

Lane Regional Air Protection Agency  
Standard - Air Contaminant Discharge Permit

**REVIEW REPORT**

**Forrest Paint Co.**

**Permit No. 202805**

1. **General Background Information**

Forrest Paint Co. manufactures solvent-based paint, latex coatings, aerosols, powder coatings, and related products at 1011 and 990 McKinley St in Eugene. Solvent-based paint production takes up over half (53%) of the total production. Aerosol paint, which contains a large proportion of solvent, is a specialty product produced at the facility. Related products include fire starter, Restorex, and glass cleaner. Low-VOC coatings produced at the facility include ultraviolet (UV) coatings, water reducible paint, high solids paint, and water-based paint. In addition, the facility includes a powder coatings manufacturing process. The facility operates as much as 4,160 hours per year (16 hours/day, 5 days/week, and 52 weeks/year).

2. **Reasons for Permit Action**

The facility operates a process listed in Table 1, Part B.68, of LRAPA Rule 37, and is, therefore, required to obtain a permit. Because the facility has the potential to emit above the Hazardous Air Pollutant (HAP) major source thresholds, the facility is required by Table 1, Part C.6 of LRAPA Rule 37 to obtain a Standard ACDP. The primary reason for this action is to issue the renewed permit as a Standard ACDP.

3. **Enforcement History**

Notice of Non-Compliance No. 2886 was issued September 14, 2006 for exceeding 9 tons per year single Hazardous Air Pollutant (HAP) emission limit for the 12-month periods of May 2005 to April 2006, June 2005 to May 2006, and July 2005 to June 2006. Toluene was the single HAP for which the exceedance occurred. Notice of Violation No. 06-2886 was issued to the facility on January 18, 2007 including a total civil penalty in the amount of \$6,000. On February 8, 2007 the facility paid the full amount of the civil penalty.

Notice of Non-Compliance No. 1079 was issued June 22, 1995. The permit violation was for installing and operating a new emissions unit (powder coating) and baghouse without first notifying LRAPA in writing and obtaining approval.

4. **Performance Test Results**

The facility has had numerous testing performed since the last renewal was issued. Those results are on file at LRAPA. Testing included at least one capture efficiency test and several biofilter destruction efficiency tests.

5. **Plant Site Emission Limits**

**Baseline Emissions Rate (BER)**

The baseline emission rate for VOC, revised in this permit issuance, is reduced from the 1978 levels of 60 tons because the facility installed a control device (Biofilter) to avoid major source and NESHAP applicability (Subpart FFFF-Miscellaneous Organic Chemical Production and Processes), and hence the reductions cannot be banked for future use. The revised VOC baseline emission rate is based on the current potential-to-permit for the facility operating under

normal downtimes and control efficiencies. The analysis of the current VOC potential-to-emit can be found in the attached detail sheets. PM/PM<sub>10</sub> baseline emission levels remain unchanged.

Pollutant	1978 Baseline Emission Rate (tons/year)
CO	0.0
NO <sub>x</sub>	0.0
SO <sub>2</sub>	0.0
PM/PM <sub>10</sub>	3.3
VOC	17.1

**Plant Site Emission Limits (PSELs)**

In accordance with LRAPA Title 42 the PSELs in the annual VOC PSELs for the facility have been set equal to the BER for VOC plus 39 tons (one (1) ton below the 40-ton Significant Emission Rate for VOC). The Generic PSEL is used for all other pollutants since the facility has the potential to emit less than the Significant Emission Rate for those pollutants.

Emissions from the boiler are classified as "Categorically Insignificant" because the natural gas-fired boiler is rated at less than 2.0 million BTU per hour (0.7 million BTU per hour). Categorically Insignificant activities are not considered regulated activities according to the definition of the term in LRAPA Title 12.

The following annual PSELs will be in the permit (all values are in tons per year).

**Annual PSEL  
 (Rolling 12-month)  
 (tons)**

PM	PM <sub>10</sub>	VOC	Single HAP	Total HAPs
<b>24</b>	<b>14</b>	<b>56</b>	<b>9</b>	<b>24</b>

The attachment to this report contains actual emissions estimations for calendar year 2009.

6. Other Emission Limitations

LRAPA's process weight rule specifies limits on the emissions of particulate matter for specific processes as a function of the amount of material processed [LRAPA 32-045(A)]. This rule is intended for large sources of PM such as wood products facilities. Since PM emissions from the facility are from the handling of pigments and fillers and are relatively small, the facility is expected to be in compliance with the process weight rule.

The permit includes general visible emissions limitations for the facility as well as general grain-loading limitations for the facility.

