



Missouri Department of Natural Resources
Air Pollution Control Program

PART 70 PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: OP2012-017
Expiration Date: MAY 06 2017
Installation ID: 183-0131
Project Number: 2010-02-080

Installation Name and Address

Superior Home Products, Inc.
211 Edinger Road
Wentzville, MO 63385
St. Charles County

Installation Description:

The installation manufactures cultured marble vanity tops, bathtubs, and wall surrounds by marble casting. Fiberglass molds are fabricated and repaired as an ancillary function. The operations are a major source of hazardous air pollutants (HAP). Specifically, the installation is a major source of the HAP styrene. The installation is subject to 40 CFR Part 63, Subpart WWW, *National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production*.

MAY 07 2012

Effective Date



Director or Designee
Department of Natural Resources

Table of Contents

I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING	4
INSTALLATION DESCRIPTION	4
EMISSION UNITS WITH LIMITATIONS	4
EMISSION UNITS WITHOUT LIMITATIONS	5
II. PLANT WIDE EMISSION LIMITATIONS.....	6
PERMIT CONDITION PW001	6
10 CSR 10-6.075, Maximum Achievable Control Technology Regulations, and.....	6
40 CFR Part 63, Subpart A, General Provisions, and	6
40 CFR Part 63, Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production.....	6
III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS	9
VOC EMISSION POINTS	9
PERMIT CONDITION (EP1, EP2, EP3, and EP5)-001	9
10 CSR 10-6.060 Construction Permits Required.....	9
Construction Permit #0195-003, Issued December 23, 1994	9
PERMIT CONDITION (EP1, EP2, EP3, and EP5)-002	10
10 CSR 10-6.075, Maximum Achievable Control Technology Regulations, and.....	10
40 CFR Part 63, Subpart A, General Provisions, and	10
40 CFR Part 63, Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production.....	10
CLEANING OPERATION.....	15
PERMIT CONDITION EP6-001	15
10 CSR 10-6.075, Maximum Achievable Control Technology Regulations, and.....	15
40 CFR Part 63, Subpart A, General Provisions, and	15
40 CFR Part 63, Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production.....	15
STORAGE TANK	16
PERMIT CONDITION EP4-001	16
10 CSR 10-6.075, Maximum Achievable Control Technology Regulations, and.....	16
40 CFR Part 63, Subpart A, General Provisions, and	16
40 CFR Part 63, Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production.....	16
CURING OVEN	16
PERMIT CONDITION EP9-001	16
10 CSR 10-5.030, Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating	16
IV. CORE PERMIT REQUIREMENTS	18
V. GENERAL PERMIT REQUIREMENTS.....	26
VI. ATTACHMENTS	32
ATTACHMENT A	33
ATTACHMENT B	34
ATTACHMENT C	36
ATTACHMENT D	38
ATTACHMENT E	39
ATTACHMENT F.....	40
ATTACHMENT G	41
ATTACHMENT H	42
ATTACHMENT I.....	43
ATTACHMENT J	44

ATTACHMENT K45
ATTACHMENT L46

I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

The installation manufactures cultured marble vanity tops, bathtubs, and wall surrounds by marble casting. Fiberglass molds are fabricated and repaired as an ancillary function. The operations are a major source of hazardous air pollutants (HAP). Specifically, the installation is a major source of the HAP styrene. The installation is subject to 40 CFR Part 63, Subpart WWWW, *National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production*.

Reported Air Pollutant Emissions, tons per year					
Pollutants	2010	2009	2008	2007	2006
Particulate Matter ≤ Ten Microns (PM ₁₀)	0.15	0.16	0.24	0.35	0.3131
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	0.00	0.00	0.00	0.00	0.00
Sulfur Oxides (SO _x)	0.00	0.00	0.00	0.00	0.00
Nitrogen Oxides (NO _x)	0.0072	0.0080	0.00	0.0080	0.0089
Volatile Organic Compounds(VOC)	7.47	6.73	10.79	15.61	15.05
Carbon Monoxide (CO)	0.0018	0.0020	0.00	0.0020	0.00
Lead (Pb)	0.00	0.00	0.00	0.00	0.00
Hazardous Air Pollutants (HAPs)	0.30	0.25	0.45	0.35	0.35
Ammonia (NH ₃)	0.00	0.00	0.00	0.00	0.00

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit
EP1	Gel Coat Spray Booth-Casting
EP2	Gel Coat Spray Booth- Mold Fabrication
EP3	Resin Hand Lay Up-Mold Fabrication
EP4	6000 gallon storage tank
EP5	Respecta Casting Machine
EP6	Cleaning Operation
EP9	Curing Oven, 3.6 MMBtu/hr-Pipeline natural gas fired

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Description of Emission Source

Grinding Booth with Dust Collector (EP7)

Grinding Booth-Panels (EP8)

Two Acetone Tanks For Manual Cleaning of Hand Pouring Tools

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

PERMIT CONDITION PW001

10 CSR 10-6.075, Maximum Achievable Control Technology Regulations, and
40 CFR Part 63, Subpart A, General Provisions, and
40 CFR Part 63, Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants:
Reinforced Plastic Composites Production

General Compliance Requirements

1. This subpart applies to each new or existing affected source at reinforced plastic composites production facilities. [§63.5790(a)]
2. The affected source consists of all parts of your facility engaged in the following operations: Open molding, closed molding, centrifugal casting, continuous lamination, continuous casting, polymer casting, pultrusion, sheet molding compound (SMC) manufacturing, bulk molding compound (BMC) manufacturing, mixing, cleaning of equipment used in reinforced plastic composites manufacture, HAP-containing materials storage, and repair operations on parts you also manufacture. [§63.5790(b)]
3. You must be in compliance at all times with the work practice standards in Table 4 (See Attachment F), as well as the organic HAP emissions limits in Table 3 (See Attachment E) or the organic HAP content limits in Table 7 (See Attachment G), as applicable, that you are meeting without the use of add-on controls. [§63.5835(a)]
4. You must be in compliance with all organic HAP emissions limits in this subpart that you meet using add-on controls, except during periods of startup, shutdown, and malfunction. [§63.5835(b)]
5. You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i). [§63.5835(c)]
6. You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3) for any organic HAP emissions limits you meet using an add-on control. [§63.5835(d)]
7. All operations at existing facilities not listed in Paragraph §63.5805(a) must meet the organic HAP emissions limits in Table 3 (See Attachment E) and the work practice standards in Table 4 (See Attachment F) that apply, regardless of the quantity of HAP emitted. [§63.5805(b)]

Initial Compliance Requirements

1. You demonstrate initial compliance with each organic HAP emissions standard in Paragraphs (a) through (h) of §63.5805 that applies to you by using the procedures shown in Tables 8 and 9 (See Attachments H and I). [§63.5860]
2. You must conduct performance tests, performance evaluations, design evaluations, capture efficiency testing, and other initial compliance demonstrations by the compliance date specified in Table 2 (See Attachment D), with three exceptions. Open molding and centrifugal casting operations that elect to meet an organic HAP emissions limit on a 12-month rolling average must initiate collection of the required data on the compliance date, and demonstrate compliance 1 year after the compliance date. [§63.5840]

Notifications

1. You must submit all of the notifications in Table 13 (See Attachment J) that apply to you by the dates specified in Table 13. The notifications are described more fully in 40 CFR Part 63, subpart A, referenced in Table 13. [§63.5905(a)]
2. If you change any information submitted in any notification, you must submit the changes in writing to the Director within 15 calendar days after the change. [§63.5905(b)]

Recordkeeping

1. You must keep the records listed in Paragraphs (a)(1) through (3) of §63.5915. [§63.5915(a)]
 - a) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(2)(xiv). [§63.5915(a)(1)]
 - b) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. [§63.5915(a)(2)]
 - c) Records of performance tests, design, and performance evaluations as required in §63.10(b)(2). [§63.5915(a)(3)]
2. You must keep all data, assumptions, and calculations used to determine organic HAP emissions factors or average organic HAP contents for operations listed in Tables 3 and 7 (See Attachments E and G). [§63.5915(c)]
3. You must keep a certified statement that you are in compliance with the work practice requirements in Table 4 (See Attachment F), as applicable. [§63.5915(d)]
4. You must maintain all applicable records in such a manner that they can be readily accessed and are suitable for inspection according to §63.10(b)(1). [§63.5920(a)]
5. As specified in §63.10(b)(1), you must keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.5920(b)]
6. You must keep each record onsite for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records offsite for the remaining three years. [§63.5920(c)]
7. You may keep records in hard copy or computer readable form including, but not limited to, paper, microfilm, computer floppy disk, magnetic tape, or microfiche. [§63.5920(d)]
8. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
9. All records shall be maintained for five years.

