



*This Advisory is provided to inform you about activities of the Air District which may affect your operation. It is intended to assist you in your effort to achieve and maintain compliance with applicable air pollution regulations.*

**ATTENTION: POLYESTER RESIN OPERATORS AND MANUFACTURERS**

**SUBJECT: NEW REQUIREMENTS FOR POLYESTER RESIN OPERATIONS (REGULATION 8, RULE 50)**

On December 2, 2009, the Bay Area Air Quality Management District (Air District) amended Regulation 8, Rule 50: Polyester Resin Operations to reduce Volatile Organic Compound (VOC) emissions. These amendments further reduce VOC emissions from the Bay Area's polyester resin operations in three ways: (1) by lowering monomer content limits for resins; (2) by establishing monomer content limits for gel coats; and, (3) by requiring the use of non-atomizing spray systems when resins are applied to open molds. In addition, there are new lower VOC content limits in cleaning products used in polyester resin operations. Below is a summary of amendments to the rule that operators and manufacturers should be aware of:

► **The rule now applies to touch-up and repair operations** as well as the manufacturing, fabrication and rework, of composite products<sup>1</sup>.

► **Process Material Requirements:**

Effective **October 1, 2010**, polyester resin operations must use one or more of the following VOC emission reduction methods:

- A closed-mold system; or
- A resin containing vapor suppressant, that prevents weight loss from VOC emissions to no more than 50 grams per square meter of exposed surface area during resin polymerization; or,
- Any polyester resins and gel coats used in open molds as well as for touchup, repair and product installations that meet applicable monomer content limits (see *Table 1 on page 2*).

► **Corrosion Resistant Materials:**

- Effective **October 1, 2010**, polyester resin operations using corrosion-resistant materials to manufacture products for corrosive or fire retardant services must use polyester resin material with a monomer content not to exceed limits established the limits (see *Table 1 on page 2*).

► **New Cleaning Requirements:**

- Effective **October 1, 2010**, no cleaning product shall contain greater than 25 grams of VOC per liter of material
- Operators may use acetone in a cold cleaner provided that:
  - The cold cleaner and any emission control device must be in proper working order;
  - The cold cleaner must have self-closing cover;
  - The cold cleaner must remain closed unless putting in or taking out parts;
  - Any liquid solvents must drain back into the cold cleaner;
  - Parts can be soaked in the cold cleaner but must be wiped, brushed or worked on outside of the cold cleaner;
  - Leaks shall be repaired before the end of the work day or the cold cleaner shall be drained and shut down until repaired;
  - The cold cleaner shall not be heated;

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<sup>1</sup>Composite materials are defined as individual components that, combined, make up the composite product. Composite materials include resins, gel coats, molding compounds, thinners, catalyzing agents, binders, fillers, reinforcement fibers, other reinforcement materials, and any other material added to enhance the properties of the composite product.

- Solvent and waste solvent shall not be stored or disposed of in a manner that causes or allows evaporation;
- No cleaning of porous or absorbent materials is allowed in the cold cleaner; and,
- **A permanent label describing these operating rules must be posted in a visible location near the cold cleaner.**

<b>TABLE 1:</b>	
<b>Gel Coats and Resins</b>	<b>Monomer Percentage by Weight</b>
<b>Gel Coats:</b>	
<b>Clear Gel Coats:</b>	
○ Marble Resin Gel Coats	42%
○ Boat Manufacturing Gel Coats	48%
○ All Other Clear Gel Coats	44%
<b>Pigmented Gel Coats:</b>	
○ White and Off-White Gel Coats	30%
○ Non-White Boat Manufacturing Gel Coats	33%
○ Other Non-White Gel Coats	37%
○ Primer Gel Coats	28%
<b>Specialty Gel Coats</b>	<b>48%</b>
<b>Resins:</b>	
○ Marble Resins	10% with fillers or 32% without fillers
○ Solid Surface Resins	17%
○ Tub/Shower Resins	24% with fillers or 35% without fillers
○ Boat Manufacturing (atomized)	28%
○ Boat Manufacturing (non-atomized)	35%
○ Lamination Resins	31% with fillers or 35% without fillers
<b>Fire Retardant Resins</b>	<b>38%</b>
<b>Corrosion Resistant, High Strength and Tooling Resins:</b>	
○ Non-atomizing Mechanical Application	46%
○ Filament Application	42%
○ Manual Application	40%
<b>Other Resins</b>	<b>35%</b>

**► New Prohibition of Specification:**

No person shall solicit, require or specify use of a composite material which will violate any of the requirements of this rule. This prohibition applies to both oral and written contracts.

**► New Compliance Statement Requirement:**

The **manufacturer** of any VOC-containing composite material sold or used in this District shall supply a designation of the percent monomer content by weight or the percent VOC content, as applicable, on data sheets, specification sheets or compliance certifications.




**► New Recordkeeping and Monitoring Requirements:**

Any owner or operator subject to this regulation shall:

- Record on a daily basis the type and amount of all resins, resin thinners, gel coats, catalyzing agents and cleaning products used (unless the owner or operator is eligible to maintain monthly records);
- Retain manufacturer certifications that all vapor-suppressed resins meet applicable standards in the rule;

- For approved emission control systems:
  - Record on a daily basis the type and amount of all resins, gel coats and cleaning products used;
  - Record key system operating parameters (as defined by Section 8-50-223) on a daily basis;
  - For emission control system monitoring subject to Section 8-50-303, owner/operators must install readily visible parametric monitoring devices to monitor the operating parameters of an emission control system at all times during operation.
- Retain and have records available for inspection by the Air District for the previous 36 months

If you have any further needs, please call the District at the following numbers.

-  For questions about this advisory contact Eric Pop, Air Quality Specialist, at [epop@baaqmd.gov](mailto:epop@baaqmd.gov) or (415) 749-5172.
-  For a copy of the above listed rule, see the web at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/Rules-and-Regulations.aspx>
-  For compliance assistance, call (415) 749-4999, the Compliance Counselor Hotline.

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