

# Bay Area Air Quality Management District

939 Ellis Street  
San Francisco, CA 94109  
(415) 771-6000

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**Final**

## MAJOR FACILITY REVIEW PERMIT

**Issued To:**  
**Commercial Pattern, Inc.**  
**Facility #A6499**

**Facility Address:**  
3162 Baumberg Avenue  
Hayward, CA 94545

**Mailing Address:**  
3162 Baumberg Avenue  
Hayward, CA 94545

**Responsible Official**  
Mark Looby, Vice President  
**510-784-1014**

**Facility Contact**  
Mark Looby, Vice President  
**510-784-1014**

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**Type of Facility:**    **Reinforced Plastic  
Composites Production**  
**Primary SIC:**        3999  
**Product:**             Transit Bus Parts

BAAQMD Permit Division Contact:  
Pamela J. Leong  
Senior Air Quality Engineer

**ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

Signed by Jeff McKay for Jack P. Broadbent \_\_\_\_\_  
Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

\_\_\_\_\_  
May 24, 2011  
Date

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## I. STANDARD CONDITIONS

### A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

BAAQMD Regulation 1 - General Provisions and Definitions  
(as amended by the District Board on 7/9/08);

SIP Regulation 1 - General Provisions and Definitions  
(as approved by EPA through 6/28/99);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements  
(as amended by the District Board on 03/04/09);

SIP Regulation 2, Rule 1 - Permits, General Requirements  
(as approved by EPA through 1/26/99);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review  
(as amended by the District Board on 6/15/05);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration  
(as approved by EPA through 1/26/99);

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking  
(as amended by the District Board on 12/21/04);

SIP Regulation 2, Rule 4 - Permits, Emissions Banking  
(as approved by EPA through 1/26/99)

BAAQMD Regulation 2, Rule 5 – New Source Review of Toxic Air Contaminants  
(as amended by the District Board on 01/06/10);

BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review  
(as amended by the District Board on 4/16/03); and

SIP Regulation 2, Rule 6 – Permits, Major Facility Review  
(as approved by EPA through 6/23/95).

### B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

1. This Major Facility Review Permit was issued on May 24, 2011, and expires on May 23, 2016. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than November 23, 2016 and no earlier than May 23, 2015. If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after May 23, 2016. If the permit renewal has not been issued by May 23, 2016, but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application. (Regulation 2-6-307, 404.2, 407, & 409.6; MOP Volume II, Part 3, §4.2)
2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)

## I. Standard Conditions

3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
5. The filing of a request by the facility for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
8. Any records required to be maintained pursuant to this permit that the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information. (40 CFR Part 2)
10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)
11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. 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. The certifications shall be signed by a responsible official for the facility. (Regulation 2-6-409.20, MOP Volume II, Part 3, §4.11)
12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)

## **I. Standard Conditions**

### **C. Requirement to Pay Fees**

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

### **D. Inspection and Entry**

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment that is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

### **E. Records**

1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501, MOP Volume II, Part 3, §4.7)

### **F. Monitoring Reports**

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. Reports shall be for the following periods: August 1st through January 31st and February 1st through July 31st, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109  
Attn: Title V Reports

(Regulation 2-6-502, MOP Volume II, Part 3, §4.7)

### **G. Compliance Certification**

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be February 1st through January 31st. The certification shall be submitted by February 28th or 29th of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy

## **I. Standard Conditions**

this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification shall be sent to the Environmental Protection Agency at the following address:

Director of the Air Division  
USEPA, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105  
Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

## **H. Emergency Provisions**

1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)
3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

## **I. Severability**

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

## **J. Miscellaneous Conditions**

1. The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. Exceedance of the maximum allowable capacity for any source is a violation of Regulation 2, Rule 1, Section 301. (Regulation 2-1-301)

## II. EQUIPMENT

**Table II A - Permitted Sources**

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

S-#	Description	Make or Type	Model	Capacity
1	Fiberglass Operation	Not applicable	Not applicable	4,100 gallons per year gelcoat, 32,000 gallons per year resin, 1,100 gallons per year acetone
2	Booth & Brush Area for Bus Component Coating Operation	Not applicable	Not applicable	5,380 gallons per year Firetemp SI spray intumescent coating

### III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP rules and regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements will not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit. This section also contains provisions that may apply to temporary sources.

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors
2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full language of SIP requirements is on EPA Region 9's website. The address is <http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions>.

**NOTE:**

There are differences between the current BAAQMD rules and the versions of the rules in the SIP. All sources must comply with both versions of a rule until US EPA has reviewed and approved the District's revision of the regulation.

**Table III  
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (03/04/09)	N
BAAQMD 2-1-429	Federal Emissions Statement (12/21/04)	N
SIP Regulation 2, Rule 1	General Requirements (1/26/99)	Y
SIP Regulation 2-1-429	Federal Emissions Statement (4/3/95)	Y



### III. Generally Applicable Requirements

**Table III  
 Generally Applicable Requirements**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y
BAAQMD Regulation 5	Open Burning (7/09/08)	N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6, Rule 1	Particulate Matter, General Requirements (12/5/07)	N
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (7/20/05)	N
SIP Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (3/22/95)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (7/1/09)	N
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (1/2/04)	Y
BAAQMD Regulation 8, Rule 4	Organic compounds - General Solvent and Surface Coating Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	<u>Y</u>
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)	N
SIP Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	Y
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/05)	N
SIP Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (4/26/95)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (7/17/02)	N
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/02)	Y
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)	N

### III. Generally Applicable Requirements

**Table III  
 Generally Applicable Requirements**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (6/8/99)	Y
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98)	N
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y
California Health and Safety Code Section 41750 et seq.	Portable Equipment	N
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	N
California Health and Safety Code Title 17, Section 93115	Airborne Toxic Control Measure for Stationary Compression Ignition Engines	N
California Health and Safety Code Title 17, Section 93116	Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater	N
California Health and Safety Code Title 17, Subchapter 10, Article 2, Sections 95100 through 95109	Mandatory Greenhouse Gas Emissions Reporting	N
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (7/20/04)	Y
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (4/13/05)	Y
Subpart F, 40 CFR 82.156	Recycling and Emissions Reductions – Required Practices	Y
Subpart F, 40 CFR 82.161	Recycling and Emissions Reductions – Technician Certification	Y
Subpart F, 40 CFR 82.166	Recycling and Emissions Reductions – Reporting and Recordkeeping Requirements	Y

#### IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP rules and regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors
2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of SIP requirements is on EPA Region 9's website. [http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions\\_](http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions_). All other text may be found in the regulations themselves.

