



**TITLE V FEDERAL OPERATING PERMIT,
AND
SMAQMD RULE 201 PERMITS TO OPERATE**

TITLE V PERMIT NO:

TV2013-18-01

ISSUED TO:

D&T Fiberglass Company, Inc.

FACILITY LOCATION:

8900 Osage Avenue
Sacramento, CA 95828

PERMIT ISSUED:

November 30, 2018

PERMIT LAST AMENDED:

NA

PERMIT EXPIRES:

November 30, 2023

RESPONSIBLE OFFICIAL:

Donald Stommel
CEO
(916) 383-9012

CONTACT PERSON:

Lane Johnson
Production manager
(916) 383-9012

NATURE OF BUSINESS:

Reinforced Plastic Composites Production

**STANDARD INDUSTRIAL
CLASSIFICATION (SIC):**

3089

Alberto Ayala
SMAQMD Air Pollution Control Officer

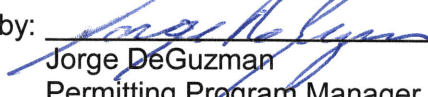
by: 
Jorge DeGuzman
Permitting Program Manager

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Fiberglass Product Manufacturing Process consisting of:	
Gel Coat Spray Room	
Gel Coat Spray Booth	
Lamination Layup Spray Room	
Filament Winding Machine	
Miscellaneous Processes	
[SMAQMD Permit to Operate No. 21466]	
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I. PERMIT SUMMARY

This permit shall serve as a Permit to Operate pursuant to SMAQMD Rule 201 (General Permit Requirements) and SMAQMD Rule 207 (Title V - Federal Operating Permit Program). Requirements identified in the permit as non-federally enforceable are not enforceable by the U.S. EPA or the public. However, they are enforceable by the SMAQMD.

The permittee's application for this air quality Permit to Operate was evaluated for compliance with SMAQMD, State of California and federal air quality rules and regulations. The following listed rules are those that were found to be applicable at the time of permit review, based on the information submitted with the Title V permit application.

Citation	Description	Rule Adoption/ Amended Date	Federally Enforceable ?
SMAQMD Rule 101	General Provisions and Definitions	10-27-2011	Yes
SMAQMD Rule 102	Circumvention	05-15-1972	Yes
SMAQMD Rule 105	Emission Statements	09-05-1996	Yes
SMAQMD Rule 201	General Permit Requirements (This rule version is SIP approved.)	11-20-1984	Yes
SMAQMD Rule 201	General Permit Requirements (This rule version is not SIP approved.)	08-24-2006	No
SMAQMD Rule 202	New Source Review (SIP approval of 11-20-1984 rule version was withdrawn on 08-19-2011)	11-20-1984	No
SMAQMD Rule 202	New Source Review (This rule version is not SIP approved.)	10-28-2010	No
SMAQMD Rule 203	Prevention of Significant Deterioration	01-27-2011	Yes
SMAQMD Rule 207	Title V - Federal Operating Permit Program (not SIP approved but rule is applicable as part of U.S. EPA approval of the SMAQMD Title V program)	04-26-2001	Yes
SMAQMD Rule 214	Federal New Source Review	08-23-2012	Yes
SMAQMD Rule 217	Public Notice Requirements for Permits	08-23-2012	Yes

I. PERMIT SUMMARY (continued)

Citation	Description	Rule Adoption/ Amended Date	Federally Enforceable ?
SMAQMD Rule 301	Permit Fees - Stationary Source (not SIP approved but Title V fees in rule applicable as part of U.S. EPA approval of the SMAQMD Title V program)	07-25-2013	Yes (Title V provisions only)
SMAQMD Rule 306	Air Toxics Fees (This rule is not SIP approved.)	05-23-2013	No
SMAQMD Rule 307	Clean Air Act Fees	09-26-2002	Yes
SMAQMD Rule 401	Ringelmann Chart	04-19-1983	Yes
SMAQMD Rule 402	Nuisance (This rule is not SIP approved.)	08-03-1977	No
SMAQMD Rule 403	Fugitive Dust	08-03-1977	Yes
SMAQMD Rule 404	Particulate Matter	11-20-1984	Yes
SMAQMD Rule 406	Specific Contaminants	12-06-1978	Yes
SMAQMD Rule 407	Open Burning	08-03-1977	Yes
SMAQMD Rule 413	Stationary Gas Turbines	03-24-2005	Yes
SMAQMD Rule 420	Sulfur Content of Fuels	08-13-1981	Yes
SMAQMD Rule 442	Architectural Coatings	09-24-2015	Yes
SMAQMD Rule 451	Surface Coatings of Miscellaneous Metal Parts and Products	10-28-2010	Yes
SMAQMD Rule 460	Adhesives and Sealants (This rule version is not SIP approved.)	11-30-2000	No
SMAQMD Rule 466	Solvent Cleaning	10-28-2010	Yes
SMAQMD Rule 601	Procedure Before the Hearing Board (This rule is not SIP approved.)	02-05-1998	No
SMAQMD Rule 602	Breakdown Conditions: Emergency Variance (This rule is not SIP approved.)	12-06-1978	No

I. PERMIT SUMMARY (continued)

Citation	Description	Rule Adoption/ Amended Date	Federally Enforceable ?
U.S. EPA National Emission Standards for Hazardous Air Pollutants (NESHAP)	National Emission Standards for Hazardous Air Pollutants for Source Categories - General Provisions [40 CFR 63 Subpart A (begin at 63.1)]	03-16-1994 (A)	Yes
U.S. EPA National Emission Standards for Hazardous Air Pollutants (NSHAPS)	National Emission Standards for Hazardous Air Pollutants: Reinforced Plastics Composites Production [40 CFR 63 Subpart WWWW (begin at 63.5780)]	03-05-2004 (A)	Yes
40 CFR 68	Chemical Accident Prevention Provisions [40 CFR 68 (begin at 68.1)]	04-09-2004 (A)	Yes (if threshold quantity is exceeded)
40 CFR 82	Protection of Stratospheric Ozone - Recycling and Emissions Reduction [40 CFR 82 (begin at 82.150)]	04-13-2005 (A)	Yes

(A) U.S. EPA promulgation/amendment date

Future changes in prohibitory rules may establish more stringent requirements that may, at the SMAQMD level, supersede the conditions listed here. For Title V purposes however, the federally enforceable requirements are those found in the Title V permit. Federally enforceable provisions of the Title V permit do not change until the Title V permit is revised.

II. FACILITY DESCRIPTION

Title V Permit Background

<u>Permit Action</u>	<u>Date Permit Issued</u>	<u>Title V Permit No.</u>
Initial Title V permit	07-20-2004	TV2004-18-01
First Renewal	07-20-2009	TV2008-18-01

Current Permitting Action

This permit action is the second renewal of the initial Title V Federal Operating Permit that was issued 07-20-2004. The permit number assigned to this Title V permit is TV2013-18-01.

Facility Description

The following facility description is for informational purposes only and does not contain any applicable federally enforceable requirements.

