# REGULATION 8 ORGANIC COMPOUNDS RULE 35 COATING, INK AND ADHESIVE MANUFACTURING

# INDEX

#### 8-35-100 GENERAL

- 8-35-101 Description
- 8-35-110 Exemptions, Small Manufacturers
- 8-35-111 Exemption, Waterbased Coatings and/or Paste Inks
- 8-35-112 Exemption, Vats Less Than 45 liters
- 8-35-113 Exemption, Low VOC Coating, Inks, or Adhesives
- 8-35-114 Exemption, Specific Operations
- 8-35-115 Exemption, Adhesive Manufacturers
- 8-35-116 Limited Exemption, Recordkeeping

#### 8-35-200 DEFINITIONS

- 8-35-201 Coatings Manufacture
- 8-35-202 Ink Manufacturer
- 8-35-203 Volatile Organic Compound (VOC)
- 8-35-204 Waterbased Coating
- 8-35-205 Paste Ink
- 8-35-206 High Speed Dispersion Mill
- 8-35-207 Grinding Mill
- 8-35-208 Roller Mill
- 8-35-209 Adhesive Manufacturer
- 8-35-210 Low VOC Coating, Ink and Adhesive
- 8-35-211 Tote Tank
- 8-35-212 Solvent
- 8-35-213 Approved Emission Control System
- 8-35-214 Leak Free
- 8-35-215 Wipe Cleaning
- 8-35-216 Low Volatility Compound
- 8-35-217 Nonporous Cover Material
- 8-35-218 Fresh Solvent
- 8-35-219 Key System Operating Parameter

#### 8-35-300 STANDARDS

- 8-35-301 Portable and Stationary Mixing Operating Requirements
- 8-35-302 Deleted March 18, 1992
- 8-35-303 Equipment Cleaning
- 8-35-304 Grinding Mills
- 8-35-305 Stationary Vats
- 8-35-306 Deleted June 15, 1994
- 8-35-320 Wipe Cleaning and Cleanup Solvent

#### 8-35-400 ADMINISTRATIVE REQUIREMENTS

- 8-35-401 Deleted March 18, 1992
- 8-35-402 Deleted March 18, 1992
- 8-35-403 Loss of Exemption
- 8-35-404 Deleted June 15, 1994

Bay Area Air Quality Management District

## 8-35-500 MONITORING AND RECORDS

- 8-35-501 Cleaning Solvent Records
- 8-35-502 Burden of Proof
- 8-35-503 Approved Emission Control System, Recordkeeping Requirements

# 8-35-600 MANUAL OF PROCEDURES

- 8-35-601 Analysis of Samples
- 8-35-602 Determination of Applicability
- 8-35-603 Determination of Emissions
- 8-35-604 Determination of Collection Efficiency

# **REGULATION 8** ORGANIC COMPOUNDS **RULE 35** COATING, INK AND ADHESIVE MANUFACTURING

(Adopted May 2, 1984)

#### 8-35-100 GENERAL

- **Description:** The purpose of this rule is to limit emissions of Organic Compounds 8-35-101 from the manufacture of coatings, inks, and adhesives. (Amended March 18, 1992)
- Exemptions, Small Manufacturers: Until January 1, 1993, the requirements of 8-35-110 Sections 8-35-301 through 320 shall not apply to any coating and/or ink manufacturer, which produces less than 1.89 cubic meters (500 gals.) of coatings and/or ink in any one day. (Amended March 18, 1992)
- 8-35-111 Exemption, Waterbased Coatings and Paste Inks: Until January 1, 1993, the provisions of Section 8-35-301 of this rule shall not apply to any equipment while it is being used in the production of waterbased coatings and paste inks.