**Table IV - A**  
**Source-specific Applicable Requirements**  
**S1 – FIBERGLASS OPERATION**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 6, Rule 1</b>	<b>Particulate Matter, General Requirements (12/5/07)</b>		
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	
6-1-401	Appearance of Emissions	N	
<b>SIP Regulation 6</b>	<b>Particulate Matter and Visible Emissions (9/4/98)</b>		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	

## IV. Source Specific Applicable Requirements

**Table IV - A**  
**Source-specific Applicable Requirements**  
**S1 – FIBERGLASS OPERATION**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 8, Rule 50</b>	<b>Organic Compounds - Polyester Resin Operations (12/2/09)</b>		
8-50-301	Process Requirements except as provided in Section 8-50-304	N	
8-50-301.4	Closed-Mold System	N	
8-50-301.5	Vapor Suppressant & VOC Emission $\leq 50\text{g/m}^2$	N	
8-50-301.6	Monomer Content Limits for Polyester Resin and Gel Coat except as provided in Section 8-50-301.7	N	
8-50-301.7	Monomer $\leq 110\%$ of Limits in Table 1 of Section 8-50-301 for Touch ups, Repairs, and Installations	N	
8-50-302	Application Allowed	N	
8-50-302.1	Application Allowed until 10/1/11	N	
8-50-302.1.1	Atomized Spray Techniques	N	
8-50-302.1.2	Non-Atomizing Mechanical	N	
8-50-302.1.3	Hopper Guns	N	
8-50-302.1.4	Non-Spray Techniques	N	
8-50-302.1.5	Manual	N	
8-50-302.2	Sections 8-50-302.1.2 through 8-50-302.1.5	N	10/1/11
8-50-302.3	Sections 8-50-302.1.1 through 8-50-302.1.5 for Touch ups, Repairs, and Installations	N	
8-50-304	Monomer Content Limits for Corrosion-resistant Materials	N	
8-50-305	Surface Preparation and Clean-up Solvent	N	
8-50-305.1	Storage in Closed Containers	N	
8-50-305.2	Self-closing Containers, Disposal	N	
8-50-305.3	Minimizing Organic Emissions from Spray Equipment Clean-up	N	
8-50-305.4	Clean-up Solvent, VOC $\leq 25\text{g/liter}$	N	
8-50-305.5	Acetone Use in Cold Cleaner	N	

## IV. Source Specific Applicable Requirements

**Table IV - A**  
**Source-specific Applicable Requirements**  
**S1 – FIBERGLASS OPERATION**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
8-50-308	Prohibition of Specification Requirement	N	
8-50-309	Compliance Statement Requirement	N	
8-50-501	Records	N	
8-50-501.1	List of Materials Used	N	
8-50-501.2	List VOC Content of Materials Used	N	
8-50-501.3	Vapor-suppressed Resin Records	N	
8-50-501.4	Daily Usage Records	N	
8-50-501.5	Record Retention for 36 months	N	
<b>SIP Regulation 8, Rule 50</b>	<b>Organic Compounds - Polyester Resin Operations (12/20/95)</b>		
8-50-110	Limited Exemption, Touch-up and Repair	Y	
8-50-301	Process Requirements except as provided in Section 8-50-304	Y	
8-50-301.1	Monomer $\leq 35$ wt%	Y	
8-50-301.2	Vapor Suppressant & VOC Emission $\leq 60\text{g/m}^2$	Y	
8-50-301.3	Closed-mold System	Y	
8-50-302	Spraying Operations Allowed	Y	
8-50-302.1	Airless Spray	Y	
8-50-302.2	Air-Assisted Airless Spray	Y	
8-50-302.3	Electrostatic Spray	Y	
8-50-302.4	HVLP	Y	
8-50-304	Monomer Content Limit for Corrosion-resistant Materials	Y	
8-50-307	Gel Coat Requirement	Y	
8-50-305	Surface Preparation and Clean-up Solvent	Y	
8-50-305.1	Storage in Closed Containers	Y	
8-50-305.2	Self-closing Containers, Disposal	Y	
8-50-305.3	Minimizing Organic Emissions from Spray Equipment Clean-up	Y	
8-50-305.4	Clean-up Solvent, VOC $\leq 200\text{g/liter}$ (refers to definition in SIP 8-50 220)	Y	
8-50-501	Records	Y	
8-50-501.1	List of Materials Used	Y	
8-50-501.2	List VOC Content of Materials Used	Y	

## IV. Source Specific Applicable Requirements

**Table IV - A**  
**Source-specific Applicable Requirements**  
**S1 – FIBERGLASS OPERATION**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
8-50-501.3	Vapor-suppressed Resin Records	Y	
8-50-501.4	Daily Usage Records	Y	
8-50-501.5	Record Retention for 24 months	Y	
<b>40 CFR, Part 63, Subpart A</b>	<b>National Emission Standards for Hazardous Air Pollutants: General Provisions (3-16-1994)</b>	Y	
§63.1	Applicability	Y	
§63.2	Definitions	Y	
§63.3	Units and Abbreviations	Y	
§63.4	Prohibited Activities and Circumvention	Y	
§63.5	Preconstruction Review and Notification Requirements (except existing facilities do not become reconstructed under subpart WWWW of Part 63)	Y	
§63.6	Compliance with Standards and Maintenance Requirements	Y	
§63.6(a)	Applicability	Y	
§63.6(c)	Compliance dates for existing sources	Y	
§63.6(e)(1) and (2)	Operation and maintenance requirements	Y	
§63.6(f)	Compliance with non-opacity emission standards	Y	
§63.6(g)	Use of an alternative non-opacity emission standard	Y	
§63.6(i)	Extension of compliance with emission standards	Y	
§63.6(j)	Presidential compliance exemption	Y	
§63.7	Performance Testing Requirements (except Subpart WWWW of Part 63 initial compliance requirements are in §63.5840)	Y	
§63.8	Monitoring Requirements (except subpart WWWW of Part 63 does not contain opacity standards)	Y	
§63.9	Notification Requirements (except existing facilities do not become reconstructed under subpart WWW of Part 63 and that subpart does not contain opacity standards)	Y	

