

Lane Regional Air Protection Agency  
Standard Air Contaminant Discharge Permit

**REVIEW REPORT**

**Rosboro, LLC**  
**Vaughn Facility**  
22833 Vaughn Road  
Veneta, OR 97487

**Permit No. 200550**

1. General Background Information

Rosboro Lumber Company LLC owns and operates a laminated beam manufacturing facility (Vaughn Laminating Complex) located on 22833 Vaughn Road in Veneta, Oregon. The facility was previously operating under an Oregon Title V Operating Permit but applied for a Standard ACDP on September 23, 2010. The facility has one (1) operating scenario and can be operated as much as 24 hours per day, 7 days per week, and 52 weeks per year.

Dried lumber is brought to the facility via truck or rail car. The facility formerly brought rough green lumber into the facility and sent it to the steam heated kilns onsite for drying, but, with the change from Title V to ACDP, the facility no longer operates the dry kilns. The dry lumber is trimmed, planed, graded and scarfed before finger jointing. Trim ends are chipped in a hog and combined with sawdust for sale. The boards are then sent to the lam plant for finger jointing and radio frequency tunnel for curing. After boards are cut to length, adhesive is applied to each lam of the beam just prior to placing them in another radio frequency press. After the pressing, the laminated beams are planed, patched, cut to length and sanded. The finished laminated beams are wrapped and shipped offsite. Raw materials, including adhesive, patching material, paints, inks, and solvents, come from offsite. A hogged fuel-fired boiler supplies all steam used onsite. Most of the hogged fuel comes from offsite.

2. Emission Units

The emission units regulated by this permit are the following:

Emission Unit (EU)	Emission Unit Description	Control Equipment
<b>EU-Boiler</b>	<b>Boiler:</b> M.A. Roberts & Co., wood-fired, dutch oven, 35 MMBtu/hr, 35 M lb steam/hr, 150 psi steam, 1939 mfg, 1952 installed.	Multiclone 1: Western Precipitation Co. P-21396-AO, installed 1952
<b>EU-Lam</b>	<b>Lam:</b> Glue Laminated Beam Production	NA
<b>EU-Finish</b>	<b>Finish:</b> Glue Laminated Beam finishing	NA
<b>EU-MH</b>	<b>Material Handling (MH):</b> Roads –paved and unpaved, dry sawdust, shavings, and sanderdust pneumatically conveyed to truck bin. Also truck bin unloading	Two (2) Baghouses: Carter-Day (installed 1988) and Donaldson (installed 1990)
<b>EU-Pile</b>	<b>Pile:</b> Hog fuel storage and handling	None

3. Reasons for Permit Action

The facility was previously operating under an Oregon Title V Operating Permit that expired on May 1, 2010. The facility applied for a renewal of the Title V permit in a timely manner on March 2, 2010 but subsequently applied for a Standard ACDP on September 23, 2010. The primary reason for the permit action is to change the permit type from Title V to Standard ACDP and include all applicable requirements.

4. Enforcement History

Following is a summary of the enforcement activity related to the facility.

On 4/6/01 Notice of Non-Compliance (NON) No. 2236 was issued to the facility for failure to have a certified observer make an opacity observation during the 4<sup>th</sup> quarter of the year 2000. No civil penalty was issued and the file was closed 5/31/01.

On 4/6/01 NON No. 2238 was issued to the facility for an inadvertent shutting off of main power which shut off all the baghouses, causing them to abort and emit excess particulate matter. No civil penalty was issued and the file was closed 5/31/01.

5. Performance Test Results

The following are the test results since 1998:

EU	Date	Pollutant	Result
Boiler	October 23, 2007	PM	0.25 lb/M lb steam
		CO	0.239 lb/M lb steam
		NO <sub>x</sub>	0.315 lb/M lb steam
Boiler	August 29, 2002	PM	0.42 lb/M lb steam
		CO	2.3 lb/M lb steam
		NO <sub>x</sub>	0.30 lb/M lb steam
Boiler	September 6, 2001	PM	0.25 lb/M lb steam
		CO	0.21 lb/M lb steam
		NO <sub>x</sub>	0.31 lb/M lb steam
Boiler	February 10, 2000	PM	0.57 lb/M lb steam
		CO	0.06 lb/M lb steam
		NO <sub>x</sub>	0.33 lb/M lb steam
		VOC	0.006 lb/M lb steam
Boiler	February 12, 1998	PM	0.41 lb/M lb steam
		CO	0.40 lb/M lb steam
		NO <sub>x</sub>	0.36 lb/M lb steam
		VOC	0.007 lb/M lb steam

The permit requires CO, NO<sub>x</sub>, and PM<sub>10</sub> emission factor verification testing for the wood-fired boiler within one (1) year of boiler startup.

