OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
OREGON TITLE V OPERATING PERMIT
Part 1 of 2

Western Region
4026 Fairview Industrial Drive SE
Salem, OR 97302
Telephone (503) 378-8240

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

ISSUED TO:

Swanson Group Mfg. LLC
P.O. Box 250
Glendale, OR 97442

PLANT SITE LOCATION:

303 Mehlwood Lane
Glendale, OR 97442

INFORMATION RELIED UPON:

Application Number: 27408
Received: 7/2/2013

LAND USE COMPATIBILITY STATEMENT:

Issued by: Douglas County Planning
Dated: 06/05/96

ISSUED BY THE DEPARTEMENT OF ENVIRONMENTAL QUALITY

Claudia J. Davis

Claudia Davis, Western Region Air Quality Manager

JUN 12 2017

Date

Nature of Business:		SIC	NAICS
Plywood Manufacturer	Primary	2436	321212
Fuel Burning Equipment	Supporting	4961	221330

RESPONSIBLE OFFICIAL

Title: Vice President of Manufacturing

FACILITY CONTACT PERSON

Name: Jay Yates
Title: Corporate Steam Systems Manager
Phone: (541) 731-0461

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LIST OF ABBREVIATIONS THAT MAY BE USED IN THIS PERMIT

ACDP	Air Contaminant Discharge Permit
Act	Federal Clean Air Act
ASTM	American Society of Testing and Materials
Btu	British thermal unit
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CPMS	Continuous parameter monitoring system
DEQ	Department of Environmental Quality
dscf	Dry standard cubic feet
EF	Emission factor
EPA	US Environmental Protection Agency
EU	Emissions Unit
FCAA	Federal Clean Air Act
FSA	Fuel sampling and analysis
gr/dscf	Grain per dry standard cubic feet (1 pound = 7000 grains)
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040
HCFC	Halogenated Chloro-Fluoro-Carbons
ID	Identification number or label
I&M	Inspection and maintenance
NA	Not applicable
NO_x	Nitrogen oxides
O2	Oxygen
OAR	Oregon Administrative Rules
ODEQ	Oregon Department of Environmental Quality
ORS	Oregon Revised Statutes
O&M	Operation and maintenance
Pb	Lead
PCD	Pollution Control Device
PM	Particulate matter
PM_{10}	Particulate matter less than 10 microns in size
ppm	Parts per million
PSEL	Plant Site Emission Limit
psia	pounds per square inch, actual
SERP	Source emissions reduction plan
SO_2	Sulfur dioxide
ST	Source test
VE	Visible emissions
VMT	Vehicle miles traveled
VOC	Volatile organic compounds

~~**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 as specified below:~~

~~2.a. Conditions 6, 7, 8, G5, and G9 (OAR 340-248-0005 through 340-248-0180) are only enforceable by the state. [OAR 340-218-0060]~~

~~3. The facility has two operating scenarios.~~

~~3.a. In the base operating scenario #1, the exhaust gases from the three veneer dryers are ducted to the regenerative thermal oxidizer (RTO).~~

~~3.b. In operating scenario #2, the exhaust gases from the veneer dryers are ducted to the combustion chamber of 1PH.~~

~~3.c. Recordkeeping: The permittee shall contemporaneously record changes from one alternative operating scenario to another. The records shall be made available or shall be submitted upon request by DEQ. [OAR 340-218-0140(1)(c)]~~

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

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

Table 1 Emission Units

Emission Unit Description	EU ID	Pollution Control Device Description*	PCD ID
Powerhouse Operations Dutch oven hog fuel boiler	1PH	Multiclones and ESP	1CD and ESP
Log Vats	VAT	None	NA
Materials Handling (Fugitive PM only) FL1 Hog fuel pile-fuel loader HFP2 Hog fuel from loader ~~HFR1 Hog fuel truck unloading ramp~~ BD1a,b,c,d Log conveyors BC1a,b,c,d Bark conveyors L1a,b,c,d Log process chip conveyors V1a,b,c,d Veneer lath chip conveyors B2 Hog fuel bark bins B3,4,5 Chip loading bins B6 Sander dust truck loading bin B7 Chip fines/sawdust loading bins B8 Ply trim loading bin FP2 Auxiliary pile L4 Hand pick	2MT	None	NA

L7 Rechipper			
Adhesives, paint and chemicals	3ADH	None	NA
Columbia Plywood Press #1	P1	None	NA
Columbia Plywood Press #2	P2	None	NA
Williams and White Plywood Press #3	P3	None	NA
Glue Mixer and Tanks	MX1	None	NA
Pneumatic Conveyors CY1 Chip fines cyclone #1 CY2 Chip fines cyclone #2 CY3 Veneer saw cyclone #3 CY4 T&G saw cyclone #4 CY5 Trim saws cyclone #5 TB1 Target box #1 TB2 Target box #2 TB3 Target box #3 BP1 Open blow pipe F8 Exhaust fan	4CON	None	NA
Sander dust pneumatic conveyor		Baghouse	BH1
Ply trim conveyor		Baghouse	BH2
Sander	1SAN	Baghouse	BH3
Veneer Dryer DR1	5VD	RTO or 1PH and ESP	RTO or 1PH & ESP
Veneer Dryer DR2			
Veneer Dryer DR3			
Veneer Dryer Fugitives	5VDa	None	NA
Wood Residual Chips	WRC	none	NA
Emissions units 2MT (except FL1, HFP2, HFR1, B2, and FP2), P1, P2, P3, 4CON, 1 SAN, aud AI PM from DB1, V2a,b, V3a,b,c, and SC1,2,3 for compliance with the emissions limitations in OAR 340-234-0510(2). Emission limitations established herein and stated in terms of pounds per 1000 square feet of production shall be computed on an hourly basis using the maximum eight-hour production capacity of the plywood presses.	PLY	NA	NA
Gasoline Dispensing Facilities	GDF	Submerged fill	NA
Plant Traffic on Paved Roads	6WE	Sweeping/Watering	NA
AGGREGATE INSIGNIFICANT ACTIVITIES			
PM/PM_{10}/$PM_{2.5}$ and VOC only	7AI	None	NA

*Cyclones listed in this table are not actually pollution control devices but are instead material handling devices. If a cyclone is followed by a baghouse, the baghouse is the control device.

EMISSION LIMITS AND STANDARDS, TESTING, MONITORING, AND RECORDKEEPING REQUIREMENTS

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

Table 2 Summary of Facility Wide Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
340-208-0210	5	Fugitive emissions	Minimize	NA	NA	8
340-208-0300	6	Air contaminants	No nuisance	NA	NA	8
340-208-0450	7	PM >250µ	No fallout	NA	NA	8
40 CFR Part 68	9	Risk management	Risk management plan	NA	NA	9

5. ~~Applicable Requirement: The permittee must not allow 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.~~

   5.a. ~~Such reasonable precautions must include, but not be limited to the following: [OAR 340-208-0210(1)]~~

      5.a.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;~~

      5.a.ii. ~~Application of water, or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;~~

      5.a.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;~~

      5.a.iv. ~~Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;~~

      5.a.v. ~~Adequate containment during sandblasting or other similar operations;~~

      5.a.vi. ~~Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; and~~

      5.a.vii. ~~Prompt removal from paved streets of earth or other material that does or may become airborne.~~

   5.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. [OAR 340-208-0210(3)]~~

6. ~~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.~~

7. ~~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.~~

8. Monitoring Requirements for Conditions 5, 6, and 7: [OAR 340-218-0050(3)(a)(C)]

8.a. 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.