D&T Fiberglass Company, Inc. is required to obtain a Title V Federal Operating Permit because the facility has a potential to emit greater than 10 tons/year of a single HAP (hazardous air pollutant). That HAP is styrene which results from the use of resins in the fiberglass product manufacturing process.

D&T Fiberglass Company is a manufacturer of reinforced plastic composites. The facility custom fabricates reinforced plastic composites parts on an order basis. The composition, shape and size of the fiberglass composite parts varies significantly from one project to the next. As a result, a wide variety of resins, gel coats and colorants are used. Specialty resins for high temperature and corrosion resistance are also used. Products may or may not receive a gel coat and may also be surfaced with a pigmented resin coating.

In general the fabrication process begins with construction of a new mold or use of an existing mold. Open molds are constructed of wood, metal and plastics. They may also be a molded composite with a high temperature specialty gel coat to facilitate parting. Molds are prepared for use by solvent cleaning and using mold release agents and waxes. Emissions from mold preparation are based on conservation of mass calculations to determine the mass of ROC in the materials applied.

Once molds are fabricated and prepared, the gel coat application and lamination process begins. If a part requires a gel coat finish, the mold is staged in the gel coat spray booth and gel coat is spray applied to the mold and allowed to cure. Gel coat particulate matter overspray and styrene emissions from styrene used in the gel coat formulation are collected in the ventilation system of the gel coat booth. Particulate matter is separated from the exhaust air by the booth filters. The styrene emissions are not captured and exhaust to the atmosphere. Gel coat material may contain up to 45% by weight styrene and does not contain a vapor suppressant due to the need to adhere subsequent layers. The gel coat material historically used at D&T Fiberglass ranges from 25% to 38% styrene by weight.

II. FACILITY DESCRIPTION (continued)

Once the gel coat is cured the part is moved to the lamination booth. Parts that do not have a gel coat begin at this booth. Most parts are mechanically sprayed with catalyzed resin and fiberglass that are mixed in a chopper gun. The fiberglass material is rolled to remove any voids and air bubbles and to compact the composite material. A small amount of manual resin operations are also performed where fiberglass mats are laid on the part and resin applied manually by brush or roller.

Lamination operations may use non-specialty resins containing up to 35% styrene by weight. Historically, D&T Fiberglass Company has used such non-specialty resins with a styrene content of 31% to 35% by weight.

Specialty resins are used for parts intended for use in high temperature or corrosive environments. These specialty resins may contain up to 50% styrene by weight. Historically, D&T Fiberglass Company has used such specialty resins with a styrene content of 46% to 49% by weight.

In addition to the open mold process to produce fiberglass reinforced plastic parts, D&T Fiberglass Company also uses a filament winder to produce fiberglass reinforced plastic pipe. Pipe is fabricated on a mandrel in two layers. The inner core uses isophthalic resin (specialty resin) and the outer layer uses standard ortho resin. The filament winder draws up to 40 fiberglass strands through a saturation tray containing the catalyzed resin and applies it to the turning mandrel on which the pipe is formed. Styrene emissions associated with the filament winder are less than the open mold process because there is no spraying process and therefore no air atomization of the resin.

Once the lamination process is complete and the part has cured, it is demolded and finished. The finishing operation may involve the use of small amounts of body putty, adhesives, application of latex paints, drilling, sanding, installation of hardware and other miscellaneous operations. The finishing operation with the greatest potential for emissions is the application of a coating of resin mixed with colorant and a wax. This finish coat imparts a glossy colored coating that is an alternative to a gel coat.

D&T Fiberglass Company also uses solvents to clean application equipment. Acetone is the primary solvent used. Acetone is a solvent exempt from air pollution control regulations because it does not contribute to the formation of ozone and is not a hazardous air pollutant. Two types of ROC containing solvents are used in enclosed gun cleaners. Spent solvent from the enclosed gun cleaners is disposed of in drums and removed by a registered waste disposal company.

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

TITLE V PERMIT MODIFICATIONS AND RENEWAL

1. The permittee shall submit to the SMAQMD Air Pollution Control Officer a complete Title V permit application for renewal no later than 12 months prior to the expiration date of the Title V permit.
[Basis: SMAQMD Rule 207 Section 301.4]
2. The permittee shall submit to the SMAQMD Air Pollution Control Officer a complete Title V permit application for minor Title V permit modification when applicable. The application shall be submitted after receiving any required preconstruction permit from the SMAQMD and before commencing operation associated with the Minor Title V permit modification.
[Basis: SMAQMD Rule 207 Section 301.6]
3. The permittee shall submit to the SMAQMD Air Pollution Control Officer a complete Title V permit application for Significant Title V permit modification when applicable. The application shall not be submitted prior to receiving any required preconstruction permit from the SMAQMD but no later than 12 months after commencing an operation associated with the Significant Title V permit modification. Where an existing federally enforceable Title V permit condition would prohibit such change in operation or the stationary source is not required to obtain a preconstruction permit, the owner or operator must obtain a Title V permit modification before commencing operation.
[Basis: SMAQMD Rule 207 Section 301.7]
4. The permittee shall submit to the SMAQMD Air Pollution Control Officer timely updates to the Title V application as new applicable federal requirements become applicable to the source.
[Basis: SMAQMD Rule 207 Section 302.1]
5. The permittee shall submit to the SMAQMD Air Pollution Control Officer any additional information necessary to correct any incorrect information in the Title V permit application upon becoming aware of such incorrect submittal or if the applicant is notified by the SMAQMD Air Pollution Control Officer of such incorrect submittal.
[Basis: SMAQMD Rule 207 Section 302.2]
6. The permittee shall submit to the SMAQMD Air Pollution Control Officer any additional information relating to the Title V application within 30 days if such information is requested in writing by the SMAQMD Air Pollution Control Officer.
[Basis: SMAQMD Rule 207 Section 302.3]
7. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted and the stationary source complies with SMAQMD Rule 207 Sections 303.1(a), (b), (c) and (d), in which case the existing Title V permit will remain in effect until the Title V permit renewal has been issued or denied.
[Basis: SMAQMD Rule 207 Section 303.2]

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

8. Any Title V application form, report, or compliance certification submitted pursuant to a federally enforceable requirement in this permit shall contain certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[Basis: SMAQMD Rule 207 Section 304]

9. This Title V permit shall have a 5-year fixed term from the date of issuance. The Title V permit shall have a new 5-year fixed term from the date of final action on reopening if the responsible official chooses to submit to the SMAQMD a complete Title V application for renewal upon reopening of the Title V permit pursuant to SMAQMD Rule 207 Sections 411 or 412, and the Title V permit is renewed according to the administrative procedures listed in SMAQMD Rule 207 Sections 401 through 408.

[Basis: SMAQMD Rule 207 Section 306]

COMPLIANCE

10. The permittee shall comply with all conditions of the Title V permit.

[Basis: SMAQMD Rule 207 Section 305.1(k)(1)]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the Title V permit.