6. Plant Site Emission Limits (PSELs)

**Baseline Emission Rate (BER)**

The 1978 baseline production rates for the facility were established during the previous permitting action and are in the following table.

Production or Process Parameter	Parameter Type	Rate	Units
Plywood (3/8" Basis)	Annual Production	72.0	MMSF - 3/8" basis
Veneer Dried	Annual Veneer Dried	72,000	MSF - 3/8" basis
Boiler	Annual Amount of Steam Generated	772.8	1000 lbs of steam

The following table compares the baseline emission rate, capacity, potential to emit, unassigned emissions, netting basis and PSELs. The detail sheets contain more information about these emissions.

Pollutant	Baseline	Capacity	Potential to Emit	Unassigned pre 7/1/10	Unassigned post 7/1/10	Netting Basis	PSEL
PM	364	167	99	197	25	99	99
PM <sub>10</sub>	166	167	99	0	0	99	99
CO	580	229	99	350	100	99	99
NO <sub>x</sub>	147	58	58	89	40	99	58
SO <sub>2</sub>	4.6	1.8	1.8	2.8	0	4.6	39
VOC	46	29	29	17	0	40	39

Where:

- Capacity is the maximum emissions under the source's physical and operational design.
- Potential to Emit (PTE) is the lesser of the "capacity" or maximum allowable emissions (synthetic minor limit for pollutants with a PTE > 100 tpy).
- Unassigned emissions equal the baseline or netting basis minus the source's current PTE.
- Unassigned emissions were reduced to no more than a Significant Emission Rate (SER) on July 1, 2010 as per LRAPA Title 42, and as "SER" are defined in LRAPA Title 12.
- The netting basis was reduced by the amount that the unassigned emissions were reduced.
- For pollutants with the potential to emit less than the SER, the PSEL is set at the Generic PSEL level.
- For pollutants with the potential to emit greater than the SER (that is, greater than an SER over the baseline or netting basis), the PSEL is set at a level of one ton less than the SER over the PTE or netting basis, whichever is less.
- For PTE/Netting Basis greater than the 100 ton per year major source threshold, the PSELs and Netting Basis are set at one ton less (99 tons/yr).

#### PM<sub>2.5</sub> Baseline Emission Rate

Temporary rules adopted August 23, 2010 specify that a PM<sub>2.5</sub> PSEL and Baseline Emission Rate be established for each permitting action involving public notice after September 1, 2010. For the purposes of this renewal, the PM<sub>2.5</sub> Baseline emission rate is based upon actual throughputs for the 2005 calendar year. The temporary rules require the use of 2006 or 2007 unless a prior time period is more representative of normal operation. This facility was allowed to use a prior time period (2005) because the plant was shut down for part of 2006 and 2007. However, the temporary PM<sub>2.5</sub> rules expired (February 19, 2010) during the public comment period and the PM<sub>2.5</sub> PSEL and baseline were removed prior to issuance.

7. Other Emission Limitations

The permit includes general visible emissions limitations for the facility. The permit includes general grain-loading limitations for the facility in addition to a specific grain loading (0.2 gr/dscf) limitation and opacity limit (40%) for existing (pre June 1, 1970) combustion sources.

8. Hazardous Air Pollutants (HAPs)

The facility has the potential to be a major HAP source. The potential to emit for HAPs are as follows:

- 10.9 tons/year of Ethanol (highest single HAP),
- 4.6 tons/year of Methanol (next highest HAP),
- 28.3 tons/year of total HAPs.

The facility has taken a limit on HAPs to ensure that the facility remains below the major source thresholds for HAPs.

