

DIVISION 14

NITROGEN OXIDES

141100 Nitrogen Oxides

141111 No person shall cause, let, permit, suffer, or allow the emission of nitrogen oxides, calculated as nitrogen dioxide and calculated as if there were 3% oxygen in the exhaust gas stream, from any new or modified heat transfer operation, designed for a maximum heat input of more than 250,000,000 BTU per hour or greater in excess of:

141111.1 125 ppm when gaseous fossil fuel is burned;

141111.2 225 ppm when liquid fossil fuel is burned.

141111.3 When different fossil fuels are burned simultaneously in any combination the applicable standard shall be determined by proration. Compliance shall be determined by using the following formula:

$$\frac{x(125) + y(225)}{x + y} = \text{allowable emission}$$

x is the percent of total heat input derived from gaseous fossil fuel, and

y is the percent of total heat input derived from liquid fossil fuel.

141111.4 No person shall cause, let, permit, suffer, or allow the emission of nitrogen oxides, calculated as nitrogen dioxide and calculated as if there were 3% oxygen in the exhaust gas stream, from any heat transfer operation, designed for a maximum heat input of 1750,000,000 BTU per hour or greater in excess of:

141111.5 175 ppm when gaseous fossil fuel is burned;

141111.6 300 ppm when liquid fossil fuel is burned.

141111.7 When different fossil fuels are burned simultaneously in any combination the applicable standard shall be determined by proration. Compliance shall be determined by using the following formula:

$$\frac{x (175) + y (300)}{x + y} = \text{allowable emission}$$

x is the percent of total heat input derived from gaseous fossil fuel, and

y is the percent of total heat input derived from liquid fossil fuel.

141111.8 Sections 141111.4 through 141111.7 shall be in force and take effect on April 19, 1975.

141112 A new heat transfer operation means any such operation that had not commenced on the effective date of this section. ~~A modified heat transfer operation means an operation in which there has been any physical change in, or change in the method of operation of, a source operation which increases the amount of nitrogen oxides previously emitted, except that:~~

~~141112.1 Routine maintenance, repair, and replacement shall not be considered physical changes, and~~

~~141112.2 The following shall not be considered a change in the method of operation: (a) an increase in the production rate, if such increase does not exceed the operating design capacity of the operation; (b) an increase in hours of operation; (c) use of an alternative fuel if, prior to the date on which this section becomes effective, the operation was designed to accommodate such alternative fuel.~~

141113 "Commenced" means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a binding agreement or contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

141114 Determination of nitrogen oxides.

141115 SCOPE. This method describes a procedure for the determination of nitrogen oxides in exhaust gases.

141116 OUTLINE OF METHOD. The method is based on the absorption of nitric oxide and nitrogen dioxide in alkaline permanganate bubblers fitted with semi-fine frits. The formed nitrite and nitrate ions are determined by first converting the nitrite formed during the collection to nitrate. The total nitrate is then reduced to nitrite, which is determined by diazotation and coupling to form a red dye.

- 141117 REAGENTS. 1. Absorption Solution: Dissolve 40 gms of potassium permanganate and 20 gms of sodium hydroxide in distilled water and dilute to 1 liter.
2. Oxalic Acid: 8% solution in distilled water.
 3. Sulfuric Acid: 0.8 N: dilute 22.4 ml of conc. sulfuric acid to 1 liter with distilled water.
 4. Reducing and Color Reagent: Nitra Ver IV, catalog No. 2013, Hach Chemical Co., Ames, Iowa.

141118 SAMPLE COLLECTION. Sampling train consists of 3 Greenburg-Smith impingers modified with semi-fine frits of approximately 70 porosity. Each impinger shall contain 150 ml of absorbing solution. The impingers are connected in series, followed by a dry meter and a source of suction. During sampling the impingers are immersed in an ice bath. Sampling rate shall be between 0.5 and 1.0 liters per minute. Sampling time shall be for 20-40 minutes, depending on the concentration of nitrogen oxides in the sample stream.

141119 SAMPLE ANALYSIS: Measure total liquid volume collected

in the impingers. Prepare an aliquot for analysis containing 10-100 μgm of nitrite. The aliquot may require dilution with unreacted absorption solution or may be used directly. The aliquot should not exceed 7.0 ml. If preferred, all three impingers may be combined to form a composite, thereby requiring only a single analysis.

Transfer aliquot to a graduated 50 ml erlenmeyer flask with screw cap top. Acidify with 0.8 N sulfuric acid using 1 ml of acid per ml of aliquot, and let stand for 10 minutes. Heat sample to 50-60°C on a hot plate. Add oxalic acid solution, using 1 ml per ml of aliquot and add 0.5 ml excess. Let stand, shaking occasionally, until solution becomes colorless. This may take up to five minutes. Cool to room temperature and dilute to 30.0 ml mark with distilled water. A reagent blank containing 2.0 ml of absorption solution should be run with each batch of samples. Add to the samples and reagent blank one Nitra Ver pillow reagent and shake for 2 minutes on a mechanical shaker or by hand. Let stand for at least 5 minutes, but no longer than 30 minutes, and read in spectrophotometer at 525 μm with 10 mm cells, setting the reagent blank at 100% T.

141120 PREPARATION OF STANDARD CURVE. Weigh and dissolve 0.220 gms of potassium nitrate in 1 liter of distilled water. Dilute 1-5 to make a working standard of 20 μgm NO_2/ml .

Prepare a series of standards containing 1, 2, 3, 4 and 5.0 ml of the standard solution added to 2.0 ml of the absorbing

solution. Proceed as described under sample analysis to prepare standard curve.

141121 CALCULATION.

$$\text{ppm NO}_x \text{ as NO}_2 = \frac{\text{Total } \mu\text{gm NO}_2 \text{ found}}{1.88 \times \text{sample volume (in liters)}}$$

7/25/73

BAY AREA AIR POLLUTION CONTROL DISTRICT

REGULATION 4

A regulation of the Bay Area Air Pollution Control District requiring the installation of crankcase devices on 1955 through 1962 model year motor vehicles within the District.

The Board of Directors of the Bay Area Air Pollution Control District does hereby enact as follows:

Section 1. Every 1955 through 1962 model year motor vehicle subject to registration in this State, upon either transfer of ownership and registration to an owner whose residence is in any county in which the Bay Area Air Pollution Control District transacts business or exercises its powers on the effective date of this regulation, or upon registration of a vehicle previously registered outside this State to an owner whose residence is in any county in which the Bay Area Air Pollution Control District transacts business or exercises its powers on the effective date of this regulation, shall be equipped with a device certified by the State Air Resources Board to control the emission of pollutants from the crankcase.

Section 2. This regulation shall take effect and be in force on June 1, 1971.

4/20/71
MSW:p

BAY AREA AIR POLLUTION CONTROL DISTRICT

REGULATION 6

The Air Pollution Control Officer and every officer and employee of the Bay Area Air Pollution Control District designated by him is authorized to arrest a person without a warrant whenever he has committed, in his presence, a violation of any provision of the Vehicle Code which the Air Pollution Control Officer is ~~required~~ authorized by law to enforce. This authority to arrest is granted in accordance with Penal Code Section 836.5.

JFP:js

12/10/75

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REGULATION 1
GENERAL PROVISIONS AND DEFINITIONS

(Adopted September 5, 1979)

1-100 GENERAL

1-101 Description: The general provisions and definitions included in Regulation 1 shall apply to all other District Rules and Regulations. Definitions which are included in any other District Rule or Regulation are specific to that Rule or Regulation and shall not apply to any other Rule or Regulation.

1-102 More than One Emission Standard: Where a person is subject to more than one emission standard for the same air contaminant, the more stringent shall apply.

1-103 Violations Not Authorized: Nothing in District Rules or Regulations is intended to permit any practice in violation of any statute, ordinance, Rule or Regulation.