Reporting

1. You must submit each report in Table 14 (See Attachment K) that applies to you. [§63.5910(a)]
2. Unless the Director has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date specified in Table 14 (See Attachment K) and according to Paragraphs (b)(1) through (5) of §63.5910. [§63.5910(b)]
 - a) Each subsequent compliance report must cover the semi-annual reporting period from January 1 through June 30 or the semi-annual reporting period from July 1 through December 31. [§63.5910(b)(3)]
 - b) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semi-annual reporting period. [§63.5910(b)(4)]
 - c) For each affected source that is subject to permitting requirements pursuant to 40 CFR Part 70 or 71, and if the permitting authority has established dates for submitting semi-annual reports

- pursuant to §70.6 (a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in Paragraphs (b)(1) through (4) of §63.5910. [§63.5910(b)(5)]
3. The compliance report must contain the information in Paragraphs (c)(1) through (6) of §63.5910: [§63.5910(c)]
 - a) Company name and address. [§63.5910(c)(1)]
 - b) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [§63.5910(c)(2)]
 - c) Date of the report and beginning and ending dates of the reporting period. [§63.5910(c)(3)]
 - d) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i). [§63.5910(c)(4)]
 - e) If there are no deviations from any organic HAP emissions limitations (emissions limit and operating limit) that apply to you, and there are no deviations from the requirements for work practice standards in Table 4 (See Attachment F), a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period. [§63.5910(c)(5)]
 4. For each deviation from an organic HAP emissions limitation (*i.e.*, emissions limit and operating limit) and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMS to comply with the organic HAP emissions limitations or work practice standards in this subpart, the compliance report must contain the information in Paragraphs (c)(1) through (4) of §63.5910 and in Paragraphs (d)(1) and (2) of §63.5910. This includes periods of startup, shutdown, and malfunction. [§63.5910(d)]
 - a) The total operating time of each affected source during the reporting period. [§63.5910(d)(1)]
 - b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.5910(d)(2)]
 5. Each affected source that has obtained a title V operating permit pursuant to 40 CFR Part 70 or 71 must report all deviations as defined in this subpart in the semi-annual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 14 (See Attachment K), along with, or as part of, the semi-annual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any organic HAP emissions limitation (including any operating limit) or work practice requirement in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semi-annual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority. [§63.5910(g)]
 6. Submit compliance reports and startup, shutdown, and malfunction reports based on the requirements in Table 14 (See Attachment K), and not based on the requirements in §63.999. [§63.5910(h)]
 7. Where multiple compliance options are available, you must state in your next compliance report if you have changed compliance options since your last compliance report. [§63.5910(i)]
 8. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any limitation established by this permit condition.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

VOC Emission Points		
Emission Unit	Description	Manufacturer/Model #
EP1	Gel coat spray booth-casting 30 lbs/hour (23 oz/min), Manufactured 2001	Magnum Venus ATG- 3500 HVLP
EP2	Gel coat spray booth- mold fabrication 30 lbs/hour (23 oz/min), Manufactured 1994	Binks Model 18
EP3	Resin Hand Lay Up- mold fabrication 0.009 ton/hr, Manufactured 1994	Not Available
EP5	Casting Machine 400 lb/hr, Manufactured 1994	Respecta Model DB22

PERMIT CONDITION (EP1, EP2, EP3, and EP5)-001

10 CSR 10-6.060 Construction Permits Required
Construction Permit #0195-003, Issued December 23, 1994

Emission Limitation

The permittee shall not discharge into the atmosphere volatile organic compounds (VOC) at a level greater than 40 tons during any 12-month rolling period. [Special Condition #1]

Monitoring

The permittee shall calculate VOC emissions monthly and on a 12-month rolling average for (1) Gel Coat Spray Booth-casting, (2) Gel Coat Spray Booth-mold fabrication, (3) Hand-Layup-mold fabrication and (4) Casting. [Special Condition #4]

Recordkeeping

1. The permittee shall maintain an accurate record of VOC emissions calculated and shall record the monthly and running 12-month totals of VOC emissions on Attachment B, "VOC Compliance Worksheet," or similar forms created by the permittee.
2. These records shall be retained for 60 months and be made available immediately to the Department of Natural Resources' personnel upon verbal request. [Special Conditions #2 & #4]

Reporting

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of each month, if the 12-month cumulative total (Special Condition #2) records show that the source exceeded the limitation of Condition 1 (40 tons of VOC). [Special Condition #3]

2. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any limitation established by this permit condition.
3. The permittee shall report any deviations from the standards, monitoring/testing, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit

PERMIT CONDITION (EP1, EP2, EP3, and EP5)-002

10 CSR 10-6.075, Maximum Achievable Control Technology Regulations, and
40 CFR Part 63, Subpart A, General Provisions, and
40 CFR Part 63, Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants:
Reinforced Plastic Composites Production

Emissions Limitations

1. All operations at existing facilities not listed in Paragraph (a) of §63.5805 must meet the organic HAP emissions limits in Table 3 (See Attachment E) and the work practice standards in Table 4 (See Attachment F) that apply, regardless of the quantity of HAP emitted. [§63.5805(b)]
2. If you have repair operations subject to this subpart as defined in §63.5785, these repair operations must meet the requirements in Tables 3 and 4 (See Attachments E and F) and are not required to meet the 95 percent organic HAP emissions reduction requirements in Paragraph (a)(1) or (d) of §63.5805. [§63.5805(g)]

Options for Meeting Standards

1. You must use one of the following methods in Paragraphs (a) through (d) of this section to meet the standards for open molding or centrifugal casting operations in Table 3 (See Attachment E). You may use any control method that reduces organic HAP emissions, including reducing resin and gel coat organic HAP content, changing to nonatomized mechanical application, using covered curing techniques, and routing part or all of your emissions to an add-on control. You may use different compliance options for the different operations listed in Table 3. The necessary calculations must be completed within 30 days after the end of each month. You may switch between the compliance options in Paragraphs (a) through (d) of this section. When you change to an option based on a 12-month rolling average, you must base the average on the previous 12 months of data calculated using the compliance option you are changing to, unless you were previously using an option that did not require you to maintain records of resin and gel coat use. In this case, you must immediately begin collecting resin and gel coat use data and demonstrate compliance 12 months after changing options. [§63.5810]
 - a) *Demonstrate that an individual resin or gel coat, as applied, meets the applicable emission limit in Table 3 to this subpart.* Calculate your actual organic HAP emissions factor for each different process stream within each operation type. A process stream is defined as each individual combination of resin or gel coat, application technique, and control technique. Process streams within operations types are considered different from each other if any of the following four characteristics vary: the neat resin plus or neat gel coat plus organic HAP content, the gel coat type, the application technique, or the control technique. You must calculate organic HAP emissions factors for each different process stream by using the appropriate equations in Table 1 (See Attachment C) for open molding and for centrifugal casting, or site-specific organic HAP emissions factors discussed in §63.5796. The emission factor calculation should include any and all emission reduction techniques used including any add-on controls. If you are using vapor

suppressants to reduce HAP emissions, you must determine the vapor suppressant effectiveness (VSE) by conducting testing according to the procedures specified in appendix A to subpart WWW of 40 CFR Part 63. If you are using an add-on control device to reduce HAP emissions, you must determine the add-on control factor by conducting capture and control efficiency testing using the procedures specified in §63.5850. The organic HAP emissions factor calculated from the equations in Table 1 (See Attachment C), or a site-specific emissions factor, is multiplied by the add-on control factor to calculate the organic HAP emissions factor after control. Use Equation 1 of this section to calculate the add-on control factor used in the organic HAP emissions factor equations.

$$\text{Add-on Control Factor} = 1 - \frac{\% \text{ Control Efficiency}}{100} \quad (\text{Eq. 1})$$

Where:

Percent Control Efficiency=a value calculated from organic HAP emissions test measurements made according to the requirements of §63.5850 to this subpart.