9. Typically Achievable Control Technology (TACT)

LRAPA Title 32-008 requires an existing emission unit at a facility to meet TACT if the emissions unit has emissions of criteria pollutants greater than ten (10) tons per year of any gaseous pollutant or five (5) tons per year of particulate, the emissions unit is not subject to the emissions standards under LRAPA Title 32, Title 33, Title 39, or Title 46 for the pollutants emitted, and the facility is required to have a permit. The only emissions units at the facility that meet these criteria are the boiler (EU-Boiler) and beam lam (EU-Lam). LRAPA 32-001 defines TACT for existing sources as the emission level that is typical of emissions units that are similar in type and size as the affected emissions unit. The wood-fired boiler gaseous emissions are greater than 10 tons/year and are therefore required to meet TACT; good combustion practices are considered TACT for the boiler. The beam lam emission unit (EU-Lam) emits more than 10 tons/year of VOC and are therefore required to meet TACT; LRAPA has determined that beam lam operations typically do not have VOC controls.

10. New Source Review (NSR) and Prevention of Significant Deterioration (PSD)

Because the proposed PSELs for all regulated pollutants are below the Significant Emission Rates (SERs) in LRAPA Title 38, the facility is not subject to LRAPA's New Source Review (NSR) requirements.

11. National Emission Standards for Hazardous Air Pollutants (NESHAPs)

As an area source of HAPs, the facility's boiler will be subject to the Boiler Area Source NESHAP (40 CFR Subpart DDDDD). The NESHAP is scheduled to be promulgated by February 21, 2011 and any applicable requirements will be added after promulgation during the next permit opening (modification or renewal).

12. New Source Performance Standards (NSPSs)

There are no emission units or devices subject to any NSPSs.

13. Reporting Requirements

The facility is required to submit an annual summary by March 15 of each year to document compliance with the PSELs in the permit and to provide and estimate of Greenhouse Gas (GHG)

emissions if emissions for the calendar year are equal to or greater than 2,500 metric tons of CO<sub>2</sub> equivalents (CO<sub>2</sub>eq) in accordance with ODEQ Division 215.

14. Public Notice

The draft permit was on public notice from February 9, 2011 to March 15, 2011. No written comments were submitted during the 35-day comment period.

MAX/cmw  
3/23/11

Baseline Emission Rates

PM Emission device	Rate	Units	PM EF	units	Reference	PM tons/yr
HF Boiler 1	231.84	MM Lb steam/yr		0.2664 lb/M lb steam	1978 source test	30.9
HF Boiler 2	154.56	MM Lb steam/yr		1.0359 lb/M lb steam	1978 source test	80.1
HF Boiler 3	154.56	MM Lb steam/yr		1.0359 lb/M lb steam	1978 source test	80.1
HF Boiler 4	231.84	MM Lb steam/yr		0.435 lb/M lb steam	1978 source test	50.4
Kilns	48,300	MBF/yr		0.05 lb/MBF	General Permit*	1.2
Veneer Dryer 1	36,000	MSF/yr		0.519 lb/MSF	TV Permit/DEQ	9.3
Veneer Dryer 2	36,000	MSF/yr		0.519 lb/MSF	TV Permit/DEQ	9.3
Sawmill/Planer Cyclones	86,363,580.00	lbs/yr		0.5 lb/BDT	TV Permit/DEQ	10.80
Plywood Cyclones/BHs	2,108,160.00	lbs/yr		0.04 lb/BDT	TV Permit/DEQ	0.02
Roads Unpaved - Saw	200,000	BF/day			TV Permit	2.3
Roads Unpaved - Ply	180,822	SF/day			TV Permit	7.9
Roads Paved - Saw	200,000	BF/day			TV Permit	18.4
Roads Paved - Ply	180,822	SF/day			TV Permit	63.2
					<b>TOTAL</b>	<b>363.9</b>

\*The dry kiln PM and PM10 emission factors were updated from NCASI (0.201 lb/MBF) to the more current, smaller emission factor.