1-104 Circumvention Not Permitted: A person shall not undertake or authorize any practice intended or designed to evade or circumvent District Rules or Regulations.

1-105 Regulations Not Intended to Apply to Workroom Atmosphere: District Regulations are not intended to apply to the air quality requirements for the workroom atmosphere necessary to protect an employee's health from contaminants emitted by the source; nor are they concerned with the occupational health factors in an employer-employee relationship.

1-106 Separation of Emissions: Where air contaminants from a single source are emitted through two or more emission points, the total quantity of air contaminants thus emitted shall not exceed the quantity allowable through a single emission point.

1-107 Combination of Emissions: Where air contaminants from two or more sources are combined prior to emission and there are no adequate and reliable means to establish the nature, extent and quantity of emission from each source, District Regulations shall be applied to the combined emission as if it originated in a single source. Such emissions shall be subject to the most stringent limitations and requirements of District Regulations applicable to any of the sources whose air contaminants are so combined.

1-108 Metric Governs: Units of weight and measure shall be expressed in the international system (SI) of metric units in District regulations. For convenience, pressure is expressed as bar. English units, which appear in parentheses, are approximations to be used for guidance only.

1-109 Severability: If any District Rule or Regulation, or portion thereof, is adjudged by a court of competent jurisdiction to be unconstitutional or otherwise invalid, such judgment shall be limited to that Rule, Regulation or portion thereof, and not otherwise affect or invalidate the remainder of District Rules and Regulations.

1-110 Exclusions: District Regulations shall not apply to the following:

- 110.1 Engines used to propel motor vehicles, and defined by the Vehicle Code of the State of California.
- 110.2 Any internal combustion engine used solely as an emergency standby source of power.
- 110.3 Aircraft.
- 110.4 Fires from residential heating and residential cooking.
- 110.5 Except as limited by Regulation 5, emissions arising from agriculture operations necessary for the growing of crops or the raising of fowl or animals, open outdoor fires, other than for the disposal of waste propellants, explosives or pyrotechnics by manufacturing facilities; recreational fires and outdoor cooking fires.
- 110.6 Any emission point which is not an intended opening and from which no significant quantities of air contaminants are emitted.
- 110.7 Smoke generators intentionally operated to train observers in appraising the shade of emissions.

110.8 Air contaminants, where purposely emitted for the sole purpose of a specific beneficial use, and where essentially all of the air contaminants are confined to the area in which such beneficial use is obtained. The quantity and nature of the air contaminants, and the proportion of air contaminants used in relation to amounts of other materials involved in the beneficial use of air contaminants, shall conform to accepted practice in type of use employed.

(Renumbered Mar. 17, 1982; Amended Dec. 19, 1990, Nov. 3, 1993)

1-111 **Deleted, October 7, 1998**

1-112 **Breakdown:** The APCO may refrain from enforcing the provisions of District regulations for excesses of emissions resulting from the breakdown of air pollution abatement equipment or operating equipment provided such emissions do not interfere with the attainment or maintenance of any national or California ambient air quality standard and further provided that the persons responsible for such emissions comply with the administrative requirements of Section 1-431 and 432.

(Amended March 17, 1982)

1-113 **Discretionary Enforcement, Breakdown:** If excessive emissions resulting from the breakdown of air pollution abatement equipment or operating equipment persist until the end of a production run or up to 24 hours, whichever is sooner, a violation of District regulations shall be deemed to have occurred. However, the APCO may elect to take no enforcement action if the person responsible for the emissions shows that appropriate corrective measures have been taken and that emissions are either in compliance or that the equipment has been shut down either before the next production run or within 24 hours, whichever is sooner.

1-114 **Exemption, Uncombined Water:** Where the presence of uncombined water is the only reason for the failure of a visible emission to meet District limitations, those limitations shall not apply. The burden of proof to establish the application of this section shall be upon the person seeking to come within its provisions.

1-115 **Exemption, Modification to Meet Emission Standards:** When permits are necessary for modifying an existing source in order to comply with emission regulations such modifications shall not subject the existing source to emission standards for new or modified plants as set forth in Section 2-2-301 or 2-2-302 or 2-2-303 of Regulation 2, Permits.

(Amended December 17, 1980)

1-200 **DEFINITIONS**

1-201 **Air Contaminant or Air Pollutant:** Any material which, when emitted, causes or tends to cause the degradation of air quality. Such material includes, but is not limited to, smoke, charred paper, dust, soot, grime, carbon, fumes, gases, odors, particulate matter, acids or any combination thereof.

1-202 **Air Pollution Control Equipment:** Any equipment, the operation of which has as its primary purpose a significant reduction in either the emission of air contaminants or the effects of such emissions.

1-203 **APCO:** The Air Pollution Control Officer of the Bay area Air Quality Management District or the designee thereof.

1-204 **ARB:** The Air Resources Board of the State of California.

1-205 **Atmosphere:** The air that surrounds the earth, excluding the general volume of gases contained within any building or structure if the APCO determines that emissions within such building or structure do not escape to the outside air.

(Amended March 17, 1982)

1-206 **BAR: 100,000 pascals (100,000 N/m²).**

1-207 **Best Modern Practices** The minimization of emissions from equipment and operations by the employment of modern maintenance and operating practices used by superior operators of like equipment and which may be reasonably applied under the circumstances.

1-208 **Breakdown (malfunction):** Any unforeseeable failure or malfunction of any air pollution control equipment or operating equipment which causes a violation of any

emission standard or limitation prescribed by District, California or federal rules, regulations or laws, where such failure or malfunction:

208.1 is not the result of intent, neglect, or disregard of any air pollution control law, rule or regulation;

208.2 is not the result of improper maintenance;

208.3 does not constitute a nuisance;

208.4 is not an excessively recurrent breakdown of the same equipment.

1-209 Commenced: Where a person has undertaken a continuous program of construction, reconstruction or modification, or a person has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction, reconstruction or modification.

1-210 Construction: Fabrication, erection or installation of a plant

1-211 Discharge: To permit, let, suffer or allow an emission.

1-212 District: The Bay Area Air Quality Management District.

1-213 Emission or Emissions: A gas or liquid stream containing one or more air contaminants. The verb form, emit, means the act of discharging an emission into the atmosphere.

1-214 Emission Point: The location (place in horizontal plane and vertical elevation) at which an emission enters the atmosphere.

1-215 Facility: Any property, real or personal, which may incorporate one or more plants all being operated or maintained by a person as part of an identifiable business on contiguous or adjacent property, and shall include, but not be limited to manufacturing plants, refineries, power generating plants, ore processing plants, construction material processing plants, automobile assembly plants, foundries and waste processing sites.

1-216 Fixed Capital Cost: The capital needed to provide all the depreciable components of a plant.

1-217 Modification: Any physical change in existing plant or change in the method of operation which results or may result in either an increase in emission of any air pollutant subject to District control, or the emission of any such air pollutant not previously emitted. The following shall not be regarded as physical changes or changes in the method of operation:

217.1 Routine maintenance, repair or replacement with identical or equivalent equipment.

217.2 Increased production rate or increased hours of operation where there is no increase in fixed capital cost, unless such production and hours are limited by permit conditions.

1-218 Opacity: The decrease in the transmission of light through a gas stream, as indicated by the expression $(1-P/P_0)$ where P_0 is the radiant power initially directed at the emission being measured, and P is the radiant power received after passing through the emission. (Amended May 21, 1980)

1-219 Operation: Any physical action resulting in a change in the location, form, or physical properties of a material, or any chemical action resulting in a change of the chemical composition, or chemical or physical properties of a material. The following are given as examples, without limiting the generality of the foregoing: heat transfer, calcination, double decomposition, fermentation, pyrolysis, electrolysis, combustion, material handling, evaporation, mixing, absorption, filtration, screening and fluidization.

