

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

REVIEW REPORT

NVWS, LLC DBA Western Structures
1381 Bailey Hill Road
Eugene, OR 97402

Permit No. 208917

1. General Background Information

Western Structures operates a laminated beam production operation in Eugene, Oregon. The operation consists of a beam laminating area, and a baghouse which controls emissions from a planer. The source operates approximately 2,600 hours per year (10 hours per day, 5 days per week, and 52 weeks per year).

2. Reasons for Permit Issuance

This source is listed in LRAPA Regulations Title 37, Table 1, Part B.45 and, therefore, is required to have an Air Contaminant Discharge Permit (ACDP). The facility's permit expired June 30, 2011. The primary reason for the permit action is to renew the expired permit. The permit is classified in the "high" fee category as per Section 37-0064-3.B. The "high" fee category is applied due to the facility's choice as it relates to projected actual VOC emissions greater than 10 tons/year.

3. Performance Testing

No performance testing has been completed by this source. At this time performance testing is not necessary. The use of material safety data sheets and other emission factors appear reasonable for use in estimating emissions from the facility.

4. Enforcement Actions

The facility was issued a Notice of Non-Compliance (NON) No. 2264 on August 21, 2001, for exceeding the permit limit of a total glue usage of 18,000 gallons per year.

The facility also was issued NON No. 1022 on January 6th, 1994, when visible emissions from a formerly-operated "wood waste incinerator" exceeded 20% opacity.

NON No. 91-08 was issued April 12, 1991, for operating a source of air contaminants without an ACDP.

5. Plant Site Emission Limits (PSELs)

The regulated pollutants emitted from processes at this facility are volatile organic compounds (VOCs), particulate matter (PM), particulate matter less than 10 microns in diameter (PM₁₀) and particulate matter less than 2.5 microns in diameter (PM_{2.5}).

Baseline Emissions

The source did not exist during the baseline period (1978). Baseline emissions are set at zero (0)

tons per year for PM, PM₁₀, SO₂, NO_x, and VOC. Also, because the facility has chosen to obtain a Simple ACDP, Titles 37 and 42 specify that the baseline emissions are set at zero (0) tons per year for all pollutants.

Plant Site Emission Limits (PSELs)

Projected VOC emissions were calculated based on mass balances using emission factors as reported by resin manufacturers. Should the source wish to increase production, the source will have to apply for a permit modification, including a new assessment of fees.

In accordance with Section 42-0040 the PM, PM₁₀, PM_{2.5} and VOC PSELs are set at the Generic Annual PSEL.

Annual
(tons)

Source	PM	PM ₁₀	PM _{2.5}	VOC
Totals	24	14	9	39

6. **PSEL Monitoring:** The facility is required to determine compliance with the VOC PSELs by calculating a new monthly VOC emission total and comparing the 12-month rolling VOC emission value with the annual VOC PSEL. LRAPA has determined that, in lieu of emission calculations, compliance with the PM, PM₁₀, and PM_{2.5} PSELs is assured by recordkeeping of the planer shavings produced.

7. PM Emission Limitation and Visible Emission

LRAPA's process weight rule limits emissions of PM for specific processes as a function of the amount of material processed. [LRAPA 32-045(A)] Since the source is expected to emit minimal amounts of PM, the source is expected to be in compliance with the process weight rule.

The permit contains limits on grain loading (particulate concentration standard) and visible emissions (opacity).

8. Pollution Controls and Typically Achievable Control Technology (TACT)

LRAPA Title 32-008 requires an existing emission unit at a source 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 source is required to have a permit. LRAPA has determined that gaseous control devices for this type of facility are not typically used.

9. New Source Review (NSR)

Because the proposed PSELs for all regulated pollutants are below the Significant Emission Rates (SERs) in LRAPA Title 38, the source is not subject to LRAPA's New Source Review (NSR) requirements for PM₁₀ nor the Prevention of Significant Deterioration (PSD) requirements for SO_x, NO_x, CO, and VOC.

10. New Source Performance Standards (NSPSs)

According to LRAPA Title 46 (Section 46-714), affected facilities which are not located at a major source are not subject to NSPS. Since this source is not a major source, and since it does not operate any affected facilities it is not subject to NSPS.

11. Hazardous Air Pollutants (HAPs)

The facility is a minor source of HAPs and does not, under current and past operating levels, have the potential to emit above major source thresholds for single and/or combination of total HAPs. For calendar year 2010 the facility estimated to have emitted approximately 100 pounds per year total HAPs. For calendar year 2007 the facility estimated actual total HAP emissions of approximately 1,000 pounds per year.

12. Monitoring and Recordkeeping Requirements

The permittee is required to maintain records of the following information:

- Material name and quantity of material used during the month (pounds),
- VOC and HAP content in pounds per pound of material, and
- Type of HAP used.
- Amount of planar shavings produced each month in terms of bone dry tons (BDT)

13. An annual summary to document compliance with the VOC PSEs is required to be submitted by March 15th each year. The summary is required to contain VOC emissions corresponding to each 12-month rolling period calculated according to Permit Condition 4. The summary will also document any new materials used at the facility and provide updated or new MSDS or emission factor as necessary.

14. The annual summary is to include the information as required per Condition G15.

15. Public Notice

The draft permit was on public notice from July 25, 2011 to August 30, 2011. No written comments were submitted during the 35-day comment period.

Western Structures Particulate Emissions

PM/PM10 Emission Estin	Annual maximum Throughput (units)	Conversion Factor (units/BDT)	Baghouse Efficiency (percent)	Annual PM Emissions (tons)	Hourly PM Emissions (lbs)
Source					
Chip Bin (dry shavings)	1000	0.7	99.8	2.9	2.2

Annual maximum throughput is projected maximum chip bin shavings throughput (actual throughput is 550 units/yr)

Conversion factor is from the DEQ Permitting and Inspection Manual.

Baghouse efficiency is rating from baghouse manufacturer for 10 micron size particles.

Hourly emissions = annual emissions x 2000 lb/ton / 2600 hours of operation (10 hrs/day, 5 days/wk, 52 wks/yr)

HAPS and VOC products for LRAPA Permit	2007 Pound consumption	Emission Factor	total pounds year 2007	projected 5% increase year 2008	projected 5% increase year 2009	projected 5% increase year 2010	projected 5% increase year 2011	projected 5% increase 2012
Hexion face glue LT 5210 J + FM 6310-L	348510	0.00131	456					
Phenol		0.00251	875					
Formaldehyde		0.04563	15902					
Ethanol								
Hexion Finger Joint glue MF-2L + 318-LY	26,218	0.00006	1,573					
Formaldehyde		0.00396	104					
Methanol								
Total HAPS and VOC emissions pounds			17338.573	18204	19,115	20070	21074	22128

5 year projection will be less than 20 tons annual emission

LT-5310 emission factors from Nick Daisey (chemist) for Borden Chemical phone call 8-29-01
 MF-2L emission factors from Dale Creel (Technical Service) on phone call 9-7-01.