[§63.5810(a)(1)]

- i. If the calculated emission factor is less than or equal to the appropriate emission limit, you have demonstrated that this process stream complies with the emission limit in Table 3 (See Attachment E). It is not necessary that all your process streams, considered individually, demonstrate compliance to use this option for some process streams. However, for any individual resin or gel coat you use, if any of the process streams that include that resin or gel coat are to be used in any averaging calculations described in Paragraphs (b) through (d) of this section, then all process streams using that individual resin or gel coat must be included in the averaging calculations.[§63.5810(a)(2)]
- b) *Demonstrate that, on average, you meet the individual organic HAP emissions limits for each combination of operation type and resin application method or gel coat type.* Demonstrate that on average you meet the individual organic HAP emissions limits for each unique combination of operation type and resin application method or gel coat type shown in Table 3 (See Attachment E) that applies to you. [§63.5810(b)]
 - i. Group the process streams described in Paragraph (a) to this section by operation type and resin application method or gel coat type listed in Table 3 (See Attachment E) and then calculate a weighted average emission factor based on the amounts of each individual resin or gel coat used for the last 12 months. To do this, sum the product of each individual organic HAP emissions factor calculated in Paragraph (a)(1) of this section and the amount of neat resin plus and neat gel coat plus usage that corresponds to the individual factors and divide the numerator by the total amount of neat resin plus and neat gel coat plus used in that operation type as shown in Equation 2 of this section.

$$\text{Average organic HAP Emissions Factor} = \frac{\sum_{i=1}^n (\text{Actual Process Stream } EF_i * \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i} \quad (\text{Eq. 2})$$

Where:

Actual Process Stream EF_i =actual organic HAP emissions factor for process stream i , lbs/ton;

Material_i =neat resin plus or neat gel coat plus used during the last 12 calendar months for process stream i , tons;

n=number of process streams where you calculated an organic HAP emissions factor.
[§63.5810(b)(1)(i)]

- ii. You may, but are not required to, include process streams where you have demonstrated compliance as described in Paragraph (a) of this section, subject to the limitations described in Paragraph (a)(2) of this section, and you are not required to and should not include process streams for which you will demonstrate compliance using the procedures in Paragraph (d) of this section. [§63.5810(b)(1)(ii)]
 - iii. Compare each organic HAP emissions factor calculated in Paragraph (b)(1) of this section with its corresponding organic HAP emissions limit in Table 3 (See Attachment E). If all emissions factors are equal to or less than their corresponding emission limits, then you are in compliance. [§63.5810(b)(2)]
- c) *Demonstrate compliance with a weighted average emission limit.* Demonstrate each month that you meet each weighted average of the organic HAP emissions limits in Table 3 (See Attachment E) that apply to you. When using this option, you must demonstrate compliance with the weighted average organic HAP emissions limit for all your open molding operations, and then separately demonstrate compliance with the weighted average organic HAP emissions limit for all your centrifugal casting operations. Open molding operations and centrifugal casting operations may not be averaged with each other.[§63.5810(c)]
- i. Each month calculate the weighted average organic HAP emissions limit for all open molding operations and the weighted average organic HAP emissions limit for all centrifugal casting operations for your facility for the last 12-month period to determine the organic HAP emissions limit you must meet. To do this, multiply the individual organic HAP emissions limits in Table 3 (See Attachment E) for each open molding (centrifugal casting) operation type by the amount of neat resin plus or neat gel coat plus used in the last 12 months for each open molding (centrifugal casting) operation type, sum these results, and then divide this sum by the total amount of neat resin plus and neat gel coat plus used in open molding (centrifugal casting) over the last 12 months as shown in Equation 3 of this section.

$$\text{Weighted Average Emission Limit} = \frac{\sum_{i=1}^n (EL_i * \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i} \quad (\text{Eq. 3})$$

Where:

EL_i=organic HAP emissions limit for operation type i, lbs/ton from Tables 3 to this subpart;

Material_i=neat resin plus or neat gel coat plus used during the last 12-month period for operation type i, tons;

n=number of operations.

[§63.5810(c)(1)]

- ii. Each month calculate your weighted average organic HAP emissions factor for open molding and centrifugal casting. To do this, multiply your actual open molding (centrifugal casting) operation organic HAP emissions factors calculated in Paragraph (b)(1) of this section and the amount of neat resin plus and neat gel coat plus used in each open molding (centrifugal casting) operation type, sum the results, and divide this sum by the total amount of neat resin plus and neat gel coat plus used in open molding (centrifugal casting) operations as shown in Equation 4 of this section.

$$\frac{\text{Actual Weighted Average organic HAP Emissions Factor}}{\text{Factor}} = \frac{\sum_{i=1}^n (\text{Actual Operation } EF_i * \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i} \quad (\text{Eq. 4})$$

Where:

Actual Individual EF_i =Actual organic HAP emissions factor for operation type i, lbs/ton;

$Material_i$ =neat resin plus or neat gel coat plus used during the last 12 calendar months for operation type i, tons;
 n =number of operations.

[§63.5810(c)(2)]

- iii. Compare the values calculated in Paragraphs (c)(1) and (2) of this section. If each 12-month rolling average organic HAP emissions factor is less than or equal to the corresponding 12-month rolling average organic HAP emissions limit, then you are in compliance.
[§63.5810(c)(3)]
- d) *Meet the organic HAP emissions limit for one application method and use the same resin(s) for all application methods of that resin type.* This option is limited to resins of the same type. The resin types for which this option may be used are noncorrosion-resistant, corrosion-resistant and/or high strength, and tooling.[§63.5810(d)]
 - i. For any combination of manual resin application, mechanical resin application, filament application, or centrifugal casting, you may elect to meet the organic HAP emissions limit for any one of these application methods and use the same resin in all of the resin application methods listed in this Paragraph (d)(1). Table 7 (See Attachment G) presents the possible combinations based on a facility selecting the application process that results in the highest allowable organic HAP content resin. If the resin organic HAP content is below the applicable value shown in Table 7, the resin is in compliance. [§63.5810(d)(1)]
 - ii. You may also use a weighted average organic HAP content for each application method described in Paragraph (d)(1) of this section. Calculate the weighted average organic HAP content monthly. Use Equation 2 in Paragraph (b)(1) of this section except substitute organic HAP content for organic HAP emissions factor. You are in compliance if the weighted average organic HAP content based on the last 12 months of resin use is less than or equal to the applicable organic HAP contents in Table 7. [§63.5810(d)(2)]
 - iii. You may simultaneously use the averaging provisions in Paragraph (b) or (c) of this section to demonstrate compliance for any operations and/or resins you do not include in your compliance demonstrations in Paragraphs (d)(1) and (2) of this section. However, any resins for which you claim compliance under the option in Paragraphs (d)(1) and (2) of this section may not be included in any of the averaging calculations described in Paragraph (b) or (c) of this section. [§63.5810(d)(3)]
 - iv. You do not have to keep records of resin use for any of the individual resins where you demonstrate compliance under the option in Paragraph (d)(1) of this section unless you elect to include that resin in the averaging calculations described in Paragraph (d)(2) of this section. [§63.5810(d)(4)]