219.1 Heat transfer operation means any operation which (a) involves the combustion of fuel for the principal purpose of utilizing the heat of combustion-product gases by the transfer of such heat to the process material; and (b) does not transfer a significant portion of heat by direct contact between the combustion-product gases and the process material.

219.2 Incineration operation means any operation in which combustion is carried on for the principal purpose, or with the principal result, of oxidizing a liquid or solid waste material to reduce its bulk or facilitate disposal or both of such.

219.3 Salvage operation means any operation in which combustion is carried out for the primary purpose or result of salvaging metals, where the principal metal to

be salvaged is not melted. Other metals present in small quantities may be melted.

219.4 General operation means any operation other than those defined in Sections 219.1, 219.2 or 219.3.

- 1-220 **Operating Day:** 24 hours from midnight to midnight.
- 1-221 **Person:** Any natural person, corporation, government agency, public officer, association, joint venture, partnership or any combination of such or such entities as are included in Section 39047, California Health and Safety Code.
- 1-222 **Plant:** The machinery and equipment, including tanks, necessary to carry out an operation.
- 1-223 **ppmv:** Parts per million by volume.
- 1-224 **Reconstruction:** Replacement of the components of an existing plant to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable, entirely new plant.
- 1-225 **Sampling Point:** The location in a Type A emission point where the measurements of flow volume and contaminant concentrations can be made which are representative of the actual flow volume and contaminant concentrations.
- 1-226 **Sea Level Atmospheric Pressure:** 1.01 bar or 101 kilo pascals (14.7 psia).
- 1-227 **Source:** Any operation that produces and/or emits air pollutants.
- 1-228 **Standard Conditions:** A sea level atmospheric pressure and a temperature of 21 degrees Celsius (70 degrees Fahrenheit).
- 1-229 **Standard Dry Cubic Meter:** One m³ of gas free of water vapor and at standard conditions.
- 1-230 **Type A Emission Point:** An emission point, having sufficiently regular geometry so that both flow volume and contaminant concentrations can be measured and where the nature and extent of air contaminants do not change substantially between a sampling point and the emission point.
- 1-231 **Type B Emission Point:** An emission point other than a type A emission point.
- 1-232 **Visible Emissions:** Emissions which are visually perceived by an observer. Restrictions on visible emissions in District Regulations are expressed as numbers on the Ringelmann Chart as published by the United States Bureau of Mines. Emissions may not be as dark or darker than the designated number on the Ringelmann Chart, or cannot be of such opacity as to obscure a trained observer's view to an equivalent or greater degree. Where the presence of uncombined water is the only reason for the failure of an emission to meet District limitations, those limitations shall not apply (see Section 1-114).
- 1-233 **Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate. (Adopted March 17, 1982)
- 1-234 **Organic Compound, Non-Precursor:** Methylene chloride 1,1,1, trichloroethane, 1,1,2 trichlorotrifluoroethane (CFC-113), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), dichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC-115). In addition, any compound designated as having a negligible contribution to photochemical reactivity by the U.S. Environmental Protection Agency as published in the Federal Register shall be considered a Non-Precursor Organic Compound. (Adopted March 17, 1982, Amended Sept. 2, 1998)
- 1-235 **Organic Compound, Precursor:** Any organic compound as defined in 1-233 excepting the non-precursor organic compounds, 1-234. (Adopted March 17, 1982)
- 1-236 **Volatile Organic Compound (VOC):** Any organic compound, as described in Section 1-233, which would be emitted during use, processing, application, curing or drying of a solvent, surface coating, or other material. (Adopted October 19, 1983)
- 1-237 **Reduced Sulfur Compounds:** All organic and inorganic sulfide compounds and mercaptans. (Adopted October 19, 1983)
- 1-238 **Parametric Monitor:** Any monitoring device or system required by District permit condition or regulation to monitor the operational parameters of either a source or an

abatement device. Parametric monitors may record temperature, gauge pressure, flowrate, pH, hydrocarbon breakthrough, or other factors. (Adopted Sept. 2, 1998)

1-239 Continuous Emission Monitor: Any monitoring device or system, required by Regulation 1-520 and 521. (Adopted Sept. 2, 1998)

1-240 Abatement Device: Any equipment or process whose principal process is to reduce the amount of one or more pollutants from the source. (Adopted October 7, 1998)

1-400 ADMINISTRATIVE REQUIREMENTS

1-401 Violation Notice: A notice of violation or citation shall be issued by the District for all violations of District regulations and shall be delivered to persons alleged to be in violation of District regulations. The notice shall identify the nature of the violation, the rule or regulation violated, and the date or dates on which said violation occurred.



1-410 Registration: A person responsible for the emission of air contaminants shall register with the District on forms provided by the APCO, and shall thereafter provide any information requested by the APCO regarding such emissions to the District on an annual basis. Plants or facilities requiring annual operating permits are exempt from registration.

1-411 Permits May Be Needed: Registration with the District shall not relieve a person from the requirements of Regulation 2, Permits, where applicable.

1-412 Address For Service: A person registered with the District may be served notices, including notices of hearings before the Hearing Board, by certified mail addressed to the address contained in the registration form on file with the District.

1-420 Emission Source Data: Upon the request of the APCO, a person responsible for the emission of air contaminants shall provide the District with any data concerning emissions from any operation under such person's control. The data shall be in such form as prescribed by the APCO, who may require that such data be certified by a registered professional engineer.

1-430 Breakdown Procedures: The APCO shall establish written procedures to insure that all reported breakdown occurrences are handled uniformly to final disposition.

1-431 Breakdown Report: A person seeking relief pursuant to Section 1-112 shall notify the APCO of the breakdown condition immediately, with due regard for public safety, including the hazard of fire and explosion. Such notification shall include the time, specific location, equipment involved and to the extent possible the cause of the breakdown.

- 1-432 Written Breakdown Report:** Within 30 days of the occurrence of a breakdown, the person responsible shall submit a written report to the APCO including the following:
- 432.1 Sufficient information to enable the APCO to determine whether or not a breakdown occurred and the cause of the breakdown;
 - 432.2 A summary of the corrective action taken following the breakdown;
 - 432.3 Present status of the breakdown, and
 - 432.4 A summary of actions taken to insure that such breakdowns will not occur in the future.
- 1-433 Determination of Breakdown:** Following the report made pursuant to Section 1-431, the APCO shall promptly investigate to determine whether the occurrence reported constitutes a breakdown. The determination may be made based upon information developed by the investigation, or upon the basis of such information in addition to information reported in the written report made pursuant to Section 1-432. If the APCO determines that the occurrence does not constitute a breakdown, appropriate enforcement action may be taken.
- 1-434 Administrative Violation, Breakdown:** Any person who knowingly files falsely, or without probable cause, a claim for relief pursuant to Section 1-112 shall be presumed to be in violation of these regulations. The burden of proof of establishing that a breakdown has occurred shall be upon the person who requests the breakdown relief.
- 1-440 Right of Access to Premises:** The person responsible for emissions shall provide to the APCO reasonable access to any facility or equipment therein which is subject to the permit requirements of the District and which may cause or control or record such emissions for the purpose of investigating compliance with District regulations or California law. Such access shall be granted with due consideration for the safety of District employees and minimum interference with the operations of the facility.
- 1-441 Right of Access to Information:** The APCO may request in writing from a person responsible for emissions from any source: plans, specifications, records, samples or other information which will disclose the nature, extent, quantity or degree of air contaminants which are or may be emitted by the source. Such information may include, but is not limited to, process charts, in-stack monitoring data and operating logs which relate to emissions. If the person feels that trade secrets are unreasonably being requested by the APCO, the person may appeal directly to the Board of Directors.
- 441.1 When copies of monitoring charts are requested, the APCO may require that such charts immediately be properly identified and labeled in the presence of a District representative.
 - 441.2 When samples relating to emissions are requested, the APCO may require that such samples be obtained in the presence of a District representative.
 - 441.3 Information requested by the APCO shall be provided as soon as reasonable possible, but in any event within 30 days from the date of receipt of the request.
- 1-500 MONITORING AND RECORDS**
- 1-501 Sampling Facilities:** A person responsible for the emission of air contaminants for which emission limits have been established by these regulations shall, upon the request of the APCO, provide such sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for the determination of the nature and quantity of such air contaminants.
- 1-502 Sampling at Type B Emission Points:** Emissions from a Type B emission point shall be measured at the place and by procedures which show the highest measurement of air contaminants.
- 1-510 Area Monitoring:** Persons subject to or seeking to come within the provisions of the area monitoring requirements of these regulations shall install, calibrate, operate, site and maintain all monitoring equipment in order to monitor continuously the concentration of the specified air pollutant. Such persons shall install suitable

instruments, and meteorological stations to monitor continuously and record weather conditions if required by the APCO or the terms of the regulations.