8.b. At least quarterly, for a minimum period of 30 minutes, the permittee shall visually survey the plant for any sources of excess fugitive emissions in accordance with EPA Method 22. For the purposes of this survey, excess emissions are considered to be any visible emissions that leave the plant boundaries from sources or activities within the facility for more than 18 seconds in a six-minute period. The person conducting the observation does not have to be EPA Method 9 certified. However, the individual should be familiar with the procedures of EPA Method 9, including using the proper location to observe visible emissions.

8.c. If excess fugitive emissions are identified, the permittee shall:

8.c.i Immediately take corrective action to minimize the excess fugitive emissions; and,

8.c.ii. Maintain records of the fugitive emissions surveys and corrective action (if necessary).

8.d. If the observer is unable to conduct the tests and/or surveys due to visual interference caused by other visible emission sources or due to adverse weather conditions such as fog, heavy rain, or snow, the observer must note such conditions on the observation form and make at least three attempts to conduct the tests and/or surveys at approximately 2-hour intervals throughout the day during daylight hours. The permittee must attempt to make the tests daily until a valid observation period is completed.

8.e. Recordkeeping: The permittee must maintain records of all visible emissions tests and surveys required by Condition 8.b, including date, time, observer, observations, results, and any corrective actions taken.

8.f. This condition is enforceable only by the State.

Accidental Release Prevention

9. Applicable Requirement: If applicable, 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]

HOG FUEL BOILER (1PH)

Table 3 Snmmary of Requirements for Emissions Unit 1PH

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
340-208-0110(5)	10	Visible emissions	40%/20% opacity	6-minute block average	NA	11
340-228-0210(2)(a)(A)	12	PM	0.10 gr/dscf @ 12% CO_2	Avg. of 3 test runs	13	14-18
40 CFR Part 63 Subpart JJJJJJ	19 and Part 2	HAP	Operate boiler in compliance with requirements of JJJJJJ	NA	NA	Part 2

10. Applicable Requirement: The permittee must comply with the following visible emission limits for emissions unit 1PH: [OAR 340-208-0110(5)]

10.a. Any visible emissions may not equal or exceed:

10.a.i. An average of 40 percent opacity through December 31, 2019, with the exception that visible emissions may equal or exceed an average of 40 percent opacity for up to two independent six-minute blocks in any hour, as long as the average opacity during each of these two blocks is less than 55 percent; and

10.a.ii. An average of 20 percent opacity on or after January 1, 2020, with one or more of the following exceptions:

10.a.ii.A. 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;

10.a.ii.B. 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.

10.b. The visible emission 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 10.b.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:

10.b.i. EPA Method 9; or

10.b.ii. A continuous opacity monitoring system (COMS) installed and operated in accordance with the DEQ Continuous Monitoring Manual or 40 CFR Part 60; or

10.b.iii. An alternative monitoring method approved by DEQ that is equivalent to EPA Method 9. [OAR 340-208-0110(2)]

11. Monitoring Requirement: At least once per quarter, the permittee shall conduct EPA Method 9 visible emissions tests on emissions unit 1PH. Should a test exceed the applicable standard, corrective action will be initiated within one (1) hour to bring the source into compliance with the applicable requirement and the monitoring frequency shall revert to weekly for a minimum of four (4) consecutive weeks. If the results of the four weekly tests are all less than the applicable standard, the test frequency may be the same as before the exceedauce occurred. [OAR 340-218-0050(3)(a)(C)]

11.a. If the observer is unable to conduct the tests due to darkness or visual interference caused by other visible emission sources or due to adverse weather conditions such as fog, heavy rain, or snow, the observer shall note such conditions on the observation form and make at least three (3) attempts to conduct the tests at approximately 2-hour intervals throughout the day during daylight hours. The permittee shall attempt to make the test daily until a valid observation period is completed.

11.b. Recordkeeping: The permittee must maintain records of all visible emissions tests, including date, time, observer, observations, results, type of fuel being burned, and any corrective actions taken.

12. Applicable Requirement: The permittee may not emit particulate matter emissions from emissions unit 1PH in excess of 0.10 grains per dry standard cubic foot corrected to 12% CO_2. Compliance with the emission standard in this condition is determined using ODEQ Method 5, or an alternative method approved by DEQ. [OAR 340-228-0210(2)(a)(A)]

13. Testing Requirement: 1PH will be tested at least once during the permit term for PM emissions (gr/dscf corrected to 12% CO_2, pounds per hour, and pounds per 1000 pounds steam), CO emissions (pounds per hour and pounds per 1000 pounds steam), aud NO_x emissions (pounds per hour and pounds per 1000

pounds steam). [OAR 340-218-0050(3)(a)(C)]

13.a. Test Methods:

13.a.i. EPA 201A and 202 and EPA Methods 1 through 4 and ODEQ Method 5 for PM, EPA Method 10 for CO, and EPA Method 7E for NO_x.

13.a.ii. Visible emissions shall be measured concurrently with each PM test run using EPA Method 9.

13.a.iii. The source tests shall be conducted at 1PH maximum operating rates. For purposes of this permit, the maximum operating rate is defined as the 90th percentile of all daily operating rates during a 12-month period of time immediately preceding the source test.

13.b. Process and control device information to be collected during the tests include:

13.b.i. Steaming rate (lbs/hr).

13.b.ii. Residual oxygen (%).

13.b.iii. Multiclone pressure drop and the kV and mA readings for the ESP.

14. Monitoring and Recordkeeping Requirement: The permittee must inspect the multiclones and ESP on emission unit 1PH at least once annually for physical degradation that could affect the performance of the multiclones or ESP, and record the results of the inspection as well as any corrective actions or repairs required. [40 CFR Part 64]

15. Monitoring Requirement: The permittee must operate and maintain a continuous residual oxygen monitor and recorder on 1PH in accordance with the manufacturer's written instructions. [40 CFR Part 64]

15.a. Real time data must be displayed at least once every minute that the boiler is in operation. Hourly averages of the data shall be recorded once each clock hour that the boiler is in operation. Minimum data availability shall be obtained for 75 percent of the hours per day for 90 percent of the days in a calendar quarter that the boiler is operating. Monitor availability must be determined excluding periods of calibrations and routine maintenance.

15.b. The permittee must take corrective action if the residual oxygen falls below 3% for an hourly average. Corrective action must be initiated within one hour of when an excursion occurs to return the boiler to the acceptable operating level.

15.c. If the excursion lasts longer than 24 hours, the permittee must conduct daily visible emissions tests using EPA Method 9, and must notify DEQ within 48 hours of the cause and corrective actions taken and proposed.

15.d. An excursion of the residual oxygen operating action level is not necessarily a violation of the particulate matter emission standards for 1PH.

15.e. Recordkeeping: The permittee must maintain records of the residual oxygen values required by Condition 15.a, any excursions, and any corrective actions taken.