Monitoring

1. Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times that the affected source is operating. [§63.5895(b)(1)]

2. You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes to this subpart, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system. [§63.5895(b)(2)]
3. At all times, you must maintain necessary parts for routine repairs of the monitoring equipment. [§63.5895(b)(3)]
4. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring equipment to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [§63.5895(b)(4)]
5. You must collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if you are meeting any organic HAP emissions limits based on an organic HAP emissions limit in Table 3 (See Attachment E). You must collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if you are meeting any organic HAP content limits in Table 7 (See Attachment F) if you are averaging organic HAP contents. Resin use records may be based on purchase records if you can reasonably estimate how the resin is applied. The organic HAP content records may be based on MSDS or on resin specifications supplied by the resin supplier. [§63.5895(c)]
6. Resin and gel coat use records are not required for the individual resins and gel coats that are demonstrated, as applied, to meet their applicable emission as defined in §63.5810(a). However, you must retain the records of resin and gel coat organic HAP content, and you must include the list of these resins and gel coats and identify their application methods in your semi-annual compliance reports. If after you have initially demonstrated that a specific combination of an individual resin or gel coat, application method, and controls meets its applicable emission limit, and the resin or gel coat changes or the organic HAP content increases, or you change the application method or controls, then you again must demonstrate that the individual resin or gel coat meets its emission limit as specified in Paragraph (a) of §63.5810. If any of the previously mentioned changes results in a situation where an individual resin or gel coat now exceeds its applicable emission limit in Table 3 (See Attachment E), you must begin collecting resin and gel coat use records and calculate compliance using one of the averaging options on a 12-month rolling average. [§63.5895(d)]
7. You must demonstrate continuous compliance with each standard in §63.5805 that applies to you according to the methods specified in Paragraphs (a)(1) through (3) of §63.5900. [§63.5900(a)]
 - a) Compliance with organic HAP emissions limits is demonstrated by maintaining an organic HAP emissions factor value less than or equal to the appropriate organic HAP emissions limit listed in Table 3 (See Attachment E), on a 12-month rolling average, and/or by including in each compliance report a statement that individual resins and gel coats, as applied, meet the appropriate organic HAP emissions limits, as discussed in §63.5895(d). [§63.5900(a)(1)]
 - b) Compliance with organic HAP content limits in Table 7 (See Attachment G) is demonstrated by maintaining an average organic HAP content value less than or equal to the appropriate organic HAP contents listed in Table 7, on a 12-month rolling average, and/or by including in each compliance report a statement that resins and gel coats individually meet the appropriate organic HAP content limits in Table 7, as discussed in §63.5895(d). [§63.5900(a)(3)]
 - c) Compliance with the work practice standards in Table 4 (See Attachment F) is demonstrated by performing the work practice required for your operation. [§63.5900(a)(4)]
8. Except as provided in Paragraph (d) of this section, during periods of startup, shutdown or malfunction, you must meet the organic HAP emissions limits and work practice standards that apply to you. [§63.5900(c)]

9. Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of malfunction for those affected sources and standards specified in Paragraph (d) of this section are not violations if you demonstrate to the Director’s satisfaction that you were operating in accordance with §63.6(e)(1). The Director will determine whether deviations that occur during a period of startup, shutdown, and malfunction are violations, according to the provisions in §63.6(e). [§63.5900(e)]

Recordkeeping

The permittee shall keep records as specified in Permit Condition PW001

Reporting

1. You must report each deviation from each standard in §63.5805 that applies to you. The deviations must be reported according to the requirements in §63.5910. [§63.5900(b)]
2. The permittee shall report any deviations from the standards, monitoring/testing, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit

Cleaning Operation		
Emission Unit	Description	Manufacturer/Model #
EP6	Flushing of cleaning solution through the Respecta casting machine’s mixing chamber	Not Available

PERMIT CONDITION EP6-001

10 CSR 10-6.075, Maximum Achievable Control Technology Regulations, and
40 CFR Part 63, Subpart A, General Provisions, and
40 CFR Part 63, Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants:
Reinforced Plastic Composites Production

Emission Limitation/Standards

The permittee must not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin. [Table 4 to Subpart WWWW of 40 CFR Part 63]

Monitoring

You must demonstrate continuous compliance with the work practice standards in Table 4 (See Attachment F) that applies to you by performing the work practice required for your operation. [§63.5900(a)(4)]

Recordkeeping

The permittee shall keep records as specified in Permit Condition PW001

Reporting

The permittee shall report as specified in Permit Condition PW001

Storage Tank		
Emission Unit	Description	Manufacturer/Model #
EP4	6000 Gallon Resin Storage Tank	Not Available

PERMIT CONDITION EP4-001

10 CSR 10-6.075, Maximum Achievable Control Technology Regulations, and
 40 CFR Part 63, Subpart A, General Provisions, and
 40 CFR Part 63, Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants:
 Reinforced Plastic Composites Production

Emissions Limitation

The permittee must keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety. [Item 3 of Table 4 to Subpart WWWW of 40 CFR Part 63]

Monitoring

Compliance with the work practice standards in Table 4 (See Attachment F) is demonstrated by performing the work practice required for your operation. [§63.5900(a)(4)]

Recordkeeping

The permittee shall keep records as specified in Permit Condition PW001

Reporting

The permittee shall report deviations as specified in Permit Condition PW001

Curing Oven		
Emission Unit	Description	Manufacturer/Model #
EP9	3.6 MMBtu/hr-Pipeline natural gas fired curing oven	Not Available

PERMIT CONDITION EP9-001

10 CSR 10-5.030, Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating¹

¹This requirement is federally enforceable only.

Emission Limitation

The permittee shall not emit particulate matter in excess of 0.40 lb/MMBtu of heat input from this indirect heating source.

Operational Limitation

The permittee shall calibrate, maintain and operate the emission unit according to the manufacturer's specifications and recommendations.

Monitoring/Recordkeeping

1. Attachment L contains calculations which demonstrate that this emission unit will never exceed the emission limitation while burning the specified fuel.
2. Records may be kept in either written or electronic form.
3. These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
4. All records shall be maintained for five years.

Reporting

The permittee shall report any deviations from the standards, monitoring/testing, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
 - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
 - ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
 - iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
 - iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;
 - b) Yard waste, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
 - ii) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
 - iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
 - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
 - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
 - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
 - (4) In each instance, the twenty-one (21)-day burning period shall be determined by the Director of Public Health and Welfare of the City of St. Joseph for the region in which the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the department Director; and

- iv) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;
- 3) Certain types of materials may be open burned provided an open burning permit is obtained from the Director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 4) Superior Home Products, Inc. may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Superior Home Products, Inc. fails to comply with the provisions or any condition of the open burning permit.
 - a) In a nonattainment area, as defined in 10 CSR 10-6.020, Paragraph (2)(N)5., the Director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the Director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- 5) Reporting and Recordkeeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the Director.
- 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971 is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions
--

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the Director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;

- i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the Paragraph 1 information list to the Director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the Director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
 - 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the Paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the Director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
 - 4) Nothing in this rule shall be construed to limit the authority of the Director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
 - 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

- 2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.100 Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

- 1) The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the Director.
- 2) The permittee may be required by the Director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
- 6) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the Director. The reports shall be submitted to the Director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
- 7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 8) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the Director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the Director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - b) Paving or frequent cleaning of roads, driveways and parking lots;
 - c) Application of dust-free surfaces;
 - d) Application of water; and
 - e) Planting and maintenance of vegetative ground cover.