1-520 Continuous Emission Monitoring: Persons responsible for the emissions from the following sources shall install monitors for the following air pollutants or analog thereof:

- 520.1 NO_x, CO₂, or O₂, from steam generators with a rated heat input of 264 GJ's (250 million BTU) or more per hour; and opacity from steam generators with a rated heat input of 264 GJ's (250 million BTU) or more per hour which are permitted for discretionary combustion of a non-gaseous fuel. Firing of non-gaseous fuel permitted under the "test-firing" provisions of District rules is not considered to be "discretionary."
- 520.2 NO_x from all new nitric acid plants, and existing plants having a production capacity in excess of 272 metric tons (300 T) per days as 100% nitric acid.
- 520.3 SO₂ from sulfuric acid plants.
- 520.4 SO₂ from sulfur recovery plants emitting more than 45 KG (100 lbs.) per day of SO₂.
- 520.5 SO₂ and opacity from the catalyst regenerators of fluid catalytic crackers.
- 520.6 SO₂ and opacity from fluid cokers with a fresh feed rate greater than 1600 m³ (10,000 bbls) per day.
- 520.7 SO₂ from fossil fuel fired steam generators with a heat input of 264 GJ's (250 million BTU) or more per hour with a use factor of at least 30% and utilizing flue gas desulfurizing units, and
- 520.8 Monitors as required by Regulations 10, 12 and Section 2-1-403 of Regulation 2. (Amended March 17, 1982; October 7, 1998)

1-521 Monitoring May Be Required: The APCO may require the installation of suitable instruments to monitor continuously the nature, quantity and opacity of any air pollutant controlled by District regulations where there is a reason to believe such emissions are in potential violation of such regulations.

1-522 Continuous Emission Monitoring and Recordkeeping Procedures: Persons responsible for installing continuous emission monitors pursuant to District regulations shall comply with the following:

- 522.1 Plans and specifications for monitoring selection and placement shall be submitted to the APCO for prior approval.
- 522.2 Installation scheduling shall be completed as specified in Volume V, Manual of Procedures (MOP).
- 522.3 Continuous emission monitors and their components shall be performance tested as specified in Volume V, MOP.
- 522.4 Continuous emission monitor periods of inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Adequate proof of expeditious repair shall be furnished to the APCO for downtime in excess of fifteen consecutive days.
- 522.5 Monitors shall be calibrated daily except for velocity sensing instruments which shall be calibrated monthly.
- 522.6 Continuous emission monitors and their components shall be maintained to be accurate to within twenty percent when compared to the field accuracy test procedures of Volume V, MOP, or 10% of the applicable emission standard, or 5% of span in the absence of an emission standard.
- 522.7 Any indicated excess of any emission standard to which the source is required to conform, as indicated by the monitor, shall be reported to the APCO within 96 hours after such occurrence. The report shall include the nature, extent, cause and corrective action taken.
- 522.8 Monitoring data shall be submitted on a monthly basis in a format specified by the APCO. Reports shall be submitted within 30 days of the close of the month reported on.
- 522.9 Records shall be maintained for a period of at least two years and shall be made available to the APCO on request. They shall include:
 - 1) Occurrence and duration of any startup, shutdown or malfunction.
 - 2) Tests, calibrations, adjustments and maintenance.

3) Emission measurements.

522.10 Monitors required by Sections 1-521 or 2-1-403 shall meet the requirements specified by the APCO. (Adopted March 17, 1982, Amended Sept. 2, 1998)

1-523 Parametric Monitoring and Recordkeeping Procedures: Persons responsible for installing parametric monitors pursuant to District permit conditions or regulations shall comply with the following:

523.1 Parametric monitor periods of inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring to the Compliance and Enforcement Division.

523.2 Parametric monitor periods of inoperation shall not exceed 15 consecutive days per incident or 30 calendar days per consecutive 12-month period.

523.3 Any violation of permit conditions or District regulations to which the source is required to conform, as indicated by the monitor, shall be reported to the APCO within 96 hours after such occurrence. The report shall include the nature, extent, cause and corrective action taken.

523.4 Records shall be maintained for a period of at least two years and shall be made available to the APCO on request. They shall include:

- 1) Dates and duration of monitoring system periods of inoperation.
- 2) Tests, calibrations, adjustments and maintenance.

(Adopted September 2, 1998)

1-530 Area Monitoring Downtime: Area monitoring downtime caused by instrument malfunction, where such downtime exceeds a continuous 24-hour period, shall be reported to the APCO within the next normal working day after discovery of the malfunction. Downtime due to maintenance or repair which is expected to exceed 5 days' duration shall be reported to the APCO prior to the commencement of such maintenance or repairs.

(Amended March 17, 1982)

1-540 Area Monitoring Data Examination: At intervals of no greater than seven days, data recorded by the instruments required pursuant to Section 1-510 shall be examined by the persons responsible for the instruments to determine compliance with District Regulations.

(Amended March 17, 1982)

1-542 Area Concentration Excesses: Excesses of air pollutant levels over limits prescribed in District regulations recorded on instruments required pursuant to Section 1-510 shall be reported to the APCO within the next normal working day following the examination of data made pursuant to Section 1-540.

1-543 Record Maintenance for Two Years: Monitoring records of the equipment required by Section 1-510 shall be kept for a period of two years and shall be made available to the APCO upon request.

(Amended March 17, 1982)

1-544 Monthly Summary: The person responsible for emissions being monitored pursuant to Section 1-510 shall provide in such form as prescribed by the APCO a summary of data obtained during each calendar month, as specified in the Manual of Procedures.

(Amended March 17, 1982)

~~1-502 **Sampling at Type B Emission Points:** Emissions from a Type B emission point shall be measured at the place and by procedures which show the highest measurement of air contaminants.~~

1-510 **Area Monitoring:** Persons subject to or seeking to come within the provisions of the area monitoring requirements of these regulations shall install, calibrate, operate, site and maintain all monitoring equipment in order to monitor continuously the concentration of the specified air pollutant. Such persons shall install suitable instruments, and meteorological stations to monitor continuously and record weather conditions if required by the APCO or the terms of the regulations.

1-520 **Emission Monitoring:** Persons responsible for the emissions from the following sources shall install monitors for the following air pollutants:

520.1 NO_x, CO₂ or O₂, and opacity from steam generators with a heat input of 264 GJ's (250 million BTU) or more per hour and with a use factor of at least 30 %.

520.2 NO_x from all new nitric acid plants, and existing plants having a production capacity in excess of 272 metric tons (300 T) per day as 100 % nitric acid.

