

Source Category Description:

Sawmill and millwork facilities producing 25,000 or more board feet per shift of finished product and veneer peeling and plywood manufacturing. Activities include sawing, debarking, chipping, planing, sanding, veneer production, kiln drying, cabinet and structural wood manufacturing, surface coating,, and supporting activities such as material conveyors (mechanical and pneumatic), veneer dryers, plywood presses and boilers.

1. Qualifications: For each qualification statement listed below, answer “yes” or “no” in the far right column.

a. Do your facility operations meet the description provided above?	
b. Is a completed Form AQ 220 attached?	
c. Does the facility use a steam-generating boiler? (If yes, a completed Form AQ 224 (if hogged fuel fired) or Form AQ 208 (for gas, diesel, or oil fired) must be attached.)	
d. Are wood-drying kilns used? (If yes, a completed Form AQ 225 must be attached.)	
e. Are cyclones used? (If yes, a completed Form AQ 226 must be attached.)	
f. Does the facility have a veneer dryer? (If yes, a completed Form AQ 221 must be attached.)	
g. Does the facility apply paint or other type of coating onto products? (If yes, a completed Form AQ 211 must be attached.)	
h. Are there any additional operations onsite, other than wood products manufacturing? (If yes, provide a brief description below.)	
i. Is the facility currently in compliance with DEQ regulations?	
j. Have there been any violations in the last 5 years?	
k. If there have been violations, have they been resolved?	
l. Does the facility have the proper land use approvals? Stationary Sources must attach a completed Land Use Compatibility Statement.	

2. Additional Comments:

3. Permit Requirements:

All conditions of the General ACDP apply to the source, unless they are listed below. Applicability of these permit conditions is based on date of construction or installation of air contaminant sources. For each permit condition listed below, indicate whether the condition applies to your plant by writing “yes” or “no” in the appropriate column.

Permit condition	Applicability question:	Applicable (yes/no)
2.1.a	Were any of the equipment or processes installed on or before June 1, 1970 and is the plant operated outside of special control areas? (yes/no)	
2.1.b	Were any of the equipment or processes installed after June 1, 1970 or is the plant operated inside of a special control area? (yes/no)	
2.1.c	Is the plant operated in Clackamas, Columbia, Multnomah, or Washington Counties? (yes/no)	
2.1.d.	Does the facility have veneer dryers and is the facility located outside of the Medford-Ashland AQMA or the Grants Pass UGA? (yes/no)	
2.1.e. & 2.2.e	Does the facility have veneer dryers and is the facility located in the Medford-Ashland AQMA or the Grants Pass UGA? (yes/no)	
2.2a. & 2.2.f	Does the facility have fuel burning equipment (boilers) installed on or before June 1, 1970? (yes/no)	
2.2.b.	Does the facility have fuel burning equipment (boilers) installed, constructed or modified after June 1, 1970? (yes/no)	
2.2.c.	Does the facility have non-fuel burning equipment that was installed on or before June 1, 1970? (yes/no)	
2.2.d.	Does the facility have non-fuel burning equipment that was or will be installed after June 1, 1970? (yes/no)	
2.6.a	Is distillate or residual fuel oil burned in any equipment at the facility? (yes/no)	
2.6.b.	Is on-specification used oil burned in any equipment at the facility? (yes/no)	
3.0	Are there any gas or oil fired boilers with a heat input of 10 to 100 million Btu/hr that constructed, modified, or reconstructed after June 9, 1989? (yes/no)	
4.2	Is the facility located in the Medford-Ashland AQMA or the Lakeview UGB? (yes/no)	
4.4	Does the facility have veneer dryers? (yes/no)	
5.2 & 6.4	Is the facility located in the Medford-Ashland AQMA? (yes/no)	
6.5	Does the facility have wood-fired boilers? (yes/no)	
8.4	Is this a new facility? (yes/no)	

4. Maximum Projected Pollutant Emissions: Determine the maximum projected annual pollutant emissions for all of the equipment used at the plant.

a. Gas, Oil and Wood Fired Boilers:

Device	Maximum Projected Annual Fuel Usage	Pollutant	Emission factor	Emissions (tons/yr.)
Boiler (gas)	10 ⁶ ft ³	PM	2.5 lb/10 ⁶ ft ³	
		PM ₁₀	2.5 lb/10 ⁶ ft ³	
		SO ₂ ⁽¹⁾	1.7 lb/10 ⁶ ft ³	
		NO _x	100 lb/10 ⁶ ft ³	
		CO	84 lb/10 ⁶ ft ³	
		VOC	5.5 lb/10 ⁶ ft ³	
Boiler (oil)	gallons Fuel sulfur content (%) _____	PM	11.5 lb/1000 gal.	
		PM ₁₀	8.2 lb/1000 gal	
		SO ₂	157 x S lb/1000 gal (1)	
		NO _x	55 lb/1000 gal	
		CO	5 lb/1000 gal	
		VOC	1.1 lb/1000 gal	
Boiler (wood)	lb. Steam	PM	0.4 lb/1000lb Steam	
		PM ₁₀	0.2 lb/1000lb Steam (2)	
			0.2 lb/1000lb Steam (3)	
		SO ₂	0.014 lb/1000lb Steam	
		NO _x	0.31 lb/1000lb Steam	
		CO	3.0 lb/1000lb Steam (4)	
			2.0 lb/1000lb Steam (3)	
			1.0 lb/1000lb Steam (5)	
VOC	0.13 lb/1000lb Steam			

- (1) S indicates that the weight % of sulfur in the oil should be multiplied by the value given. For example, if the fuel is 1% sulfur, then S=1.
- (2) Emission factor for Dutch Ovens. These PM10 estimates are based on uncontrolled emissions. The PM10 fraction is dependent on the type of control equipment.
- (3) Emission factor for Spreader-Stokers.
- (4) Emission factor for Dutch Ovens.
- (5) Emission factor for Fuel Cells.

b. Cyclones and Target Boxes:

Device	Material	Type	Projected Annual Production (BDT)	Emission factors (lb/BDT)		Emissions (tons/yr)
				PM	PM ₁₀	
Cyclone	Dry & Green Chips, Shavings, Hogged Fuel/Bark, Green Sawdust	Medium Efficiency		PM	0.5	
				PM ₁₀	0.25	
		High Efficiency		PM	0.2	
				PM ₁₀	0.16	
		Baghouse Control		PM	0.001	
				PM ₁₀	0.001	
	Sanderdust	Medium Efficiency		PM	NA	
				PM ₁₀	NA	
		High Efficiency		PM	2.0	
				PM ₁₀	1.6	
		Baghouse Control		PM	0.04	
				PM ₁₀	0.04	
Target Box	Sanderdust	Medium Efficiency		PM	0.1	
				PM ₁₀	0.05	

c. Kilns:

Device	Lumber Species	Projected Annual Production (MBF) (1)	Pollutant	Emission Factor (2)	Emissions (tons/yr)
Steam Kiln	Douglas Fir		PM/PM ₁₀	0.02 lb/MBF (3)	
			VOC	0.6 lb/MBF (4), (5)	
	Ponderosa Pine		PM/PM ₁₀	0.02 lb/MBF (6)	
			VOC	1.7 lb/MBF (3)	
	Hemlock		PM/PM ₁₀	0.04 lb/MBF (3)	
			VOC	0.33 lb/MBF (3)	
Electric Kiln	Any Species		VOC	0.81 lb/MBF	

- (1) MBF stands for 1,000 board feet
- (2) Use source specific data, if available. VOC factors are on a propane basis.
- (3) OSU studies
- (4) NCASI/University of Idaho study
- (5) Average of sap and heart wood
- (6) Assumed to equal emissions for Douglas Fir

d. Veneer Dryers:

Device	Wood species	Controls	Annual Production (MSF) (1)	Emission Factors (lb/MSF)		Emissions (tons/yr.)
Veneer Dryer (Gas Heat)	Douglas Fir	uncontrolled		PM/PM ₁₀	0.52	
				NO _x	0.12	
				CO	0.02	
				VOC	0.22	
		Burley or 45% control		PM/PM ₁₀	0.29	
				NO _x	0.12	
				CO	0.02	
				VOC	0.22	
	Hemlock, White Fir	uncontrolled		PM/PM ₁₀	0.15	
				NO _x	0.12	
				CO	0.02	
				VOC	0.22	
		Burley or 45% control		PM/PM ₁₀	0.10	
				NO _x	0.12	
				CO	0.02	
				VOC	0.22	
Veneer Dryer (Steam Heat)	Douglas Fir	uncontrolled		PM/PM ₁₀	1.01	
				NO _x	NA	
				CO	NA	
				VOC	0.04	
		Burley or 45% control		PM/PM ₁₀	0.56	
				NO _x	NA	
				CO	NA	
				VOC	0.04	
	Hemlock, White Fir	uncontrolled		PM/PM ₁₀	0.25	
				NO _x	NA	
				CO	NA	
				VOC	0.04	
		Burley or 45% control		PM/PM ₁₀	0.15	
				NO _x	NA	
				CO	NA	
				VOC	0.04	

(1) thousand square feet on a 3/8" basis

e. Surface Coating Operations

Note: Consult manufacturer or material safety data sheet for required information to calculate emissions.

Paint Type	Projected Annual Quantity (gallons)	VOC Content (lb/gal.)	Annual Emissions (tons/yr.)