Lane Regional Air Protection Agency
Simple Air Contaminant Discharge Permit

REVIEW REPORT

Lane Forest Products, Inc. **Permit No. 204741**
2111 Prairie Road, Eugene

1. General Background Information

Lane Forest Products, Inc. produces miscellaneous wood products (landscaping and garden materials, industrial fuel, chips for paper production, etc.) at its 2111 Prairie Road, Eugene, Oregon, facility. The regulated emission units are various storage/market piles, screens, materials handling equipment, one electric-powered grinder and five (5) portable diesel-fired horizontally-fed grinders. Air contaminant emissions from this operation include all criteria pollutants (PM, PM_{10}, $PM_{2.5}$, NO_X, CO, SO_2, and VOC). Emissions from paved haul roads within the urban growth boundary are considered categorically insignificant in accordance with LRAPA Title 12.

2. Reason for Permit Action

The current permit expired November 1, 2011. The primary reason for the permit action is to renew the expired permit.

3. Enforcement Actions

No enforcement actions have been taken against the facility.

4. Plant Site Emission Limits (PSELs)

The PSELs are set at the Generic PSEL level in accordance with LRAPA Title 42. The annual emissions were based upon a maximum No.2 fuel combustion of 120,000 gallons/year in the grinders and 220,000 tons/year of materials in the storage piles. The permit limits the total combustion of No. 2 fuel to no more than 120,000 gallons and 220,000 tons of materials in the storage piles per 12-month rolling period to ensure compliance with the PSELs.

Source	NO_X	CO	SO_X	$PM_{2.5}$	PM_{10}	PM	VOC
Totals	39	99	39	9	14	25	39

The facility did not exist in the Baseline year of 1978 and there are zero (0) emissions credited for the facility for the Baseline for all criteria pollutants. The following are the maximum emission estimations for the facility. The emission details are included as an attachment to this review report.

Process	Pollutant	Emission Factor)	Units	Emissions (ton/yr)
Diesel-fired	PM/PM_{10}	0.31	Lb/MMBtu	2.6
	$PM_{2.5}$	0.26	Lb/MMBtu	2.2

Grinders* 120,000 gal/yr	NOx	4.41	Lb/MMBtu	37.0
	CO	0.95	Lb/MMBtu	8.0
	SO2	0.29	Lb/MMBtu	2.4
	VOC	0.36	Lb/MMBtu	3.0
Storage Piles 220,000 ton/yr	PM	0.1	Lb/ton	12.0
	PM_{10}	0.047	Lb/ton	5.2
	$PM_{2.5}$	0.015	Lb/ton	1.7
	VOC	0.33	Lb/ton	36.3

*Note: Conversion factor: 140,000 BTU/gallon No. 2 Diesel, 1 hp = 2,544 mmBtu/hr

5. Performance Standards and Emissions Limits

Particulate emissions from the facility are required to not exceed 0.1 grain per standard dry cubic foot (dscf). Emissions from the facility are required to not exceed 20% opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour. The PM emissions from the facility are not expected to exceed the limits allowed under LRAPA's process weight rule (LRAPA 32-045). There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) that are applicable to this facility. Furthermore, there are no New Source Performance Standards (NSPSs) that are applicable to this facility. Because the grinders are portable and are occasionally move within, and out of the plant site, the Reciprocating Internal Combustion Engines (RICE) NSPSs and NESHAPs do not apply; those standards apply only to Stationary RICEs. This will be verified again at the next renewal or sooner if permit is opened for modification.

6. Monitoring and Continuous Compliance

The facility is required to maintain records of the amount of No. 2 fuel oil consumed each month, maintenance activities on the water spray system on the horizontally-fed grinders, hours, fuel type and quantity used in the grinder each month, monthly records of the type and amount of material through each pile, and monthly records of the hours of mixer operation.

7. Production or Throughput Limits

The permit contains a material storage pile limit of 220,000 tons/year and a 120,000 gallon/year limit on the No. 2 oil fired in the diesel-powered grinders. Throughput and fuel combustion recordkeeping including an annual report ensure compliance with the PSELs.

8. Permit Fee Category

The permit is classified as a Simple "High". The "high" fee category is applicable because actual emissions are greater than 10 tons/yr gaseous pollutants and/or 5 tons/yr particulate.

9. Public Notice

The draft permit was on public notice from December 15, 2011 to January 18, 2012. No written comments may be submitted during the 35-day comment period.

MAX/cmw
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Grinder Combustion Emissions

120,000 gallons/yr

Pollutant	Max hp rate total (hp)	Max BTU Input (MMBTU/hr)	Emission Factor (lb/MM BTU)	Maximum Potential Emissions (tons/yr)	Maximum Allowable Emissions (ton/yr)
NOx	3,625	9.2	4.41	89.1	37.0
CO	3,625	9.2	0.95	19.2	8.0
SO2	3,625	9.2	0.29	5.9	2.4
PM10	3,625	9.2	0.31	6.3	2.6
PM2.5	3,625	9.2	0.26	5.3	2.2
VOC	3,625	9.2	0.36	7.3	3.0

The facility has five (5) diesel-fired grinders rated at 700 hp, 765 hp, 630 hp, 765 hp, and 765 hp each for a total of 3
The power conversion factor used is 1hp = 2,544 Btu/hr (not 7000 btu/hr stated in AP42 3.3-1.)
Emission factors are from AP-42 Table 3.3-1, Emission Factors for Uncontrolled Diesel Engines
PM2.5 fraction of PM10 is 89% from DEQ AQEF-08
Maximum potential emissions evaluated assuming 12 hrs/day x 365 days/yr of grinder operation
Annual emissios = hourly emissions x 2300 hours/yr of operation / 2000 lb/ton.

Storage Piles Emissions

Pollutant	Throughput (tons/yr)	Emission Factor (lb/ton)	Annual Emissions (tons/yr)
PM	220,000	0.1	11.0
PM10	220,000	0.047	5.2
PM2.5	220,000	0.015	1.7
VOC	220,000	0.33	36.3

PM and PM10 emission factors from Kinsgford Title V Permit for Storage Pile (engineering estimate based upon EF
PM2.5 fraction (0.15) from DEQ AQEF-08
VOC emission factor is derived from NCASI Tech Bull. 723 Pg 14, converted from as-carbon to as-VOC (x1.22)

Pollutant	Potential	Allowable	PSEL
PM	17.3	13.6	24
PM10	7.8	7.8	14
PM2.5	32.4	3.9	9
VOC	43.6	39.3	39
NOx	89.1	37.0	39
CO	19.2	8.0	99
SO2	5.9	2.4	39