520.3 SO₂ from sulfuric acid plants.

520.4 SO₂ from sulfur recovery plants emitting more than 45 kg (100 lbs.) per day of SO₂.

520.5 SO₂ and opacity from the catalyst regenerators of fluid catalytic crackers.

520.6 SO₂ and opacity from fluid cokers with a fresh feed rate greater than 1600 m³ (10,000 bbls) per day; and

520.7 SO₂ from fossil fuel fired steam generators with a heat input of 264 GJ's (250 million BTU) or more per hour with a use factor of at least 30 % and utilizing flue gas desulfurizing units.

1-521 **Monitoring May Be Required:** The APCO may require the installation of suitable instruments to monitor continuously the nature, quantity and opacity of any air pollutant controlled by District regulations where there is a reason to believe such emissions are in potential violation of such regulations.

~~1-530 **Instrument Downtime:** Instrument downtime caused by malfunction, where such downtime exceeds a continuous 24 hour period, shall be reported to the APCO within the next normal working day after discovery of the malfunction. Downtime due to scheduled maintenance or scheduled repair which is expected to exceed 5 days duration shall be reported to the APCO prior to the commencement of such maintenance or repairs.~~

1-540 **Data Examination:** At intervals of no greater than seven days, data recorded by the instruments required pursuant to Sections 1-510, 520 and 521 shall be examined by the persons responsible for the instruments to determine compliance with District regulations.

1-541 **Emission Excesses:** Excesses of air pollutant levels over limits prescribed in District regulations recorded on instruments required pursuant to Sections 1-520 and 1-521 shall be reported to the APCO in the units of the emissions standard within 96 hours of the discovery of such excess. Such excesses shall be reported to the ARB by the APCO within five working days of the receipt of the report of the occurrence.

(Amended May 21, 1980)

~~1-542 **Area Concentration Excesses:** Excesses of air pollutant levels over limits prescribed in District regulations recorded on instruments required pursuant to Section 1-510 shall be reported to the APCO within the next normal working day following the examination of data made pursuant to Section 1-540.~~

1-543 **Record Maintenance for Two Years:** Monitoring records of the equipment required by Sections 1-510, 1-520 and 1-521 shall be kept for a period of two years and shall be made available to the APCO upon request.

1-544 **Monthly Summary:** The persons responsible for emissions being monitored pursuant to Sections 1-510, 1-520 and 1-521 shall provide in such form as prescribed by the APCO a summary of data obtained during each calendar month, as specified in the Manual of Procedures.

1-500 **MANUAL OF PROCEDURES:** As part of these regulations there shall be established and periodically updated a Manual of Procedures. The Manual of Procedures shall include laboratory techniques, source test procedures, instrument specifications, monitoring require-

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~~1-502 **Sampling at Type B Emission Points:** Emissions from a Type B emission point shall be measured at the place and by procedures which show the highest measurement of air contaminants.~~

~~1-510 **Area Monitoring:** Persons subject to or seeking to come within the provisions of the area monitoring requirements of these regulations shall install, calibrate, operate, site and maintain all monitoring equipment in order to monitor continuously the concentration of the specified air pollutant. Such persons shall install suitable instruments, and meteorological stations to monitor continuously and record weather conditions if required by the APCO or the terms of the regulations.~~

~~1-520 **Emission Monitoring:** Persons responsible for the emissions from the following sources shall install monitors for the following air pollutants:~~

- ~~520.1 NO_x, CO₂ or O₂, and opacity from steam generators with a heat input of 264 GJ's (250 million BTU) or more per hour and with a use factor of at least 30 %.~~
- ~~520.2 NO_x from all new nitric acid plants, and existing plants having a production capacity in excess of 272 metric tons (300 T) per day as 100 % nitric acid.~~
- ~~520.3 SO₂ from sulfuric acid plants.~~
- ~~520.4 SO₂ from sulfur recovery plants emitting more than 45 kg (100 lbs.) per day of SO₂.~~
- ~~520.5 SO₂ and opacity from the catalyst regenerators of fluid catalytic crackers.~~
- ~~520.6 SO₂ and opacity from fluid cokers with a fresh feed rate greater than 1600 m³ (10,000 bbls) per day; and~~
- ~~520.7 SO₂ from fossil fuel fired steam generators with a heat input of 264 GJ's (250 million BTU) or more per hour with a use factor of at least 30 % and utilizing flue gas desulfurizing units.~~

~~1-521 **Monitoring May Be Required:** The APCO may require the installation of suitable instruments to monitor continuously the nature, quantity and opacity of any air pollutant controlled by District regulations where there is a reason to believe such emissions are in potential violation of such regulations.~~

~~1-530 **Instrument Downtime:** Instrument downtime caused by malfunction, where such downtime exceeds a continuous 24 hour period, shall be reported to the APCO within the next normal working day after discovery of the malfunction. Downtime due to scheduled maintenance or scheduled repair which is expected to exceed 5 days duration shall be reported to the APCO prior to the commencement of such maintenance or repairs.~~

~~1-540 **Data Examination:** At intervals of no greater than seven days, data recorded by the instruments required pursuant to Sections 1-510, 520 and 521 shall be examined by the persons responsible for the instruments to determine compliance with District regulations.~~

~~1-541 **Emission Excesses:** Excesses of air pollutant levels over limits prescribed in District regulations recorded on instruments required pursuant to Sections 1-520 and 1-521 shall be reported to the APCO within 96 hours of the discovery of such excess. Such excesses shall be reported to the ARB by the APCO within five working days of the receipt of the report of the occurrence.~~

~~1-542 **Area Concentration Excesses:** Excesses of air pollutant levels over limits prescribed in District regulations recorded on instruments required pursuant to Section 1-510 shall be reported to the APCO within the next normal working day following the examination of data made pursuant to Section 1-540.~~

~~1-543 **Record Maintenance for Two Years:** Monitoring records of the equipment required by Sections 1-510, 1-520 and 1-521 shall be kept for a period of two years and shall be made available to the APCO upon request.~~

~~1-544 **Monthly Summary:** The persons responsible for emissions being monitored pursuant to Sections 1-510, 1-520 and 1-521 shall provide in such form as prescribed by the APCO a summary of data obtained during each calendar month, as specified in the Manual of Procedures.~~

~~1-600 **MANUAL OF PROCEDURES:** As part of these regulations there shall be established and periodically updated a Manual of Procedures. The Manual of Procedures shall include laboratory techniques, source test procedures, instrument specifications, monitoring require-~~

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ments, enforcement procedures and other relevant information to determine the bases for enforcement action by the District.

1-601 Approval of Sampling Facilities: The criteria by which the APCO shall determine the acceptability of sampling facilities are set forth in the Manual of Procedures.

~~**1-602 Area and Source Monitoring Requirements:** The procedures for selection and placement, installation scheduling, performance testing, reporting, records and retention and instrument calibration are detailed in the Manual of Procedures.~~

1-603 Visible Emissions; Procedures for reading of visible emissions by an observer are contained in the Manual of Procedures

1-604 Opacity Measurements: Specifications and calibration procedures for instruments to be used to measure P and P₀ are to be found in the Manual of Procedures.

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~~1-541--Emission-Excesses:--Excesses-of-air-pollutant-levels over-limits-prescribed-in-District-regulations-recorded on-instruments-required-pursuant-to-Sections-1-520-and 1-521-shall-be-reported-to-the-APCO-in-the-units-of-the of-the-emissions-standard-within-96-hours-of-the-discovery of-such-excess.--Such-excesses-shall-be-reported-to-the ARB-by-the-APCO-within-five-working-days-of-the-receipt of-the-report-of-the-occurrence.~~

1-543 Record Maintenance for Two Years: Monitoring records of the equipment required by Section 1-510, 1-520 and 1-521 shall be kept for a period of two years and shall be made available to the APCO upon request.

1-544 Monthly Summary: The person responsible for emissions being monitored pursuant to Section 1-510, 1-520 and 1-521 shall provide in such form as prescribed by the APCO a summary of data obtained during each calendar month, as specified in the Manual of Procedures.