Monitoring:

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then-
 - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
 - b) If a violation is noted, monitoring reverts to weekly.
 - c) Should no violation of this regulation be observed during this period then-
 - i) The permittee may observe once per month.
 - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether the visible emissions were normal for the installation.
- 3) Whether equipment malfunctions contributed to an exceedance.
- 4) Any violations and any corrective actions undertaken to correct the violation.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

- 1) The Director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The Director may specify testing methods to be used in accordance with good professional practice. The Director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The Director may conduct tests of emissions of air contaminants from any source. Upon request of the Director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The Director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

**10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations
(Contained in State Implementation Plan)**

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

10 CSR 10-5.240 Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area

The Air Conservation Commission may prescribe more restrictive air quality control requirements that are more restrictive and more extensive than provided in regulations of general application for:

- 1) Areas in which there are one or more existing sources and/or proposed new sources of particulate matter in any circular area with a diameter of two miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from these sources by regulations of general application are or would be greater than 2000 tons per year or 500 pounds per hour.
- 2) Areas in which there are one or more existing sources and/or proposed new sources of sulfur dioxide in any circular area with a diameter of two miles from which the sum of sulfur dioxide emissions from these sources allowed by regulations of general application are or would be greater than 1000 tons for any consecutive three months or 1000 pounds per hour.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

10 CSR 10-6.280 Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the Director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the Director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements

- 1) Recordkeeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi-annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in Paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semi-annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to

the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

None

10 CSR 10-6.065(6)(C)3 Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification;
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;

- c) Whether compliance was continuous or intermittent;
- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The applicable requirements are included and specifically identified in this permit, or
 - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable

under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
 - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and

- d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by Raymond Daggett, President. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire;
or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit;
or
- 5) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

Attachment B
VOC Compliance Worksheet

Installation VOC Emissions Calculations

This sheet covers the month of _____ in the year _____

Column A	Column B (1)	Column C (2)	Column D (3) or (4)	Column E (5)
Materials Used (name, type)	Amount of Material Used (lbs)	VOC Content (%)	VOC Emitted (%)	VOC Emissions (ton)
(6) Total VOC for Month				

- (1) From usage records
- (2) See Material Safety Data Sheet (MSDS)
- (3) Use the CFA model¹ to estimate VOC emissions from Gel Coat Spraying and Resin Hand Lay-up applications.
- (4) Use 2% for Casting, AP-42 Chapter 4.4
- (5) [Column b] x [Column C] x [Column D] x (0.0005) = [Column E]
- (6) Summation of Column E to be added to Column (a) of Page 1.

¹“CFA Emission Models for the Reinforced Plastics Industries” by Robert A Haberlein, February 28, 1998

Attachment C

Table 1 to Subpart WWW of Part 63--Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams

As specified in §63.5810, use the equations in the following table to calculate organic HAP emissions factors for specific open molding and centrifugal casting process streams:

If your operation type is a new or existing...	And you use...	With...	Use this organic HAP Emissions Factor (EF) Equation for materials with less than 33 percent organic HAP (19 percent organic HAP for nonatomized gel coat) ²³⁴	Use this organic HAP emissions Factor (EF) Equation for materials with 33 percent or more organic HAP (19 percent for nonatomized gel coat) ²³⁴ ...
1. open molding operation	a. manual resin application	i. nonvapor-suppressed resin	$EF = 0.126 \times \%HAP \times 2000$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.126 \times \%HAP \times 2000 \times (1 - (0.5 \times VSE \text{ factor}))$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times (1 - (0.5 \times VSE \text{ factor}))$
		iii. vacuum bagging/closed-mold curing with roll out	$EF = 0.126 \times \%HAP \times 2000 \times 0.8$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times 0.8$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = (0.126 \times \%HAP \times 2000 \times 0.5$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times 0.5$
	b. atomized mechanical resin application	i. nonvapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$
		iii. vacuum bagging/closed-mold curing with roll-out	$EF = 0.169 \times \%HAP \times 2000 \times 0.85$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times 0.85$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = 0.169 \times \%HAP \times 2000 \times 0.55$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times 0.55$
	c. nonatomized mechanical resin application	i. nonvapor-suppressed resin	$EF = 0.107 \times \%HAP \times 2000$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.107 \times \%HAP \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$
		iii. closed-mold curing with roll-out	$EF = 0.107 \times \%HAP \times 2000 \times 0.85$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.85$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = 0.107 \times \%HAP \times 2000 \times 0.55$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.55$
	d. atomized mechanical resin application with robotic or automated spray control ⁵	nonvapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000 \times 0.77$	$EF = 0.77 \times ((0.714 \times \%HAP) - 0.18) \times 2000$
	e. filament application ⁶	i. nonvapor-suppressed resin	$EF = 0.184 \times \%HAP \times 2000$	$EF = ((0.2746 \times \%HAP) - 0.0298) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.12 \times \%HAP \times 2000$	$EF = ((0.2746 \times \%HAP) - 0.0298) \times 2000 \times 0.65$
	f. atomized spray gel coat application	nonvapor-suppressed gel coat	$EF = 0.445 \times \%HAP \times 2000$	$EF = ((1.03646 \times \%HAP) - 0.195) \times 2000$

Attachment C (Continued)

	g. nonatomized spray gel coat application	nonvapor-suppressed gel coat	$EF = 0.185 \times \%HAP \times 2000$	$EF = ((0.4506 \times \%HAP) - 0.0505) \times 2000$
	h. atomized spray gel coat application using robotic or automated spray	nonvapor-suppressed gel coat	$EF = 0.445 \times \%HAP \times 2000 \times 0.73$	$EF = ((1.03646 \times \%HAP) - 0.195) \times 2000 \times 0.73$
2. centrifugal casting operations ⁷⁸	a. heated air blown through molds	nonvapor-suppressed resin	$EF = 0.558 \times (\%HAP) \times 2000$	$EF = 0.558 \times (\%HAP) \times 2000$
	b. vented molds, but air vented through the molds is not heated	nonvapor-suppressed resin	$EF = 0.026 \times (\%HAP) \times 2000$	$EF = 0.026 \times (\%HAP) \times 2000$

Footnotes to Table 1

¹ The equations in this table are intended for use in calculating emission factors to demonstrate compliance with the emission limits in subpart WWW. These equations may not be the most appropriate method to calculate emission estimates for other purposes. However, this does not preclude a facility from using the equations in this table to calculate emission factors for purposes other than rule compliance if these equations are the most accurate available.

² To obtain the organic HAP emissions factor value for an operation with an add-on control device multiply the EF above by the add-on control factor calculated using Equation 1 of §63.5810. The organic HAP emissions factors have units of lbs of organic HAP per ton of resin or gel coat applied.

³ Percent HAP means total weight percent of organic HAP (styrene, methyl methacrylate, and any other organic HAP) in the resin or gel coat prior to the addition of fillers, catalyst, and promoters. Input the percent HAP as a decimal, i.e., 33 percent HAP should be input as 0.33, not 33.

⁴ The VSE factor means the percent reduction in organic HAP emissions expressed as a decimal measured by the VSE test method of appendix A to this subpart.

⁵ This equation is based on a organic HAP emissions factor equation developed for mechanical atomized controlled spray. It may only be used for automated or robotic spray systems with atomized spray. All spray operations using hand held spray guns must use the appropriate mechanical atomized or mechanical nonatomized organic HAP emissions factor equation. Automated or robotic spray systems using nonatomized spray should use the appropriate nonatomized mechanical resin application equation.

⁶ Applies only to filament application using an open resin bath. If resin is applied manually or with a spray gun, use the appropriate manual or mechanical application organic HAP emissions factor equation.

⁷ These equations are for centrifugal casting operations where the mold is vented during spinning. Centrifugal casting operations where the mold is completely sealed after resin injection are considered to be closed molding operations.