(Amended March 18, 1992)

- 8-35-112 Exemption, Vats Less Than 45 Liters: Until January 1, 1993, the provisions of Section 8-35-301 and 303 of this rule shall not apply to any vat with a volume of 45 liters (12 gallons) or less. (Amended March 18, 1992)
- 8-35-113 Exemption, Low VOC Coatings, Inks and Adhesives: The provisions of Section 8-35-301 of this rule shall not apply to any equipment while it is being used in the production of low VOC coatings, inks or adhesives. (Adopted March 18, 1992)
- 8-35-114 **Exemption.** Specific Operations: The provisions of this rule shall not apply to the manufacture of coatings, inks or adhesives, which may be subject to other rules of Regulation 8. (Adopted March 18, 1992)

Flexible and Rigid Disc Manufacturing (Rule 38). 114.1

114.2 Paper, Fabric and Film Coating (Rule 12).

- (Adopted March 18, 1992) Exemption, Adhesive Manufacturers: Until January 1, 1993, the provisions of 8-35-115 this rule shall not apply to the manufacture of adhesives. (Adopted March 18, 1992)
- 8-35-116 Limited Exemption, Recordkeeping: The provisions of Section 8-35-501 shall not apply to solvent, which is used to clean or flush a mill or vat, during the manufacture of a coating, ink, or adhesive and is subsequently incorporated into the same batch.

(Adopted March 18, 1992)

#### 8-35-200 **DEFINITIONS:**

- 8-35-201 Coatings Manufacturer: Any manufacturing facility that mixes, blends, or compounds paints, varnishes, lacquers, enamels, shellacs, or sealers from raw materials. (Amended March 18, 1992)
- 8-35-202 Ink Manufacturer: Any manufacturing facility that mixes, blends, or compounds printing inks from raw materials. (Amended March 18, 1992)
- 8-35-203 Volatile Organic Compounds (VOC): Any organic compound, (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides of carbonates and ammonium carbonate) which would be emitted during the manufacture of coatings, inks or adhesives. (Amended March 18, 1992)
- 8-35-204 Waterbased Coating: A paint, varnish, lacquer, enamel, shellac, sealer or ink that contains 10 percent or more, by weight, of water, as determined by analytical procedures as prescribed in the Manual of Procedures, Volume III, Method 21.

(Amended March 18, 1992)

- 8-35-205 Paste Ink: An ink that contains, primarily, Magie Oil or glycol or equivalent solvent.
- High Speed Dispersion Mill: A mixer with one or more blades that rotate at high 8-35-206 speed in order to disperse coating solids.
- 8-35-207 Grinding Mill: A mill with cylindrical chambers containing grinding media such as balls, stones, pebbles, or sand that grind and disperse coating solids.

(Amended March 18, 1992)

- 8-35-208 Roller Mill: A mill with horizontal rollers that grind and disperse coating solids. (Amended March 18, 1992)
- 8-35-209 Adhesive Manufacturer: Any manufacturing facility that mixes, blends or compounds adhesives from raw materials. (Adopted March 18, 1992)
- 8-35-210 Low VOC Coating, Ink and Adhesive: Any coating, ink or adhesive that contains less than 1% VOC (wt). (Adopted March 18, 1992)
- 8-35-211 Tote Tank: Any transportable container used to convey coatings, inks, adhesives or any other related materials with a capacity equal to or greater than 209 liters (55 gallons). (Adopted March 18, 1992)
- **8-35-212** Solvent: Organic compounds which are used as diluents, thinners, dissolvers, viscosity reducers, cleaning agents or for other similar uses.

(Adopted March 18, 1992)

- **8-35-213** Approved Emission Control System: A system for reducing emissions of VOC to the atmosphere, consisting of a control device and a collection system, which is approved in writing by the APCO and achieves the overall abatement efficiency specified in the applicable standards section at all times during normal operation of the equipment being controlled. (Adopted March 18, 1992)
- 8-35-214 Leak Free: A liquid leak of no greater than three drops per minute.

(Adopted March 18, 1992)

- 8-35-215 Wipe Cleaning: The method of cleaning which utilizes a material such as a rag wetted with a solvent, prior to a physical rubbing process to remove contaminants from surfaces. (Adopted March 18, 1992)
- **8-35-216** Low Volatility Compounds: For the purposes of this rule, solvents with an initial boiling point greater than 120oC (248oF), and where the initial boiling point exceeds the maximum operating temperature by at least 100oC (180oF).