## IV. Source Specific Applicable Requirements

**Table IV - A**  
**Source-specific Applicable Requirements**  
**S1 – FIBERGLASS OPERATION**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
§63.10	Recordkeeping and Reporting Requirements	Y	
§63.10(a)	Applicability and general information	Y	
§63.10(b)	General recordkeeping requirements	Y	
§63.10(d)	General reporting requirements	Y	
§63.10(f)	Waiver of recordkeeping or reporting requirements	Y	
§63.13	Addresses for requests, reports, applications, submittals, and other communications	Y	
§63.14	Incorporations by reference	Y	
§63.15	Availability of information	Y	
<b>40 CFR 63 Subpart WWWW</b>	<b>National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production (4-21-2003)</b>		
63.5785	Am I subject to this subpart?	Y	
63.5785 (a)	Subject if reinforced plastic composites production facility at a major source of HAP emissions	Y	
63.5790	What parts of my plant does this subpart cover?	Y	
63.5790 (a)	Covers new and existing affected sources	Y	
63.5790 (b)	Affected sources include open molding, closed molding, mixing, cleaning of manufacturing equipment, HAP-containing materials storage, and repair of manufactured parts	Y	
63.5790 (c)	Excluded operations include mold sealing and release agents, mold stripping and cleaning	Y	
63.5795	How do I know if my ... facility is ... an existing affected source?	Y	
63.5795 (b)	Existing affected source is any source that is not a new affected source	Y	
63.5796	Organic HAP emission factors	Y	
63.5797	How do I determine the organic HAP content of my resins and gel coats?	Y	
63.5800	When do I have to comply with this subpart?	Y	
63.5805	What standards must I meet to comply with this subpart?	Y	
63.5805 (a)	Existing facility must meet annual average organic HAP emissions limits in Table 3 and work practice standards in Table 4	Y	

## IV. Source Specific Applicable Requirements

**Table IV - A**  
**Source-specific Applicable Requirements**  
**S1 – FIBERGLASS OPERATION**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
63.5810	What are my options for meeting the standards for open molding ... at ... existing sources?	Y	
63.5810 (d)	Use resins and gel coats that do not exceed the maximum organic HAP contents shown in Table 3	Y	
63.5835	What are my general requirements for complying with this subpart?	Y	
63.5835 (a)	Comply with work standard practices in Table 4, as well as organic HAP emission limits in Table 3, or organic HAP content limits in Table 7 without the use of add-on controls	Y	
63.5840	By what date must I conduct ... other initial compliance demonstration?	Y	
63.5860	How do I demonstrate initial compliance with the standards?	Y	
63.5860 (a)	Demonstrate using procedures shown in Tables 8 and 9	Y	
63.5895	How do I monitor and collect data to demonstrate continuous compliance?	Y	
63.5895 (c)	Keep records of organic HAP content and operation where the resin is used	Y	
63.5895 (d)	Statement required in compliance report	Y	
63.5900	How do I demonstrate continuous compliance with the standards?	Y	
63.5900 (a) (2)	Include in compliance report a statement that all resins and gel coats meet appropriate limits in 63.5895 (d)	Y	
63.5900 (a) (4)	Comply with work practice standards by performing work practice required for each operation	Y	
63.5905	What notifications must I submit and when?	Y	
63.5905 (a)	Submit notifications per Table 13	Y	
63.5905 (b)	Submit changes within 15 days	Y	
63.5910	What reports must I submit and when?	Y	
63.5910 (a)	Each relevant report in Table 14	Y	
63.5910 (b)	Submit report by date in Table 14 and according to (b) (1) through (b) (4)	Y	
63.5910 (b) (1)	First compliance report to cover 4/21/2006 through 6/30/2006	Y	
63.5910 (b) (2)	First compliance report delivered or postmarked by 7/31/2006	Y	
63.5910 (b) (3)	Subsequent compliance reports cover semiannual reporting periods January 1 through June 30 and July 1 through December 31	Y	



## IV. Source Specific Applicable Requirements

**Table IV - A**  
**Source-specific Applicable Requirements**  
**S1 – FIBERGLASS OPERATION**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
63.5910 (b) (4)	Subsequent compliance reports delivered or postmarked by end of month following reporting period	Y	
63.5910 (c)	Compliance report information requirements	Y	
63.5910 (d)	Deviation reporting	Y	
63.5910 (g)	Deviations required to be included in Title V semiannual monitoring report unless compliance report submitted with or included in semiannual monitoring report	Y	
63.5915	What records must I keep?	Y	
63.5920	In what form and how long must I keep my records?	Y	
63.5925	What parts of the General Provisions apply to me?	Y	
<b>BAAQMD Condition #9997</b>			
Part 1	Gel coat usage limit (basis: Cumulative Increase)	Y	
Part 2	Gel coat monomer content limitations (basis: Regulation 8-50-301)	Y	
Part 3	Resin usage limit (basis: Cumulative Increase)	Y	
Part 4	Resin monomer content limitations (basis: Regulation 8-50-301 or 304)	Y	
Part 5	Clean-up solvent usage limitation (basis: Cumulative Increase)	Y	
Part 6	Solvent evaporation loss minimization and cleaning product POC plus NPOC limit (basis: Regulation 8-50-305)	Y	
Part 7	Maintain list of materials used (basis: Cumulative Increase)	Y	
Part 8	POC annual emission limit (basis: Cumulative Increase)	Y	
Part 9	NPOC annual emission limit (basis: Cumulative Increase)	N	
Part 10	Flexibility to use other materials (basis: Cumulative Increase, Regulation 2-5)	Y	
Part 11	Monthly and consecutive 12-month record keeping (basis: Cumulative Increase, Regulation 8-50)	Y	
Part 12	Source test may be requested(basis: Regulation 2-1-403)	Y	
Part 13	Mechanical application of resin and fiberglass must use mechanical non-atomized applicator. (basis: Cumulative Increase)	Y	
Part 14	No use of materials subject to 40CFR82, Protection of Stratospheric Ozone (basis: 40CFR82)	Y	
Part 15	Daily filter inspection and repair (basis: Regulation 2-6-503)	Y	