[Basis: SMAQMD Rule 207 Section 305.1(k)(2)]

12. This Title V permit may be modified, revoked, reopened, and reissued, or terminated for cause.

[Basis: SMAQMD Rule 207 Section 305.1(k)(3)]

13. The permittee shall furnish to the SMAQMD Air Pollution Control Officer, within a reasonable time, any information that the SMAQMD Air Pollution Control Officer may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit pursuant to SMAQMD Rule 207 Section 411, or to determine compliance with this Title V permit.

Upon request, the permittee shall also furnish to the SMAQMD Air Pollution Control Officer copies of records required to be kept by conditions of this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the U.S. EPA along with a claim of confidentiality.

[Basis: SMAQMD Rule 207 Section 305.1(k)(4)]

14. Noncompliance with any federally enforceable requirement in this Title V permit is grounds for Title V permit termination, revocation and reissuance, modification, enforcement action or denial of the Title V permit renewal application. Any violation of the Title V permit shall also be a violation of SMAQMD Rule 207.

[Basis: SMAQMD Rule 207 Section 305.1(k)(5)]

15. A pending Title V permit action (e.g. a proposed permit revision) or notification of anticipated noncompliance does not stay any permit condition.

[Basis: SMAQMD Rule 207 Section 305.1(k)(6)]

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

16. This Title V permit does not convey any property rights of any sort or any exclusive privilege.
[Basis: SMAQMD Rule 207 Section 305.1(k)(7)]
17. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the SMAQMD Air Pollution Control Officer or an authorized representative to perform all of the following:
- A. Enter upon the stationary source's premises where this source is located or 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 Title V permit;
 - C. Inspect at reasonable times, the stationary source, equipment (including monitoring and air pollution control equipment), practices and operations regulated or required under this Title V permit, and;
 - D. As authorized by the Federal Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the Title V permit conditions or applicable federal requirements.

[Basis: SMAQMD Rule 207 Section 413.1]

REPORTS AND RECORDKEEPING

18. Monitoring Reports

SMAQMD Monitoring Reports

- A. The permittee shall submit to the SMAQMD Air Pollution Control Officer at least once every six months, unless required more frequently by an applicable requirement, reports of all required monitoring.
- B. The reporting periods for this permit shall be for the six month periods January 1 through June 30 and July 1 through December 31. The reports shall be submitted by July 30 and January 30 of each year respectively.
- C. All instances of deviations from Title V permit conditions must be clearly identified in such reports. All required reports must be certified by the responsible official and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[Basis: SMAQMD Rule 207 Section 501.1]

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

19. Compliance Reports

Title V Compliance Reports

- A. The permittee shall submit to the SMAQMD Air Pollution Control Officer and U.S. EPA (Air-3, U.S. EPA, Region IX) on an annual basis, unless required more frequently by additional applicable federal requirements such as Section 114(a)(3) and 504(b) (42 U.S.C. Sections 7414(a)(3) and 7661c(b)) of the Federal Clean Air Act, a certification of compliance by the responsible official with all terms and conditions contained in the Title V permit, including emission limitations, standards and work practices.
- B. The reporting period for this permit shall be January 01 through December 31. The report shall be submitted by January 30 following the reporting period.
- C. All required reports must be certified by the responsible official and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- D. The Compliance Certification Report shall include the following:
 - i. The identification of each term or condition of the Title V permit that is the basis of the certification.
 - ii. The method(s) used for determining the compliance status of the source, currently and over the reporting period, and whether such method(s) provides continuous or intermittent data.
 - iii. The status of compliance with the terms and conditions of the Title V permit for the period covered by the certification, based on the method designated in Section D.ii of this condition.
 - iv. Such other facts as the SMAQMD Air Pollution Control Officer may require to determine the compliance status of the source.
 - v. In accordance with SMAQMD Rule 207 Section 305, a method for monitoring the compliance of the stationary source with its emissions limitations, standards and work practices.

[Basis: SMAQMD Rule 207 Section 413.4 and 40 CFR 70.6(c)(5)]

- 20. The permittee shall report, within 24 hours of detection, any deviation from a federally enforceable Title V permit condition not attributable to an emergency. In order to fulfill the reporting requirement of this condition, the permittee shall notify the SMAQMD Air Pollution Control Officer by telephone followed by a written statement describing the nature of the deviation from the federally enforceable permit condition.

[Basis: SMAQMD Rule 207 Section 501.3]

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

21. All monitoring data and support information required by a federally enforceable applicable requirement must be kept by the permittee for a period of 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the federally enforceable applicable requirements in the Title V permit.

[Basis: SMAQMD Rule 207 Section 502.3]

RINGELMANN CHART

22. Except as otherwise provided in SMAQMD Rule 401 Section 100, the permittee shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three minutes in any one hour which is:

- A. As dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or
- B. Of such opacity as to obscure a human observer's view, or a certified calibrated in-stack opacity monitoring system to a degree equal to or greater than No. 1 on the Ringelmann Chart.

[Basis: SMAQMD Rule 401 Section 301]

PARTICULATE MATTER

23. The permittee shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:

- A. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land.
- B. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles and other surfaces which can give rise to airborne dusts;
- C. Other means approved by the SMAQMD Air Pollution Control Officer.

[Basis: SMAQMD Rule 403]

24. Except as otherwise provided in SMAQMD Rule 406, the permittee shall not discharge into the atmosphere, from any source, particulate matter in excess of 0.23 grams per dry standard cubic

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

meter (0.1 grains per dry standard cubic foot).

[Basis: SMAQMD Rule 404 Section 301]

25. A person shall not discharge into the atmosphere particulate matter from the burning of any kind of material containing carbon in a free or combined state, from any single source of emission whatsoever, combustion contaminants in any state or combination thereof exceeding in concentration at the point of discharge: 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot) of gas corrected to 12% carbon dioxide (CO₂) at standard conditions.
[Basis: SMAQMD Rule 406]

ARCHITECTURAL COATING AND SOLVENT CLEANING

25. Any coating applied to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements or to curbs, shall meet the requirements of SMAQMD Rule 442.

[Basis: SMAQMD Rule 442 (09-05-1996 version)]

26. All VOC-containing materials used for architectural coating, including clean-up, shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired.

[Basis: SMAQMD Rule 442 Section 304 (09-05-1996 version)]

27. The permittee shall comply with the requirements of SMAQMD Rule 466 Solvent Cleaning when using volatile organic compounds for the cleanup of architectural coating application equipment or for other applications of solvent cleaning at the facility.

[Basis: SMAQMD Rule 466]

28. The permittee shall keep a record of all architectural coatings purchased that are not clearly labeled as complying with the VOC content limits contained in SMAQMD Rule 442. Compliance in these cases can be determined by maintaining records of the manufacturer's certifications or by Material Safety Data Sheets (MSDS) that demonstrate compliance with the VOC limits of SMAQMD Rule 442.