16. Monitoring Requirement: The permittee must operate and maintain a pressure gauge for measuring the pressure drop across the multiclones on 1PH in accordance with the manufacturer's written instructions. [OAR 340-218-0050(3)(a)(C)]

17. Monitoring and Recordkeeping Requirement: The permittee must maintain, operate, and record the output of a steam flow meter on emissions unit 1PH in accordance with the manufacturer's written instructions. Real time data for steam production shall be displayed at least once every minute that the boiler is in operation. Hourly averages of the data shall be recorded once each clock hour that the boiler is in operation. At a minimum, valid steam production readings shall be obtained for 75 percent of the hours per day for 90 percent of the days in a calendar quarter that the boiler is operating. Monitor availability shall be determined excluding periods of calibrations and routine maintenance. The total steam produced each day must be recorded once each day of operation. [OAR 340-218-0050(3)(a)(C)]

18. Monitoring Requirement: The permittee must operate and maintain a continuous monitoring system for measuring the voltage across and the milliamp output of the ESP on 1PH in accordance with the manufacturer's written instructions. [40 CFR Part 64]

18.a. Real time data for the voltage and milliamps must be displayed at least once every minute that the boiler is in operation. Hourly averages of the data shall be recorded once each clock hour that the boiler is in operation. Minimum data availability shall be obtained for 75 percent of the hours per day for 90 percent of the days in a calendar quarter that the boiler is operating. Monitor availability must be determined excluding periods of calibrations and routine maintenance.

18.b. The permittee shall take corrective action when the average ESP voltage is less than 14 kVDC for any 1 hour period. [OAR 340-226-0120 and 340-218-0050(3)(a)(C)]

18.c. The permittee shall take corrective action when the average ESP current in both cells is less than 20 mA for any 1 hour period. [OAR 340-226-0120(2)(b) and 340-218-0050(3)(a)(C)]

18.d. If corrective action cannot be performed within three hours, or the corrective action is ineffective, the permittee shall immediately conduct a visible emission test using modified EPA Method 9.

18.e. An action level excursion is not necessarily a violation of the particulate matter emission standard for 1PH.

18.f. Recordkeeping: The permittee must maintain records of the ESP voltage and milliamp values required by Condition 18.a, any excursions, and any corrective actions taken.

18.g. Changes in the action levels must be approved in writing by DEQ.

19. Applicable Requirement: The permittee must operate and maintain emissions unit 1PH in compliance with the applicable requirements of 40 CFR Part 63 Subpart JJJJJJ, the area source boiler rule, as detailed in Part 2 of this permit.

VENEER DRYER EMISSION UNITS, 5VD and 5VDa

Table 4 Summary of Requirements for Emissions Units 5VD and 5VDa

Applicable Requirement	Requirement Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirement	Monitoring Condition Number
340-234-0510(1)(a) and (b)	20	Visible emissions	10% average opacity, 20% maximum opacity as 6 min. avg.	Quarterly VE tests	20.c

Applicable Requirement	Requirement Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirement	Monitoring Condition Number
340-226-0210(2)(a)(A)	21	PM---Dryer 1	0.10 gr/dscf (avg. of 3 test runs)	RTO temperature	25
340-226-0210(2)(a)(B)	22	PM---Dryer 2	0.24/0.15 gr/dscf (avg. of 3 test runs)	RTO temperature	25
340-226-0210(2)(b)(B)	23	PM---Dryer 3	0.14 gr/dscf (avg. of 3 test runs)	RTO temperature	25
340-226-0310	24	PM	Table 1 OAR 340 Division 226	RTO temperature	25
340-234-0510(1)(e) & (g)	26.a	Air contaminant emissions	Minimize with highest and best operation	Monthly I & M	26.e
340-234-0510(1)(f)	26.b	Air contaminant emissions	Concealing emissions prohibited	Yearly I & M	26.d

Visible Emissions Standard

20. Applicable Requirement: The permittee shall not cause or allow the operation of emissions units 5VD and 5VDa such that visible air contaminants emitted from a dryer stack or emission point exceed: [OAR 340-234-0510(1)]

20.a. A daily average operating opacity of 10 percent on more than two days within any 12-month period, with the days separated from each other by at least 30 days, as measured by EPA Method 9; and [OAR 340-234-0510(1)(b)(A)]

20.b. A maximum opacity of 20 percent at any time as measured by EPA Method 9. [OAR 340-234-0510(1)(b)(B)]

20.c. Monitoring: The permittee must monitor visible emissions from emissions units 5VD and 5VDa by conducting EPA Method 9 tests at the outlet of each dryer cooling vent and on the roof vent above each dryer. The RTO outlet does not require visible emissions monitoring. [OAR 340-218-0050(3)(a)(C)]

20.c.i. The EPA Method 9 test method may be waived provided the permittee conducts a six (6) minute visible emissions survey on the device at the compliance demonstration point using EPA Method 22 and visible emissions, excluding water vapor, are not detected for more than 5% (18 seconds) of the survey time.

20.c.ii. The visible emissions tests on each dryer cooling vent and roof vent must be conducted at least once per quarter.

20.c.iii. If any test result exceeds the applicable standard in Condition 20.a or 20.b, the permittee must initiate corrective action within 1-hour to bring the dryer into compliance with the applicable standards. Upon completion of the corrective actions, an EPA Method 9 test must be conducted as soon as is practicable to demonstrate that the source is in compliance with the applicable standard. If the permittee observes no further exceedances during the EPA Method 9 test, the monitoring frequency can go back to the previous monitoring frequency for the monitoring point that had an exceedance.

20.c.iv. If the observer is unable to conduct the tests and/or surveys due to darkness or visual interference caused by other visible emission sources or due to adverse weather conditions such as fog, heavy rain, or snow, the observer shall note such conditions on

the observation form and make at least three attempts to conduct the tests and/or surveys at approximately 2-hour intervals throughout the day during daylight hours. The permittee must attempt to conduct the tests daily until a valid observation period is completed.

20.c.v. All visible emissions tests and surveys shall be conducted during operating conditions that have the potential to create visible emissions.

20.c.vi. Recordkeeping: The permittee must maintain records of all visible emissions tests and surveys, including: date, time, observer, observations, results, and any corrective actions taken.

PM Emission Standards

21. Applicable Requirement: The permittee may not emit particulate matter emissions from Dryer #1 in emissions units 5VD and 5VDa in excess of 0.10 grains per dry standard cubic foot: [OAR 340-226-0210(2)(a)(A)]

22. Applicable Requirement: The permittee may not emit particulate matter emissions from Dryer #2 in emissions units 5VD and 5VDa in excess of the following limits: [OAR 340-226-0210(2)(a)(B)]

22.a. 0.24 grains per dry standard cubic foot until December 31, 2019; and
22.b. 0.15 grains per dry standard cubic foot on and after January 1, 2020.

23. Applicable Requirement: The permittee must not cause or allow the emissions of particulate matter in excess of 0.14 gr/dscf from Dryer #3 in emissions units 5VD and 5VDa . [OAR 340-226-0210(2)(b)(B)]

24. Applicable Requirement: The permittee must not cause, suffer, allow, or permit the emissions of particulate matter in any one hour from emissions unit 5VD in excess of the amount shown in Table 1 of OAR 340 Division 226, for the process weight allocated to that process. [OAR 340-226-0310 and -8010]

RTO Operating Requirements

25. Monitoring: The permittee shall maintain the temperature of the RTO (controlling emissions unit 5VD heated zones) at a minimum firebox temperature of 1450 °F as a 3-hour block average using a temperature monitoring device that meets the requirements of Condition 25.a. [OAR 340-226-0120)(2)(b) and 340-218-0050(3)(a)(C)]

25.a For each temperature monitoring device, the permittee must meet the requirements in Conditions 25.a.i through 25.a.vi.