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1-602 Area and Continuous Emission Source Monitoring Requirements: The procedures for relocation selection and placement, installation scheduling, performance testing, reporting, records and retention and instrument calibration are detailed in the Manual of Procedures.

ORGANIC COMPOUND

In order to provide a common definition of "organic compound" and of its "precursors" and "non-precursors", we propose a series of minor changes in the Regulations. The approach will be to have three definitions (OC; OC,P; and OC,NP) in Regulation 1. These definitions would be reproduced in full in Regulation 2, Rule 1 and in Regulation 8, Rule 1. In all other rules, reference will be by calling out one of the above definitions by number.

This approach will require some minor reference changes. The following pages give all the additions/changes required to provide consistency:

1-233 - ORGANIC COMPOUND: Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.

1-234 - ORGANIC COMPOUND, NON-PRECURSOR: Methylene chloride, 1,1,1 trichloroethane, 1,1,2 trichlorotrifluoroethane (CFC-113), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), dichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC-115).

1-235 - ORGANIC COMPOUND, PRECURSOR: Any organic compound as defined in 1-233 excepting the non-precursor organic compounds (1-234).

1-201 - ORGANIC COMPOUNDS - No change.

2-1-206 - ORGANIC COMPOUNDS, NON-PRECURSOR (same wording as 1-234)

2-1-207 - ORGANIC COMPOUNDS, PRECURSOR (same wording as 1-235)

**REGULATION 2
PERMITS
RULE 1
GENERAL REQUIREMENTS**

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REGULATION 2
PERMITS
RULE 1
GENERAL REQUIREMENTS

(Adopted January 1, 1980)

2-1-100 GENERAL

2-1-101 Description: The purpose of Regulation 2 is to provide an orderly procedure for the review of new sources of air pollution, and of the modification and operation of existing sources, and of associated air pollution control devices, through the issuance of authorities to construct and permits to operate. The applicability of Regulation 2, Rule 1 is illustrated by Figure 2-1-101, Permit/Exemption Flow Chart. An applicant may choose to obtain a permit to operate for a source that is exempt from permit requirements. In that case, the affected source is deemed to be subject to the requirements of Section 2-1-302 until such time as an application for return to exempt status is approved.

(Amended 7/17/91; 6/7/95; 5/17/00; 12/21/04)

2-1-102 Applicability to Other Rules in Regulation 2: The provisions of this Rule, including the definitions, shall apply to the other Rules of this Regulation, where applicable, unless superseded by specific provisions in those other Rules.

(Amended November 3, 1993)

2-1-103 Exemption, Source not Subject to any District Rule: Any source that is not already exempt from the requirements of Section 2-1-301 and 302 as set forth in Sections 2-1-105 to 2-1-128, is exempt from Section 2-1-301 and 302 if the source meets all of the following criteria:

- 103.1 The source is not in a source category subject to any of the provisions of Regulation 6⁽¹⁾, Regulation 8⁽²⁾ excluding Rules 1 through 4, or Regulations 9 through 12; and
- 103.2 The source is not subject to any of the provisions of Sections 2-1-316 through 319; and
- 103.3 Actual emissions of precursor organic compounds (POC), non-precursor organic compounds (NPOC), nitrogen oxides (NO_x), sulfur dioxide (SO₂), PM_{2.5}, PM₁₀ and carbon monoxide (CO) from the source are each (i) less than 10 pounds per highest day; or (ii) if greater than 10 pounds per highest day, total emissions are less than 150 pounds per year, per pollutant; and
- 103.4 The source is not an ozone generator (a piece of equipment designed to generate ozone) emitting 1 lb/day or more of ozone.

Note 1: Typically, any source may be subject to Regulation 6, Particulate Matter and Visible Emissions. For the purposes of this section, Regulation 6 applicability shall be limited to the following types of sources that emit PM_{2.5} and PM₁₀: combustion source; material handling/processing; sand, gravel or rock processing; cement, concrete and asphaltic concrete production; tub grinder; or similar PM_{2.5} and PM₁₀-emitting sources, as deemed by the APCO.

Note 2: If an exemption in a Regulation 8 Rule indicates that the source is subject to Regulation 8, Rules 1 through 4, then the source must comply with all applicable provisions of Regulation 8, Rules 1 through 4, to qualify for this exemption.

(Adopted 6/7/95; Amended 5/17/00; 12/21/04)

2-1-104 Deleted October 7, 1998

2-1-105 Exemption, Registered Statewide Portable Equipment: Equipment that complies with all applicable requirements of and is registered under the Statewide Portable Equipment Registration Program (California Code of Regulations Title 13, Division 3, Chapter 3, Article 5) is exempt from the requirements of Sections 2-1-301 and 302. If the equipment ceases to qualify for this exemption for any reason (for example, if it remains at any fixed location for more than twelve months or otherwise ceases to be portable as defined by the Program), the equipment shall be subject to the requirements of Regulation 2 as if it were a new source.

(Adopted 6/7/95; Amended 10/7/98; 5/17/00)

2-1-106 Limited Exemption, Accelerated Permitting Program: Unless subject to any of the provisions of Sections 2-1-316 through 319, any new source or modification or alteration of an existing source is exempt from the Authority to Construct requirements of Section 2-1-301 if it has received a temporary Permit to Operate under the Accelerated Permitting Program set forth in Section 2-1-302.2.

(Adopted 6/7/95; Amended 10/7/98; 5/17/00; 6/15/05; 12/19/12)

2-1-109 Deleted June 7, 1995

2-1-110 Deleted June 7, 1995

2-1-111 Deleted June 7, 1995

2-1-112 Deleted June 7, 1995

2-1-113 Exemption, Sources and Operations:

113.1 The following sources and operations are exempt from the requirements of Sections 2-1-301 and 302, in accordance with the California Health and Safety Code:

- 1.1 Single and multiple family dwellings used solely for residential purposes.
- 1.2 Agricultural sources (as defined in Section 2-1-239) with actual emissions of each regulated air pollutant, excluding fugitive dust and greenhouse gases, less than 50 tons per year. Agricultural sources engaged in composing and other similar biomass processing that primarily process green materials or animal waste products derived from agricultural operations shall not become ineligible for this exemption for processing material from non-agricultural operations as long as the facility processes less than 500 tons per year of such material from non-agricultural operations.
- 1.3 Any vehicle. Equipment temporarily or permanently attached to a vehicle is not considered to be a part of that vehicle unless the combination is a vehicle as defined in the Vehicle Code. Specialty vehicles may include temporarily or permanently attached equipment including, but are not limited to, the following: oil well production service unit; special construction equipment; and special mobile equipment.
- 1.4 Tank vehicles with vapor recovery systems subject to state certification, in accordance with the Health and Safety Code.

113.2 The following sources and operations are exempt from the requirements of Sections 2-1-301 and 302:

- 2.1 Road construction, widening and rerouting.
- 2.2 Restaurants, cafeterias and other retail establishments for the purpose of preparing food for human consumption.
- 2.3 Structural changes which do not change the quality, nature or quantity of air contaminant emissions.