[Basis: SMAQMD Rule 201 Section 405]

PERMIT COMPLIANCE

29. Compliance with the conditions of the Title V permit shall be deemed compliance with all applicable requirements identified in the Title V permit.

[Basis: SMAQMD Rule 207 Section 307]

EQUIPMENT BREAKDOWNS

30. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology based emission limitations if the following conditions are met:

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

- A. The affirmative defense of an emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- i. An emergency occurred and that the permittee can identify the cause(s) of the emergency.
 - ii. The permitted facility was at the time being properly operated.
 - iii. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the Title V permit.
 - iv. The permittee submitted notice of the emergency to the SMAQMD Air Pollution Control Officer within two working days of the time when emissions limitations were exceeded due to the emergency. The notice must contain a description of the emergency and corrective actions taken.
- B. In any enforcement proceedings, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[Basis: SMAQMD Rule 207 Section 414]

31. The permittee shall notify the SMAQMD Air Pollution Control Officer of any occurrence which constitutes an emergency as defined in SMAQMD Rule 207 Section 212 as soon as reasonably possible, but no later than one hour after its detection. If the emergency occurs when the SMAQMD Air Pollution Control Officer cannot be contacted, the report of the emergency shall be made at the commencement of the next regular working day. The notification shall identify the time, specific location, equipment involved and, to the extent known, the cause(s) of the occurrence.

[Basis: SMAQMD Rule 207 Section 501.2]

PAYMENT OF FEES

32. The fee for (1) the issuance of an initial Title V operating permit, (2) the renewal and/or inspection of a Title V operating permit, (3) the modification of a Title V operating permit or (4) an administrative Title V permit amendment shall be assessed in accordance with SMAQMD Rule 301 Section 313.

[Basis: SMAQMD Rule 207 Section 305.7 and SMAQMD Rule 301 Section 313]

33. After the provisions for granting permits as set forth in SMAQMD Rule 207 have been complied with, the permittee will be notified by mail of the fee due and payable and the date the fee is due. If the fee is not paid by the specified due date, the fee shall be increased by one half the amount and the applicant/permittee shall be notified by mail of the increased fee. If the increased fee is not paid within 30 days after notice the application/permit will be canceled/revoked and the applicant/permittee will be notified by mail.

[Basis: SMAQMD Rule 207 Section 305.7]

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

ACCIDENTAL RELEASES

34. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall register and submit to the EPA the required data related to the risk management plan (RMP) for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities and accident prevention regulations promulgated under 40 CFR Part 68 do not limit in any way the general duty provisions under Section 112(r)(1) of the federal Clean Air Act of 1990.

[Basis: 40 CFR 68]

35. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall comply with the requirements of 40 CFR Part 68 no later than the latest of the following dates as provided in 68.10(a):

A. June 21, 1999,

B. Three years after the date on which a regulated substance is first listed under 68.130, or

C. The date on which a regulated substance is first present above a threshold quantity in a process.

[Basis: 40 CFR 68]

36. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.

[Basis: 40 CFR 68]

37. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) of the federal Clean Air Act of 1990 as part of the annual compliance certification as required by SMAQMD Rule 207 Section 413.4.

[Basis: 40 CFR 68]

TITLE VI REQUIREMENTS (OZONE DEPLETING SUBSTANCES)

38. The permittee, when opening appliances containing CFCs for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156.

[Basis: 40 CFR 82 Subpart F]

39. Equipment used during the maintenance, service, repair or disposal of appliances containing CFCs must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

[Basis: 40 CFR 82 Subpart F]

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

40. The permittee, when performing maintenance, service, repair or disposal of appliances containing CFCs must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

[Basis: 40 CFR 82 Subpart F]

IV. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

APPLICABILITY

1. The requirements outlined in this section are applicable to the SMAQMD Rule 201 Permit to Operate only and are not an enforceable part of the Title V permit.

SMAQMD RULE 201 PERMIT RENEWAL

2. Permits to Operate issued, pursuant to SMAQMD Rule 201 (non-Title V Permits to Operate), shall be renewed annually on May 14 and upon payment of the permit renewal fee established pursuant to SMAQMD Rule 301.
3. The SMAQMD Air Pollution Control Officer shall review every SMAQMD Rule 201 Permit to Operate upon annual renewal, pursuant to California Health and Safety Code Section 42301(c), to determine that permit conditions are adequate to ensure compliance with, and the enforceability of, SMAQMD rules and regulations applicable to the article, machine, equipment or contrivance for which the permit was issued. Applicable SMAQMD rules and regulations shall include those which were in effect at the time the permit was issued or modified, or which have subsequently been adopted and made retroactively applicable to an existing article, machine, equipment or contrivance, by the SMAQMD Board of Directors. The SMAQMD Air Pollution Control Officer shall revise the conditions, if such conditions are not consistent, in accordance with all applicable rules and regulations.

GENERAL

4. The SMAQMD Air Pollution Control Officer and/or authorized representatives, upon the presentation of credentials shall be permitted:
 - A. To enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this permit to operate, and
 - B. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Permit to Operate, and
 - C. To inspect any equipment, operation, or method required in this Permit to Operate, and
 - D. To sample emissions from the source or require samples to be taken.
5. Legible copies of all SMAQMD Rule 201 permits shall be maintained on the premises with the equipment.

EQUIPMENT OPERATION

6. The equipment shall be properly maintained.

IV. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

7. This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26, Part 4, Chapter 3, of the Health and Safety Codes of the State of California or the Rules and Regulations of the Sacramento Metropolitan Air Quality Management District.

EQUIPMENT BREAKDOWNS

8. The permittee shall notify the SMAQMD Air Pollution Control Officer of any occurrence which constitutes a breakdown as defined in SMAQMD Rule 602 Section 201 as soon as reasonably possible, but no later than one hour after its detection. If the breakdown occurs when the SMAQMD Air Pollution Control Officer cannot be contacted, the report of breakdown shall be made at the commencement of the next regular working day. The notification shall identify the time, specific location, equipment involved, and to the extent known, the cause(s) of the occurrence.
9. Upon notification of the breakdown condition, the SMAQMD Air Pollution Control Officer shall investigate the breakdown condition in accordance with uniform written procedures and guidelines relating to logging of initial reports on appropriate forms, investigation, and enforcement follow-up. If the occurrence does not constitute a breakdown condition, the SMAQMD Air Pollution Control Officer may take appropriate enforcement action.
10. An occurrence which constitutes a breakdown condition, and which persists only until the end of the production run or 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours) shall constitute a violation of any applicable emission limitation or restriction prescribed by SMAQMD Rules and Regulations; however, the SMAQMD Air Pollution Control Officer may elect to take no enforcement action if the owner or operator demonstrates to his satisfaction that a breakdown condition exists and the following requirements are met:
- A. The notification required in SMAQMD Rule 602 Section 301.1 is made; and
 - B. Immediate appropriate corrective measures are undertaken and compliance is achieved, or the process is shutdown for corrective measures before commencement of the next production run or within 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment for which the period shall be 96 hours). If the owner or operator elects to shut down rather than come into immediate compliance, (s)he must nonetheless take whatever steps are possible to minimize the impact of the breakdown within the 24 hour period; and
 - C. The breakdown does not interfere with the attainment and maintenance of any national ambient air quality standard.
11. An occurrence which constitutes a breakdown condition shall not persist longer than the end of the production run or 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours), unless an emergency variance has been obtained.