25.a.i. Locate the temperature sensor in a position that provides a representative temperature.

25.a.ii. Use a temperature sensor with a minimum accuracy of 4°F or 0.75 percent of the temperature value, whichever is larger.

25.a.iii. If a chart recorder is used, it must have a sensitivity with minor divisions not more than 20°F.

25.a.iv. Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's manual. Following the electronic calibration, the

permittee must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 30°F of the process temperature sensor's reading.

25.a.v. Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

25.a.vi. At least quarterly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

25.b. Recordkeeping: The permittee must determine the 3-hour block average of all recorded readings and maintain a record of the averages.

25.c. The permittee may establish a different minimum firebox temperature for the RTO by submitting a written notification to DEQ and conducting a repeat performance test that demonstrates compliance with the applicable compliance options in Condition 25.d.

~~25.d. The RTO must achieve one of the following six options to reduce emissions from the heated zones of emissions unit 5VD:~~

~~25.d.i. Reduce emissions of total HAP, measured as THC (as carbon) (the permittee may choose to subtract methane from THC as carbon measurements), by 90 percent; or~~

~~25.d.ii. Limit emissions of total HAP, measured as THC (as carbon) (the permittee may choose to subtract methane from THC as carbon measurements), to 20 ppmvd; or~~

~~25.d.iii. Reduce methanol emissions by 90 percent; or~~

~~25.d.iv. Limit methanol emissions to less than or equal to 1 ppmvd if uncontrolled methanol emissions entering the RTO are greater than or equal to 10 ppmvd; or~~

~~25.d.v. Reduce formaldehyde emissions by 90 percent; or~~

~~25.d.vi. Limit formaldehyde emissions to less than or equal to 1 ppmvd if uncontrolled formaldehyde emissions entering the RTO are greater than or equal to 10 ppmvd.~~

~~**RTO Testing**~~

~~26. At least once per permit term, but no later than 18 months prior to the expiration date of this permit, the permittee shall conduct a source test for HAPs destruction efficiency to determine compliance with Condition 25 using test procedures in 40 CFR Part 63, Subpart DDDD or another method approved by DEQ. Test results shall be reported as parts per million, pounds per hour, pounds per thousand square feet of veneer dried on a 3/8" basis, and percent destruction efficiency. [OAR 340-218-0050(3)(a)(C)]~~

~~26.a. During each test run, the permittee shall record the following information:~~
~~26.a.i. Veneer dryer production for each dryer;~~
~~26.a.ii. Control device operating parameters including the RTO operating temperature and amount of natural gas combusted.~~

Emission Factor Verification Testing

27. Once per permit term and during one of the tests required by Condition 26, but no later than 18 months prior to the expiration date of this permit, the permittee shall conduct an emission factor verification test on

the RTO in accordance with the DEQ Source Sampling Manual for PM, CO, NOx, and VOC using DEQ Method 7 and EPA Methods 10, 7E, and 25A & 0011, respectively, or other methods approved by DEQ. [OAR 340-218-0050(3)(a)(C)]

27.a. During each test run, the permittee shall record the following information:
- 27.a.i. Veneer dryer production for each dryer;
- 27.a.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 7 test run; and,
- 27.a.iii. Control device operating parameters including the RTO operating temperature and amount of natural gas combusted.

Highest and Best and Concealing Emissions

28. Applicable Requirement: The permittee shall comply with the following:

28.a. Emission unit 5VD shall be maintained and operated at all times such that air contaminant generating processes and all contaminant control equipment shall be at full efficiency and effectiveness so that the emission of air contaminants are kept at the lowest practicable levels. The permittee must minimize fugitive emissions from the doors of emissions unit 5VD through proper maintenance procedures and the green end of the dryers through proper balancing of the heated zone exhaust. Where effective measures are not taken to minimize fugitive emissions, DEQ may require that the equipment or structures in which processing, handling, and storage are done, be tightly closed, modified, or operated in such a way that air contaminants are minimized, controlled, or removed before discharge to the open air. [OAR 340-234-0510(1)(e) and (g)]

28.b. The permittee shall not willfully cause or permit the installation or use of any means, such as dilution, which, without resulting in a reduction in the total amount of air contaminants emitted, conceals an emission which would otherwise violate OAR 340-234-0510. [OAR 340-234-0510(1)(f)]

28c. Monitoring: At least once per quarter the permittee shall conduct an external inspection of emission unit 5VD for fugitive emissions and signs of physical degradation. Recordkeeping: Records shall be maintained of each inspection, findings, and maintenance or corrective actions taken. [OAR 340-218-0050(3)(a)(C)]

28.d. Monitoring: At least once per calendar year, the permittee shall inspect emission unit 5VD to ensure that the dryers have not been altered in such a manner that could conceal the discharge of air contaminant emissions without actually reducing emissions. Recordkeeping: Records shall be maintained of the inspections, findings, and actions taken. [OAR 340-218-0050(3)(a)(C)]

PLYWOOD PRESS EMISSION UNITS (P1, P2, P3)

Table 5 Summary of Requirements for Emissions Units P1, P2, P3

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
340-208-0110(3)(b); 340-208-0010(4)	29	Visible emissions--- Presses 1 & 2; Press 3	20% opacity	6-minute block average	NA	33

340-226-0210(2)(a)(B)	30	PM---Presses 1 & 2	0.24/0.15 gr/dscf	Avg. of 3 test runs	NA	33
340-226-0210(2)(b)(B)	31	PM---Press 3	0.14 gr/dscf	Avg. of 3 test runs	NA	33
340-226-0310	32	PM	Table 1 OAR 340 Division 226	Avg. of 3 test runs	NA	33

29. Applicable Requirement: The permittee must not cause or allow visible emissions from emissions units P1 and P2 or P3 to equal or exceed 20 percent opacity as a six-minute block average. [OAR 340-208-0110(3)(b) or (4)]

29.a. The visible emissions standard in this condition is based on the average of 24 consecutive observations recorded at 15-second intervals, or more frequently as allowed under Condition 29.a.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:

29.a.i. EPA Method 9; or

29.a.ii. A continuous opacity monitoring system (COMS) installed and operated in accordance with the DEQ Continuous Monitoring Manual or 40 CFR Part 60; or

29.a.iii. An alternative monitoring method approved by DEQ that is equivalent to EPA Method 9. [OAR 340-208-0110(2)]

30. Applicable Requirement: The permittee may not emit particulate matter emissions from emissions units P1 or P2 in excess of the following limits: [OAR 340-226-0210(2)(a)(B)]

30.a. 0.24 grains per dry standard cubic foot until December 31, 2019; and

30.b. 0.15 grains per dry standard cubic foot on and after January 1, 2020.

