

Lane Regional Air Protection Agency
 Simple Air Contaminant Discharge Permit

REVIEW REPORT

Lane Forest Products, Inc.
 2111 Prairie Road, Eugene
<http://laneforest.com/>

Permit No. 204741

Source Information:

SIC - Primary	2875
SIC - Secondary	5261
NAICS - Primary	325314
NAICS - Secondary	444220

Source Categories (LRAPA Title 37, Table 1)	B.74: Source of air quality concern
Public Notice Category	II

Compliance and Emissions Monitoring Requirements:

Unassigned emissions	n
Emission credits	n
Compliance schedule	n
Source test date	n

COMS	n
CEMS	n
Ambient monitoring	n

Reporting Requirements:

Annual reports (due dates)	March 15th
Semi-annual reports (due dates)	n
SACC (due date)	n
Quarterly report (due dates)	n

Monthly report (due dates)	n
Excess emissions report	y
Other reports	n

Air Programs:

NSPS (list subparts)	n
NESHAP (list subparts)	n
CAM	n
Regional Haze (RH)	n
Synthetic Minor (SM)	n
Part 68 Risk Management	n
Title V	n
ACDP (SIP)	n
New Source Review (NSR)	n
Prevention of Significant Deterioration (PSD)	n
Acid Rain	n
Clean Air Mercury Rule (CAMR)	n
TACT	y

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. 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 January 25, 2017. The primary reason for the permit action is to renew the expired permit. The facility submitted a timely renewal application on June 2, 2016.

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 bone dry tons per year (BDT/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 BDT 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. Additionally, the facility has potential emissions of greenhouses gases (GHG) below the de minimis level and no GHG baseline has been established nor PSEL required. 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/year)
Diesel-fired Grinders* 120,000 gal/year	PM/PM ₁₀	0.31	Lb/MMBtu	2.6
	PM _{2.5}	0.26	Lb/MMBtu	2.2
	NO _x	4.41	Lb/MMBtu	37.0
	CO	0.95	Lb/MMBtu	8.0
	SO ₂	0.29	Lb/MMBtu	2.4
	VOC	0.36	Lb/MMBtu	3.0

Process	Pollutant	Emission Factor	Units	Emissions (ton/year)
Storage Piles 220,000 BDT/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 of 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 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. Typically Achievable Control Technology (TACT)

LRAPA 32-008 requires an existing emission unit at a facility to meet TACT if the emission unit meets the following criteria: the emissions of criteria pollutants are greater than five (5) tons per year of particulate or ten (10) tons per year of any gaseous pollutant, the emission unit is not subject to the emissions standards under LRAPA Title 30, Title 32, Title 33, Title 38, Title 39, or Title 46 for the pollutants emitted, and the facility is required to have a permit. The facility emits greater than ten (10) tons per year of VOC and is, therefore, required to meet TACT. While a formal TACT determination has not been conducted, LRAPA has determined that good combustion practices and dust suppression likely meet the TACT requirement for this facility.

7. 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.

8. Production or Throughput Limits

The permit contains a material storage pile limit of 220,000 BDT/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. The net tons the facility records are divided in half to obtain the estimated bone dry tons (as it is estimated that the storage pile materials are 50% moisture by weight).

9. Hazardous Air Pollutants (HAP)

A major source is a facility that has the potential to emit 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. This source is not a major source of hazardous air

pollutants because the facility does not currently emit, or have the potential to emit, HAPs above the major source levels. The following table includes the maximum estimated potential to emit for HAPs:

Hazardous Air Pollutant	Emissions (lbs/year)	Emissions (tons/year)
Acetaldehyde	2,600	1.3
Acrolein	0.2	0.0001
Benzene	8.8	0.0044
Formaldehyde	2.3	0.0012
PAHs	2.3	0.0012
Toluene	3.3	0.0017
Xylene	2.3	0.0012
Total	2,619	1.3

10. 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/year gaseous pollutants and/or 5 tons/year of particulate.

11. Public Notice

The draft permit was on public notice from March 2, 2018 to April 5, 2018. LRAPA received one (1) written comment from an individual. The comment did not result in changes to the permit.

12. Public Comment Summary and LRAPA Response

Comment: One (1) comment from an individual was received during the public comment period. The commenter stated that they are often subjected to extremely strong odors that they attribute to the facility. The commenter stated the odors are particularly noticeable in the mornings, especially in the summer and that, despite being located approximately one (1) mile away from the facility, they must close their windows to avoid the odors.

Response: LRAPA appreciates the comment and acknowledges that odors can emanate from the composting of organic materials at the facility. The complaint response program and comment process are important parts of the overall LRAPA air quality protection effort. It provides additional eyes and ears and noses throughout the community to provide an important feedback loop to LRAPA field staff.

LRAPA reviewed the complaint records for the facility dating back to 2008 and found that five (5) odor complaints were received, but none since 2012.

The best time for LRAPA to respond to complaints are when they occur, so that LRAPA field staff can respond as quickly as possible to investigate, notify the facility, and discuss work practices or other measures that can be taken to minimize the odors. Past odor response investigations with the facility involved discussing the complaint with facility representatives which resulted in the temporary cessation of pile turning to minimize acute odor impacts.

LRAPA will continue to respond to odor complaints and work with the facility to reduce offsite impacts.

Emission Details

Grinder Combustion Emissions

120,000 gallons/yr

Pollutant	Max hp rate total (hp)	Max BTU Input (MMBTU/hr)	Emission Factor (lb/MM BTU)	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 3,625 hp in total. 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 (assume similar to No.2 oil-fired commercial boiler). Maximum potential emissions evaluated assuming 12 hrs/day x 365 days/yr of grinder operation. Annual emissions = hourly emissions x 2300 hours/yr of operation / 2000 lb/ton.

Storage Piles Emissions

Pollutant	Throughput (BDT/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 Kingsford Title V Permit for Storage Pile (engineering estimate based upon EPA's AP42 for aggregate material storage). 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

Hazardous Air Pollutants (HAPs)

Pollutant	Pounds/yr	Ton/yr
Acetaldehyde	2,600	1.3
Acrolein	0.2	0.0001
Benzene	8.8	0.0044
Formaldehyde	2.3	0.0012
PAHs	2.3	0.0012
Toluene	3.3	0.0017
Xylenes	2.3	0.0012
TOTAL	2,619	1.3

HAP emission estimates based upon AP-42 for diesel combustion

Throughputs include a maximum of 70,233 gallons/year of Diesel #2 through >600 HP engines, and Throughputs include a maximum of 9,575 gallons/year of Diesel #2 through <600 HP engines.