(Adopted March 18, 1992)

- 8-35-217 Nonporous Cover Material: Cover material, including wood, that does not allow liquid to penetrate. (Adopted March 18, 1992)
- 8-35-218 Fresh Solvent: For the purpose of this rule, virgin solvent that has never been reused or recycled. (Adopted March 18, 1992)
- **8-35-219** Key System Operating Parameter. An emission control system operating parameter, such as temperature, flow rate or pressure, that ensures operation of the abatement equipment within manufacturer specifications and compliance with the standards in Section 8-35-301.6, 303.3, and 305. (Adopted June 15, 1994)

#### 8-35-300 STANDARDS

- **8-35-301 Portable and Stationary Mixing Operating Requirements:** Except as provided in Subsection 8-35-301.6, a person shall not manufacture coatings, inks, or adhesives unless all portable and stationary mixing vats are kept covered, except to add ingredients or to take samples, with lids which satisfy the following conditions:
  - 301.1 Lids are maintained in good condition, such that when in place, they maintain contact with the rim for at least 90 percent of the circumference of the rim of the vat.
  - 301.2 Lids may have a slit to allow clearance for insertion of a mixer shaft. The slit shall be covered after insertion of the mixer, except to allow safe clearance for the mixer shaft.
  - 301.3 There shall be no holes, tears, or openings in the lid that would allow for the emission of organic vapors, except under the provision of Subsections 8-35-301.2 and 8-35-301.4.
  - 301.4 The difference between the diameter of the mixer shaft and the diameter of the opening in the lid for the mixer shaft, shall be no greater than 5.1 cm (2 inches).
  - 301.5 Polyethylene or other non-permanent covers may be used provided that the cover material is nonporous, as defined in Section 8-35-217, and the requirements of Subsections 8-35-301.1 through 8-35-301.4 are met.

301.6 The requirements of Subsection 8-35-301.1 through 8-35-301.4 shall not apply, if the emissions from portable and stationary mixing vats are vented to an approved emission control system that has an overall abatement efficiency of 80% or more on a mass basis. Where such reduction is achieved by incineration, at least 90% of the organic carbon shall be oxidized to carbon dioxide.(Adopted May 2, 1984;Amended March 18, 1992)

#### 8-35-302 Deleted March 18, 1992

- **8-35-303** Equipment Cleaning: A person shall not manufacture a coating, ink, or adhesive unless portable or stationary mixing vats, high dispersion mills, grinding mills, tote tanks and roller mills are cleaned, except as provided in Section 8-35-320, by one or more of the following methods:
  - 303.1 Use a cleaning material that either contains less than 200 grams VOC (wt) per liter or is a low volatility compound, as defined in Section 8-35-216. The low volatility cleaning material shall be collected and stored in closed containers.
  - 303.2 Operate a closed cleaning system that has been approved by the APCO in writing and that meets the following conditions:
    - 2.1 The system, including equipment being cleaned, is maintained leak free,
    - 2.2 Organic solvent must be drained from the cleaned equipment before the system is opened to the atmosphere, and
    - 2.3 Solvent, including waste solvent, shall not be stored or disposed of in such a manner that will cause or allow evaporation into the atmosphere.
  - 303.3 Collect and vent the emissions from equipment cleaning to an approved emission control system that has an overall abatement efficiency of 80% or more on a mass basis. Where such reduction is achieved by incineration, at least 90% of the organic carbon shall be oxidized to carbon dioxide.
  - 303.4 Use organic solvents other than those allowed in Section 8-35-303.1 provided the following conditions are met:
    - 4.1 No more than 228 liters (60 gallons) of fresh solvent shall be used per month. Organic solvent that is reused or recycled (either onsite or offsite), for further use in equipment cleaning or the manufacture of coating, ink, or adhesive shall not be included in this limit.
    - 4.2 Organic solvent, including cleanup solvent is collected and stored in closed containers.
    - 4.3 Cleanup solvent records are maintained as required per Section 8-35-501.
      - (Adopted May 2, 1984; Amended March 18, 1992)
- 8-35-304 Grinding Mills: Grinding mills installed after November 1, 1985 shall have fully enclosed screens.
- **8-35-305** Stationary Vats: A person shall not operate a stationary vat, which emits more than 6.8 kg (15 lbs.) per day of organic compounds unless all emissions from the vat have been vented to an approved emission control system that has an overall abatement efficiency of 80% or more on a mass basis. Where such reduction is achieved by incineration, at least 90% of the organic carbon shall be oxidized to carbon dioxide.