31. Applicable Requirement: The permittee must not cause or allow the emissions of particulate matter in excess of 0.14 gr/dscf from emissions unit P3 . [OAR 340-226-0210(2)(b)(B)]

32. Applicable Requirement: The permittee must not cause, suffer, allow, or permit the emissions of particulate matter in any one hour from emissions units P1, P2, or P3 in excess of the amount shown in Table 1 of OAR 340 Division 226, for the process weight allocated to that process. [OAR 340-226-0310 and -8010]

33. Monitoring Requirement: At least once per quarter, the permittee must conduct EPA Method 9 visible emissions tests on the roof vents above emissions units P1, P2, and P3. [OAR 340-218-0050(3)(a)(C)]

33.a. The EPA Method 9 test method may be waived provided the permittee conducts a six (6) minute visible emissions survey on the emission unit at the compliance demonstration point using EPA Method 22 and visible emissions, excluding water vapor, are not detected for more than 5% (18 seconds) of the survey time.

33.b. Should a test exceed the applicable standard, corrective action will be initiated within one (1) hour to bring the source into compliance with the applicable requirement and the monitoring frequency shall revert to weekly for a minimum of four (4) consecutive weeks. If the results of the four weekly tests are all less than the applicable standard, the test frequency may be the same as before the exceedance occurred.

33.c. If the observer is unable to conduct the tests due to darkness or visual interference caused by other visible emission sources or due to adverse weather conditions such as fog, heavy rain, or

snow, the observer shall note such conditions on the observation form and make at least three (3) attempts to conduct the tests at approximately 2-hour intervals throughout the day during daylight hours. The permittee shall attempt to make the test daily until a valid observation period is completed.

31.d. All visible emissions tests and surveys shall be conducted during operating conditions that have the potential to create visible emissions.

31.e. Recordkeeping: The permittee must maintain records of all visible emissions tests and surveys, including: date, time, observer, observations, results, and any corrective actions

OTHER EMISSION UNITS (4 CON, 1SAN, and PLY)

Table 6 Summary of Requirements for Emissions Units 4CON, 1SAN, and PLY)

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit /Standard	Averaging Time	Testing Condition	Monitoring Condition
340-208-0110(4)	34	Visible emissions	20% opacity	6-minute block average	NA	35
340-226-0210(2)(b)(B)	36	PM---4CON &1SAN	0.14 gr/dscf	Average of 3 test runs	NA	38
340-226-0310	37	PM	Process weight	Average of 3 test runs	NA	38
340-234-510(2)(a)	38	PM	33.0 lb/hr from PLY	24 hours	NA	40

34. Applicable Requirement: The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere from emissions units 4CON or 1SAN to equal or exceed 20 percent opacity as a six-minute block average, excluding uncombined water. [OAR 340-208-0110(4) and 340-208-0110(3)(a)]

34.a. The visible emissions standard in this condition is based on the average of 24 consecutive observations recorded at 15-second intervals, or more frequently as allowed under Condition 34.a.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:

34.a.i. EPA Method 9; or

34.a.ii. A continuous opacity monitoring system (COMS) installed and operated in accordance with the DEQ Continuous Monitoring Manual or 40 CFR Part 60; or

34.a.iii. An alternative monitoring method approved by DEQ that is equivalent to EPA Method 9. [OAR 340-208-0110(2)]

35. Monitoring Requirement: At least once per quarter, the permittee must conduct EPA Method 9 visible emissions tests on emissions units 4CON and 1SAN.

35.a. The EPA Method 9 test method may be waived provided the permittee conducts a six (6) minute visible emissions survey on the emission unit at the compliance demonstration point using EPA Method 22 and visible emissions, excluding water vapor, are not detected for more than 5% (18 seconds) of the survey time.

35.b. Should a test exceed the applicable standard, corrective action will be initiated within one (1) hour to bring the source into compliance with the applicable requirement and the monitoring frequency shall revert to weekly for a minimum of four (4) consecutive weeks. If the results of the four weekly tests are all less than the applicable standard, the test frequency may be the same as before the exceedance occurred.

35.c. If the observer is unable to conduct the tests due to darkness or visual interference caused by other visible emission sources or due to adverse weather conditions such as fog, heavy rain, or snow, the observer shall note such conditions on the observation form and make at least three (3) attempts to conduct the tests at approximately 2-hour intervals throughout the day during daylight hours. The permittee shall attempt to make the test daily until a valid observation period is completed.

35.d. All visible emissions tests and surveys shall be conducted during operating conditions that have the potential to create visible emissions.

35.e. Recordkeeping: The permittee must maintain records of all visible emissions tests and surveys, including: date, time, observer, observations, results, and any corrective actions

36. Applicable Requirement: The permittee shall not cause or allow the emission of particulate matter in excess of 0.14 grains per dry standard cubic foot, from emissions unit 4CON and 1SAN. [OAR 340-226-0210(2)(b)(B)]

37. Applicable Requirement: The permittee shall not cause or allow the emission of particulate matter in any one hour from emissions unit 4CON in excess of the amount shown in Table 1, OAR 340-226-0310, for the process weight allocated to the veneer dryers. [OAR 340-226-0310 and -8010]

38. Monitoring Requirement: The permittee must inspect the cyclones, target boxes, and baghouses of emissions unit 4CON and the sanderdust baghouse of emissions unit 1SAN at least quarterly for physical degradation that could affect the performance of the cyclones, target boxes, or baghouses, and record the results of the inspection as well as any corrective actions, bag replacements, or repairs required. [OAR 340-218-0050(3)(a)(C)]

Plywood Rule

39. The permittee must not cause or allow the emission of particulate matter (PM) emissions in excess of 43.0 pounds per hour from emissions unit PLY on a daily basis. [OAR 340-234-0510(2)(a)]

Plywood Rule Monitoring

40. The permittee must perform the following monitoring to demonstrate compliance with the limits of Condition 39. [OAR 340-234-0510(2)(c)]

40.a. The permittee must calculate the daily hourly average particulate matter emission rate from emissions unit PLY by dividing the total daily emissions from this emissions unit by the greatest number of hours that any plywood press (P1, P2, P3) operated that day. The results from these calculations will then be compared to the standard in Condition 39. The calculations for each day must be performed within 7 days of the given day; or

40.b. As an alternative to the above emission calculation monitoring, the permittee may keep daily records demonstrating that the combined production of all plywood presses (P1, P2, and P3) does not exceed 43,000 square feet per hour, 3/8 inch finished basis as a daily hourly average. The daily hourly average production values must be computed within 7 days of the given day.

40.c. Recordkeeping: Records shall be maintained of the PM calculations in Condition 40.a or the plywood production in Condition 40.b and the results compared to the standard in Condition 39 or the production value in Condition 40.b.

Gasoline Dispensing Facilities

41. The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: [40 CFR 63.11116(a), (b), (d) and OAR 340-244-0240, federally enforceable]

41.a. Minimize gasoline spills;
41.b. Clean up spills as expeditiously as practicable;
41.c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
41.d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators;
41.e. The permittee is not required to submit the notifications or reports as specified in 40 CFR 63.11124 and 63.11126, m or Subpart A, but the permittee must have records available within 24 hours of a request by DEQ to document gasoline throughput;
41.f. Portable gasoline containers that met the requirements of 40 CFR Part 59, subpart F, are considered acceptable for compliance with Condition 41.c.

