

REGULATION IV
PROHIBITIONS

RULE 416. SOLVENTS

(Adopted 9-1-74; Revised 12-13-84, 9-18-85, 4-20-94, and 1-17-01)

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PART 1 GENERAL

1.1 Purpose

The purpose of this Rule is to limit the emissions of volatile organic compounds (VOCs) that are used as solvents.

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1.2 Applicability

The provisions of this Rule shall apply to any equipment or process that uses solvents, unless specifically exempted.

1.3 Exemptions

The requirements of this Rule shall not apply to the following:

- 1.3.1 The manufacture of solvents, or the transport or storage of solvents, or materials containing solvents.
- 1.3.2 The use of equipment or surface coating material for which other requirements are specified by other rules of the District, including Rules 417, 418, 419, 420, 426, 430, and 433 or which are exempt from the air pollution control requirements of said Rules.
- 1.3.3 Any source subject to an emission limit imposed by the BACT or NSR requirements of District Rule 207 (Review of New or Modified Sources) shall not be subject to Sections 3.1 or 3.2 of this Rule for the same pollutant.
- 1.3.4 Any source in operation prior to January 17, 2001 with actual emissions greater than those allowed for in Sections 3.1 or 3.2 of this Rule shall not be subject to Sections 3.1 or 3.2 of this Rule provided that the source was operating in compliance with the requirements of Rule 416 that were in effect prior to January 17, 2001, and provided that the source apply for permit revision(s) no later than March 19, 2001 to establish new emission limits that are based upon the source's Historical Emissions calculated pursuant to Section 7.2 of District Rule 207.
- 1.3.5 The spraying or other use of insecticides, pesticides or herbicides.
- 1.3.6 The use, application, evaporation or drying of saturated halogenated hydrocarbons or perchloroethylene.
- 1.3.7 The use of any material, in any equipment described in Part 3 if the VOC content of the material is less than 20 grams/liter.

1.4 Effective Dates

This Rule has been in effect since September 1, 1974. This Rule in its present form is effective March 19, 2001.

1.5 References

The requirements of this Rule arise from the provisions of the California Clean Air Act and amendments (Health and Safety Code Section 40910 *et seq.*) and the federal Clean Air Act and amendments (42 U.S.C. Section 7401 *et seq.*).

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PART 2 DEFINITIONS

2.1 Equipment

Any article, machine, equipment or other contrivance.

2.2 Solvent

Material containing VOCs, where the material and/or the VOCs are used as dissolvers, viscosity reducers or cleaning agents.

2.3 Volatile Organic Compounds (VOCs)

As defined in District Rule 101, Definitions.

PART 3 REQUIREMENTS AND STANDARDS

3.1 Equipment Exposing Solvent to Flame or Oxidizing Conditions

A person shall not cause or allow the uncontrolled emissions of more than 15 pounds of VOCs in any one day from any equipment in which any solvent comes into contact with flame or is baked, heat-cured or heat-polymerized at a temperature at or above 194°F (90°C), in the presence of oxygen.

3.1.1 Emissions from all equipment designed for processing a continuous web, strip or wire shall be collectively subject to compliance with this Section.

3.1.2 Emissions resulting from the use of solvents to cleanup any equipment described in Part 3 shall be included with the other emissions from that equipment for determining compliance with this Rule.

3.2 Equipment Using Solvents

A person shall not cause or allow the uncontrolled emissions of more than 40 pounds of VOCs in any one day from any equipment or permit unit using, or applying any solvent.

3.2.1 Emissions resulting from air or heated drying of products for the first 12 hours after their removal from any equipment using solvents shall be included in determining compliance with Section 3.2.

3.2.2 Emissions resulting from baking, heat-curing or heat-polymerizing, as described in Section 3.1, shall be excluded from determination of compliance with Section 3.2.

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- 3.2.3 Emissions from all equipment designed for processing a continuous web, strip or wire shall be collectively subject to compliance with Section 3.2.
- 3.2.4 Emissions resulting from the cleanup with solvents of any equipment described in Part 3 shall be included with the other emissions from that equipment for determining compliance with this Rule.

3.3 Alternate Compliance Using Control Equipment

The requirements of Sections 3.1 and 3.2 shall not apply if control equipment (other than incineration) is used to reduce emissions by at least 85 percent.

- 3.3.1 If incineration is used to reduce emissions pursuant to Section 3.3, the control equipment shall reduce emissions by at least 90 percent.
- 3.3.2 A person using control equipment pursuant to this Rule shall provide, properly install and maintain in calibration, in good working order and in operation, devices as specified in the Authority to Construct or the Permit to Operate, or as specified by the Air Pollution Control Officer, for indicating and recording temperatures, pressures, rates of flow or other operating conditions necessary to determine the degree and effectiveness of air pollution control. Records sufficient to demonstrate the compliant operation of the equipment shall be maintained as specified in Part 4.
- 3.3.3 Compliance with the control efficiencies of Section 3.3 shall be determined using the test methods specified in Part 5.

PART 4 ADMINISTRATIVE REQUIREMENTS

Any person using solvents or any material containing solvents shall maintain the following records for at least two years and make them available to the District upon request:

4.1 Composition of Materials

Material data sheets, manufacturer's certifications or product labels showing the chemical compositions and physical properties of each solvent.

4.2 Amount of Solvent Used

Records of the amount of solvent that is used. Where compliance with the daily emission limits is required, usage records shall be sufficient to document compliance with the limit.

4.3 Operation of Control Equipment

Records sufficient to demonstrate the continuous compliant operation of control equipment

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installed pursuant to Section 3.3.

PART 5 TEST METHODS

5.1 Control Efficiency

The control efficiency of air pollution control equipment shall be determined using EPA Methods 2, 2A, 2C, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25B for measuring the total gaseous organic concentrations at the inlet and outlet of the control device (40 CFR 60, Appendix A).

5.2 Source Testing Procedures

All source testing shall be performed in compliance with the District Source Testing Procedures Manual.

5.3 VOC Content

5.3.1 The VOC content of any water-based materials subject to this Rule shall be determined using Bay Area Air Quality Management District Method 31 (Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners and Low-Solids Coatings).

5.3.2 The VOC content of any other class of materials and clean-up solvents subject to this Rule shall be determined using EPA Method 24 (Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings) in 40 Code of Federal Regulations Part 60, Appendix A.

5.4 Quantity of Exempt Compounds

5.4.1 The quantity of exempt compounds and water in water-based materials subject to this Rule shall be determined using Bay Area Air Quality Management District Method 31 (Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners and Low-Solids Coatings).

5.4.2 The quantity of exempt compounds in any other class of materials and clean-up solvents subject to this Rule shall be determined using California Air Resources Board Test Method 432 (Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings).

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