

Lane Regional Air Protection Agency
Air Contaminant Discharge Permit

REVIEW REPORT

Tom Smith Fiberglass, Inc.

Permit No. 207524

1. General Background Information

Tom Smith Fiberglass Inc. operates a fiberglass manufacturing operation in Goshen. The operation consists of a closed molding system, a gel coat system, and an open molding system. The facility operates approximately 2,080 hours per year (8 hours per day, 5 days per week, and 52 weeks per year).

2. Reasons for Permit Issuance

This facility is listed in LRAPA Regulations Title 37, Table 1, Part B, and, therefore, is required to have an Air Contaminant Discharge Permit (ACDP). This is a renewal of an existing ACDP which expired December 19, 2009.

3. Performance Testing

No performance testing has been completed by this facility. At this time performance testing is not required.

4. Enforcement Actions

There have been no enforcement actions against the facility.

5. Plant Site Emission Limits (PSELs)

The regulated pollutants emitted from processes at this facility are volatile organic compounds (VOCs). Tom Smith Fiberglass Inc. is a minor source of hazardous air pollutants (HAPs). Actual HAP emissions, primarily styrene, from this facility are below the 50% threshold of the federal major source threshold. The facility is not presently subject to an emission standard for its HAP emissions.

Baseline Emissions

The facility 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.

Plant Site Emission Limits (PSELs)

Projected VOC emissions were calculated based on AP-42 Section 4.4 factors for closed-molding composites and Unified Emission Factors for open molding composites. Should the facility wish to increase production, it will have to apply for a permit modification, which will include a new assessment of fees.

The yearly PSEL for VOC was set in the previous permit at 5 tons per year, which in turn limits HAP emissions from the facility to 50% of the major source threshold of 10 tons per year for any single HAP. (See the attachment to this review report for emission calculations.) The VOC PSEL is set at the generic level in accordance with LRAPA Title 42. The production limit remains to ensure that emissions are maintained at the level established previously.

Annual (rolling 12-month) PSELs
(tons)

Source	PM	PM ₁₀	VOC
Fiberglass Operation	24	14	39

Total VOC (styrene) emissions in 2009 were estimated to be approximately 2 tons/year.

The PM and PM₁₀ emissions from sawing and/or grinding of fiberglass parts are controlled by a baghouse filter system. Emissions are expected to be very minimal. To ensure compliance with the PSEL the facility is required to record the amount of material collected by the baghouse (lbs/month).

6. Production Limits

To ensure compliance with the VOC PSEL, the facility is required to keep usage records for each 12-month rolling period of all VOC-containing materials utilized in the process. Since the bulk of VOC emissions are also HAPs (mainly styrene), a yearly usage limit of laminating resin and gel coat provides a practical avenue for demonstrating compliance with both the HAPS and the PSEL. The yearly gallon usage limits for the laminating resin and gel coat were set by multiplying 1997 usages by 1.3. Emission estimates from multiplying total 1997 resin gallon usages by 1.3 results in total styrene emissions of 4.8 tons per year.

Two (2) methods of compliance verification are available to the facility:

- 1) Compliance with the VOC PSEL may be shown by maintaining the records required per Condition 8 and using these records in combination with the best available emission factors for the process to calculate actual emissions for each 12-month rolling period, or

- 2) The facility may monitor compliance by monthly calculations showing that the total material usage during each 12-month rolling period did not exceed a maximum of 82,342 pounds for laminating resin and 16,511 pounds of gel coat.

In 2004 the facility reported using 32,700 pounds of resin and 7,574 pounds of gel coat as per the inspection report from the inspector's January 5, 2005 facility site visit (Inspection ID 01074).

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 facility is expected to emit minimal amounts of PM, the facility is expected to be in compliance with the process weight rule.

The permit contains limits on grain loading and visible emissions.

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

LRAPA 32-008 requires an existing facility to meet TACT if the source is required to have a permit and the emissions of PM are greater than five (5) tons per year. This facility does not satisfy these criteria and is, therefore, not required to meet TACT.

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

This requirement applies to new major sources or major modifications. According to the definition found in LRAPA Title 38, to be major for applicability of PSD/NSR a source must have emissions at or above the Significant Emission Rates (SERs). Because the projected amount of VOCs emitted by this facility is five (5) tons per year, which is below the VOC SER of 40 tons of VOC per year, the facility is not major and these requirements do not apply.

10. New Source Performance Standards (NSPS)

The facility does not operate any affected facilities, as defined in LRAPA Title 46, that are subject to NSPS requirements.

11. Hazardous Air Pollutants (HAPs)

The facility is a minor source of HAPs and the facility is not subject to any area source standard for HAPs. Total HAP emissions in 2009 were estimated to be 1.8 tons/year of styrene.

12. Monitoring, Recordkeeping and Reporting Requirements

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

- **Monthly usage of each VOC/HAP-containing material used in the process, including the name and volume used.**
- Current material supplier information showing the material name, density in pounds per gallon, VOC/HAP content expressed as % by weight. MSD sheets can be used to satisfy this requirement as long as these are appropriately updated and provide the information required.
- The facility is required maintain a log of complaints received and subsequent remedial action taken, to check compliance with Condition G10.
- The facility is required to maintain a record of the weight of material collected by the baghouse each month (lbs/month).
- By March 15th each year the facility is required to submit 12 month rolling usage of each VOC/HAP-containing material used in the process, including the name and volume.

13. Public Notice

The draft permit was on public notice from February 19, 2010 to March 25, 2010. No written comments were submitted during the 35-day comment period.

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