IV. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

12. If the breakdown condition will either require more than 24 hours to correct or persists longer than the end of the production run (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours) the owner or operator may, in lieu of shutdown, request the SMAQMD Air Pollution Control Officer to commence the emergency variance procedure set forth in SMAQMD Rule 602 Section 304.
13. No emergency variance shall be granted unless the chairperson of the SMAQMD Hearing Board or other designated member(s) of the SMAQMD Hearing Board finds that:
 - A. The occurrence constitutes a breakdown condition;
 - B. Continued operation is not likely to create an immediate threat or hazard to public health or safety; and
 - C. The requirements for a variance set forth in California Health & Safety Code Sections 42352 and 42353 have been met;
 - D. The continued operation in a breakdown condition will not interfere with the attainment or maintenance of the national ambient air quality standards.
14. At any time after an emergency variance has been granted, the SMAQMD Air Pollution Control Officer may request for good cause that the SMAQMD Hearing Board chairperson or designated member(s) reconsider and revoke, modify or further condition the variance. The procedures set forth in SMAQMD Rule 602 Section 304.1 shall govern any further proceedings conducted under this section.
15. An emergency variance shall remain in effect only for as long as necessary to repair or remedy the breakdown condition, but in no event after a properly noticed hearing to consider an interim or 90 day variance has been held, or 15 days from the date of the subject occurrence, whichever is sooner.
16. Within one week after a breakdown condition has been corrected, the owner or operator shall submit a written report to the SMAQMD Air Pollution Control Officer on forms supplied by the SMAQMD Air Pollution Control Officer describing the causes of the breakdown, corrective measures taken, estimated emissions during the breakdown and a statement that the condition has been corrected, together with the date of correction and proof of compliance. The SMAQMD Air Pollution Control Officer may, at the request of the owner or operator for good cause, extend up to 30 days the deadline for submittal of the report described in this subsection.
17. The burden of proof shall be on the owner or operator of the source to provide sufficient information to demonstrate that a breakdown condition did occur. If the owner or operator fails to provide sufficient information, the SMAQMD Air Pollution Control Officer shall undertake appropriate enforcement action.
18. Any failure to comply, or comply in a timely manner, with the reporting requirements established in SMAQMD Rule 602 Sections 301.1 and 401 shall constitute a separate violation of SMAQMD Rule 602.

IV. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

19. It shall constitute a separate violation of SMAQMD Rule 602 for any person to file with the SMAQMD Air Pollution Control Officer a report which falsely, or without probable cause, claims that an occurrence is a breakdown condition.

ARCHITECTURAL COATINGS

20. The permittee shall comply with the requirements of SMAQMD Rule 466 Solvent Cleaning when using volatile organic compounds for the cleanup of architectural coating application equipment.
[Basis: SMAQMD Rule 466 Sections 301 and 302 (09-25-2008 version)]

V.A. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

A. EQUIPMENT DESCRIPTION

The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

1. Gel Coat Spray Room

SMAQMD Rule 201 Permit to Operate No. 21466

(permit number is for reference purposes only - not federally enforceable)

Size: 16' W x 12' H x 30' D

Spray method: air-assisted airless or non-atomized mechanical spray equipment

2. Gel Coat Spray Booth

SMAQMD Rule 201 Permit to Operate No. 21466

(permit number is for reference purposes only - not federally enforceable)

Size: 15' W x 10' H x 25' D

Spray method: air-assisted airless or non-atomized mechanical spray equipment

3. Lamination Layup Spray Room

SMAQMD Rule 201 Permit to Operate No. 21466

(permit number is for reference purposes only - not federally enforceable)

Size: 35' W x 12' H x 35' D

Spray method: air-assisted airless or non-atomized mechanical spray equipment

4. Filament Winding Machine

SMAQMD Rule 201 Permit to Operate No. 21466

(permit number is for reference purposes only - not federally enforceable)

Manufacturer: Dura-Wound Dura Winder

Model No.: 20

5. Miscellaneous Processes

SMAQMD Rule 201 Permit to Operate No. 21466

(permit number is for reference purposes only - not federally enforceable)

- a. Mold Preparation
- b. Finishing Operations
- c. Equipment Cleanup

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

- B. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC:**
The requirements specified under this section are enforceable by the SMAQMD, U.S. EPA and the public.

EMISSION LIMITATION REQUIREMENTS

1. Emissions from the permittee's reinforced plastic composites manufacturing process shall not exceed the following limits:
[Basis: SMAQMD Rule 202]

Pollutant	Maximum Allowable Emissions				
	Quarter 1 lb/quarter	Quarter 2 lb/quarter	Quarter 3 lb/quarter	Quarter 4 lb/quarter	Yearly (A) tons/year
ROC	13,500	13,650	13,800	13,800	24.4

(A) The yearly ROC emissions shall be calculated on the basis of a 12 month rolling average.

2. Compliance with the emission limitations specified in Condition No. 1 shall be determined as follows:
[Basis: SMAQMD Rule 202]

ROC emissions = **[1]** HAP ROC emissions + **[2]** Non-HAP ROC emissions
(lb/quarter)

Where:

[1] HAP ROC emissions are calculated as follows:

HAP ROC emissions = Sum of HAP emissions from each HAP containing material
(lb/quarter) used.

= [HAP containing material usage, lb/quarter] / [2000 lb/ton] x
[HAP emission factor from Table 1 of 40 CFR 63 Subpart
WWWW]

(see Attachment A for Table 1 which is included for reference
purposes only)

"HAP" as used above includes styrene, methyl methacrylate and other organic HAP.

"HAP containing material" as used above includes, but is not limited to, resins, gel coats, additives, cleaners, waxes, catalysts, adhesives and cleanup solvents that contain HAP.

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

[2] Non-HAP ROC emissions are calculated as follows:

$$\begin{array}{lcl} \text{Non-HAP ROC} & = & [\text{Non-HAP ROC containing material usage, lb/quarter}] \\ \text{emissions} & & \times [\% \text{ ROC by weight in the material}] \\ (\text{lb/quarter}) & & \end{array}$$

"ROC containing material" as used above includes, but is not limited to, additives, cleaners, waxes, catalysts, adhesives, cleanup solvents and non-HAP containing resins or gel coats. ***If a material contains both HAP and non-HAP ROC the non-HAP portion of the ROC shall be calculated in this category.***

3. The permittee shall not exceed the 12 month rolling average organic HAP emission limit specified in Table 3 of 40 CFR 63 Subpart WWWW.

[Basis: 40 CFR 63.5805(b)]

(See Attachment B for Table 3 which is included for reference purposes only.)