## IV. Source Specific Applicable Requirements

**Table IV - B**  
**Source-specific Applicable Requirements**  
**S2 – BOOTH & BRUSH AREA FOR BUS COMPONENT COATING OPERATION**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 8, Rule 1</b>	<b>Organic Compounds – General Provisions (6/15/94)</b>		
8-1-320	Storage and Disposal of Solvent Impregnated Cloth or Paper	Y	
8-1-321	Closed Containers for Spent or Fresh Organic Solvents	Y	
8-1-322	Spray Equipment Clean-up Limitation	Y	
<b>BAAQMD Regulation 8, Rule 45</b>	<b>Organic Compounds – Motor Vehicle and Mobile Equipment Coating Operations (12/3/08)</b>		
8-45-301	Coating VOC Limits	N	
8-45-301.3	Coating VOC Limits for Finishing or Refinishing Vehicles, Mobile Equipment or Their Parts and Components	N	
8-45-303	Transfer Efficiency	N	
8-45-303.1	Electrostatic Application; or	Y	
8-45-303.2	HVLP Spray; or	Y	
8-45-303.3	Other Method Approved in Writing by the APCO	N	
8-45-304	Prohibition of Specification	Y	
8-45-308	Surface Preparation and Solvent Loss Minimization	N	
8-45-308.1	Storage and Disposal of Solvent Impregnated Cloth or Paper	Y	
8-45-308.2	Closed Containers for Spent or Fresh Organic Solvents	Y	
8-45-308.3	No Organic Compounds for Cleanup of Spray Equipment Unless Controls are Used	Y	
8-45-308.4	Surface Preparation Solvent VOC Limits	N	
8-45-312	Specialty Coating Limitations	N	
8-45-315	HVLP Marking	Y	
8-45-316	Particulate Filtration	N	
8-45-317	Most Restrictive VOC Limit	N	
8-45-318	Prohibition of Possession	N	
8-45-501	Records	N	
8-45-501.1	Maintain Data Necessary to Evaluate Compliance	N	
8-45-501.2	Monthly Coating Records	N	

## IV. Source Specific Applicable Requirements

**Table IV - B**  
**Source-specific Applicable Requirements**  
**S2 – BOOTH & BRUSH AREA FOR BUS COMPONENT COATING OPERATION**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
8-45-501.3	Current Material Information	N	
8-45-501.4	Records Retention	N	
8-45-505	Recordkeeping Requirements for Clients of Mobile Refinishing Operators	N	
<b>SIP Regulation 8, Rule 45</b>	<b>Organic Compounds – Motor Vehicle and Mobile Equipment Coating Operations (5/26/00)</b>		
8-45-301	Coating VOC Limits	Y	
8-45-301.2	Coating VOC Limits, Group II Vehicles	Y	
8-45-303	Transfer Efficiency	Y	
8-45-303.3	Other Method Approved in Writing by the APCO	Y	
8-45-306	Compliance Statement Requirement	Y	
8-45-308	Surface Preparation and Solvent Loss Minimization	Y	
8-45-308.4	Surface Preparation Solvent VOC Limits	Y	
8-45-311	Utility Bodies – Small Production Exclusion	Y	
8-45-312	Specialty Coating Limitations	Y	
8-45-313	Temporary Protective Coating VOC Limit	Y	
8-45-314	Precoat Limitation	Y	
8-45-316	Particulate Filtration	Y	
8-45-501	Coating Records	Y	
8-45-501.1	Maintain Data Necessary to Evaluate Compliance	Y	
8-45-501.2	Weekly Coating Records	Y	
8-45-501.3	Daily Coating Records	Y	
8-45-501.4	Monthly Coating Records	Y	
8-45-501.5	Records Retention	Y	
8-45-503	Precoat Purchase Records	Y	
<b>BAAQMD Condition #22654</b>			
Part 1	Coating usage limit (basis: Cumulative Increase)	Y	
Part 2	Flexibility to use other materials (basis: Cumulative Increase or Regulation 2-5)	Y	
Part 3	Maintain list of materials used (basis: Cumulative Increase)	Y	

## IV. Source Specific Applicable Requirements

**Table IV - B**  
**Source-specific Applicable Requirements**  
**S2 – BOOTH & BRUSH AREA FOR BUS COMPONENT COATING OPERATION**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
Part 4	Monthly and consecutive 12-month record keeping (basis: Cumulative Increase, Regulation 8-45)	Y	
Part 5	No use of materials subject to 40CFR82, Protection of Stratospheric Ozone (basis: Regulation 2-6-503)	Y	

## V. SCHEDULE OF COMPLIANCE

The permit holder shall comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit on a timely basis.

## VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk is not federally enforceable.

Condition # 9997

For S1, Fiberglass Operation:

1. The total amount of gel coat applied at S1 shall not exceed 4,100 gallons during any consecutive 12-month period.  
(basis: Cumulative Increase)
2. The gel coat shall not have a monomer content exceeding the applicable limit specified in Section 8-50-301, Table 1.  
(basis: Regulation 8-50-301)
3. Total amount of resin applied at S1 shall not exceed 32,000 gallons during any consecutive 12-month period.  
(basis: Cumulative Increase)
4. The resin shall meet one of the following:
  - a. monomer content shall not exceed the applicable limit specified in Section 8-50-301, Table 1; or
  - b. the resin shall be vapor suppressed and shall have emissions not to exceed 50 grams of volatile compounds per square meter of surface area or
  - c. monomer content of a corrosion-resistant, high-strength and tooling resin shall not exceed 46% by weight provided product is for corrosive or fire retardant service  
(basis: Regulation 8-50-301 or 304)
5. Total cleanup solvent shall not exceed 1,100 gallons of acetone during any consecutive 12-month period. This limit excludes cleanup solvent used in cold cleaners qualifying for a permit exemption in accordance with BAAQMD Regulation 2, Permits, Rule 1, General Requirements, Section 118, Exemption, Surface Preparation and Cleaning Equipment, Subsection 118.6.

## VI. Permit Conditions

(basis: Cumulative Increase)

6. The operator shall comply with all of the following measures to minimize solvent evaporation: use closed containers for the storage of all polyester resin materials, cleaning materials and any unused VOC-containing materials, except when accessed for use; use self-closing containers for the disposal of all polyester resin materials, cleaning materials, waste materials, and any unused VOC containing materials in such a manner as to effectively control VOC emissions to the atmosphere; shall not use organic compounds for the clean-up of spray equipment including spray lines unless equipment for collecting the cleaning material and minimizing their evaporation to the atmosphere is used; use cleaning products that contain no greater than 25 grams of VOC per liter of material; and may use acetone in a cold cleaner provided the provisions of Section 8-50-305.5 are complied with, notwithstanding the provisions of Regulation 8, Rule 16.

(basis: Regulation 8-50-305)

7. The operator shall maintain a current list of all materials used at S1 and the Material Safety Data Sheets for each. The list shall provide all of the data necessary to evaluate compliance, including the following information: material used, VOC content of the material or monomer content, as applied.

(basis: Cumulative Increase)

8. The permit holder shall emit not more than 11.008 tons of POC in any consecutive 12-month period. This emission limit excludes cleanup solvent used in cold cleaners qualifying for a permit exemption in accordance with BAAQMD Regulation 2, Permits, Rule 1, General Requirements, Section 118, Exemption, Surface Preparation and Cleaning Equipment, Subsection 118.6.