(Amended March 18, 1992)

# 8-35-306 Deleted June 15, 1994.

- 8-35-320 Wipe Cleaning and Cleanup Solvent: The requirements of this Section shall apply to any person using solvent for wipe cleaning:
  - 320.1 A person shall not use open containers for the storage or disposal of cloth or paper impregnated with organic compounds that is used for cleanup, or coating, ink, or adhesive removal.
  - 320.2 A person shall not store spent or fresh organic compounds to be used for cleanup or coating, ink, or adhesive removal in open containers.

(Adopted March 18, 1992)

## 8-35-400 ADMINISTRATIVE REQUIREMENTS

- 8-35-401 Deleted March 18,1992
- 8-35-402 Deleted March 18, 1992
- **8-35-403** Loss of Exemption: Any person, who becomes subject to the requirements of Sections 8-35-301 and 303 through loss of exemption in Section 8-35-110 and 111, shall comply with the following increments of progress:
  - 403.1 By July 1, 1992, submit to the APCO an application for an Authority to Construct and/or a compliance plan as necessary describing the method(s) to be used to comply with the requirements of this Rule.
  - 403.2 By January 1, 1993, be in full compliance with all applicable requirements.

(Adopted March 18, 1992)

### 8-35-404 Deleted June 15, 1994.

## 8-35-500 MONITORING AND RECORDS

- 8-35-501 Cleaning Solvent Records: Any person subject to Sections 8-35-303 and 320 shall:
  - 501.1 Record on a monthly basis facilitywide cleaning solvent usage for each solvent or solvent blend.
  - 501.2 Indicate the following for each solvent or solvent blend used.
    - 2.1 Total volume of fresh cleaning solvent used for equipment cleaning.
    - 2.2 Total volume of cleaning solvent recovered for either off-site or on-site recycling.
    - 2.3 Initial boiling point.
  - 501.3 Records shall be maintained and available for inspection by the APCO, and retained for two years.

(Adopted May 2, 1984; Amended March 18, 1992; June 15, 1994)

**8-35-502 Burden of Proof:** Persons seeking to demonstrate compliance with Sections 8-35-301.6, 303.3, and 305 must maintain production records, adequate test data, and/or calculations that would allow the APCO to verify compliance on a daily basis.

(Adopted March 18, 1992)

- **8-35-503** Approved Emission Control System, Recordkeeping Requirements: Any person subject to Sections 8-35-301.6, 303.3, and 305 shall:
  - 503.1 Record key system operating parameters on a daily basis.
  - 503.2 Retain and have such records available for inspection by the APCO for the previous 24-month period. (Adopted June 15, 1994)

#### 8-35-600 MANUAL OF PROCEDURES

- **8-35-601** Analysis of Samples: Samples of organic compounds shall be analyzed as prescribed in the Manual of Procedures, by the following applicable methods:
  - 601.1 Volume III, Method 31 for the determination of volatile organic content as specified in Section 8-35-210 and 8-35-303.1.
  - 601.2 ASTM D-1078-78 for the determination of initial boiling point as specified in Section 8-35-216 and Section 8-35-303.4.

(Adopted May 2, 1984; Amended March 18, 1992)

- 8-35-602 Determination of Applicability: The applicability of Section 8-35-305 shall be calculated or determined as described in EPA publication AP-42, Sections 5-10.1 and 5-14.1. (Adopted March 18, 1992)
- **8-35-603** Determination of Emissions: Emissions of organic compounds, as specified in Sections 8-35-301.6, 303.3, and 305 shall be measured as prescribed by any of the following methods: 1) BAAQMD Manual of Procedures, Volume IV, ST-7, 2) EPA Method 25 or 25A. A source shall be considered in violation if the VOC emissions measured by any of the methods exceed the standards of the rule.

(Adopted March 18, 1992; Amended June 15, 1994)

8-35-604 Determination of Collection Efficiency: The efficiency of the collection system, as specified in Sections 8-35-213 and 8-35-301.6, 303.3, and 305 shall be determined by the EPA test method cited in 55 FR 26865, 29 June 1990. (Adopted March 18, 1992)