

United States Environmental Protection Agency
Region 10, Office of Air and Waste
OAW-150
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101

Permit Number: R10NT500101
Issued: September 28, 2016
AFS Plant I.D. Number: 53-077-00076

Non - Title V Air Quality Operating Permit Revision No. 1

This permit is issued in accordance with the provisions of 40 CFR 49.139 and applicable rules and regulations, to:

McClarín Plastics, LLC (formerly, Amtech Corporation)

for operations in accordance with the conditions listed in this permit, at the following location:

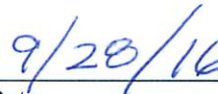
Yakama Reservation
180 East Jones Road
Wapato Industrial Park
Wapato, WA 98951

Facility Contact: W. Scott Bayha
Director of Manufacturing and Quality
McClarín Plastics, LLC
180 East Jones Road
Wapato, WA 98951
Phone: 509-877-2421
E-mail: wsbayha@amtechcorp.com

A technical support document that describes the bases for conditions contained in this permit is also available.



Donald A. Dossett, P.E.
Office of Air and Waste
U.S. EPA, Region 10



Date

1. General Conditions

- 1.1. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Air Act.
- 1.2. Compliance with the terms of this permit does not relieve or exempt the permittee from compliance with other applicable Clean Air Act requirements or other applicable federal requirements, tribal, state or local laws or regulations.
- 1.3. For the purpose of establishing whether or not a person has violated or is in violation with any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
- 1.4. The Regional Administrator may reopen an existing, currently-in-effect permit for cause on its own initiative, such as if it contains a material mistake or fails to assure compliance with applicable requirements. However, except for those permit reopenings that do not increase the emissions limitations in the permit, such as permit reopenings that correct typographical, calculation and other errors, all other permit reopenings shall be carried out after the opportunity of public notice and comment and in accordance with one or more of the public participation requirements under 40 CFR 49.139.
- 1.5. At such time as this source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in the conditions of this permit, then the requirements of 40 CFR 52.21(j) through (s) shall apply to the source or modification as though construction had not yet commenced on the source or modification.

2. Emission Limits and Work Practice Requirements

- 2.1. Emissions of volatile organic compounds (VOC) from the facility shall not exceed 249 tons per year, determined monthly on a rolling, 12-month basis, which shall be determined by calculating the emissions (tons) for each month and adding the emissions (tons) for the previous eleven months. Monthly VOC emissions (tons) shall be determined using the methods required in Conditions 2.1.1 through 2.1.9. The permittee may use any of the alternative calculation methods in Condition 2.1.10.
 - 2.1.1. VOC emissions from open molding, centrifugal casting, and manual resin application shall be calculated using the following equation:

$$Ems = \left(\sum_{i,j=1,1}^{m,n} EF_{i,j} * M_j \right) * \frac{1}{2000}$$

Where

Ems is emissions of organic monomer species in tons;

EF_{i,j} is the emission factor for total organic monomers emitted during process *i* as a result of using material *j*, in pounds of emissions per ton of material applied (from 40 CFR part 63, subpart WWWW, Table 1, unless another emission factor has been approved, e.g. resins that meet military specifications)¹;

M_j is the mass of material *j* used, in tons; and

¹ The emission factors in Table 1 of 40 CFR part 63, subpart WWWW were developed to determine emissions of organic hazardous air pollutants (HAP). To determine VOC emissions, the permittee shall include all organic monomer species included on the Safety Data Sheet for the liquid resin, regardless of whether or not they are HAPs.

$1/2000$ is a factor to convert from pounds of emissions to tons.

- 2.1.2. VOC emissions from closed molding shall be calculated using the following equation:

$$Ems = 0.01 * \left(\sum_{i=1}^n S_i * M_i \right) * \frac{1}{2000}$$

Where

Ems is emissions of VOC in tons;

0.01 is a factor that estimates the quantity of styrene that escapes the closed mold;

S_i is the mass fraction of styrene in material i ;

M_i is the mass of material i used, in pounds; and

$1/2000$ is a factor to convert from pounds of emissions to tons.