PM10 Emission device	Rate	Units	PM10 EF	units	Reference	PM10 tons/yr
HF Boiler 1	231.84	MM Lb steam/yr		0.1332 lb/M lb steam	50%PM10 General	15.4
HF Boiler 2	154.56	MM Lb steam/yr		0.51795 lb/M lb steam	50%PM10 General	40.0
HF Boiler 3	154.56	MM Lb steam/yr		0.51795 lb/M lb steam	50%PM10 General	40.0
HF Boiler 4	231.84	MM Lb steam/yr		0.2175 lb/M lb steam	50%PM10 General	25.2
Kilns	48,300	MBF/yr		0.05 lb/MBF	General Permit*	1.2
Veneer Dryer 1	36,000	MSF/yr		0.519 lb/MSF	TV Permit/DEQ	9.3
Veneer Dryer 2	36,000	MSF/yr		0.519 lb/MSF	TV Permit/DEQ	9.3
Sawmill/Planer Cyclones	86,363,580.00	lbs/yr		0.25 lb/BDT	TV Permit/DEQ	5.4
Plywood Cyclones/BHs	2,108,160.00	lbs/yr		0.04 lb/BDT	TV Permit/DEQ	0.0
Roads Unpaved - Saw	200,000	BF/day			TV Permit	0.8
Roads Unpaved - Ply	180,822	SF/day			TV Permit	2.8
Roads Paved - Saw	200,000	BF/day			TV Permit	3.7
Roads Paved - Ply	180,822	SF/day			TV Permit	12.6
					<b>TOTAL</b>	<b>165.9</b>

\*The dry kiln PM and PM10 emission factors were updated from NCASI (0.201 lb/MBF) to the more current, smaller emission factor.

PM2.5* Emission device	Rate	Units	PM2.5 EF	units	Reference	PM2.5 tons/yr
Boiler	142.9	MM Lb steam/yr		0.54 lb/M lb steam	TV permit/ST, assume 50%	38.6
Pile	13,233	cu unit/yr		0.002 lb/cu unit	AP42 & assume 25% of PM10	0.01
MH	12,369	cu unit/yr		0.138 lb/cu unit	AP42 & assume 25% of PM10	0.85
B1	12,369	cu unit/yr		0.006 lb/cu unit	AP42 & assume 50% of PM10	0.04
B2	12,369	cu unit/yr		0.006 lb/cu unit	AP42 & assume 50% of PM10	0.04
					<b>TOTAL</b>	<b>39.5</b>

\*The temporary rules for PM2.5 that expire February 19 2011 require the use of actual annual emissions in 2006 or 2007 unless a prior time period is more representative. The facility has chosen calendar year 2005 for the PM2.5 baseline period due to facility being shut down for part of 2006 and 2007.

CO Emission device	Rate	Units	CO EF	units	Reference	CO tons/yr
HF Boiler 1	231.84	MM Lb steam/yr		1.5 lb/M lb steam	ST from Foster plant 9/25/92	173.9
HF Boiler 2	154.56	MM Lb steam/yr		1.5 lb/M lb steam	ST from Foster plant 9/25/92	115.9
HF Boiler 3	154.56	MM Lb steam/yr		1.5 lb/M lb steam	ST from Foster plant 9/25/92	115.9
HF Boiler 4	231.84	MM Lb steam/yr		1.5 lb/M lb steam	ST from Foster plant 9/25/92	173.9
					<b>TOTAL</b>	<b>579.6</b>

NOx Emission device	Rate	Units	NOx EF	units	Reference	NOx tons/yr
HF Boiler 1	231.84	MM Lb steam/yr		0.38 lb/M lb steam	ST from Foster plant 9/25/91	44.0
HF Boiler 2	154.56	MM Lb steam/yr		0.38 lb/M lb steam	ST from Foster plant 9/25/91	29.4
HF Boiler 3	154.56	MM Lb steam/yr		0.38 lb/M lb steam	ST from Foster plant 9/25/91	29.4
HF Boiler 4	231.84	MM Lb steam/yr		0.38 lb/M lb steam	ST from Foster plant 9/25/91	44.0
					<b>TOTAL</b>	<b>146.8</b>

SO2 Emission device	Rate	Units	SO2EF	units	Reference	SO2 tons/yr
HF Boiler 1	231.84	MM Lb steam/yr		0.012 lb/M lb steam	ST from Foster plant 9/25/91	1.4
HF Boiler 2	154.56	MM Lb steam/yr		0.012 lb/M lb steam	ST from Foster plant 9/25/91	0.9
HF Boiler 3	154.56	MM Lb steam/yr		0.012 lb/M lb steam	ST from Foster plant 9/25/91	0.9
HF Boiler 4	231.84	MM Lb steam/yr		0.012 lb/M lb steam	ST from Foster plant 9/25/91	1.4
					<b>TOTAL</b>	<b>4.6</b>

