



# ADVISORY

**SUBJECT: SMAQMD Rules:**  
**454 - Degreasing Operations**  
**466 - Solvent Cleaning**

ADVISORY #03-01

2003

**IMPORTANT INFORMATION FOR ALL OWNERS AND OPERATORS OF SOLVENT  
 DEGREASERS AND USERS OF SOLVENT CLEANERS**

<b>Purpose of this advisory</b>	The purpose of this two part advisory is to inform the regulated community of changes to Sacramento Metropolitan Air Quality Management District (SMAQMD) Rule 454 and to outline the requirements of new SMAQMD Rule 466.
<b>Who needs this information?</b>	This advisory has useful information for organizations, businesses and facilities that utilize degreasing operations subject to Rule 454 (these include parts washers, solvent sinks, solvent immersion units, carburetor cleaners, etc.) and businesses that sell or use cleaning materials containing volatile organic compounds (VOC) in wipe cleaning applications subject to rule 466. Wipe cleaning is defined as a cleaning process that uses towels, shop rags or sponges that are moistened with a solvent then used to clean a surface.
<b>Background</b>	Rules 454 & 466 are of a series of rules adopted by the SMAQMD to reduce air pollution. On May 23, 2002, the SMAQMD Board of Directors revised Rule 454 and adopted Rule 466 in an effort to achieve additional emission reductions.

## Part I - Rule 454 Solvent Degreasing Operations

<b>What is Rule 454?</b>	SMAQMD Rule 454 regulates VOC emissions from solvent degreasing operations. Rule 454 has been amended so that non-vapor degreasers (degreasers that do not heat the solvent above its boiling point) must use cleaners with a VOC content of 50 grams/liter (g/l) or less. Airtight/airless and vapor degreasing cleaning systems may use higher VOC containing materials provided the units comply with the provisions below.								
<b>What is required?</b>	<p>Effective May 22, 2003 Rule 454 requires the following operational requirements:</p> <ol style="list-style-type: none"> <li>1. Non-vapor degreasers must use a cleaning material with a VOC content of 50 g/l or less.</li> <li>2. In lieu of using a material with a VOC content less than 50 g/l an airtight/airless cleaning system may be used. These units must:       <ol style="list-style-type: none"> <li>a. Have a sealing door or hatch.</li> <li>b. Have no vapor leaks greater than 50 parts per million.</li> <li>c. Have no liquid leaks in excess of three drops per minute.</li> <li>d. Have no leaks that appear as visible mist.</li> <li>e. Clean up spilled materials immediately and store all wastes in closed containers.</li> </ol> </li> <li>3. Vapor degreasers must have :       <table border="0" style="width: 100%;"> <tr> <td>a. Automated parts handling system.</td> <td>b. Circumferential Condensing Coils.</td> </tr> <tr> <td>c. Circumferential Trough.</td> <td>d. Water separator.</td> </tr> <tr> <td>e. Freeboard Ratio of at least 1.0.</td> <td>f. Superheated Vapor Zone.</td> </tr> <tr> <td>g. Refrigerated freeboard chiller.</td> <td>h. Safety Switch &amp; Automatic Shut Off Switch.</td> </tr> </table> </li> </ol>	a. Automated parts handling system.	b. Circumferential Condensing Coils.	c. Circumferential Trough.	d. Water separator.	e. Freeboard Ratio of at least 1.0.	f. Superheated Vapor Zone.	g. Refrigerated freeboard chiller.	h. Safety Switch & Automatic Shut Off Switch.
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**Once I have a compliant unit, what else?**

Operators that use a non-vapor degreaser and cleaning materials with a VOC content less than 50 g/l are not subject to the recordkeeping and general operating requirements of SMAQMD Rule 454. Airtight/airless and vapor degreasers must adhere to the operational requirements outlined on the previous page and recordkeeping requirements.

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## Part II - Rule 466 Solvent Cleaning Operations

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**Rule 466 Solvent Cleaning**

SMAQMD Rule 466 regulates VOC emissions from solvent cleaning operations. If your business engages in wipe cleaning activities during production, repair, maintenance or general cleaning operations you must use a cleaning material that meets the VOC requirements in Rule 466.

**What are compliant materials?**

If your operations are not subjected to any other SMAQMD Rule pertaining to the use of cleaning solvents then the following VOC limits apply:

A. General (wipe cleaning, maintenance cleaning).....50 g/l

B. Product Cleaning During Manufacturing Process or Surface Preparation for Coating, Adhesive, Sealants, or Ink Application

General.....50 g/l  
Electrical Apparatus Components and Electronic Components...500 g/l  
Medical Devices and Pharmaceuticals.....800 g/l  
Platelets.....800 g/l

C. Repair and Maintenance Cleaning

General.....50 g/l  
Electrical Apparatus Components and Electronic Components...900 g/l  
Medical Devices and Pharmaceuticals  
    General Work Surfaces.....600 g/l  
    Tools, Equipment, and Machinery.....800 g/l  
Platelets.....800 g/l

D. Architectural Coating Application Equipment Cleaning

Water based Coatings..... 50 g/l  
Solvent based Coatings used in field and remote operations..... 300 g/l

**What other requirements apply?**

By using cleaning solvents with a VOC content of 50 g/l or less you are exempt from any of the recordkeeping and operational requirements of Rule 466. If you use of cleaning solvents with a VOC great than 50 g/l you are subject to the recordkeeping requirements (section 500) and storage requirements (section 300) of Rule 466.

**Are there exemptions?**

Acetone may be used as a cleanup or surface preparation material. Acetone is an exempt compound and is not subject to the requirements of Rule 466. Completely methylated siloxanes are also exempt from SMAQMD Rules. A facility may use up 160 fluid ounces of aerosol products for cleaning purposes provided the usage is recorded.

**What about suppliers and vendors?**

Any person who sells solvent cleaning product subject to Rule 466 must make available to persons purchasing products all of the following:

1. Solvent type by name/code/manufacture
2. VOC content of the material as applied
3. Any thinning, reducing or mixing recommendations.

**For More Information & Technical Assistance**

For copies of these rules or for further information please visit our web site at [www.airquality.org](http://www.airquality.org). You may also call the SMAQMD Compliance Assistance Hotline at (916) 874 4884 for technical assistance.