4. The permittee, for open molding operations, may use one of the methods specified in 40 CFR 63.5810 (a) - (d) to meet the standards in Condition No. 3.

A. The permittee may switch between the compliance options listed, but must comply with the requirements for switching specified in 40 CFR 63.5810.

[Basis: 40 CFR 63.5810]

(See Attachment C for 40 CFR 63.5810 which is included for reference purposes only.)

EQUIPMENT OPERATION REQUIREMENTS

5. The permittee shall comply with the work practice standards specified in 40 CFR 63 Subpart WWWW Table 4.

[Basis: 40 CFR 63.5805(b)]

(See Attachment D for Table 4 which is included for reference purposes only.)

6. The permittee shall operate and maintain the affected source according to the provisions of 40 CFR 63.6(e)(1)(i) as follows:

[Basis: 40 CFR 63.5835 (c)]

A. **[40 CFR 63.6(e)(1)(i)]** At all times, including periods of startup, shutdown and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

- i. During a period of startup, shutdown or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices.
- ii. The general duty to minimize emissions during a period of startup, shutdown or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.
- iii. Determination of whether such operation and maintenance procedures are being used will be based on information available to the SMAQMD Air Pollution Control Officer which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

MONITORING REQUIREMENTS

There are no monitoring requirements.

RECORDKEEPING AND REPORTING REQUIREMENTS

7. The permittee shall continuously maintain onsite the following records for the most recent five year period and shall make such records available to the SMAQMD Air Pollution Control Officer upon request. Monthly and quarterly records shall be made available within 30 days of the end of the reporting period.

[Basis: SMAQMD Rule 201 Section 405 and 40 CFR 63.5895(c)]

Frequency	Information to be recorded
At all times	<p>A. A copy of each notification and report submitted to comply with 40 CFR 63 Subpart WWWW, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted. [Basis: 40 CFR 63.5915(a)(1)]</p> <p>B. All data, assumptions and calculations used to determine organic HAP emissions factors or average organic HAP contents for operations listed in Tables 3, 5 and 7 to 40 CFR 63 Subpart WWWW. [Basis: 40 CFR 63.5915(c)]</p>

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

Frequency	Information to be recorded
	<p>C. A certified statement that operation of the facility is in compliance with the work practice requirements in Table 4 to 40 CFR 63 Subpart WWW, as applicable. [Basis: 40 CFR 63.5915(d)]</p>
Monthly	<p>D. For each resin and gel coat that is used: [Basis: 40 CFR 63.5895(c)]</p> <ul style="list-style-type: none"> i. Amount of each resin and gel coat that is used. (lb/month) ii. HAP content of each resin and gel coat that is used. (recordkeeping units are % by weight) iii. Operation where the resin and gel coat is used. <p>E. Quantity of all ROC containing materials used. (recordkeeping units are lb or gallons/month)</p> <p>["ROC containing materials" includes, but is not limited to, additives, cleaners, waxes, catalysts, adhesives, cleanup solvents, resins and gel coats.] [Basis: SMAQMD Rule 201 Section 405]</p> <p>F. If the permittee chooses to comply with Condition No. 3 by using one of the averaging methods in 40 CFR 63.5810(b) or 40 CFR 63.5810(c) then:</p> <ul style="list-style-type: none"> i. For 40 CFR 63.5810(b): <ul style="list-style-type: none"> a. Calculation of the 12 month rolling <u>average HAP emissions factor</u>. (recordkeeping units are lb/ton). <li style="text-align: center;">— or — ii. For 40 CFR 63.5810(c): <ul style="list-style-type: none"> a. Calculation of the 12 month rolling <u>weighted average HAP emission limit</u>. (recordkeeping units are lb/ton). b. Calculation of the 12 month rolling <u>actual weighted average HAP emissions factor</u>. (recordkeeping units are lb/ton). <p>[Basis: 40 CFR 63.5900(a)(2)]</p>

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

Frequency	Information to be recorded
	G. Calculation of the rolling 12 month average ROC emissions by the method specified in Condition No. 2 except that lb/preceding 12 months is used in place of lb/quarter in the equation (recordkeeping units are tons ROC/preceding 12 months). [Basis: SMAQMD Rule 201 Section 405]
Quarterly	H. Calculation of quarterly ROC mass emissions by the method specified in Condition No. 2 (recordkeeping units are lb ROC/quarter). [Basis: SMAQMD Rule 201 Section 405]

8. In addition to the requirements in Condition No. 7, the permittee shall keep the records required in Condition No. 7.A, 7.B and 7.C in the following form and length of time.

A. Maintain all applicable records in such a manner that they can be readily accessed and are suitable for inspection according to 40 CFR 63.10(b)(1).

B. Records shall be kept in hard copy or computer readable form including, but not limited to, paper, microfilm, computer floppy disk, magnetic tape or microfiche.
[Basis: 40 CFR 63.5920]

9. The permittee shall submit a Compliance Report to the SMAQMD Air Pollution Control Officer by the dates specified. The Compliance report shall contain the following information:

[Basis: 40 CFR 63.5910(b)(5)]

Frequency	Information to be reported
July 30 for the period Jan 01 through June 30 and January 30 for the period July 01 through Dec 31	A. Company name and address. [Basis: 40 CFR 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. [Basis: 40 CFR 63.5910(c)(2)] C. Date of the report and beginning and ending dates of the reporting period. [Basis: 40 CFR 63.5910(c)(3)]

**V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS**

Frequency	Information to be reported
	<p>D. 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 to 40 CFR 63 Subpart WWWW, a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period. [Basis: 40 CFR 63.5910(c)(5)]</p> <p>E. For each deviation from a 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 40 CFR 63 Subpart WWWW, the compliance report must contain the following information. This includes periods of startup, shutdown and malfunction. [Basis: 40 CFR 63.5910(d)]</p> <p>i. The total operating time of each affected source during the reporting period.</p> <p>ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.</p>

EMISSION REDUCTION CREDIT (ERC) REQUIREMENTS

There are no ERC requirements.

EMISSION TESTING REQUIREMENTS

There are no periodic testing requirements.

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

ATTACHMENT A (for reference purposes only)

Table 1 to Subpart WWW of Part 63--Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams¹
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 33 percent or more organic HAP less than 33 percent organic HAP (19 percent for nonatomized gel coat) ^{2,3,4} ...	Use this organic HAP emissions Factor (EF) Equation for materials with 33 percent or more organic HAP less than 33 percent organic HAP (19 percent for nonatomized gel coat) ^{2,3,4} ...
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	$EF = 0.445 \times \%HAP \times 2000$	$EF = ((1.03646 \times \%HAP) - 0.195) \times 2000$

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

ATTACHMENT A (continued)

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

Footnotes to Table 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.
- 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.
- 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.
- The VSB 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.
- 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.
- 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.
- 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.
- 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.