VOC Emission device	Rate	Units	SO2EF	units	Reference	VOC tons/yr
HF Boiler 1	231.84	MM Lb steam/yr		0.012 lb/M lb steam	ST from Foster plant 9/25/91	1.4
HF Boiler 2	154.56	MM Lb steam/yr		0.012 lb/M lb steam	ST from Foster plant 9/25/91	0.9
HF Boiler 3	154.56	MM Lb steam/yr		0.012 lb/M lb steam	ST from Foster plant 9/25/91	0.9
HF Boiler 4	231.84	MM Lb steam/yr		0.012 lb/M lb steam	ST from Foster plant 9/25/91	1.4
Kilns	48,300	MBF/yr		1.7 lb/MBF	General Permit for P. Pine*	41.1
Veneer Dryer 1	36,000	MSF/yr		0.3217 lb/MSF	DEQ- 2 STs from Foster Plant & 1:	5.8
Veneer Dryer 2	36,000	MSF/yr		0.3217 lb/MSF	DEQ- 2 STs from Foster Plant & 1:	5.8
Presses 1	28,800	MSF/yr		0.07 lb/MSF	General Permit**	1.0
Presses 2	43,200	MSF/yr		0.07 lb/MSF	General Permit**	1.5
Storage Piles	125,008	tons/yr		0.076 lb/ton	NCASI, TV permit	4.8
					<b>TOTAL</b>	<b>45.7</b>

\*The dry kiln VOC emission factor was updated from NCASI (3.1681 x 0.76 lb/MBF) to the more current, smaller emission factor.

\*\*The plywood press VOC emission factor was updated from AP42 (0.0243 lb/MBF) to the more current, but larger, emission factor in the General Permit.

Baseline Emission Rate Totals	
Pollutant	tons/yr
PM	364
PM10	166
PM2.5	40
CO	580
NOx	147
SO2	4.6
VOC	45

Emission Factors

Criteria Pollutants

Source	Pollutant	Emission Factor	units	Reference
Boiler	PM	1.08	(lb/M lb steam)	TV permit/ST
Boiler	PM10	1.08	(lb/M lb steam)	TV permit/ST
Boiler	PM2.5	0.54	(lb/M lb steam)	TV permit/ST, assume 50%
Boiler	CO	1.5	(lb/M lb steam)	TV permit/ST
Boiler	NOx	0.38	(lb/M lb steam)	TV permit/ST
Boiler	SO2	0.012	(lb/M lb steam)	TV permit/ST
Boiler	VOC	0.029	(lb/M lb steam)	TV permit/ST
Pile	PM	0.007	lb/cu unit	TV Permit
Pile	PM10	0.004	lb/cu unit	TV Permit
Pile	PM2.5	0.002	lb/cu unit	AP42 & assume 25% of PM10
Pile	VOC	0.1812	lb/cu unit	NCASI Tech Bul. 723 Pg. 14
Lam	VOC	0.43	lb/MBF	TV Permit conv.
Finish	VOC	Material Balance		MSDS
MH	PM	0.276	lb/cu unit	AP42 converted to cu unit
MH	PM10	0.276	lb/cu unit	AP42 converted to cu unit
MH	PM2.5	0.138	lb/cu unit	AP42 & assume 25% of PM10
B1	PM	0.012	lb/cu unit	TV Permit
B1	PM10	0.012	lb/cu unit	TV Permit
B1	PM2.5	0.006	lb/cu unit	AP42 & assume 50% of PM10
B3	PM	0.012	lb/cu unit	TV Permit
B3	PM10	0.012	lb/cu unit	TV Permit
B3	PM2.5	0.006	lb/cu unit	AP42 & assume 50% of PM10

