

Lane Regional Air Protection Agency
Simple Air Contaminant Discharge Permit (Simple-ACDP)

REVIEW REPORT

Willamette Valley Company

586 McKinley Street
Eugene, Oregon 97402

Permit No. 208935

General Background Information

1. Lane Regional Air Protection Agency (LRAPA) has reviewed the permit renewal application received on December 23, 2009. The contents of the application and subsequent correspondence with the facility were the basis for the calculations contained within this review report.
2. Willamette Valley Co. operates a wood filler, putty, and coating manufacturing operation at 586 McKinley Street in Eugene. The facility will control PM (particulate matter)/PM₁₀ emissions by using silo filters on dry raw material storage silos by closing mixer-area doors, as necessary, and using a vacuum system for material recovery in the dry mixing areas. Total annual production of finished product for the facility is approximately 6300 tons of paints, fillers, and coatings. The facility was not installed and operated prior to 1977; therefore, Baseline Emissions were not set in the permit. The facility operates 2,210 hours per year (8.5 hours per day, 5 days per week, 52 weeks per year).

Emission Units

3.
 - #1 Dust Collector 1
 - #2 Zone 1 Mixing Vat
 - #3 Zone 1 PMDI Pump
 - #4 Zone 2 Mixing Vat
 - #5 Zone 3 Mixing Vat
 - #6 Zone 4 Tank Farm
 - #7 Zone 6 Mixing Vat
 - #8 Zone 8 Mixing Vat

Reasons for Permit Issuance

4. This facility is listed in LRAPA Rules and Regulations, Title 34, Table A, Part II and, therefore, is required to have an Air Contaminant Discharge Permit (ACDP). This is an existing facility applying for a renewed permit. The primary reason for this permit action is to renew the expired permit.

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

5. This source is not subject to PSD for the affected criteria pollutants. The PSEL of 39 tons VOC per year is below the 40 ton per year significant emission rate (SER) as established in LRAPA Title 38. The maximum estimated annual emissions of VOC that occurred between 2005 and 2009 were 1.35 tons per year (ending in September 2009) – less than the 40 ton/year SER in LRAPA Title 38.

Enforcement Actions

6. There have been no enforcement actions against the facility.

Source Tests

- No source testing has been performed at this facility. Material Safety Data Sheets (MSDS), Certified Product Data Sheet, and material usage are used to determine the facility's VOC and HAP emissions.

Hazardous Air Pollutants (HAPs)

- Projected HAP totals for 2010 are 0.12 tons/year for total HAPs and 0.07 tons/year maximum single HAP (Glycol Ethers). These values likely represent maximum actual historical emissions. As an "area source" of HAPs the facility is not subject to any major source National Standard for Hazardous Air Pollutants (NESHAP).

Plant Site Emission Limits (PSELS) Information

- PSELS for the source restrict potential emissions from the facility to 24 tons per year of Particulate Matter (PM), 14 tons per year of Particulate Matter less than 10 micrometers (PM₁₀), 9 tons per year of Particulate Matter less than 2.5 micrometers (PM_{2.5}), 39 tons per year of Volatile Organic Compounds (VOCs), 9 tons per year for any single HAP and 24 tons per year for total HAPs.
- Because this permit was issued after September 1, 2010, PM_{2.5} PSELS were added after the public comment period had ended in accordance with the PM_{2.5} temporary rules adopted August 23, 2010.
- The permit does not contain PSEL monitoring for PM, PM₁₀, and PM_{2.5} because actual emissions are expected to be less than 1 ton per year.

Baseline Emission Rate (BER)

- The BER has been set at zero (0) tons per year for all pollutants since this source was not in operation during the 1978 baseline year.

Significant Emission Rate (SER)

- The PSEL increase over the baseline emissions is less than the SER, as defined in LRAPA Title 38, for PM, PM₁₀, CO, NO_x, VOC, and SO₂ as shown below. No further air quality analysis is required for these pollutants.

Pollutant	Baseline Emissions (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	Change in PSEL (tons/yr)	Increase From Baseline (tons/yr)	SER (tons/yr)
PM	0	NA	24	24	24	25
PM ₁₀	0	NA	14	14	14	15
PM ₁₀	0	NA	9	9	9	10
CO	0	NA	0	0	0	100
NO _x	0	NA	0	0	0	40
VOC	0	NA	39	39	39	40
SO _x	0	NA	0	0	0	40

Performance Standards and Limitations

14. The facility is subject to the visible emissions standards in LRAPA 32-010, the particulate grain-loading standard in LRAPA 32-015, the highest and best requirement of LRAPA 32-005. Operation of a well-maintained baghouse should assure compliance with the grain loading and visible emissions limits. The permittee is also required to conduct inspections and maintenance of the equipment to assure compliance with the highest and best requirement.
15. The facility is subject to the PSEL rules in LRAPA 42-0040 and 42-0060. To assure compliance with the PSEL, detailed records are required to be maintained which demonstrate that the emissions of VOC and HAPs are below the limits.

Monitoring, Recordkeeping and Reporting

16. The facility is required to record all inspections and maintenance of air pollution control equipment. The facility is also required to keep records of the amount and types of VOC and HAP containing materials used, the VOC and HAP compositions of each material, and calculations of VOC and HAP emissions. Annual reports are required to document compliance with the HAP and VOC limits contained in the permit.
17. In addition and/or including the above requirements, the facility is required to implement and maintain an LRAPA-approved Inspection and Maintenance (I&M) plan. The plan will be required to specify items such as: proper baghouse inspections and filter replacements, maintaining closed containers when not in use, proper minimization and clean-up of any spillage, and inspection and maintenance.

Public Notice

16. The draft permit was on public notice from <date> to <date>. No written comments were submitted during the 30-day comment period.

MTL/cmw
09/03/10

Willamette Valley Company Emission Detail Sheet						
Material Description	Usage¹ (lbs/yr)	VOC (lb/lb)	HAP (lb/lb)	Emission		
				Factor²	VOC (tons/yr)	HAP (tons/yr)
2-ethyl-1,3-hexanediol	76393	1.00	0.00	0.02	0.76	0.00
Glycol Ether	37050	1.00	0.00	0.02	0.37	0.00
Propylene Glycol	11748	1.00	0.00	0.02	0.12	0.00
Naptha	9942	1.00	0.00	0.02	0.10	0.00
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	5807	1.00	0.00	0.02	0.06	0.00
Glycol Ether N230	3491	1.00	1.00	0.02	0.03	0.03
Methanol	3206	1.00	1.00	0.02	0.03	0.03
Ethylene Glycol	1358	1.00	1.00	0.02	0.01	0.01
4,4'-diphenylmethane diisocyanate ³	1393849	1.00	1.00	0.0015	1.05	1.05
Total					2.54	1.13
¹ Usage data from October 2008 to September 2009						
² Emission factor for all compounds except MDI based on AP-42 6.4 emission factor of 0.015 lbs/lb of product raw materials containing VOC/HAP used in coating manufacturing.						
³ MDI emission factor based on conservative engineering estimate that accounts for MDI's high reactivity, low vapor pressure (1×10^{-6} mm Hg at 20° C), and calculation done using MDI Emissions Estimator (Ver. 4.0.1).						