- 2.4 Any abatement device which is used solely to abate equipment that does not require an Authority to Construct or Permit to Operate.
- 2.5 Architectural and industrial maintenance coating operations that are exclusively subject to Regulation 8, Rules 3 or 48, because coatings are applied to stationary structures, their appurtenances, to mobile homes, to pavements, or to curbs. This does not apply to coatings applied by the manufacturer prior to installation, nor to the coating of components removed from such structures and equipment.
- 2.6 Portable abatement equipment exclusively used to comply with the tank degassing or vacuum truck control requirements of Regulation 8, Rules 5, 40 or 53.
- 2.7 Equipment that transports, holds or stores California Public Utilities Commission regulated natural gas, excluding drivers.
- 2.8 Deleted May 17, 2000
- 2.9 Deleted May 17, 2000
- 2.10 Deleted May 17, 2000
- 2.11 Teaching laboratories used exclusively for classroom experimentation and/or demonstration.
- 2.12 Laboratories located in a building where the total laboratory floor space within the building is less than 25,000 square feet, or the total number of fume hoods within the building is less than 50, provided that Responsible Laboratory Management Practices, as defined in Section 2-1-224, are used. Buildings connected by passageways and/or corridors shall be considered as separate buildings, provided that structural integrity could be maintained in the absence of the passageways and/or corridors and the buildings have their own separate and independently operating HVAC and fire suppression systems. For the purposes of this subsection, teaching laboratories that are exempt per Section 2-1-113.2.11 are not included in the floor space or fume hood totals. In addition, laboratory units for which the owner or operator of the source can demonstrate that toxic air contaminant emissions would not occur, except under accidental or upset conditions, are not included in the floor space or fume hood totals.
- 2.13 Maintenance operations on natural gas pipelines and associated equipment, provided that emissions from such operations consist solely of residual natural gas that is vented after the equipment is isolated or shut down.
- 2.14 [Deleted 12/19/2012]
- 2.15 Asbestos and asbestos containing material renovation or removal conducted in compliance with Regulation 11, Rule 2 and Regulation 3.
- 2.16 Closed landfills that have less than 1,000,000 tons of decomposable solid waste in place and that do not have an operating landfill gas collection system.
- 2.17 Closed landfills that have not accepted waste for at least 30 years and that never had a landfill gas collection system.
- 2.18 Construction of a building or structure that is not itself a source requiring a permit.
- 2.19 Vacuum trucks subject to Regulation 8, Rule 53 and processing regulated material as defined in that rule.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 11/15/00; 5/2/01; 7/19/06; 4/18/12; 12/06/17)

2-1-114 Exemption, Combustion Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, only if the source does not emit pollutants other than combustion products, and those combustion products are not caused by the combustion of a pollutant generated from another source, and the source does not require permitting pursuant to Section 2-1-319.

114.1 Boilers, Heaters, Steam Generators, Duct Burners, and Similar Combustion Equipment:

- 1.1 Any of the above equipment with less than 1 million BTU per hour rated heat input.
- 1.2 Any of the above equipment with less than 10 million BTU per hour rated heat input if fired exclusively with natural gas (including compressed natural gas), liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures), or any combination thereof.

114.2 Internal Combustion Engines and Gas Turbines:

- 2.1 Internal combustion (IC) engines and gas turbines with a maximum output rating less than or equal to 50 bhp.
- 2.2 Internal combustion (IC) engines and gas turbines used solely for instructional purposes at research, teaching, or educational facilities.
- 2.3 Portable internal combustion engines which are at a location for less than 72 consecutive hours.
- 2.4 Any engine mounted on, within, or incorporated into any vehicle, train, ship, boat, or barge used to provide propulsion for the vehicle, train, ship, boat, or barge.
- 2.5 Any engine mounted on, within, or incorporated into any vehicle, train, ship, boat, or barge used to provide propulsion for the vehicle, train, ship, boat, or barge and which is also used to supply mechanical or electrical power to ancillary equipment (e.g., crane, drill, winch, etc.) which is affixed to or is a part of the vehicle, train, ship, boat, or barge.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 8/1/01, 12/06/17)

2-1-115 Exemption, Particulate Sources at Quarries, Mineral Processing and Biomass Facilities: The following potential PM_{2.5} and PM₁₀ sources are exempt from the requirements of sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

115.1 Sources located at quarrying; mineral or ore handling or processing; concrete production; asphaltic concrete production; marine bulk transfer stations; concrete or asphaltic concrete recycling; vehicle shredding; glass manufacturing; handling or processing of cement, coke, lime, flyash, fertilizer, or catalyst; or other similar facility which meets one of the following:

- 1.1 Mixer and other ancillary sources at concrete or aggregate product production facilities with a maximum rated production capacity less than 15 cubic yards (yd³) per hour;
- 1.2 Other source at a facility with a maximum throughput less than 5000 tons per year;
- 1.3 Operating, loading and unloading a crusher or grinder which processes exclusively material with a moisture content greater than or equal to 20 percent by weight;
- 1.4 Operating, loading and unloading the following sources which process exclusively material with a moisture content greater than or equal to 5 percent by weight:

- 1.4.1 Screen or other size classification;
- 1.4.2 Conveyor, screw, auger, stacker or bucket elevator;
- 1.4.3 Grizzly, or other material loading or unloading;
- 1.4.4 Storage silos;
- 1.4.5 Storage or weigh hopper/bin system.
- 1.5 Haul or access roads;
- 1.6 Drilling or blasting.
- 115.2 Sources located at biomass recycling, composting, landfill, POTW, or related facilities, including, but not limited to, the following:
 - 2.1 Tub grinder powered by a motor with a maximum output rating less than 10 horsepower;
 - 2.2 Hogger, shredder or similar source powered by a motor with a maximum output rating less than 25 horsepower;
 - 2.3 Other biomass processing/handling sources at a facility with a total throughput less than 500 tons per year.

(Amended 6/7/95; 5/17/00)

2-1-116 Exemption, Furnaces, Ovens and Kilns: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 116.1 Porcelain enameling furnaces, porcelain enameling drying ovens, vitreous enameling furnaces or vitreous enameling drying ovens.
- 116.2 Crucible furnaces, pot furnaces, induction furnaces, cupolas, electric arc furnaces, reverberatories, or blast furnaces with a capacity of 1000 lbs or less each.
- 116.3 Crucible furnaces, pot furnaces, or induction furnaces for sweating or distilling that process 100 tons per year of all metals or less.
- 116.4 Drying or heat-treating ovens with less than 10 million BTU per hour capacity provided that a) the oven does not emit pollutants other than combustion products and b) the oven is fired exclusively with natural gas (including compressed natural gas), liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures), or any combination thereof.
- 116.5 Ovens used exclusively for the curing of plastics which are concurrently being vacuum held to a mold, or for the softening and annealing of plastics.
- 116.6 Ovens used exclusively for the curing of vinyl plastisols by the closed mold curing process.
- 116.7 Ovens used exclusively for curing potting materials or castings made with epoxy resins.
- 116.8 Kilns used for firing ceramic ware, heated exclusively by natural gas, liquefied petroleum gas, electricity or any combination thereof.
- 116.9 Parts cleaning, bake-off, and similar ovens that meet both of the following:
 - 9.1 Oven is equipped with a secondary combustion chamber or abated by a fume incinerator; and
 - 9.2 Internal oven volume is 1 cubic yard or less.
- 116.10 Electric ovens used exclusively for curing or heat-treating where no significant off-gassing or evaporation of any air contaminants occurs.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-117 Exemption, Food and Agricultural Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 117.1 Smokehouses or barbecue units in which the maximum horizontal inside cross sectional area does not exceed 20 square feet.
- 117.2 Equipment at facilities other than restaurants, cafeterias or other retail operations, which is used to dry, cook, fry, bake, or grill less than 1000 tons per year of food products.
- 117.3 Any oven with a total production of yeast leavened bakery products of less than 10,000 pounds per operating day, averaged over any period of seven consecutive days, and which is heated either electrically or exclusively by natural gas firing with a maximum capacity of less than 10 million BTU per hour.
- 117.4 Equipment used exclusively to grind, blend, package, or store tea, cocoa, spices, or coffee.
- 117.5 Equipment used to dry, mill, grind, blend, or package less than 1000 tons per year of dry food products such as seeds, grains, corn, meal, flour, sugar, and starch.
- 117.6 Equipment used to convey, transfer, clean, or separate less than 1000 tons per year of dry food products or waste from food production operations.
- 117.7 Storage equipment or facilities containing dry food products; which are not vented to the outside atmosphere, or which handle less than 1000 tons per year.
- 117.8 Coffee, cocoa and nut roasters with a roasting capacity of less than 15 pounds of beans or nuts per hour; and any stoners or coolers operated in conjunction with these roasters.
- 117.9 Containers, reservoirs, tanks, or loading equipment used exclusively for the storage or loading of beer, wine or other alcoholic beverages.
- 117.10 Fermentation tanks for beer or wine. Fermentation tanks used for the commercial production of yeast for sale are not exempt.
- 117.11 Brewing operations at facilities producing less than 3 million gallons per year of beer.
- 117.12 Fruit sulfuring operations at facilities producing less than 10 tons per year of sulfured fruits and vegetables.