HAPs

Source	Pollutant	Emission Factor	units	Reference
Boiler	Acetaldehyde	0.01411	lb/ton hog fuel	TV permit/Ap42
Boiler	Acrolein	0.0680	lb/ton hog fuel	TV permit/Ap42
Boiler	Benzene	0.0714	lb/ton hog fuel	TV permit/Ap42
Boiler	Formaldehyde	0.0221	lb/ton hog fuel	TV permit/ncasi
Boiler	Methanol	0.0143	lb/ton hog fuel	TV permit/ncasi
Boiler	Naphthalene	0.0016	lb/ton hog fuel	TV permit/Ap42
Boiler	Phenol	0.0009	lb/ton hog fuel	TV permit/Ap42
Boiler	Propionaldehyde	0.0010	lb/ton hog fuel	TV permit/Ap42
Boiler	Styrene	0.0323	lb/ton hog fuel	TV permit/Ap42
Boiler	Toluene	0.0156	lb/ton hog fuel	TV permit/Ap42
Boiler	Xylene	0.0004	lb/ton hog fuel	TV permit/Ap42
Boiler	HCL	0.1139	lb/ton hog fuel	TV permit/Ap42
Boiler	Arsenic	0.0004	lb/ton hog fuel	TV permit/Ap42
Boiler	Cadmium	0.0001	lb/ton hog fuel	TV permit/Ap42
Boiler	Chromium	0.0004	lb/ton hog fuel	TV permit/Ap42
Boiler	Lead	0.0008	lb/ton hog fuel	TV permit/Ap42
Boiler	Manganese	0.0272	lb/ton hog fuel	TV permit/Ap42
Boiler	Mercury	0.0001	lb/ton hog fuel	TV permit/Ap42
Boiler	Nickel	0.0001	lb/ton hog fuel	TV permit/Ap42
Boiler	Selenium	0.0000	lb/ton hog fuel	TV permit/Ap42
Boiler	Total	0.38465	lb/ton hog fuel	sum of above
Lam Production	Formaldehyde	0.034	lb/MBF	TV permit converted to MBF basis
Lam Production	Phenol	0.039	lb/MBF	TV permit converted to MBF basis
Lam Production	Ethanol	0.242	lb/MBF	TV permit converted to MBF basis
Lam Production	Propanol	0.021	lb/MBF	TV permit converted to MBF basis
Lam Production	Methanol	0.095	lb/MBF	TV permit converted to MBF basis
Finish Face Repair	Formaldehyde	0.00019	lb/lb	TV permit- Borden
Finish Face Repair	Ethanol	0.00467	lb/lb	TV permit- Borden
Finish Face Repair	Methanol	0.00037	lb/lb	TV permit- Borden
Finish Gap Filling	Formaldehyde	0.00038	lb/lb	TV permit- Borden
Finish Gap Filling	Ethanol	0.00934	lb/lb	TV permit- Borden
Finish Gap Filling	Methanol	0.00074	lb/lb	TV permit- Borden
Finish - Hand Putty	Styrene	0.27000	lb/lb	TV permit MSDS
B1 or B3 - joist saw	Methanol	0.01600	lb/MLF	General Permit
B1 or B3 -sander	Acetaldehyde	0.00300	lb/MSF	General Permit
B1 or B3 -sander	Formaldehyde	0.00200	lb/MSF	General Permit
B1 or B3 -sander	Methanol	0.01200	lb/MSF	General Permit