⁸ If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, use the appropriate open molding equation with covered cure and no rollout to determine an emission factor for operations prior to the closing of the centrifugal casting mold. If the closed centrifugal casting mold is vented during spinning, use the appropriate centrifugal casting equation to calculate an emission factor for the portion of the process where spinning and cure occur. If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, and the mold is then closed and is not vented, treat the entire operation as open molding with covered cure and no rollout to determine emission factors.

Attachment D

Table 2 to Subpart WWWW of Part 63—Compliance Dates for New and Existing Reinforced Plastic Composites Facilities

As required in §§63.5800 and 63.5840 you must demonstrate compliance with the standards by the dates in the following table:

If your facility is . . .	And . . .	Then you must comply by this date . . .
An existing source	Is a major source on or before the publication date of this subpart	April 21, 2006, or You must accept and meet an enforceable HAP emissions limit below the major source threshold prior to April 21, 2006.

Attachment E

Table 3 to Subpart WWWW of Part 63—Organic HAP Emissions Limits for Existing Open Molding Sources, New Open Molding Sources Emitting Less Than 100 TPY of HAP, and New and Existing Centrifugal Casting and Continuous Lamination/Casting Sources that Emit Less Than 100 TPY of HAP

As specified in §63.5805, you must meet the following organic HAP emissions limits that apply to you:

If your operation type is . . .	And you use . . .	¹ Your organic HAP emissions limit is . . .
open molding—tooling	a. mechanical resin application b. manual resin application	254 lb/ton. 157 lb/ton.
open molding—gel coat ¹	a. tooling gel coating b. white/off white pigmented gel coating c. all other pigmented gel coating d. CR/HS or high performance gel coat e. fire retardant gel coat f. clear production gel coat	440 lb/ton. 267 lb/ton. 377 lb/ton. 605 lb/ton. 854 lb/ton. 522 lb/ton.

¹If you only apply gel coat with manual application, for compliance purposes treat the gel coat as if it were applied using atomized spray guns to determine both emission limits and emission factors. If you use multiple application methods and any portion of a specific gel coat is applied using nonatomized spray, you may use the nonatomized spray gel coat equation to calculate an emission factor for the manually applied portion of that gel coat. Otherwise, use the atomized spray gel coat application equation to calculate emission factors.

Attachment F

Table 4 to Subpart WWWW of Part 63—Work Practice Standards

As specified in §63.5805, you must meet the work practice standards in the following table that apply to you:

For ...	You must ...
a new or existing cleaning operation	not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.
a new or existing materials HAP-containing materials storage operation	keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.

Attachment G

Table 7 to Subpart WWW of Part 63—Options Allowing Use of the Same Resin Across Different Operations That Use the Same Resin Type

As specified in §63.5810(d), when electing to use the same resin(s) for multiple resin application methods, you may use any resin(s) with an organic HAP content less than or equal to the values shown in the following table, or any combination of resins whose weighted average organic HAP content based on a 12-month rolling average is less than or equal to the values shown the following table:

If your facility has the following resin type and application method . . .	The highest resin weight is* * * percent organic HAP content, or weighted average weight percent organic HAP content, you can use for . . .	is . . .
1. CR/HS resins, centrifugal casting ^{1,2}	a. CR/HS mechanical	³ 48.0
	b. CR/HS filament application	48.0
	c. CR/HS manual	48.0
2. CR/HS resins, nonatomized mechanical	a. CR/HS filament application	46.4
	b. CR/HS manual	46.4
3. CR/HS resins, filament application	CR/HS manual	42.0
4. non-CR/HS resins, filament application	a. non-CR/HS mechanical	³ 45.0
	b. non-CR/HS manual	45.0
	c. non-CR/HS centrifugal casting ^{1,2}	45.0
5. non-CR/HS resins, nonatomized mechanical	a. non-CR/HS manual	38.5
	b. non-CR/HS centrifugal casting ^{1,2}	38.5
6. non-CR/HS resins, centrifugal casting ^{1,2}	non-CR/HS manual	37.5
7. tooling resins, nonatomized mechanical	tooling manual	91.4
8. tooling resins, manual	tooling atomized mechanical	45.9

¹If the centrifugal casting operation blows heated air through the molds, then 95 percent capture and control must be used if the facility wishes to use this compliance option.

²If the centrifugal casting molds are not vented, the facility may treat the centrifugal casting operations as if they were vented if they wish to use this compliance option.

³Nonatomized mechanical application must be used.

Attachment H

Table 8 to Subpart WWWW of Part 63—Initial Compliance With Organic HAP Emissions Limits

As specified in §63.5860(a), you must demonstrate initial compliance with organic HAP emissions limits as specified in the following table:

For . . .	That must meet the following organic HAP emissions limit . . .	You have demonstrated initial compliance if . . .
open molding and centrifugal casting operations	an organic HAP emissions limit shown in Tables 3 or 5 to this subpart, or an organic HAP content limit shown in Table 7 to this subpart	i. you have met the appropriate organic HAP emissions limits for these operations as calculated using the procedures in §63.5810 on a 12-month rolling average 1 year after the appropriate compliance date, and/or ii. you demonstrate that any individual resins or gel coats not included in (i) above, as applied, meet their applicable emission limits, or iii. you demonstrate using the appropriate values in Table 7 to this subpart that the weighted average of all resins and gel coats for each resin type and application method meet the appropriate organic HAP contents.

Attachment I

Table 9 to Subpart WWWW of Part 63—Initial Compliance With Work Practice Standards

As specified in §63.5860(a), you must demonstrate initial compliance with work practice standards as specified in the following table:

For . . .	That must meet the following standards . . .	You have demonstrated initial compliance if . . .
a new or existing cleaning operation	not use cleaning solvents that contain HAP, except that styrene may be used in closed systems, and organic HAP containing materials may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin between storage and applying resin to the mold or reinforcement	the owner or operator submits a certified statement in the notice of compliance status that all cleaning materials, except styrene contained in closed systems, or materials used to clean cured resin from application equipment, contain no HAP.
a new or existing materials HAP-containing materials storage operation	keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety	the owner or operator submits a certified statement in the notice of compliance status that all HAP-containing storage containers are kept closed or covered except when adding or removing materials, and that any bulk storage tanks are vented only as necessary for safety.

Attachment J

Table 13 to Subpart WWW of Part 63—Applicability and Timing of Notifications

As required in §63.5905(a), you must determine the applicable notifications and submit them by the dates shown in the following table:

If your facility . . .	You must submit . . .	By this date . . .
Is an existing source subject to this subpart	An Initial Notification containing the information specified in §63.9(b)(2)	No later than the dates specified in §63.9(b)(2).

Attachment K

Table 14 to Subpart WWWW of Part 63—Requirements for Reports

As required in §63.5910(a), (b), (g), and (h), you must submit reports on the schedule shown in the following table:

You must submit a(n)	The report must contain . . .	You must submit the report . . .
Compliance report	a. A statement that there were no deviations during that reporting period if there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you and there were no deviations from the requirements for work practice standards in Table 4 to this subpart that apply to you. If there were no periods during which the CMS, including CEMS, and operating parameter monitoring systems, was out of control as specified in §63.8(c)(7), the report must also contain a statement that there were no periods during which the CMS was out of control during the reporting period	Semi-annually according to the requirements in §63.5910(b).
	b. The information in §63.5910(d) if you have a deviation from any emission limitation (emission limit, operating limit, or work practice standard) during the reporting period. If there were periods during which the CMS, including CEMS, and operating parameter monitoring systems, was out of control, as specified in §63.8(c)(7), the report must contain the information in §63.5910(e)	Semi-annually according to the requirements in §63.5910(b).
	c. The information in §63.10(d)(5)(i) if you had a startup, shutdown or malfunction during the reporting period, and you took actions consistent with your startup, shutdown, and malfunction plan	Semi-annually according to the requirements in §63.5910(b).
2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan	a. Actions taken for the event	By fax or telephone within 2 working days after starting actions inconsistent with the plan.
	b. The information in §63.10(d)(5)(ii)	By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority. (§63.10(d)(5)(ii)).