(basis: Cumulative Increase)

\*9. The permit holder shall emit not more than 3.630 tons of NPOC, including acetone, in any consecutive 12-month period. This emission limit excludes cleanup solvent used in cold cleaners qualifying for a permit exemption in accordance with BAAQMD Regulation 2, Permits, Rule 1, General Requirements, Section 118, Exemption, Surface Preparation and Cleaning Equipment, Subsection 118.6.

(basis: Cumulative Increase)

10. Usages in excess of those specified in Parts 1, 3 and 5 and/or cleanup solvents, other than the materials specified in Part 5 but excluding cleanup solvent used in cold cleaners qualifying for a permit exemption in accordance with BAAQMD Regulation 2, Permits, Rule 1, General Requirements, Section 118, Exemption, Surface Preparation and Cleaning Equipment, Subsection 118.6, may be used at S1 provided that the owner/operator can demonstrate that all of the following are satisfied:

## VI. Permit Conditions

a. Total emissions of POC from S1 do not exceed 11.008 tons in any consecutive twelve month period; and

b. Total emissions of NPOC from S1 do not exceed 3.630 tons in any consecutive twelve month period; and

c. The use of these materials does not increase toxic emissions above any risk screening trigger level.

(basis: Cumulative Increase, Regulation 2, Rule 5)

11. To determine compliance with the above conditions, the operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including the following information: the type, quantity, and VOC content of each material, as applied, on a monthly basis; monthly usages and/or emission calculations shall be totaled for consecutive twelve-month sums on a monthly basis.

All records shall be retained on-site for five years from the date of entry and made available for inspection by District staff upon request. These record-keeping requirements shall not replace the record keeping requirements contained in any applicable District Regulations.

(basis: Cumulative Increase, Regulation 8-50)

12. The District may require the owner/operator of the spray booth to conduct a District-approved source test to determine emissions of precursor organic compounds, POC, non-precursor organic compounds, NPOC and any toxic compounds. The permit holder shall notify the Manager of the District's Source Test Section at least seven (7) days prior to the test, to provide the District staff the option of observing the testing. Within 45 days of test completion, a comprehensive report of the test results shall be submitted to the Manager of the District's Source Test Section for review and disposition.

(basis: Regulation 2-1-403)

13. The permit holder shall use mechanical non-atomized application for the mechanical application of catalyzed resin and chopped glass fibers to an open mold. Mechanical non-atomized application means the use of a device for applying resin or gel coat that a) has been provided by the device manufacturer with documentation showing that use of the device results in HAP emissions that are no greater than the emissions predicted by the applicable non-atomized application equation(s) in Table 1 to Subpart WWW of 40 CFR Part 63 and b) is operated according to the

## VI. Permit Conditions

manufacturer's directions, including instructions to prevent the operation of the device at excessive spray pressures.

(basis: Cumulative Increase)

14. The permit holder shall not use any resin, catalyst, gelcoat or cleanup solvent subject to 40 CFR 82, Protection of Stratospheric Ozone. (basis: Regulation 2-6-503)

15. The permit holder shall check the "left booth" and "right booth" filters in the "Molding Booth" at least once per operating day for gaps, sags and holes. Any filters with gaps, sags or holes shall be repaired or replaced the same operating day. The permit holder shall record the result of the inspection as well as any corrective action taken. (basis: Regulation 2-6-503)

### Condition # 22654

For S-2, Booth and Brush Area for Bus Component Coating Operation:

1. The permit holder shall apply not more than 5,380 gallons of Firetemp SI spray intumescent coating at S-2 during any consecutive 12-month period.

(basis: Cumulative Increase)

2. The permit holder may use coatings other than or in addition to the materials specified in Part 1 and/or usages in excess of those specified in Part 1 provided that the permit holder can demonstrate that all of the following are satisfied:

a. Total POC emissions from S-2 do not exceed 1.0 ton in any consecutive twelve month period; and

b. Total NPOC emissions from S-2 do not exceed 1.0 ton in any consecutive twelve month period; and

c. The use of these materials does not increase toxic emissions above any risk screening trigger level in Table 2-5-1 of District Regulation 2, Rule 5.

(basis: Cumulative Increase or Regulation 2, Rule 5)

3. The permit holder shall maintain a current list of all materials used at S-2 and the Material Safety Data Sheets for each. The list shall provide all of the data necessary to evaluate compliance, including the following information: material used; VOC content of the material, as applied.

(basis: Cumulative Increase)

4. To determine compliance with the above conditions, the permit holder shall maintain the following records and provide all of the data necessary to evaluate



## VI. Permit Conditions

compliance with the above conditions, including the following information: the type, quantity, and VOC plus toxic air contaminant content of each material, as applied, on a weekly basis; weekly usages and/or emission calculations shall be totaled for consecutive twelve-month sums on a weekly basis.

All records shall be retained on-site for five years from the date of entry and made available for inspection by District staff upon request. These record-keeping requirements shall not replace the record keeping requirements contained in any applicable District Regulations.

(basis: Cumulative Increase, Rule 8-45)

5. The permit holder shall not use any coating subject to 40 CFR 82, Protection of Stratospheric Ozone.

(basis: Regulation 2-6- 503)

## VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), hourly (H), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S1 – FIBERGLASS OPERATION**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Weight Loss from VOC Emissions	BAAQMD 8-50-301.5 and BAAQMD Condition #9997, part 4b	N		weight loss/emissions from vapor suppressed resin $\leq$ 50 g/m <sup>2</sup> surface area or compliance with BAAQMD 8-50-301.6 or 8-50-301.7	BAAQMD 8-50-501.3 and BAAQMD Condition #9997, parts 7 and 11	P/E	records
VOC	BAAQMD 8-50-301.6 and BAAQMD Condition #9997, parts 2 plus 4a	N		applicable limits for open-mold resin or gel coat in BAAQMD 8-50-301, Table 1 or compliance with BAAQMD 8-50-301.5 or 8-50-301.7	BAAQMD 8-50-501.2a and BAAQMD Condition #9997, parts 7 and 11	P/E	records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S1 – FIBERGLASS OPERATION**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	BAAQMD 8-50-301.7	N		monomer content up to 10% more than applicable limits in BAAQMD 8-50-301, Table 1 of resins and gel coats used to touch up, repair, or install a composite product and the use of hand-held atomized spray technologies with a container that is part of gun with capacity ≤ 1 quart or compliance with BAAQMD 8-50-301.5 or 8-50-301.6	BAAQMD 8-50-501.2a and BAAQMD Condition #9997, parts 7 and 11	P/E	records
VOC	BAAQMD 8-50-304 and BAAQMD Condition #9997, part 4c	N		applicable limits for corrosion resistant materials in BAAQMD 8-50-301, Table 1	BAAQMD 8-50-501.2a and BAAQMD Condition #9997, parts 7 and 11	P/E	records
VOC	BAAQMD 8-50-305.4 and BAAQMD Condition #9997, part 6	N		content of cleaning material ≤ 25 g/liter	BAAQMD 8-50-501.2b and Condition #9997, parts 7 and 11	P/E	records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S1 – FIBERGLASS OPERATION**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	SIP 8-50-301.1	Y		monomer content of resin ≤ 35% by weight or compliance with BAAQMD 8-50-301.2 or 8-50-304	SIP 8-50-501.2 and BAAQMD Condition #9997, parts 7 and 11	P/E	records
Weight Loss from VOC Emissions	SIP 8-50-301.2	Y		weight loss/emissions from vapor suppressed resin ≤ 60 g/m <sup>2</sup> surface area or compliance with BAAQMD 8-50-301.1 or 8-50-304	SIP 8-50-501.3 and BAAQMD Condition #9997, parts 7 and 11	P/E	records
VOC	SIP 8-50-304	Y		monomer content of corrosion resistant materials ≤ 50% by weight or compliance with BAAQMD 8-50-301.1 or 8-50-301.2	SIP 8-50-501.2 and BAAQMD Condition #9997, parts 7 and 11	P/E	records
VOC	SIP 8-50-305.4	Y		content of cleaning material ≤ 200 g/liter	SIP 8-50-501.2 and Condition #9997, parts 7 and 11	P/E	records
VOC	SIP 8-50-307	Y		content of gel coat, as applied ≤ 250 g/liter	SIP 8-50-501.2 and Condition #9997, parts 7 and 11	P/E	records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S1 – FIBERGLASS OPERATION**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Material Throughput	BAAQMD Condition # 9997, part 1	Y		Gelcoat throughput $\leq$ 4,100 gal/yr yr and compliance with BAAQMD Condition # 9997, parts 8 plus 9 or none of the above but compliance with BAAQMD Condition # 9997, part 10	BAAQMD Condition # 9997, parts 7 and 11	P/D	records
Material Throughput	BAAQMD Condition # 9997, part 3	Y		Resin throughput $\leq$ 32,000 gal/yr and compliance with BAAQMD Condition # 9997, parts 8 plus 9 or none of the above but compliance with BAAQMD Condition # 9997, part 10	BAAQMD Condition # 9997, parts 7 and 11	P/D	records
POC	BAAQMD Condition # 9997, part 10a	Y		POC emissions $\leq$ 11.008 tpy and compliance with BAAQMD Condition # 9997, part 10b and c	BAAQMD Condition # 9997, parts 7 and 11	P/D	records
POC	BAAQMD Condition # 9997, part 13	Y		Mechanical non-atomized application for mechanical application of catalyzed resin and chopped glass fibers to an open mold	BAAQMD Condition # 9997, parts 7 and 11	P/D	records
NPOC	BAAQMD Condition # 9997, part 5	N		Cleanup solvent $\leq$ 1,100 gal/yr and compliance with BAAQMD Condition # 9997, parts 8 plus 9 or none of the above but compliance with BAAQMD Condition # 9997, part 10	BAAQMD Condition # 9997, parts 7 and 11	P/D	records
NPOC	BAAQMD Condition # 9997, part 10b	N		NPOC emissions $\leq$ 3.630 tpy and compliance with BAAQMD Condition # 9997, part 10a and c	BAAQMD Condition # 9997, parts 7 and 11	P/D	records

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S1 – FIBERGLASS OPERATION**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
HAP	40 CFR 63.5805(a)	Y		Open molding – tooling – with Mechanical resin application < 254 lb/ton	40 CFR 63.5810	P/E	records
HAP	40 CFR 63.5805(a)	Y		Open molding – tooling – with Manual resin application < 157 lb/ton	40 CFR 63.5810	P/E	records
HAP	40 CFR 63.5805(a)	Y		Open molding – low-flame spread/low-smoke products – with Mechanical resin application < 497 lb/ton	40 CFR 63.5810	P/E	records
HAP	40 CFR 63.5805(a)	Y		Open molding – low-flame spread/low-smoke products – with Manual resin application < 238 lb/ton	40 CFR 63.5810	P/E	records
HAP	40 CFR 63.5805(a)	Y		Open molding – gel coat: Tooling gel coating < 440 lb/ton	40 CFR 63.5810	P/E	records
HAP	40 CFR 63.5805(a)	Y		Open molding – gel coat: White/off white pigmented gel coating < 267 lb/ton	40 CFR 63.5810	P/E	records
HAP	40 CFR 63.5805(a)	Y		Open molding – gel coat: All other pigmented gel coating < 377 lb/ton	40 CFR 63.5810	P/E	records
TAC	BAAQMD Condition # 9997, part 10c	Y		TAC emissions ≤ TAC risk screening level and compliance with BAAQMD Condition # 9997, part 10a and b	BAAQMD Condition # 9997, parts 7 and 11	P/D	records
Opacity	BAAQMD 6-1-301	N		Ringelmann 1.0 for < 3 minutes/hr	BAAQMD Condition #9997, part 15	P/D	Visual Filter Inspection

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S1 – FIBERGLASS OPERATION**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
FP	BAAQMD 6-1-310	N		0.15 gr/dscf	BAAQMD Condition #9997, part 15	P/D	Visual Filter Inspection
FP	BAAQMD 6-1-311	N		4.10P <sup>0.67</sup> lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	BAAQMD Condition #9997, part 15	P/D	Visual Filter Inspection
Opacity	SIP 6-301	Y		Ringelmann 1.0 for < 3 minutes/hr	BAAQMD Condition #9997, part 15	P/D	Visual Filter Inspection
FP	SIP 6-310	Y		0.15 gr/dscf	BAAQMD Condition #9997, part 15	P/D	Visual Filter Inspection
FP	SIP 6-311	Y		4.10P <sup>0.67</sup> lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	BAAQMD Condition #9997, part 15	P/D	Visual Filter Inspection