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

ATTACHMENT B (for reference purposes only)

Table 3 to Subpart WWW 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 40 CFR 63.5805, you must meet the following organic HAP emissions limits that apply to you:

If your operation type is . . .	And you use . . .	¹Your organic HAP emissions limit is . . .
1. open molding—corrosion-resistant and/or high strength (CR/HS)	a. mechanical resin application b. filament application c. manual resin application	113 lb/ton. 171 lb/ton. 123 lb/ton.
2. open molding—non-CR/HS	a. mechanical resin application b. filament application c. manual resin application	88 lb/ton. 188 lb/ton. 87 lb/ton.
3. open molding—tooling	a. mechanical resin application b. manual resin application	254 lb/ton. 157 lb/ton.
4. open molding—low-flame spread/low-smoke products	a. mechanical resin application b. filament application c. manual resin application	497 lb/ton. 270 lb/ton. 238 lb/ton.
5. open molding—shrinkage controlled resins ²	a. mechanical resin application b. filament application c. manual resin application	354 lb/ton. 215 lb/ton. 180 lb/ton.
6. open molding—gel coat ³	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.

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

If your operation type is . . .	And you use . . .	¹ Your organic HAP emissions limit is . . .
7. centrifugal casting—CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure. b. resin application with the mold closed, and the mold is not vented during spinning and cure. c. resin application with the mold open, and the mold is vented during spinning and cure. d. resin application with the mold open, and the mold is not vented during spinning and cure.	25 lb/ton. ⁴ NA—this is considered to be a closed molding operation. 25 lb/ton. ⁴ Use the appropriate open molding emission limit. ⁵
8. centrifugal casting—non-CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure. b. resin application with the mold closed, and mold is not vented during the spinning and cure. c. resin application with the mold open, and the mold is vented during spinning and cure. d. resin application with the mold open, and the mold is not vented during spinning and cure.	20 lb/ton. ⁴ NA—this is considered to be a closed molding operation. 20 lb/ton. ⁴ Use the appropriate open molding emission limit. ⁵
9. pultrusion ⁶	N/A	reduce total organic HAP emissions by at least 60 weight percent.
10. continuous lamination/casting	N/A	reduce total organic HAP emissions by at least 58.5 weight percent or not exceed an organic HAP emissions limit of 15.7 lbs of organic HAP per ton of neat resin plus and neat gel coat plus.

¹ Organic HAP emissions limits for open molding and centrifugal casting are expressed as lb/ton. You must be at or below these values based on a 12-month rolling average.

² This emission limit applies regardless of whether the shrinkage controlled resin is used as a production resin or a tooling resin.

³ If 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.

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

- ⁴ For compliance purposes, calculate your emission factor using only the appropriate centrifugal casting equation in item 2 of Table 1 to this subpart, or a site specific emission factor for after the mold is closed as discussed in 40 CFR 63.5796.
- ⁵ Calculate your emission factor using the appropriate open molding covered cure emission factor in item 1 of Table 1 to this subpart, or a site specific emission factor as discussed in 40 CFR 63.5796.
- ⁶ Pultrusion machines that produce parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more are not subject to this requirement. Their requirement is the work practice of air flow management which is described in Table 4 to this subpart.

[70 FR 50131, Aug. 25, 2005]

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

ATTACHMENT C *(for reference purposes only)*

40 CFR 63.5810 What are my options for meeting the standards for open molding and centrifugal casting operations at new and existing sources?

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 or 5 to this subpart. 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 or 5 to this subpart. 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.

(a) Demonstrate that an individual resin or gel coat, as applied, meets the applicable emission limit in Table 3 or 5 to this subpart.

(1) 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 to this subpart 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 WWWW 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 to this subpart, 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.

(2) 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 to this subpart. It is not

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

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.

(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 to this subpart that applies to you.

(1)(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 to this subpart 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.

(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.

(2) Compare each organic HAP emissions factor calculated in paragraph (b)(1) of this section with its corresponding organic HAP emissions limit in Table 3 or 5 to this subpart. If all emissions factors are equal to or less than their corresponding emission limits, then you are in compliance.

(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 or 5 to this subpart 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.

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

(1) 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 or 5 to this subpart 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 or 5 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.

(2) 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.

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

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.

(3) 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.

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

(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.

(1) 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 to this subpart 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 to this subpart, the resin is in compliance.

(2) 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 to this subpart.

(3) 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.

(4) 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.

[70 FR 50125, Aug. 25, 2005]

**V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS**

ATTACHMENT D
(for reference purposes only)

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

As specified in 40 CFR 63.5805, you must meet the work practice standards in the following table that apply to you:

For ...	You must ...
1. a new or existing closed molding operation using compression/injection molding	uncover, unwrap or expose only one charge per mold cycle per compression/injection molding machine. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting.
2. 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.
3. 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.
4. an existing or new SMC manufacturing operation	close or cover the resin delivery system to the doctor box on each SMC manufacturing machine. The doctor box itself may be open.
5. an existing or new SMC manufacturing operation	use a nylon containing film to enclose SMC.
6. all mixing or BMC manufacturing operations ¹	use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation.
7. all mixing or BMC manufacturing operations ¹	close any mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety. Vents routed to a 95 percent efficient control device are exempt from this requirement.
8. all mixing or BMC manufacturing operations ¹	keep the mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels.

V.B. FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

For ...	You must ...
9. a new or existing pultrusion operation manufacturing parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more that is not subject to the 95 percent organic HAP emission reduction requirement	<ul style="list-style-type: none"> i. not allow vents from the building ventilation system, or local or portable fans to blow directly on or across the wet-out area(s), ii. not permit point suction of ambient air in the wet-out area(s) unless that air is directed to a control device, iii. use devices such as deflectors, baffles, and curtains when practical to reduce air flow velocity across the wet-out area(s), iv. direct any compressed air exhausts away from resin and wet-out area(s), v. convey resin collected from drip-off pans or other devices to reservoirs, tanks, or sumps via covered troughs, pipes, or other covered conveyance that shields the resin from the ambient air, vi. cover all reservoirs, tanks, sumps, or HAP-containing materials storage vessels except when they are being charged or filled, and vii. cover or shield from ambient air resin delivery systems to the wet-out area(s) from reservoirs, tanks, or sumps where practical.

¹ 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.

[70 FR 50133, Aug. 25, 2005]

V.C. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS

C. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
The requirements specified under this section are enforceable by the SMAQMD only.