42. In addition to the measures specified in Condition 41, the permittee must take the following measures to minimize vapor releases: [OAR 340-244-0240, state only enforceable]

42.a. Do not top off or overfill vehicle tanks. If a person can confirm that a vehicle tank is not full after the nozzle clicks off (such as by checking the vehicle's fuel tank gauge), the person may continue to dispense fuel using best judgment and caution to prevent a spill;
42.b. Post a sign at the gasoline dispensing facility (GDF) instruction a person filling up a motor vehicle to not top off the vehicle tank;
42.c. Ensure that cargo tanks unloading at the GDF comply with Conditions 41.a through 41.c, 42.a, and 42.b.
42.d. The permittee must only load gasoline into storage tanks at the facility by utilizing submerged filling, as defined in OAR 340-244-0030. The submerged fill pipe must be no more than 12 inches from the bottom of the storage tank.

Insignificant Activities Requirements

43. 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:

43.a. OAR 340-208-0110 (20% opacity)
43.b. OAR 340-228-0210 (grain loading for fuel burning equipment)
43.c. OAR 340-226-0210 (grain loading for non-fugitive, non-fuel burning equipment)
43.d. OAR 340-226-0310 (process weight limit for non-fugitive, non-fuel burning process equipment)

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

44. The permittee must not cause or allow plant site emissions to exceed the following limits for any 12

~~consecutive calendar month period: [OAR 340-222-0020 through OAR 340-222-0041]~~

~~Pollutant~~	~~Plant Site Emission Limit (tons/yr)~~	~~Unassigned Emissions (tons/yr)~~
~~PM~~	~~279~~	~~25~~
~~PM_{10}~~	~~197~~	~~15~~
~~$PM_{2.5}$~~	~~103~~	~~10~~
~~NO_x~~	~~72~~	~~0~~
~~CO~~	~~236~~	~~0~~
~~SO_2~~	~~39~~	~~0~~
~~VOC~~	~~40~~	~~40~~
~~GHG (CO_2e)~~	~~96,800~~	~~0~~

~~44.a. The PSEL is based on the predicted emissions for the current operating conditions at the facility.~~
~~44.b. The annual PSELs are twelve (12) month rolling totals.~~

~~Plant Site Emission Limit Monitoring~~

~~45. The permittee shall determine compliance with the Plant Site Emission Limits established in Condition 44 of this permit by conducting monitoring in accordance with the following procedures, test methods, and frequencies in this condition and Condition 45: [OAR 340-218-0050(3)(a)(C)]~~

~~45.a. The permittee shall maintain records of the following process parameters on a monthly and annual basis:~~

~~Emissions Unit(s)/Process~~	~~Process Parameter~~	~~Units~~
~~Boiler 1PH~~	~~Steam production~~ ~~Hog fuel combusted~~	~~Pounds~~ ~~BDT~~
~~Presses P1, P2, P3~~	~~Plywood production~~	~~MM ft^2 (3/8" basis)~~
~~Log Vats VAT~~	~~Green veneer production~~	~~MM ft^2 (3/8" basis)~~
~~Veneer Dryers 5VD~~	~~Dried veneer production – Douglas Fir~~ ~~Dried veneer production – White Fir~~	~~MM ft^2 (3/8" basis)~~ ~~MM ft^2 (3/8" basis)~~
~~RTO~~	~~Natural gas usage~~	~~MM ft^3~~
~~Wood Residuals WRC~~	~~Chips sold~~	~~BDT~~

~~45.b. The permittee shall calculate pollutant mass emissions on a monthly and annual basis using the following equation, except for GHGs and VOCs from emissions unit 3ADH:~~

$$E = \Sigma(P_{eu} \times EF_{eu}) \times Z + AI$$

~~where:~~

~~E = pollutant emissions (lbs/month, tons/year);~~
~~P_{eu} = process parameters identified in Condition 45.a ;~~
~~EF_{eu} = emission factor identified for each emissions unit and pollutant in Condition 45.e;~~
~~Z = conversion constant: 1 ton/2000 lbs;~~
~~AI = 1 ton per year for PM, PM_{10}, $PM_{2.5}$, and VOC only~~

~~45.e. The emission factors for calculating pollutant emissions are as follows:~~

~~Table 7~~ **~~Process Parameters~~**

~~EU ID~~	~~Pollutant~~	~~Process Parameter~~	~~Units~~	~~Emission Factor~~	~~Units~~
~~1PH Hog fuel boiler~~	~~PM~~	~~Steam produced~~	~~1000 lbs~~	~~0.07~~	~~lb/1000 lb steam~~
	~~PM_{10}~~			~~0.0697~~	
	~~$PM_{2.5}$~~			~~0.0634~~	
	~~CO~~			~~0.591~~	
	~~NO_x~~			~~0.257~~	
	~~SO_2~~			~~0.014~~	
	~~VOC~~			~~0.011~~	
~~P1, P2, P3 Plywood Presses~~	~~VOC~~	~~Plywood production~~	~~MMsqft~~	~~0.07~~	~~lb/Msqft~~
	~~PM~~			~~0.2~~	
	~~PM_{10}~~			~~0.17~~	
	~~$PM_{2.5}$~~			~~0.085~~	
~~2MT Hog fuel truck unloading ramp HFR1~~	~~PM~~	~~Plywood production~~	~~MMsqft~~	~~0.168~~	~~lb/Msqft~~
	~~PM_{10}~~			~~0.124~~	
	~~$PM_{2.5}$~~			~~0.063~~	
~~2MT Hog fuel pile - fuel loader FL1~~	~~PM~~	~~Plywood production~~	~~MMsqft~~	~~0.271~~	~~lb/Msqft~~
	~~PM_{10}~~			~~0.203~~	
	~~$PM_{2.5}$~~			~~0.102~~	
~~2MT Bark conveyors BC1a,b,c,d~~	~~PM~~	~~Plywood production~~	~~MMsqft~~	~~0.007~~	~~lb/Msqft~~
	PM_{10}			0.005	
	$PM_{2.5}$			0.002	
~~2MT Chip Conveyors L1a,b,c,d~~	PM	~~Plywood production~~	~~MMsqft~~	~~0.002~~	~~lb/Msqft~~
	~~PM_{10}~~			~~0.002~~	
	~~$PM_{2.5}$~~			~~0.001~~	
~~2MT Veneer lath chip conveyors V1a,b,c,d~~	~~PM~~	~~Plywood production~~	~~MMsqft~~	~~0.003~~	~~lb/Msqft~~
	~~PM_{10}~~			~~0.002~~	
	~~$PM_{2.5}$~~			~~0.001~~	
~~2MT Hog fuel and bark bins B2~~	~~PM~~	~~Plywood production~~	~~MMsqft~~	~~0.106~~	~~lb/Msqft~~
	~~PM_{10}~~			~~0.080~~	
	~~$PM_{2.5}$~~			~~0.012~~	
~~2MT Chip loading bins B3,4,5 and pile~~	~~PM~~	~~Plywood production~~	~~MMsqft~~	~~0.248~~	~~lb/Msqft~~
	~~PM_{10}~~			~~0.185~~	