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S2 – BOOTH & BRUSH AREA FOR BUS COMPONENT COATING OPERATION**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	BAAQMD 8-45-301.3	N		Adhesion promoter limit: 840 g/l or 7.0 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S2 – BOOTH & BRUSH AREA FOR BUS COMPONENT COATING OPERATION**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	BAAQMD 8-45-301.3	N		Clear coating limit: 250 g/l or 2.1 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	BAAQMD 8-45-301.3	N		Color coating limit: 420 g/l or 3.5 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	BAAQMD 8-45-301.3	N		Multi-color coating limit: 680 g/l or 5.7 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	BAAQMD 8-45-301.3	N		Pretreatment coating limit: 660 g/l or 5.5 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	BAAQMD 8-45-301.3	N		Primer limit: 250 g/l or 2.1 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	BAAQMD 8-45-301.3	N		Primer sealer limit: 340 g/l or 2.8 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	BAAQMD 8-45-301.3	N		Single-stage coating limit: 420 g/l or 3.5 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	BAAQMD 8-45-301.3	N		Temporary protective coating limit: 60 g/l or 0.5 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	BAAQMD 8-45-301.3	N		Truck bed liner coating limit: 310 g/l or 2.6 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	BAAQMD 8-45-301.3	N		Underbody coating limit: 430 g/l or 3.6 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	BAAQMD 8-45-301.3	N		Uniform finish coating limit: 540 g/l or 4.5 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	BAAQMD 8-45-301.3	N		Other coating type limit: 250 g/l or 2.1 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S2 – BOOTH & BRUSH AREA FOR BUS COMPONENT COATING OPERATION**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	BAAQMD 8-45-308.5	N		Surface Preparation Solvent: General limit: 25 g/l or 0.2 lb/gal; Bug and tar remover: 350 g/l or 2.9 lb/gal	BAAQMD 8-45-501	P/W	Recordkeeping
Coating Usage	BAAQMD 8-45-312	Y		Combined volume of adhesion promoter, uniform finish coating and multi-color coating ≤ 5% of topcoats applied, monthly basis	BAAQMD 8-45-501	P/W	Recordkeeping
VOC	SIP 8-45-301.2	Y		Group II Vehicles, Pretreatment wash primer limit: 780 g/l or 6.5 lb/gal	SIP 8-45-501	P/W	Recordkeeping
VOC	SIP 8-45-301.2	Y		Group II Vehicles, Precoat limit: 600 g/l or 5.0 lb/gal	SIP 8-45-501	P/W	Recordkeeping
VOC	SIP 8-45-301.2	Y		Group II Vehicles, Primer limit: 250 g/l or 2.1 lb/gal	SIP 8-45-501	P/W	Recordkeeping
VOC	SIP 8-45-301.2	Y		Group II Vehicles, Primer sealer limit: 340 g/l or 2.8 lb/gal	SIP 8-45-501	P/W	Recordkeeping
VOC	SIP 8-45-301.2	Y		Group II Vehicles, Topcoat limit: 420 g/l or 3.5 lb/gal	SIP 8-45-501	P/W	Recordkeeping
VOC	SIP 8-45-301.2	Y		Group II Vehicles, Metallic/iridescent topcoat limit: 420 g/l or 3.5 lb/gal	SIP 8-45-501	P/W	Recordkeeping

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S2 – BOOTH & BRUSH AREA FOR BUS COMPONENT COATING OPERATION**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	SIP 8-45-301.2	Y		Group II Vehicles, Camouflage limit: 420 g/l or 3.5 lb/gal	SIP 8-45-501	P/W	Recordkeeping
VOC	SIP 8-45-308.4	Y		Surface Preparation Solvent: General limit: 72 g/l or 0.6 lb/gal; Hand help spray: 780 g/l or 6.5 lb/gal	SIP 8-45-501	P/W	Recordkeeping
VOC	SIP 8-45-312	Y		Special coating limit: 840 g/l or 7.0 lb/gal	SIP 8-45-501	P/W	Recordkeeping
VOC	SIP 8-45-313	Y		Temporary protective coating limit: 60 g/l or 0.5 lb/gal	SIP 8-45-501	P/W	Recordkeeping
	SIP 8-45-314	Y		Precoat usage limit: 25% of waterborn primer sealer	SIP 8-45-501	P/W	Recordkeeping

## VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally found in Section 600 et seq. of the regulation. The following table indicates only the test methods associated with the emission limits included in Section VII, Applicable Limits & Compliance Monitoring Requirements, of this permit.

**Table VIII  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
BAAQMD Regulation 8-45-301.3	Surface Coating, VOC Content	Manual of Procedures, Volume III, Method 21, Determination of Compliance of Volatile Organic Compounds for Water Reducible Coatings; or Manual of Procedures, Volume III, Method 22, Determination of Compliance of Volatile Organic Compounds for Solvent Based Coatings, Inks, and Other Related Products
BAAQMD Regulation 8-45-301.3	Determination of VOC Emissions	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Method 25, Determination of Total Gaseous Non-Methane Organic Emissions as Carbon; or EPA Method 25A, Determination of Total Gaseous Non-Methane Organic Emissions Using a Flame Ionization Analyzer
BAAQMD Regulation 8-45-308.5	Surface Preparation, VOC Content	Manual of Procedures, Volume III, Method 31, Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners, and Low Solids Coatings
SIP Regulation 8-45-301	Surface Coating, VOC Content	Manual of Procedures, Volume III, Method 21, Determination of Compliance of Volatile Organic Compounds for Water Reducible Coatings; or Manual of Procedures, Volume III, Method 22, Determination of Compliance of Volatile Organic Compounds for Solvent Based Coatings, Inks, and Other Related Products
SIP Regulation 8-45-308.4	Surface Preparation, VOC Content	Manual of Procedures, Volume III, Method 31, Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners, and Low Solids Coatings
BAAQMD Regulation 8-50-301.1	Process Requirements, Monomer Content	Manual of Procedures, Volume III, Method 39, Determination of Styrene Monomer Content of Polyester Resin Material

## VIII. Test Methods

**Table VIII**  
**Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
BAAQMD Regulation 8-50-301.2	Process Requirements, Vapor Suppressed Resins	Manual of Procedures, Volume III, Method 23, Determination of Volatile Emissions from Polyester Resins
BAAQMD Regulation 8-50-301.5	Process Requirements, Vapor Suppressed Resins	Manual of Procedures, Volume III, Method 23, Determination of Volatile Emissions from Polyester Resins
BAAQMD Regulation 8-50-301.6	Process Requirements, Monomer Content	Manual of Procedures, Volume III, Method 39, Determination of Styrene Monomer Content of Polyester Resin Material
BAAQMD Regulation 8-50-301.7	Process Requirements, Monomer Content	Manual of Procedures, Volume III, Method 39, Determination of Styrene Monomer Content of Polyester Resin Material
BAAQMD Regulation 8-50-304	Corrosion-resistant Materials	Manual of Procedures, Volume III, Method 39, Determination of Styrene Monomer Content of Polyester Resin Material
BAAQMD Regulation 8-50-305.4	Surface Preparation and Clean-up Solvent, VOC Content	Manual of Procedures, Volume III, Method 31, Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners, and Low Solids Coatings
BAAQMD Regulation 8-50-307	Gel Coat Requirement	Manual of Procedures, Volume III, Method 26, Determination of Volatile Weight Loss of Gel Coats
SIP Regulation 8-50-301.1	Process Requirements, Monomer Content	Manual of Procedures, Volume III, Method 39, Determination of Styrene Monomer Content of Polyester Resin Material
SIP Regulation 8-50-301.2	Process Requirements, Vapor Suppressed Resins	Manual of Procedures, Volume III, Method 23, Determination of Volatile Emissions from Polyester Resins
SIP Regulation 8-50-304	Corrosion-resistant Materials	Manual of Procedures, Volume III, Method 39, Determination of Styrene Monomer Content of Polyester Resin Material
SIP Regulation 8-50-305.4	Surface Preparation and Clean-up Solvent, VOC Content	Manual of Procedures, Volume III, Method 31, Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners, and Low Solids Coatings
SIP Regulation 8-50-307	Gel Coat Requirement	Manual of Procedures, Volume III, Method 26, Determination of Volatile Weight Loss of Gel Coats