- 2.1.3. VOC emissions from painting operations shall be calculated using the following equation:

$$Ems = \left(\sum_{i=1}^n F_i * SG_i * 8.34 * Q_i \right) \frac{1}{2000}$$

Where

Ems is emissions of VOC in tons;

F_i is the mass fraction of VOC of coating i ;

SG_i is the specific gravity of coating i ;

8.34 is the density of water in pounds per U.S. gallon;

Q_i is the quantity of coating i applied, in U.S. gallons; and

$1/2000$ is a factor to convert from pounds of emissions to tons.

- 2.1.4. VOC emissions from the use of VOC-containing cleaners, thinners, solvents, and additives shall be calculated using the following equation:

$$Ems = \left(\sum_{i=1}^n F_i * SG_i * 8.34 * Q_i \right) \frac{1}{2000}$$

Where

Ems is emissions of VOC in tons;

F_i is the mass fraction of VOC in cleaner, thinner, or solvent i ;

SG_i is the specific gravity of cleaner, thinner, or solvent i ;

8.34 is the density of water in pounds per U.S. gallon;

Q_i is the quantity of cleaner, thinner, or solvent i used, in U.S. gallons; and

$1/2000$ is a factor to convert from pounds of emissions to tons.

- 2.1.5. VOC emissions from application of polyurethane adhesives shall be calculated by either:

- 2.1.5.1. Using the most recent version of the *MDI/PMDI Calculator* published by the American Chemistry Council and adding to the Calculator's output estimate of

MDI emissions, in tons, the sum of any inert VOC ingredients (e.g. propellants and thinners) calculated using the mass balance equation in Condition 2.1.4.; Or

- 2.1.5.2. If a polyurethane adhesive system's Safety Data Sheet (SDS) includes information about the material's VOC content as applied, the permittee may calculate VOC emissions from application of that adhesive using the following equation:

$$Ems = VOC * Q * \frac{1}{2000}$$

Where

Ems is emissions of VOC in tons;

VOC is the material's VOC content in pounds per U.S. gallon;

Q is the quantity of material applied in U.S. gallons; and

1/2000 is a factor to convert from pounds of emissions to tons

- 2.1.6. VOC emissions from application of reactive adhesives, as defined in 40 CFR 63.4581, shall be calculated using the following equation:

$$Ems = \left(0.3 * \sum_{i=1}^n F_i * SG_i * 8.34 * Q_i \right) \frac{1}{2000}$$

Where

Ems is emissions of VOC in tons;

F_i is the mass fraction of VOC in reactive adhesive i;

SG_i is the specific gravity of reactive adhesive i;

8.34 is the density of water in pounds per U.S. gallon;

Q_i is the quantity of reactive adhesive i applied, in U.S. gallons; and

1/2000 is a factor to convert from pounds of emissions to tons.

- 2.1.7. VOC emissions from polystyrene foam hardening processes shall be calculated using the following equation

$$Ems = 10^{-6} * \left(\sum_{i=1}^n S_i * M_i \right) * \frac{1}{2000}$$

Where

Ems is emissions of VOC in tons;

10⁻⁶ is a factor that estimates the quantity of styrene that escapes during foam hardening;

S_i is the mass fraction of styrene in material i;

M_i is the mass of material i used, in pounds; and

1/2000 is a factor to convert from pounds of emissions to tons.

- 2.1.8. VOC emissions from bulk storage tanks shall be calculated using the most recent version of EPA's Tanks model, in tons.

- 2.1.9. VOC emissions from natural gas combustion shall be calculated using the following equation:

$$Ems = 5.5 * Q * \frac{1}{2000}$$

Where

Ems is emissions of VOC in tons;

5.5 is an emission factor for VOC combustion from natural gas in lb/MMscf;

Q is the volume of natural gas combusted in MMscf; and

1/2000 is a factor to convert from pounds of emissions to tons.