EU ID	Pollutant	Process Parameter	Units	Emission Factor	Units
	$PM_{2.5}$			0.028	
2MT Sanderdust truck loading bin B6	PM	Plywood production	MMsqft	0.013	lb/Msqft
	PM_{10}			0.010	
	$PM_{2.5}$			0.005	
2MT Sawdust truck loading bin B7	PM	Plywood production	MMsqft	0.026	lb/Msqft
	PM_{10}			0.019	
	$PM_{2.5}$			0.010	
2MT Ply trim truck loading bin B8	PM	Plywood production	MMsqft	0.085	lb/Msqft
	PM_{10}			0.064	
	$PM_{2.5}$			0.032	
4CON Target Box #1	PM	Plywood production	MMsqft	0.034	lb/Msqft
	PM_{10}			0.026	
	$PM_{2.5}$			0.013	
4CONTarget Box #2	PM	Plywood production	MMsqft	0.049	lb/Msqft
	PM_{10}			0.036	
	$PM_{2.5}$			0.018	
4CONTarget Box #3	PM	Plywood production	MMsqft	0.049	lb/Msqft
	PM_{10}			0.036	
	$PM_{2.5}$			0.018	
4CON Cyclone #1	PM	Plywood production	MMsqft	0.027	lb/Msqft
	PM_{10}			0.022	
	$PM_{2.5}$			0.012	
4CON Cyclone #2	PM	Plywood production	MMsqft	0.038	lb/Msqft
	PM_{10}			0.033	
	$PM_{2.5}$			0.016	
4CON Cyclone #3	PM	Plywood production	MMsqft	0.074	lb/Msqft
	PM_{10}			0.064	
	$PM_{2.5}$			0.032	
4CON Cyclone #4	PM	Plywood production	MMsqft	0.178	lb/Msqft
	PM_{10}			0.151	
	$PM_{2.5}$			0.076	
4CON Cyclone #5	PM	Plywood production	MMsqft	0.323	lb/Msqft
	PM_{10}			0.274	
	$PM_{2.5}$			0.137	

EU ID	Pollutant	Process Parameter	Units	Emission Factor	Units
4CON Glue Mixer exhaust fan F8	PM	Plywood production	MMsqft	0.013	lb/Msqft
	PM_{10}			0.013	
	$PM_{2.5}$			0.006	
4CON Sanderdust cyclone/baghouse	PM	Plywood production	MMsqft	0.034	lb/Msqft
	PM_{10}			0.033	
	$PM_{2.5}$			0.033	
4CON Ply trim cyclone/baghouse	PM	Plywood production	MMsqft	0.033	lb/Msqft
	PM_{10}			0.032	
	$PM_{2.5}$			0.032	
4CON Open blow pipe BP1	PM	Plywood production	MMsqft	0.069	lb/Msqft
	PM_{10}			0.052	
	$PM_{2.5}$			0.007	
5VD Veneer dryer RTO	PM	Veneer dried	MMsqft	0.025	lb/Msqft
	PM_{10}			0.025	
	$PM_{2.5}$			0.025	
	CO			0.73	
	NO_x			0.004	
	VOC			0.02	
	SO_2	Natural gas	$MMft^3$	1.7	$lb/MMft^3$
5VDa Veneer dryer fugitives	PM	Veneer dried	MMsqft	0.10 Doug fir 0.03 – white fir	lb/Msqft
	PM_{10}			0.10 Doug fir 0.03 – white fir	
	$PM_{2.5}$			0.10 Doug fir 0.03 – white fir	
	VOC			0.036	
5VD Veneer dryer cooling zones	VOC	Veneer dried	MMsqft	0.054	lb/Msqft
VAT Log vats	VOC	Green veneer produced	MMsqft	0.0744	lb/Msqft
WRC Wood residuals chips	VOC	Chips sold	BDT	0.05	lb/BDT
6WE Paved roads	PM	Plywood production	MMsqft	0.57	lb/Msqft
	PM_{10}			0.11	

~~EU ID~~	~~Pollutant~~	~~Process Parameter~~	~~Units~~	~~Emission Factor~~	~~Units~~
	~~$PM_{2.5}$~~			~~0.028~~	

~~46. The emissions factors listed in Condition 45.c are not enforceable limits unless otherwise specified in this permit. Compliance with PSELs shall only be determined by the calculations contained in Condition 45.b of this permit using the measured process parameters recorded during the reporting period and the emission factors contained in Condition 45.c. [OAR 340-218-0050(3)(a)(C)]~~

~~47. The permittee shall monitor and calculate the contribution from emissions unit 3ADH to the annual VOC PSEL established in Condition 44 using the following calculations: [OAR 340-218-0050(3)(a)(C)]~~

~~47.a. The permittee shall maintain records of the amount of materials used at emissions unit 3ADH for each month.~~

~~47.b. The VOC content of the materials shall be determined by material safety data sheets or supplier technical bulletins. If a range of VOC content is given, the maximum of the range shall be used to calculate emissions.~~

~~47.c. Emissions from emissions unit 3ADH shall be monitored using the following equation:~~

$$V = \%V_u \times M_u \times D$$

~~where:~~

~~V = volatile organic compounds emissions, lbs/month;~~
~~$\%V_u$ = percent VOC of material used in the process, wt/wt;~~
~~M_u = material used in the process, gallons/month; and~~
~~D = density of material used in process, lb/gallon.~~

~~47.d. The annual VOC emissions calculated using material balance shall be added to the VOC emissions calculated in Condition 45.b for monitoring compliance with the facility-wide VOC PSEL in Condition 44.~~

~~48. Monthly calculations shall be completed within 30 days of the end of each month and annual calculations shall be completed by February 15 of each year this permit is in effect. [OAR 340-218-0050(3)(a)(C)]~~

~~**EMISSION FEES**~~

~~49. Emission fees will be based on the Plant Site Emissions Limits, unless the permittee elects to report actual emissions for one or more permitted processes/pollutants. [OAR 340-220-0090]~~

TESTING REQUIREMENTS

50. Unless otherwise specified in this permit, the permittee must conduct all testing in accordance with DEQ's Source Sampling Manual. [OAR 340-212-0120(3)]

50.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 the 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.

50.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.

50.c. Unless otherwise specified by permit condition or DEQ approved source test plan, all compliance source tests must be performed as follows:

50.c.i. At least 90% of the design capacity for new or modified equipment;

50.c.ii. At least 90% of the maximum operating rate for existing equipment; or

50.c.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.

50.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.

50.e. Source test reports prepared in accordance with DEQ's Source Sampling Manual must be submitted to DEQ within 60 days of completing any required source test, unless a different time period is approved in the source test plan.

GENERAL MONITORING AND RECORDKEEPING REQUIREMENTS

General Monitoring Requirements:

51. The permittee must not knowingly render inaccurate any required monitoring device or method. [OAR 340-218-0050(3)(a)(E)]

52. 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)]

53. 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

54. The permittee must maintain the following general records of testing and monitoring required by this permit: [OAR 340-218-0050(3)(b)(A)]

54.a. The date, place as defined in the permit, and time of sampling or measurements;

54.b. The date(s) analyses were performed;

54.c. The company or entity that performed the analyses;

54.d. The analytical techniques or methods used;

54.e. The results of such analyses;

54.f. The operating conditions as existing at the time of sampling or measurement; and

54.g. The records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibration drift checks).