## VIII. Test Methods

**Table VIII**  
**Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
40 CFR Part 63, Subpart WWW	Determining Vapor Suppressant Effectiveness	Appendix A

## **IX. PERMIT SHIELD**

**Not applicable.**

## **X. REVISION HISTORY**

**Title V Permit Issuance (Application # 7629):**

**February 18, 2005**

**Major Facility Review Permit Renewal (Application 21507):**

**May 24, 2011**

This major facility review permit renewal includes Application 13307 for S-2 Booth & Brush Area for Bus Component Coating Operation.

## **XI. GLOSSARY**

**ACT**

Federal Clean Air Act

**APCO**

Air Pollution Control Officer

**ARB**

Air Resources Board

**BAAQMD**

Bay Area Air Quality Management District

**BACT**

Best Available Control Technology

**BARCT**

Best Available Retrofit Control Technology

**Basis**

The underlying authority that allows the District to impose requirements.

**CAA**

The federal Clean Air Act

**CAAQS**

California Ambient Air Quality Standards

**CAPCOA**

California Air Pollution Control Officers Association

**CEQA**

California Environmental Quality Act

**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

**CO<sub>2</sub>**

Carbon Dioxide



## **XI. Glossary**

### **Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

### **District**

The Bay Area Air Quality Management District

### **dscf**

Dry Standard Cubic Feet

### **dscm**

Dry Standard Cubic Meter

### **E 6, E 9, E 12**

Very large or very small number values are commonly expressed in a form called scientific notation, which consists of a decimal part multiplied by 10 raised to some power. For example, 4.53 E 6 equals  $(4.53) \times (10^6) = (4.53) \times (10 \times 10 \times 10 \times 10 \times 10 \times 10) = 4,530,000$ . Scientific notation is used to express large or small numbers without writing out long strings of zeros.

### **EPA**

The federal Environmental Protection Agency.

### **Excluded**

Not subject to any District Regulations.

### **Federally Enforceable, FE**

All limitations and conditions which are enforceable by the Administrator of the 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), and also including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

### **FP**

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

### **FR**

Federal Register

### **grains**

1/7000 of a pound

## **XI. Glossary**

### **HAP**

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

### **Hg**

Mercury

### **Major Facility**

A facility with potential emissions of: (1) at least 100 tons per year of any regulated air pollutant, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

### **MFR**

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Act and implemented by District Regulation 2, Rule 6.

### **MOP**

The District's Manual of Procedures

### **MSDS**

Material Safety Data Sheet

### **NA**

Not Applicable

### **NAAQS**

National Ambient Air Quality Standards

### **NESHAPs**

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63.

### **NMHC**

Non-methane Hydrocarbons

### **NMOC**

Non-methane Organic Compounds (Same as NMHC)

### **NO<sub>x</sub>**

Oxides of nitrogen.

### **NPOC**

Non-Precursor Organic Compound, as defined in BAAQMD Regulation 2, General Requirements, Rule 1, Permits, Section 207

## **XI. Glossary**

### **NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Act, and implemented by 40 CFR Part 60 and District Regulation 10.

### **NSR**

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

### **O<sub>2</sub>**

The chemical name for naturally-occurring oxygen gas.

### **Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets at a specified ratio for the emissions from a new or modified source and any pre-existing cumulative increase minus any onsite contemporaneous emission reduction credits. Applies to emissions of POC, NO<sub>x</sub>, PM<sub>10</sub>, and SO<sub>2</sub>.

### **PM**

Total Particulate Matter

### **PM<sub>10</sub>**

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

### **POC**

Precursor Organic Compound, as defined in BAAQMD Regulation 2, General Requirements, Rule 1, Permits, Section 208

### **PSD**

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

### **SIP**

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

### **SO<sub>2</sub>**

Sulfur dioxide

## **XI. Glossary**

### **SO2 Bubble**

An SO2 bubble is an overall cap on the SO2 emissions from a defined group of sources, or from an entire facility. SO2 bubbles are sometimes used at refineries because combustion sources are typically fired entirely or in part by "refinery fuel gas" (RFG), a waste gas product from refining operations. Thus, total SO2 emissions may be conveniently quantified by monitoring the total amount of RFG that is consumed, and the concentration of H2S and other sulfur compounds in the RFG.

### **THC**

Total Hydrocarbons (NMHC + Methane)

### **therm**

100,000 British Thermal Units

### **Title V**

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

### **TOC**

Total Organic Compounds (NMOC + Methane, Same as THC)

### **TRMP**

Toxic Risk Management Plan

### **TSP**

Total Suspended Particulate

### **TVP**

True Vapor Pressure

### **VOC**

Volatile Organic Compounds, as defined in BAAQMD Regulation 8, Organic Compounds, Rule 50, Polyester Resin Operations, Section 220

## XI. Glossary

### Units of Measure:

bbl	=	barrel of liquid (42 gallons)
bhp	=	brake-horsepower
btu	=	British Thermal Unit
C	=	degrees Celsius
F	=	degrees Fahrenheit
f <sup>3</sup>	=	cubic feet
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
m <sup>2</sup>	=	square meter
min	=	minute
M	=	thousand
Mg	=	mega-gram, one thousand grams
μg	=	micro-gram, one millionth of a gram
MM	=	million
mm	=	millimeter
MMbtu	=	million btu
mm Hg	=	millimeters of Mercury (pressure)
MW	=	megawatts
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year

### Symbols:

<	=	less than
>	=	greater than
≤	=	less than or equal to
≥	=	greater than or equal to