <200°F	DEQ Factor	88.2
Aggregate Insignificant				1.0
Total VOC Emissions				118

1. If the kiln temperature measured during a drying cycle exceeds 200°F, then a Kiln VOC emission factor of 2.345 lb/MBF must be used for Ponderosa Pine, for the load.

Baseline GHG (Aug 2004 – July 2005)

Emission Point	Operating Parameters	Emission Factor		Emissions CO ₂ e ton/yr
		Rate	Reference	
Boilers, hogged fuel	211,648,488 lb steam/yr	0.34 lb/1000 lb steam	40 CFR 98	36,355
		6.6E-04 lb/1000 lb steam	40 CFR 98	70
		3.9E-03 lb/1000 lb steam	40 CFR 98	416
Boiler #2, natural gas	50.306 MMft3/yr	1.2E+05 lb/MMft3	40 CFR 98	3,010
		56.4 lb/MMft3	40 CFR 98	1
		67.3 lb/MMft3	40 CFR 98	2
Aggregate Insignificant				2,756
Total GHG Emissions (CO₂e) including hog fuel CO₂				42,610
Total GHG Emissions (CO₂e) excluding hog fuel CO₂				6,255

Fuel Combustion Greenhouse Gas Calculator



This sheet calculates greenhouse gas emissions from fuel combustion.

1) Enter the combustion emission sources at the facility (e.g. "boiler 1") in the 1st column.

2) In the 2nd column, select the fuel type used in each emissions unit. If more than one fuel type was used in a single emissions unit, you must enter that same emissions unit on multiple rows and then enter the different fuel types in each row.

3) Enter the fuel quantities in the 3rd column and specify the unit of measure in the 4th column. Emissions are then calculated in metric tons of carbon dioxide equivalent (mtCO₂e).

Enter emissions information				Convert to mmBtu				Emissions (kg/mmBtu)			CO ₂ Equivalent			Anthropogenic (mtCO ₂ e)			Biogenic (mtCO ₂)
Emissions unit ¹	Fuel Type ²	Quantity ³	Fuel units ³	HHV Units	HHV Unit	HHV	mmBtu	CH ₄	CO ₂	N ₂ O	CH ₄	CO ₂	N ₂ O	CH ₄	CO ₂	N ₂ O	mtCO ₂
Boiler 1	Wood/Wood Waste (dry b	17,096	Ton (2,000 lb	17,096	short ton	17.5	298,841	0	0	0	25	1	298	54	0	321	28,031
Boiler 2	Natural gas	588	Million cubic	588,000,000	cubic ft	0	603,288	0	53	0	25	1	298	15	32,010	18	0
Boiler 3	Wood/Wood Waste (dry b	17,096	Ton (2,000 lb	17,096	short ton	17.5	298,841	0	0	0	25	1	298	54	0	321	28,031
Boiler 4	Wood/Wood Waste (dry b	6,838	Ton (2,000 lb	6,838	short ton	17.5	119,536	0	0	0	25	1	298	22	0	128	11,213
				0	0	0	0	0	0	0	25	1	298	0	0	0	0
				0	0	0	0	0	0	0	25	1	298	0	0	0	0
				0	0	0	0	0	0	0	25	1	298	0	0	0	0
				0	0	0	0	0	0	0	25	1	298	0	0	0	0
				0	0	0	0	0	0	0	25	1	298	0	0	0	0

Anthropogenic combustion emissions (mtCO ₂ e):	32,942
Biogenic combustion emissions (mtCO ₂ e):	67,275
Total combustion emissions (mtCO₂e):	100,217

Use the following formula to calculate a HHV for woodwaste on a wet basis:

$$HHV_w = (100 - M)/100 * 17.48$$

where HHV_w = wet basis HHV, M = moisture content (percent). 17.48 is the HHV on a dry basis.

Conversion to short tons

Anthropogenic combustion emissions:	36,312
Biogenic combustion emissions:	74,158
Total combustion emissions:	110,471

Use this new HHV to replace the default HHV in the calculator above once the "wood/woodwaste" fuel type is selected.

0.001194 mmBtu/lb steam, from EPA worksheet sgec_tool_v5_1.xlsm

assumed boiler efficiency = 70%

derived wood fuel quantity = (175,200,000 lb steam/yr)*(0.001194 mmBtu/lb steam)*(1/0.70)*(ton wood fuel/17.48mmBtu) = 17,096 tons wood/year

including aggregate insignificant (AI) = 2756 tons: total GHG = 110,471 + 2756 = 113,236 tons

including AI, excluding biomass CO₂e: total GHG = 32,010 + 15 + 18 + 2756 = 34,799 tons