- 2.1.10. The permittee may use any of the following alternative calculation methodologies below:
- 2.1.10.1. The permittee may substitute a material's density (in pounds-per-gallon) for the product of specific gravity and 8.34 in the mass balance equations in Conditions 2.1.3, 2.1.4, and 2.1.6.
- 2.1.10.2. The permittee may substitute a material's VOC content (in pounds-per-gallon) for the product of mass fraction of VOC, specific gravity and 8.34 in the mass balance equations in Conditions 2.1.3, 2.1.4, and 2.1.6.

3. Monitoring and Recordkeeping Requirements

- 3.1. Each month, the permittee shall calculate and record facility-wide monthly and rolling 12-month total VOC emissions (tons) for all emission units and emission generating activities that emit VOC using the methods required by Condition 2.1.
- 3.2. The permittee shall track and record the operations and production for each emission unit and emission generating activity that emits VOC at the facility, such that facility-wide VOC emissions can be calculated on a monthly and 12-month basis. Records shall include, but not be limited to:
- 3.2.1. Material purchase records;
 - 3.2.2. Monthly gelcoat usage;
 - 3.2.3. Monthly resin usage in open molding operations;
 - 3.2.4. Monthly quantity of resin or gelcoat mixed;
 - 3.2.5. Number of batches mixed each month;
 - 3.2.6. Monthly VOC-containing solvent usage to clean equipment used in open molding and mixing operations;
 - 3.2.7. Quantity of VOC-containing material stored in open or partially-open containers each month;
 - 3.2.8. Monthly resin usage in repair operations;
 - 3.2.9. Monthly resin usage in closed mold operations;
 - 3.2.10. Monthly usage of polyurethane adhesives;
 - 3.2.11. Monthly usage of reactive adhesives;
 - 3.2.12. Monthly usage of polystyrene foam;
 - 3.2.13. Monthly usage of each VOC-containing coating or solvent used in the spray booth;
 - 3.2.14. Monthly usage of each VOC-containing material used in support activities;
 - 3.2.15. Monthly natural gas usage;
 - 3.2.16. Safety Data Sheets (SDS);
 - 3.2.17. Emission factors used;
 - 3.2.18. Vapor pressure of materials stored in the tanks;
 - 3.2.19. Parameters used to determine emission factors; and

3.2.20. Any other information used to determine monthly facility emissions of VOC.

3.3. The permittee shall maintain records of emission calculations and parameters used to calculate emissions for at least five years.

4. Reporting Requirements

4.1. Once each year, on or before December 1, the permittee shall, along with the annual registration required by 40 CFR 49.138(e)(2), submit to EPA a report containing the twelve monthly rolling 12-month emissions calculations for the previous calendar year.

4.2. The report required under Condition 4.1 shall contain a description of all emissions estimating methods used, including emission factors and their sources, a summary of materials usage and VOC content, assumptions made and production data.

4.3. The permittee shall notify EPA promptly upon discovering any activities or equipment at the facility that contribute significantly to annual VOC emissions and that are not included in the calculations in Condition 2.1. For the purposes of this condition:

4.3.1. *Significantly* means having the potential to emit two tons or more of VOC in a 12-month period, and

4.3.2. *Promptly* means within 30 days of discovery.

Notifications to EPA pursuant to this condition shall be sent to:

Tribal Air Permits Coordinator, OAW-150
U.S. EPA, Region 10, OAW-150
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

Copies to: Environmental Management Program
Yakama Nation
P.O. Box 151
Toppenish, WA 98948

4.4. Unless otherwise specified in this permit, all submittals, notifications and reports to EPA shall be sent to:

Clean Air Act Compliance Manager
U.S. EPA, Region 10, OCE-101
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

Copies to: Environmental Management Program
Yakama Nation
P.O. Box 151
Toppenish, WA 98948