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Source	Pollutant	Production Rate	Emission Factor	Reference	Annual Emissions
Boiler	Acetaldehyde	46,000 ton/yr	0.01411 lb/ton hog fuel	TV permit/Ap42	0.32 ton/yr
Boiler	Acroelin	46,000 ton/yr	0.0680 lb/ton hog fuel	TV permit/Ap42	1.56 ton/yr
Boiler	Benzene	46,000 ton/yr	0.0714 lb/ton hog fuel	TV permit/Ap42	1.64 ton/yr
Boiler	Formaldehyde	46,000 ton/yr	0.0221 lb/ton hog fuel	TV permit/ncasi	0.51 ton/yr
Boiler	Methanol	46,000 ton/yr	0.0143 lb/ton hog fuel	TV permit/ncasi	0.33 ton/yr
Boiler	Naphthalene	46,000 ton/yr	0.0016 lb/ton hog fuel	TV permit/Ap42	0.04 ton/yr
Boiler	Phenol	46,000 ton/yr	0.0009 lb/ton hog fuel	TV permit/Ap42	0.02 ton/yr
Boiler	Propionaldehyde	46,000 ton/yr	0.0010 lb/ton hog fuel	TV permit/Ap42	0.02 ton/yr
Boiler	Styrene	46,000 ton/yr	0.0323 lb/ton hog fuel	TV permit/Ap42	0.74 ton/yr
Boiler	Toluene	46,000 ton/yr	0.0156 lb/ton hog fuel	TV permit/Ap42	0.36 ton/yr
Boiler	Xylene	46,000 ton/yr	0.0004 lb/ton hog fuel	TV permit/Ap42	0.01 ton/yr
Boiler	HCL	46,000 ton/yr	0.1139 lb/ton hog fuel	TV permit/Ap42	2.62 ton/yr
Boiler	Arsenic	46,000 ton/yr	0.0004 lb/ton hog fuel	TV permit/Ap42	0.01 ton/yr
Boiler	Cadmium	46,000 ton/yr	0.0001 lb/ton hog fuel	TV permit/Ap42	0.00 ton/yr
Boiler	Chromium	46,000 ton/yr	0.0004 lb/ton hog fuel	TV permit/Ap42	0.01 ton/yr
Boiler	Lead	46,000 ton/yr	0.0008 lb/ton hog fuel	TV permit/Ap42	0.01 ton/yr
Boiler	Manganese	46,000 ton/yr	0.0272 lb/ton hog fuel	TV permit/Ap42	0.02 ton/yr
Boiler	Mercury	46,000 ton/yr	0.0001 lb/ton hog fuel	TV permit/Ap42	0.00 ton/yr
Boiler	Nickel	46,000 ton/yr	0.0001 lb/ton hog fuel	TV permit/Ap42	0.00 ton/yr
Boiler	Selenium	46,000 ton/yr	0.0000 lb/ton hog fuel	TV permit/Ap42	0.00 ton/yr
Boiler	Total	46,000 ton/yr	0.38465 lb/ton hog fuel	sum of above	8.85 ton/yr
Lam Production	Formaldehyde	90,000 MBF/yr	0.034 lb/MBF	TV permit converted	1.5 ton/yr
Lam Production	Phenol	90,000 MBF/yr	0.039 lb/MBF	TV permit converted	1.8 ton/yr
Lam Production	Ethanol	90,000 MBF/yr	0.242 lb/MBF	TV permit converted	10.9 ton/yr
Lam Production	Propanol	90,000 MBF/yr	0.021 lb/MBF	TV permit converted	0.9 ton/yr
Lam Production	Methanol	90,000 MBF/yr	0.095 lb/MBF	TV permit converted	4.3 ton/yr
Lam Production	Total HAP				19.4 ton/yr
Finish Face Repair	Formaldehyde	1,500 lbs	0.00019 lb/lb	TV permit- Borden	0.0001 ton/yr
Finish Face Repair	Ethanol	1,500 lbs	0.00467 lb/lb	TV permit- Borden	0.0035 ton/yr
Finish Face Repair	Methanol	1,500 lbs	0.00037 lb/lb	TV permit- Borden	0.0003 ton/yr
Finish Gap Filling	Formaldehyde	1,500 lbs	0.00038 lb/lb	TV permit- Borden	0.0003 ton/yr
Finish Gap Filling	Ethanol	1,500 lbs	0.00934 lb/lb	TV permit- Borden	0.0070 ton/yr
Finish Gap Filling	Methanol	1,500 lbs	0.00074 lb/lb	TV permit- Borden	0.0006 ton/yr
Finish - Hand Putty	Styrene	500 lbs	0.27000 lb/lb	TV permit MSDS	0.0675 ton/yr
Finish - Hand Putty	Total HAP				0.0793 ton/yr
B1 or B3 - Joist saw	Methanol		0.01600 lb/MLF	General Permit	NA
B1 or B3 -sander	Acetaldehyde		0.00300 lb/MSE	General Permit	NA
B1 or B3 -sander	Formaldehyde		0.00200 lb/MSE	General Permit	NA
B1 or B3 -sander	Methanol		0.01200 lb/MSE	General Permit	NA

Pollutant	Potential Emissions (ton/yr)
Highest Single HAP	Ethanol 10.9
Next Highest Single HAP	Methanol 4.6
Total HAPs	Sum 28.3