55. 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)]

56. 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)]

57. 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

58. The permittee shall maintain the following specific records of required monitoring information that include the following: [OAR 340-218-0050(3)(b)(A)]

- 58.a. quarterly records of visible emission surveys for facility fugitive emissions (Condition 8.b);
- 58.b. complaint log and investigation reports (Condition 8.a);
- 58.c. visible emissions survey/observation reports for emissions units 1PH, 2MT, 4CON, 5VD, 5VDa, and 1SAN;
- 58.d. hourly, monthly, and annual records of steam production rates (Condition 17);
- 58.e. records of inspection and maintenance procedures for emissions unit 5VD (Condition 28);
- 58.f. records of inspection and maintenance procedures for emissions units 4CON and 1SAN (Condition 38);
- 58.g. daily, monthly, and annual records of plywood production (MSF, 3/8" basis) (Conditions 40 and 45.a);
- 58.h. daily, monthly, and annual records of veneer dried, type and species (MSF, 3/8" basis) (Conditions 40 and 45.a);
- 58.i. daily, monthly, and annual records of green veneer produced , type and species (MSF, 3/8" basis) (Condition 45.a);
- 58.j. monthly and annual records of hog fuel combusted (Condition 45.a);
- 58.k. monthly and annual records of chip shipments (Condition 45.a);
- 58.l. monthly and annual records of VOC materials used in emissions unit 3ADH (Condition 47);
- 58.m. occurrence and length of downtime for all pollution control devices;
- 58.n. pollutant emissions (daily, monthly, annual) (Condition 40 and 45.a); and
- 58.o. excess emissions log (Condition 59).

Note: Annual records are for any twelve consecutive calendar month period.

REPORTING REQUIREMENTS

General Reporting Requirements

59. Excess Emissions Reporting: The permittee must report all excess emissions as follows: [OAR 340-214-0300 through 340-214-0360]
    - 59.a. Immediately (by 9:00 am on the day following the event) notify DEQ of an excess emission event by phone, email, or facsimile; and
    - 59.b. Within 15 days of the excess emissions event, submit a written report that contains the following information: [OAR 340-214-0340(1)]

59.b.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;
59.b.ii. The date and time the permittee notified DEQ of the event;
59.b.iii. The equipment involved;
59.b.iv. Whether the event occurred during planned startup, planned shutdown, scheduled maintenance, or as a result of a breakdown, malfunction, or emergency;
59.b.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;
59.b.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);
59.b.vii. The final resolution of the cause of the excess emissions; and
59.b.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.

59.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 Accident Response System (OARs). The current number is 1-800-452-0311.

59.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.

59.e. The permittee must notify DEQ of planned startup/shutdown or scheduled maintenance events.

59.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 340-214-0340(4)(a)]

60. 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 59. [OAR 340-218-0050(3)(c) (B)]

61. All required reports must be certified by a responsible official consistent with OAR 340-218-0040(5); [OAR 340-218-0050(3)(c)(D)]

62. 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 Western Region Permit Coordinator.

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

Western Region Office
4026 Fairview Industrial Drive SE
Salem, OR 97302
503-378-8240

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
503-229-5263

Submit all reports for EPA requirements to:

Air Operating Permits
US Environmental Protection Agency
Mail Stop OAQ-108
1200 Sixth Avenue
Seattle, WA 98101

Semi-annual and Annual Reports

63. 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 copy of the report must be submitted to the EPA and two copies 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)]

63.a. The first semi-annual report is be due on August 15 and must include the semi-annual compliance certification. [OAR 340-218-0050(3)(c)(A)(i)]

63.b. The annual report is due on February 15 and must consist of the following: [OAR 340-218-0050(3)(c)(A)(ii)]

63.b.i. The emission fee report (F1101 and F1102) [OAR 340-220-0100]

63.b.ii. A summary of the excess emissions upset log [OAR 340-214-0340]

63.b.iii. The second semi-annual compliance certification (R1002 and R1003 if there are permit deviations) [OAR 340-218-0050(3)(c)(A)(i)]]

63.b.iv. The annual emission inventory report for the prior calendar year (R1001) [OAR 340-218-0050(3)(a)(C)].

64. 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)]

64.a. The identification of each term or condition of the permit that is the basis of the certification;

64.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;

64.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 64.b of this permit. 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

64.d. Such other facts as DEQ may require to determine the compliance status of the source.

~~65. 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 Chapter 340, Division 215. The greenhouse gas report must be certified by the responsible official consistent with OAR 340-218-0040(5). [OAR 340-215-0030(2)(b) and -0040(1)]~~

66. 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**~~

~~67. The following State and Federal air quality requirements are not applicable to this facility for the reasons stated. [OAR 340-218-0110(1)(b)]~~

~~Oregon Administrative Rules, Chapter 340~~

~~Applicable Requirement~~	~~Section~~	~~Reason Code~~	~~Applicable Requirement~~	~~Section~~	~~Reason Code~~
~~Division 202~~	~~All rules~~	~~I~~	~~Division 230~~	~~All rules~~	~~E~~
~~Division 204~~	~~All rules~~	~~I~~	~~Division 232~~	~~All rules~~	~~C~~
~~Division 206~~	~~0050~~ ~~0060 through 0070~~	~~C~~ ~~I~~	~~Division 234~~	~~0100 through 0270, 0520 and 0530~~	~~B~~
~~Division 208~~	~~0500 through 0610~~	~~D~~	~~Division 236~~	~~All rules~~	~~B~~
~~Division 210~~	~~0100 through 0120~~	~~B~~	~~Division 238~~ ~~Division 240~~	~~0060 through 0100~~ ~~All rules~~	~~E~~ ~~C~~
~~Division 214~~	~~0200 through 0220~~	~~C~~	~~Division 242~~	~~All rules~~	~~C~~
~~Division 218~~	~~0050(4)~~	~~B~~	~~Division 244~~	~~0100, 0232 through 0252~~	~~H~~ ~~E~~
	~~0060~~	~~I~~	~~Division 248~~	~~0210 through 0230~~	~~B~~
	~~0070~~	~~I~~	~~Division 250~~	~~All rules~~	~~I~~
	~~0090~~	~~B~~	~~Division 252~~	~~All rules~~	~~I~~
	~~0100~~	~~B~~	~~Division 253~~	~~All rules~~	~~B~~
~~Division 222~~	~~0042~~	~~H~~	~~Division 254~~	~~All rules~~	~~E~~
	~~0060~~	~~H~~	~~Division 256~~	~~All rules~~	~~B~~
~~Division 223~~	~~All rules~~	~~B~~	~~Division 257~~	~~All rules~~	~~E~~
~~Division 224~~	~~0045 through 0060~~	~~C~~	~~Division 258~~	~~All rules~~	~~B~~
	~~0245 through 0260~~	~~C~~	~~Division 259~~	~~All rules~~	~~I~~
~~Division 225~~	~~0045~~	~~C~~	~~Division 260~~	~~All rules~~	~~B~~
~~Division 226~~	~~0400~~	~~H~~	~~Division 262~~	~~All rules~~	~~B~~
~~Division 228~~	~~0100 through 0130~~	~~F~~	~~Division 264~~	~~0100 through 0160,~~	~~D~~
	~~0200~~	~~E~~		~~0175~~	~~D~~
	~~0300~~	~~B~~	~~Division 266~~	~~All rules~~	~~B~~
	~~0600 through 0639~~	~~B~~			

Pages 29 - 40 redacted -- outside the scope of the SIP