EQUIPMENT OPERATION REQUIREMENTS

10. The permittee's polyester resin operations performed at this facility shall comply with **one** of the following process or control requirements:

[Basis: Non-SIP approved SMAQMD Rule 465 Section 302]

A. Use low-VOC polyester resins	Type of Material	Maximum Allowable Monomer Content % by weight as applied
	Resins, except specialty resins and gel coats	35
	Pigmented gel coats	45
	Specialty resins and clear gel coats	50

— or —

B. Use a polyester resin containing vapor suppressant	Weight loss from VOC emissions shall not exceed 60 grams per square meter of exposed surface area during resin polymerization as determined by SMAQMD Rule 465 Section 504.1.
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— or —

C. Use a closed-mold system	No limit on monomer content.
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**V.C. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS**

11. The permittee's use of cleaning materials, as defined in SMAQMD Rule 465 Section 204, shall comply with **all** of the following VOC limits when used in polyester resin operations:
[Basis: Non-SIP approved SMAQMD Rule 465 Section 303]

Cleaning Method Used in the Polyester Resin Operation	Maximum Allowable VOC Content grams/liter (lb/gal)
A. Prior to September 25, 2009: Cleaning with material not used in an enclosed gun cleaner and to clean molds, spray or other dispensing equipment.	204 (1.7)
B. Prior to September 25, 2009: Cleaning with material used in an enclosed gun cleaner as defined in Rule 465 Section 209.	No limit on VOC content
C. Prior to September 25, 2009: To clean molds, spray equipment or other dispensing equipment tools used in gel coat or specialty resin operations that come in direct contact with polyester resin products, provided the usage of cleaning materials does not exceed 16 gallons/month.	No limit on VOC content
D. Effective September 25, 2009: All cleaning materials.	25 (0.21)

12. The permittee's polyester resin operation shall use closed containers to store all polyester resin materials, cleaning materials and any unused VOC containing materials, except when accessed for use.

[Basis: Non-SIP approved SMAQMD Rule 465 Section 304.1]

13. The permittee's polyester resin operation shall use closed containers for the disposal of all uncured polyester resin materials, cleaning materials, waste materials and any unused VOC containing materials.

[Basis: Non-SIP approved SMAQMD Rule 465 Section 304.2]

14. The application method to be used when spray applying polyester resin materials shall be any one of the following:

A. Airless spray.

B. Air-assisted airless spray.

**V.C. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
REINFORCED PLASTICS COMPOSITE MANUFACTURING PROCESS**

C. High-volume low-pressure (HVLP) spray.

D. Low-volume low-pressure (LVLP) spray.

E. Electrostatic spray.

F. Non-atomized mechanical spray, including but not limited to fluid impingement spray guns.

[Basis: Non-SIP approved SMAQMD Rule 465 except for F. which is from 40 CFR 63 Subpart WWWW]

RECORDKEEPING AND REPORTING REQUIREMENTS

15. The permittee shall continuously maintain onsite the following records for the most recent five year period and shall make such records available to the SMAQMD Air Pollution Control Officer upon request. Monthly and quarterly records shall be made available within 30 days of the end of the reporting period.

[Basis: Non-SIP approved SMAQMD Rule 465 Section 501]

Frequency	Information to be recorded
At all times	List of currently used materials including: A. Types of resins, catalysts, filler materials, pigments and cleaning materials. B. Monomer content of all resins (recordkeeping units are % by weight). C. VOC content of all cleaning materials others than acetone (recordkeeping units are grams/liter or lb/gal). D. Weight loss per square meter during resin polymerization for each vapor-suppressed resin and the amount of such resin used. Alternatively, the Vapor Suppressant Effectiveness (VSE) as supplied by the resin manufacturer may be recorded.
Monthly	E. Quantity of all ROC containing materials used. (recordkeeping units are lb or gallons/month) ["ROC containing materials" includes, but is not limited to, additives, cleaners, waxes, catalysts, adhesives, cleanup solvents, resins and gel coats.]

VI. INSIGNIFICANT EMISSIONS UNITS

The following systems are considered insignificant emissions units and are not subject to equipment specific requirements. However, these units are required to comply with all applicable general requirements.

Equipment Description	Basis for the Exemption
Forklifts, propane fueled	SMAQMD Rule 201 Section 111.1 Vehicles used to transport passengers or freight.
Internal combustion engine, 28 hp, driving compressor	SMAQMD Rule 201 Section 112.1 Internal combustion engines with a manufacturer's maximum continuous rating of 50 hp or less.
Welding and shop equipment Abrasive blasting process	SMAQMD Rule 201 Section 122 Other equipment which would emit any pollutant, without the benefit of air pollution control devices, at a rate less than 2 pounds in any 24 hour period.
Acetone solvent cleaning	← acetone is a material exempt from air pollution control regulations because it: a. is not defined as a reactive organic compound (ROC) by SMAQMD Rule 101 Section 204.28. b. is not a federal Hazardous Air Pollutant (HAP). c. is not a California Toxic Air Pollutant (TAC).

VII. ACRONYMS, ABBREVIATIONS AND UNITS OF MEASURE

Acronyms, abbreviations and units of measure used in this permit are defined as follows:

ASTM

American Society for Testing and Materials

BACT

Best Available Control Technology.

CAA

The federal Clean Air Act.

CARB

California Air Resources Board.

CFC

Chloro-fluoro-carbons. A class of compounds responsible for destroying ozone in the upper atmosphere.

CFR

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

CO

Carbon monoxide.

CO₂

Carbon dioxide.

ERC

Emission reduction credit.

Federally Enforceable

All limitations and conditions which are enforceable by the Administrator of the U.S. EPA including those requirements developed pursuant to 40 CFR Part 51, Subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (HAP) and Part 72 (Permits Regulation, Acid Rain) including limitations and conditions contained in operating permits issued under a U.S. EPA approved program that has been incorporated into the California SIP.

NESHAP

National Emission Standards for Hazardous Air Pollutants (see 40 CFR Parts 61 and 63).

NO_x

Nitrogen oxides.

VII. ACRONYMS, ABBREVIATIONS AND UNITS OF MEASURE

NSPS

New Source Performance Standards. U.S. EPA standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the federal Clean Air Act and implemented by 40 CFR Part 60 and SMAQMD Regulation 8.

NSR

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and SMAQMD Rule 202. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

O₂

Oxygen.

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of ROC, NO_x, SO₂ and PM₁₀.

PM

Particulate matter.

PM₁₀

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns.

PSD

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the SMAQMD is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the federal Clean Air Act and implemented by 40 CFR Part 52.

ROC

Reactive organic compounds.

SIP

State Implementation Plan. CARB and SMAQMD programs and regulations approved by U.S. EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the federal Clean Air Act.

SMAQMD

Sacramento Metropolitan Air Quality Management District.

SO₂

Sulfur dioxide.

VII. ACRONYMS, ABBREVIATIONS AND UNITS OF MEASURE

Title V

Title V of the federal Clean Air Act. Title V requires the SMAQMD to operate a federally enforceable operating permit program for major stationary sources and other specified sources.

TSP

Total suspended particulate.

U.S. EPA

The federal Environmental Protection Agency.

VOC

Volatile Organic Compounds.

UNITS OF MEASURE:

BTU	=	British Thermal Unit
cfm	=	cubic feet per minute
cm	=	centimeter
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inch
kg	=	kilogram
max	=	maximum
m ²	=	square meter
min	=	minute
mm	=	millimeter
MM	=	million
ppmv	=	parts per million by volume
ppmw	=	parts per million by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
quarter	=	calendar quarter
RVP	=	Reid vapor pressure
scfm	=	standard cubic feet per minute
yr	=	year