Rosboro LLC, Vaughn Facility  
 Permit No. 200550  
 Rosboro Vaughn  
 Permit No. 200550  
 Current PSELS

Source	Production Rate	units	Pollutant	Emission Factor	units	Reference	Emissions
							(ton/yr)
Boiler	305,760	(M lb steam/yr)	PM	1.08	(lb/M lb steam)	TV permit/ST	165.1
Boiler	305,760	(M lb steam/yr)	PM10	1.08	(lb/M lb steam)	TV permit/ST	165.1
Boiler	305,760	(M lb steam/yr)	PM2.5	0.54	(lb/M lb steam)	TV permit/ST, assume 50%	82.6
Boiler	305,760	(M lb steam/yr)	CO	1.5	(lb/M lb steam)	TV permit/ST	229.3
Boiler	305,760	(M lb steam/yr)	NOx	0.38	(lb/M lb steam)	TV permit/ST	58.1
Boiler	305,760	(M lb steam/yr)	SO2	0.012	(lb/M lb steam)	TV permit/ST	1.8
Boiler	305,760	(M lb steam/yr)	VOC	0.029	(lb/M lb steam)	TV permit/ST	4.4
Pile	38,000	cu unit/yr	PM	0.007	lb/cu unit	TV Permit	0.1
Pile	38,000	cu unit/yr	PM10	0.004	lb/cu unit	TV Permit	0.1
Pile	38,000	cu unit/yr	PM2.5	0.002	lb/cu unit	AP42 & assume 25% of PM10	0.0
Pile	38,000	cu unit/yr	VOC	0.1812	lb/cu unit	NCA&I Tech Bul. 723 Pg. 14	3.4 converted to as propane
Lam	90,000	MBF/yr	VOC	0.43	lb/MBF	TV Permit conv.	19.4
Finish	Material Balance		VOC	NA	NA	NA	1.5
MH	11,000	cu unit/yr	PM	0.276	lb/cu unit	AP42 converted	1.518
MH	11,000	cu unit/yr	PM10	0.276	lb/cu unit	AP42 converted	1.518
MH	11,000	cu unit/yr	PM2.5	0.138	lb/cu unit	AP42 & assume 25% of PM10	0.759
B1	11,000	cu unit/yr	PM	0.012	lb/cu unit	TV Permit	0.066
B1	11,000	cu unit/yr	PM10	0.012	lb/cu unit	TV Permit	0.066
B1	11,000	cu unit/yr	PM2.5	0.006	lb/cu unit	AP42 & assume 50% of PM10	0.033
B1			VOC	0.11	lb/MLF	General Permit - Joist Saw	NA
B3	11,000	cu unit/yr	PM	0.012	lb/cu unit	TV Permit	0.066
B3	11,000	cu unit/yr	PM10	0.012	lb/cu unit	TV Permit	0.066
B3	11,000	cu unit/yr	PM2.5	0.006	lb/cu unit	AP42 & assume 50% of PM10	0.033
B3			VOC	0.18	lb/MSE	General Permit - Sander	NA

  

Pollutant	Baseline	Capacity	Synthetic Minor		Netting Basis	PSEL
			Potential to Emit	Pre 7/1/10		
PM	364	167	99	197	25	99
PM10	166	167	99	0	0	99
PM2.5	40	83	83	0	0	49
CO	580	229	99	350	100	99
NOx	147	58	58	89	40	58
SO2	4.6	1.8	1.8	2.8	0	4.6
VOC	46	29	29	17	0	39

Capacity is the maximum emissions under the source's physical and operational design Potential to Emit (PTE) is the lesser of the "capacity" or maximum allowable emissions (synthetic minor limit for pollutants > 100 tpy) Unassigned emissions equal the netting basis minus the source's current PTE Unassigned emissions were reduced to no more than an SEF on July 1, 2010 as per LBAPA Title 42 The netting basis was reduced by the amount that the unassigned emissions were reduced. For pollutants with the potential to emit less than the SEF, the PSEL is set at the Generic PSEL level For pollutants with the potential to emit greater than the SEF, the PSEL is set at the PTE or netting basis, whichever is less For PTE/Netting Basis greater than the 100 ton per year major source threshold, the PSELS and Netting Basis are set at one ton less (99 tons/yr)