Attachment L

10 CSR 10-5.030 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-5.030 *Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*.

The maximum allowable PM emission limitation for new indirect heating sources having a heat input of less than 10 MMBtu/hr is 0.40 lb/MMBtu of heat input: [10 CSR 10-5.030(3)(B)1]

Emission Unit	Description	Emission Factor (lb/MMscf)	Emission Factor (lb/MMBtu)	Emission Limit (lb/MMBtu)
EP9	Curing Oven	7.6	0.0072	0.40

The emission factor was taken from AP-42 Table 1.4-2. The average heating value of 1,050 Btu/scf for natural gas used to convert the emission factor from lb/MMscf to lb/MMBtu was taken from AP-42 Appendix A. The calculations demonstrate that the emission unit has worst-case emissions far below the applicable emission limit while being properly maintained and operated; therefore, no monitoring or recordkeeping other than maintenance records are required while combusting natural gas.

STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application, received February 22, 2010;
- 2) 2010 Emissions Inventory Questionnaire, received March 21, 2011; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.
- 4) webFIRE
- 5) Construction Permit No. 0994-014
- 6) Construction Permit No. 0195-003
- 7) No Permit Required Project No. 2006-05-056

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-5.300 *Control of Emissions from Solvent Metal Cleaning*

This rule does not apply to hand cleaning or flush cleaning operations. The only cleaning operations the installation has are hand cleaning and flush cleaning operations. Therefore this rule does not apply [10 CSR 10-5.300(1)(D)E]

10 CSR 10-5.410 *Control of Emissions From Manufacture of Polystyrene Resin*

This rule does not apply because this installation does not manufacture polystyrene resin.

10 CSR 10-5.455 *Control of Emissions From Solvent Metal Cleaning Operations*

The acetone tanks are exempt from this rule because it is a cold cleaner. The flushing of the casting machine uses strictly S-0280 Resin Flush and methylene chloride. The rule does not apply because methylene chloride is not considered a VOC and the VOC emissions from the S-0280 resin flush are less than three tons per rolling 12 month period in the absence of control equipment. [10 CSR 10-5.455(1)(B)]

10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants*

Since this facility primarily emits VOC, and no units are present that emit particulate matter in significant amounts, it is highly unlikely that this facility will exceed the opacity limitations, therefore no conditions were included in this permit for this rule.

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds*

This rule does not apply because the curing oven uses pipeline grade natural gas exclusively. [10 CSR 10-6.260(1)(A)2]

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter from Industrial Processes*

This rule does not apply because none of the emission units have a potential to emit particulate matter of over 0.5 tons per hour.

10 CSR 10-6.405 *Restriction of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*

This rule does not apply because the curing oven is natural gas fired. [10 CSR 10-6.405(1)(E)]

Construction Permits

- 1) Construction Permit No. 0994-014, Issued September 30, 1994;
- 2) This construction permit was issued for a fiberglass mold fabrication unit which involves the use of gel coat and resin. This construction permit contains special conditions that are not included in this operating permit because the construction permit was replaced in its entirety by Construction Permit No. 0195-003.
- 3) Construction Permit No. 0195-003, Issued December 23, 1994;
- 4) This construction permit was issued to begin a cultured marble manufacturing line aided by a fiberglass mold fabrication department. This construction permit contains special conditions which are applied in Permit Condition (EP1, EP2, EP3, and EP5)-001.
- 5) No Construction Permit Required Determination, Issued July 3, 2006;
- 6) This no construction permit required determination was issued for a new grinding booth. No permit was required because the same grinding activities will take place in the new grinding area and maximum design production capacity will not change with the new configuration. There was not an increase in emissions from the equipment change.

New Source Performance Standards (NSPS) Applicability

10 CSR 10-6.070, *New Source Performance Regulations*

40 CFR Part 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*

This subpart applies to storage vessel which has a storage capacity of greater than 19,812 gallons. The resin storage tank with a capacity of 6,000 gallons does not meet the applicability criteria of this subpart; therefore the tank is not subject to this regulation.

Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63, Subpart WWWW, *National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production*

The installation is an existing source subject to the requirements of this subpart. The installation's potential to emit of HAPs is less 100 tons per year and therefore the installation is not subject to the standards in §63.5805(a)(1) and must meet the standards in Table 3 of Subpart WWWW. The primary sources of HAP emissions that are subject to this MACT are the gel coat spray booths, resin hand lay-up mold fabrication, cleaning operation and HAP containing storage materials.

Startup, shutdown, and malfunction plan and recordkeeping

40 CFR 63.6 (e)(1) and (2), Subpart A, Startup, shutdown, and malfunction plan and recordkeeping requirements, requires the source to operate at all times, including periods of startup, shutdown and maintenance (SSM), in a manner consistent with good air pollution control practices for minimizing emissions. Written SSM plans are required to be completed, upgraded as necessary and records maintained for each SSM event. Subpart WWWW of Part 63 requires this only for sources using add-on controls. The installation does not use add on controls to comply with the rule, therefore is not required to have submit a written SSM plan. 40 CFR 63.10(d)(5), Subpart A, Startup, shutdown, and malfunction reports requirement does not apply to this installation. This requirement only applies for installations that use add-on controls.

Emission Unit EP5 is considered a polymer casting process as defined in 40 CFR 63.5935; therefore no HAP emission limits are applicable to this process.

A component of Emission Unit EP5 is considered a mixing container which is subject to the work practice item 8 in Table 4 of subpart WWWW. However, containers of 5 gallons or less may be open when active mixing is taking place, or during periods when they are in process (i.e., they are actively being used to apply resin). For polymer casting mixing operations, containers with a surface area of 500 square inches or less may be open while active mixing is taking place. Therefore, since the surface area of the container is less than 500 square inches, it is exempt from the requirement to cover the mixer.

The acetone dip tanks are not subject to this subpart because they contain acetone which is not considered a HAP.

The tables to this subpart are included in this operating permit as attachments. These tables have been modified to only show the requirements that apply.

40 CFR Part 63, Subpart T, *National Emission Standards for Halogenated Solvent Cleaning*

The provisions of this subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent.

The installation has two solvent dip tanks which use acetone. The installation sometimes uses methylene chloride in the casting machine cleaning process (EP6), however this process does not involve placing parts into a device or piece of equipment to remove soils. Therefore this rule does not apply.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

40 CFR Part 61, Subpart M – *National Emission Standards for Asbestos* is applicable to the installation and has been applied within this permit (see Section IV. Core Permit Requirements).

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and

- Uses a control device to achieve compliance, and
 - Has pre-control emissions that exceed or are equivalent to the major source threshold.
- 40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

Greenhouse Gas Emissions

On May 13, 2010, EPA issued the GHG Tailoring Rule which set the major source threshold for CO₂e to be 100,000 tons per year within 40 CFR Part 70. As of July 1, 2011 all Title V operating permits are required to include GHG emissions. Potential emissions of greenhouse gases (CO₂e) for this installation are calculated to be 1,798 tons, classifying the installation as a minor source of GHGs.

This source is not subject to 40 CFR Part 98 - *Mandatory Greenhouse Gas Reporting Rule*. In addition, Missouri regulations do not require the installation to report CO₂ emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation’s actual CO₂ emissions were not included within this permit.

Updated Potential to Emit for the Installation

Pollutant	Potential to Emit (tons/yr) ¹
CO	1.25
CO ₂ e	1,798
HAP	47.43
Styrene	47.43
NO _x	2.08
PM ₁₀	1.09
PM ₂₅	0.11
SO _x	0.009
VOC	50.47

¹Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation unless otherwise noted.