7. Hazardous Air Pollutants (HAPs)

The facility is required to calculate emissions of HAPs on a 12-month rolling basis. Actual emissions of total HAPs are expected to be approximately ten (10) tons per year.

As an area source of HAPs the facility is subject to the National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Paints and Allied Products Manufacturing (40 CFR Part 63 Subpart CCCCCC). The permit contains the requirements for Subpart CCCCCC.

8. 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. This facility emits more than ten (10) tons per year of gaseous pollutants and is, therefore, required to meet TACT. LRAPA has determined that the Biofilter control device meets TACT for this facility.

9. New Source Review and Prevention of Significant Deterioration

Because the proposed PSEs 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 for PM<sub>10</sub> nor the Prevention of Significant Deterioration (PSD) requirements for SO<sub>x</sub>, NO<sub>x</sub>, CO, and VOC.

10. New Source Performance Standards (NSPSs)

There are no NSPSs which are currently applicable to this facility.

11. General Recordkeeping Requirements

To ensure compliance with the 12-month rolling annual PSEs, and other permit requirements, the facility is required to keep records of the following information for a period of two (2) years.

<u>Parameter</u>	<u>Minimum Recording Frequency</u>
Estimation of total VOC, total HAPs, and individual HAPs rolling 12-month emissions (tons)	Monthly

The facility is also required to report any entries in the upset log as required per Condition G15.

12. General Reporting Requirements

By February 15<sup>th</sup> each year, the facility is required to submit annual reports. The reports are required to contain the rolling 12-month emission estimations for total VOCs, total HAPs, and individual HAP totals. The Annual Compliance Certification for the Subpart CCCCCC NESHAP is also due on February 15<sup>th</sup> each year.

13. PUBLIC NOTICE

The draft permit was on public notice from May 26, 2010 to June 30, 2010. No written comments were submitted during the 35-day comment period.

MH/cmw  
7/12/10

FORREST PAINT COMPANY ANNUAL REPORT  
12 Month Rolling Total  
(lbs)

DESCRIPTION	CAS #	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Total (lbs)
<b>EMISSIONS</b>														
VOC (Includes HAPs)		5,846	4,984	6,910	5,588	7,647	5,368	3,784	4,580	3,624	2,391	4,371	6,113	61,207
2-BUTOXYETHANOL	111-76-2	98	90	53	69	33	70	77	125	56	48	79	75	873
2-PROPOXYETHANOL	2807-90-9	0	8	0	0	0	3	4	0	2	0	0	0	17
GLYCOL ETHER DB	112-94-5	2	3	2	1	2	2	3	3	3	2	3	1	27
GLYCOL ETHER-DEGHE	112-59-4	0	0	0	0	0	0	0	0	0	0	0	0	0
METHANOL	67-56-1	0	0	0	0	0	0	0	0	0	0	2	0	4
METHYL ISOBUTYL KETONE	106-10-1	60	54	23	86	15	56	47	65	39	32	57	30	564
METHYL METHACRYLATE	80-62-6	1	0	1	0	1	0	1	0	1	0	1	0	6
HEXAMETHYLENE DISOCYANATE (HDI)	822-06-0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOLUENE DIISOCYANATE (TDI)	584-84-9	0	0	0	0	0	0	0	0	0	0	0	0	0
2-PHENOXETHANOL	122-99-6	0	0	0	0	0	0	0	0	0	0	0	0	2
GLYCOL ETHER DM	111-77-3	0	0	1	1	1	0	1	0	0	0	1	0	6
GLYCOL ETHER-PROPYLENE	34590-94-8	2	1	3	1	1	0	0	0	0	1	2	1	15
2-(2-ETHYLHEXYLOXY) ETHANOL	1559-35-9	0	0	0	0	0	0	0	0	0	0	0	0	0
2-(2-PHENOXETHOXY) ETHANOL	104-68-7	0	0	0	0	0	0	0	0	0	0	0	0	0
FORMALDEHYDE	50-00-0	0	0	0	0	0	0	0	0	0	0	0	0	2
CUMENE	98-82-8	1	1	1	1	1	1	1	1	1	1	1	1	9
BENZENE	71-43-2	0	0	0	0	0	0	0	0	0	0	0	0	3
TOLUENE	108-88-3	933	470	1,127	503	1,252	733	511	1,248	907	618	580	1,008	9,889
XYLENE	1330-20-7	1,119	751	1,024	576	1,078	772	619	950	729	517	1,186	856	10,179
ETHYL BENZENE	100-41-4	186	130	165	110	163	116	90	137	109	78	178	136	1,595
STYRENE MONOMER	100-42-5	1	1	0	0	1	0	0	0	0	0	1	0	5
GLYCOL ETHER EM	111-15-9	0	0	0	0	0	0	0	0	0	0	0	0	0
POLYETHYLENE GLYCOL	25322-68-3	0	0	0	0	0	0	0	0	0	0	0	0	2
GLYCOL ETHER PM	107-98-2	9	7	4	4	2	4	11	9	10	3	12	7	82
ETHYLENE GLYCOL	107-21-1	3	1	1	1	4	1	0	1	2	3	5	2	26
CARBON TETRACHLORIDE	56-23-5	0	0	0	0	0	0	0	0	0	0	0	0	1
VINYL ACETATE	108-05-4	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL HAPs</b>		<b>2,417</b>	<b>1,518</b>	<b>2,408</b>	<b>1,354</b>	<b>2,555</b>	<b>1,759</b>	<b>1,365</b>	<b>2,542</b>	<b>1,858</b>	<b>1,304</b>	<b>2,109</b>	<b>2,120</b>	<b>23,311</b>
<b>Other Information:</b>														
LPA RM USAGE (LBS)		694,053	589,522	682,029	591,049	644,911	515,490	460,546	514,240	440,695	354,554	657,561	644,899	6,799,547
PAINT PRODUCTION (HRS)		210	168	184	144	168	168	160	168	176	168	176	176	2,066
BIOFILTER OPERATION (HRS)		210	168	176	112	168	168	160	160	170	168	176	176	2,012
NUMBER OF WORK DAYS		21	21	23	18	21	21	20	21	22	21	22	22	253
NATURAL GAS USED (FT <sup>3</sup> )		205,000	177,300	196,700	235,600	379,800	229,900	205,100	118,800	244,300	236,200	177,100	98,100	2,504,900

Jul 2009

LRARM Usage	USAGE (LBS)	VOC (lbs)
	S 103 2-Butoxyethanol	
	S 105 2-Propoxyethanol	
	S 114 Glycol Ether DB	
	S 130 Glycol Ether DEGHE	
	SA 41 Methanol	
	SK 83 Methyl Isobutyl Ketone	
	Y101 Methyl Methacrylate	
	Y12 Hexamethylene Diisocyanate	
	Y13 Toluene Diisocyanate	
	Y140 2-phenoxyethanol	
	Y145 Glycol Ether DM	
	Y154 Dipropylene Glycol Methyl Ether	
	Y169 2-(2-Ethylhexyloxy) Ethanol	
	Y174 2-(2-phenoxyethoxy) Ethanol	
	Y18 Formaldehyde	
	Y180 Cumene	
	Y186 Benzene	
	Y187 Toluene	
	Y241 Xylene	
	Y248 Ethyl benzene	
	Y26 Styrene Monomer	
	Y271 Glycol Ether EM	
	Y404 Polyethylene Glycol	
	Y46 Glycol Ether PM	
	Y501 Ethylene Glycol	
	Y69 Carbon tetrachloride	
	Y73 Vinyl Acetate	

Air Emisss. Factors(3% & 2.5%)
A) Stack Emisss. (74.3%)
B) Fugitive Emisss. (25.7%)

9,351	115	0	2	0	0	46	0	0	0	1	2	0	0	1	0	1	0	1,635	1,182	286	0	0	2	10	3	0	0
6,948	85	0	1	0	0	34	0	0	0	1	2	0	0	1	0	1	0	1,215	878	212	0	0	2	7	2	0	0
2,403	29	0	1	0	0	12	0	0	0	0	1	0	0	0	0	0	0	420	304	73	0	0	1	3	1	0	0

% OPERATION BIOFIL TER (FROM A)
C) Normal Operation (100%)
D) Downtime (0%)

6,948	85	0	1	0	0	34	0	0	0	1	2	0	0	1	0	1	0	1,215	878	212	0	0	2	7	2	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BIOFIL TER (FROM C)
E) Controlled (46.6%)
F) Pass thru (53.4%)
EMITTED TO ATMOSPHERE (B + D + F)

3,238	40	0	1	0	0	16	0	0	0	0	1	0	0	0	0	0	0	627	326	150	0	0	1	3	1	0	0
3,710	45	0	1	0	0	18	0	0	0	0	1	0	0	0	0	0	0	588	553	62	0	0	1	4	1	0	0
6,113	75	0	1	0	0	30	0	0	0	0	1	0	0	0	0	0	0	1,408	856	136	0	0	1	7	2	0	0