Detailed calculations are shown below:

EP1: Gelcoat Spraying-Casting

$$VOC\ PTE = MHDR \times VOC\% \times Evaporation\ Factor$$

$$VOC\ PTE = 0.015 \frac{ton}{hr} \times \frac{522\ lb\ styrene}{ton} \times 8760\ hours/year \times \frac{1\ ton}{2000\ lb}$$

$$VOC\ PTE = 34.3\ ton/year$$

$$Styrene\ \% = 100\%$$

$$Styrene\ PTE = 34.3\ ton/year$$

$$PM_{10}\ PTE = MHDR \times PM\% \times (1 - Transfer\ Efficiency) \times (1 - Control\ Efficiency)$$

$$PM_{10}\ PTE = 30 \frac{lb}{hr} \times 0.6566 \frac{lb\ PM}{lb\ coating} \times (1 - 0.65) \times (1 - 0.9714) \times \frac{8760\ hrs/year}{2000\ lb/ton}$$

$$PM_{10}\ PTE = 0.86\ tons/year$$

EP2: Gelcoat Spraying-Mold Fabrication

$$VOC\ PTE = MHDR \times VOC\% \times Evaporation\ Factor$$

$$\text{VOC PTE} = 0.0003 \frac{\text{ton}}{\text{hr}} \times \frac{440 \text{ lb styrene}}{\text{ton}} \times 8760 \text{ hours/year} \times \frac{1 \text{ ton}}{2000 \text{ lb}}$$

VOC PTE = 0.58 ton/year

Styrene % = 100%
Styrene PTE = 0.58 ton/year

$$\text{PM}_{10} \text{ PTE} = \text{MHDR} \times \text{PM}\% \times (1 - \text{Transfer Efficiency}) \times (1 - \text{Control Efficiency})$$
$$\text{PM}_{10} \text{ PTE} = 0.6 \frac{\text{lb}}{\text{hr}} \times 0.6566 \frac{\text{lb PM}}{\text{lb coating}} \times (1 - 0.65) \times (1 - 0.9714) \times \frac{8760 \text{ hrs/year}}{2000 \text{ lb/ton}}$$

PM₁₀ PTE = 0.02 tons/year

EP3: Hand Lay-up Mold Fabrication

$$\text{VOC PTE} = \text{MHDR} \times \text{VOC}\% \times \text{Evaporation Factor}$$

$$\text{VOC PTE} = 0.0014 \frac{\text{ton}}{\text{hr}} \times \frac{157 \text{ lb styrene}}{\text{ton}} \times 8760 \text{ hours} \times \frac{1 \text{ ton}}{2000 \text{ lb}}$$

VOC PTE = 0.96 ton/year

Styrene % = 100%
Styrene PTE = 0.96 ton/year

EP4: Resin Storage Tank

$$\text{VOC PTE} = \text{Maximum Throughput} \times \text{Emission Factor}$$

$$\text{VOC PTE} = 43.6 \frac{\text{gal}}{\text{hr}} \times 0.17 \frac{\text{lb}}{1000 \text{ gal}} \times \frac{8760 \text{ hrs/year}}{2000 \text{ lb/ton}}$$

VOC PTE = 0.032 ton/year

$$\text{Styrene PTE} = 43.6 \text{ gal/hr} \times 0.17 \frac{\text{lb}}{1000 \text{ gal}} \times \frac{8760 \text{ hrs/year}}{2000 \text{ lb/ton}}$$

Styrene PTE = 0.032 ton/year

EP5: Casting Machine

$$\text{VOC PTE} = \text{MHDR} \times \text{VOC}\% \times \text{Emission Factor}$$

$$\text{VOC PTE} = 0.2 \frac{\text{ton}}{\text{hr}} \times 0.33 \times 0.02 \times 8760 \text{ hours}$$

VOC PTE = 11.56 ton/year

Styrene % = 100%
Styrene PTE = 11.56 ton/year

EP6: Cleaning Operation

VOC emissions are less than three tons per year. (10 CSR 10-5.455)

EP7: Grinding Booth with Dust Collector

$$\text{PM}_{10} \text{ PTE} = \text{MHDR} \times \text{Emission Factor} \times \text{PM}\%$$

$$PM_{10} PTE = 0.1446 \frac{\text{ton}}{\text{hr}} \times 8 \frac{\text{lb}}{\text{ton}} \times 0.01 \times \frac{8760 \text{ hrs/year}}{2000 \text{ lb/ton}}$$

$PM_{10} PTE = 0.0507 \text{ ton/year}$

EP8: Grinding Booth-Panels

$$PM_{10} PTE = MHDR \times \text{Emission Factor} \times PM\%$$
$$PM_{10} PTE = 0.1446 \frac{\text{ton}}{\text{hr}} \times 8 \text{ lb/ton} \times 0.01 \times \frac{8760 \text{ hrs/year}}{2000 \text{ lb/ton}}$$

$PM_{10} PTE = 0.0507 \text{ ton/year}$

EP9: Curing Oven

$$3.6 \frac{\text{MMBtu}}{\text{hr}} \times \frac{1 \text{ mmcf}}{1050 \text{ MMBtu}} = 0.0034 \text{ mmcf/hr}$$

$$PM_{10} PTE = 0.0034 \text{ mmcf/hr} \times 7.6 \text{ lb/mmcf} \times \frac{8760 \text{ hrs/year}}{2000 \text{ lb/ton}}$$

$PM_{10} PTE = 0.11 \text{ tons/year}$

$$PM_{2.5} PTE = 0.0034 \text{ mmcf/hr} \times 7.6 \text{ lb/mmcf} \times \frac{8760 \text{ hrs/year}}{2000 \text{ lb/ton}}$$

$PM_{2.5} PTE = 0.11 \text{ tons/year}$

$$SO_x PTE = 0.0034 \text{ mmcf/hr} \times 0.6 \text{ lb/mmcf} \times \frac{8760 \text{ hrs/year}}{2000 \text{ lb/ton}}$$

$SO_x PTE = 0.009 \text{ tons/year}$

$$VOC PTE = 0.0034 \text{ mmcf/hr} \times 2.8 \text{ lb/mmcf} \times \frac{8760 \text{ hrs/year}}{2000 \text{ lb/ton}}$$

$VOC PTE = 0.042 \text{ tons/year}$

$$CO PTE = 0.0034 \text{ mmcf/hr} \times 84 \text{ lb/mmcf} \times \frac{8760 \text{ hrs/year}}{2000 \text{ lb/ton}}$$

$CO PTE = 1.25 \text{ tons/year}$

$$NO_x PTE = 0.0034 \text{ mmcf/hr} \times 140.0 \text{ lb/mmcf} \times \frac{8760 \text{ hrs/year}}{2000 \text{ lb/ton}}$$

$NO_x PTE = 2.08 \text{ tons/year}$

Other Regulatory Determinations

10 CSR 10-5.030 *Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating* was rescinded by the State of Missouri on October 30, 2011, and replaced by 10 CSR 10-6.405 *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating*. 10 CSR 10-5.030 has not yet been removed from Missouri's State Implementation

Plan (SIP) and is, therefore, still federally enforceable, but not state enforceable (see Permit Condition EP9-001). 10 CSR 10-5.030 will no longer be federally enforceable upon removal from Missouri's SIP.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

- 1) The specific pollutant regulated by that rule is not emitted by the installation;
- 2) The installation is not in the source category regulated by that rule;
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule;
- 4) The installation does not contain the type of emission unit which is regulated by that rule;
- 5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

Colin Janssen
Environmental Engineer

CERTIFIED MAIL: 70093410000193528385
RETURN RECEIPT REQUESTED

Mr. Raymond Daggett
Superior Home Products, Inc.
P.O. Box 702
Wentzville, MO 63385

Re: Superior Home Products, Inc., 183-0131
Permit Number: **OP2012-017**

Dear Mr. Daggett:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Colin Janssen at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS:cjk

Enclosures

c: St. Louis Regional Office
PAMS File: 2010-02-080