(Adopted 10/19/83; Amended 4/16/86; 7/1791; 6/7/95; 5/17/00)

2-1-118 Exemption, Surface Preparation and Cleaning Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 118.1 Permanent abrasive blasting source, as defined by Regulation 12, Rule 4, that has a confined volume less than 100 cubic feet (ft³) and is abated by a particulate filter.
- 118.2 Blast cleaning equipment using a suspension of abrasive in water.
- 118.3 Portable abrasive blasting equipment used on a temporary basis within the District.
- 118.4 Equipment, including solvent cold cleaners using an unheated solvent mixture for surface preparation, cleaning, wipe cleaning, fluxing or stripping by use of solutions with a VOC content less than or equal to 50 grams per liter (0.42 lb/gal).
- 118.5 Equipment using a heated solvent mixture for steam cleaning, surface preparation, fluxing, stripping, wipe cleaning, washing or drying products, provided that a) only solutions containing less than 2.5 percent VOC (wt) are used; and b) any combustion sources used in the process are exempt under Section 2-1-114.

- 118.6 Equipment or operations which use unheated solvent and which contain less than 1 gallon of solvent or have a liquid surface area of less than 1 ft². This exemption does not apply to solvent stations at semiconductor manufacturing operation fabrication areas or aerospace stripping operations.
- 118.7 Deleted December 21, 2004
- 118.8 Batch solvent recycling equipment where all of the following apply:
 - 8.1 Recovered solvent is used primarily on site (more than 50% by volume); and
 - 8.2 Maximum heat input (HHV) is less than 1 million BTU per hour; and
 - 8.3 Batch capacity is less than 150 gallons.
- 118.9 Wipe cleaning at a facility that meets one of the following:
 - 9.1 net cleanup solvent usage less than 20 gallons per year from all wipe cleaning operations; or
 - 9.2 emission to the atmosphere of less than 150 pounds per year of uncontrolled VOC from all wipe cleaning operations.

At a facility with total wipe cleaning emissions greater than 150 lb/yr, wipe cleaning operations may be grouped per Section 2-1-401.4.
- 118.10 Any solvent cleaning or surface preparation source which employs only non-refillable hand held aerosol cans.
- 118.11 Spray gun cleaning performed in compliance with Regulation 8, provided the cleaning is associated with a source, such as a spray booth, subject to the requirements of Section 2-1-301 and 302.

(Adopted 10/19/83; Amended 4/16/86; 8/2/89; 7/17/91; 6/7/95; 5/17/00; 12/21/04)

2-1-119 Exemption, Surface Coating and Printing Equipment: The following equipment and operations are exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 119.1 Any powder coating operation, or radiation cured coating operation where ultraviolet or electron beam energy is used to initiate a reaction to form a polymer network.
- 119.2 Any coating, adhesive, dipping, laminating, screening, masking, electrodeposition, resist application, or similar source or operation at any facility that is not operated or conducted as part of a graphic arts operation, which:
 - 2.1 Consumes a total of less than 30 gallons of coating, adhesive, laminate or resist per year on a facility wide basis, or emits less than 150 pounds per year of uncontrolled VOC on a facility wide basis, resulting from the application of these materials; or
 - 2.2 Uses exclusively materials that contain less than one percent VOC (wt).

At a facility with emissions from these sources or operations of greater than 150 lb/yr, these sources or operations may be grouped per Section 2-1-401.3.
- 119.3 Any coating source which employs only non-refillable hand held aerosol cans.
- 119.4 An oven associated with an exempt coating source, provided that the oven is electrically heated, or the oven is fired exclusively with natural gas, liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures) and the maximum firing rate is less than 10 million BTU per hour.
- 119.5 Any graphic arts operation that emits less than 400 pounds of uncontrolled VOC emissions per month on a facility-wide basis.

(Adopted 10/19/83; Amended 4/16/86; 7/17/91; 6/7/95; 5/17/00; 12/21/04; 11/19/08)

2-1-120 Exemption, Dry Cleaning Equipment: Any dry cleaning facility which uses (gross consumption) less than 200 gallons of petroleum solvent or any other non-halogenated solvent in any single year is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319; the facility is in compliance with the registration requirement in Regulation 8, Rule 17, Section 404; and the equipment does not use solvent that contains perchloroethylene or more than 1% by weight of any other halogenated compound.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 3/4/09)

2-1-121 Exemption, Material Working and Handling Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 121.1 Equipment used for buffing, carving, cutting, drilling, grinding, machining, planing, routing, sanding, sawing, shredding, stamping or turning of wood, ceramic artwork, ceramic precision parts, leather, metals, plastics, rubber, fiberboard, masonry, glass, silicon, semiconductor wafers, carbon or graphite, provided that organic emissions from the use of coolant, lubricant, or cutting oil are 5 ton/yr or less.
- 121.2 Equipment used for pressing or storing sawdust, wood chips or wood shavings.
- 121.3 Equipment used exclusively to mill or grind coatings and molding compounds in a paste form provided the solution contains less than one percent VOC (wt).
- 121.4 Tumblers used for the cleaning or deburring of metal products without abrasive blasting.
- 121.5 Batch mixers with a rated working capacity of 55 gallons or less.
- 121.6 Mixing equipment provided no material in powder form is added and mixture contains less than one percent VOC (wt).
- 121.7 Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water based adhesives.
- 121.8 Equipment used exclusively for the mixing and packaging of lubricants or greases.
- 121.9 Presses used exclusively for extruding metals, minerals, plastics or wood.
- 121.10 Presses used for the curing of rubber products and plastic products. The use of mold release products or lubricants is not exempt unless the VOC content of these materials is less than or equal to 1 percent, by weight, or unless the total facility-wide uncontrolled VOC emissions from the use of these materials are less than 150 lb/yr.
- 121.11 Platen presses used for laminating.
- 121.12 Roll mills or calendars for rubber or plastics.
- 121.13 Equipment used exclusively for forging, pressing, rolling, stamping or drawing metals or for heating metals immediately prior to forging, pressing, rolling, stamping or drawing, provided that: (1) maximum fuel use rate is less than 10 million BTU/hr; (2) no lubricant with an initial boiling point less than 400°F is used; and (3) organic emissions are 5 ton/yr or less.
- 121.14 Atmosphere generators used in connection with metal heat treating processes.
- 121.15 Equipment used exclusively for the sintering of glass or metals.
- 121.16 Equipment used exclusively for the melting or applying of wax containing less than one percent VOC (wt).

- 121.17 Equipment used exclusively for conveying and storing plastic pellets.
- 121.18 Solid waste transfer stations that receive or load out a total of all material less than 50 tons/day.
- 121.19 Inactive solid waste disposal sites which do not have an operating landfill gas collection system.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-122 Exemption, Casting and Molding Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 122.1 Molds used for the casting of metals.
- 122.2 Foundry sand mold forming equipment to which no heat is applied, except processes utilizing organic binders yielding in excess of 0.25% free phenol by weight of sand.
- 122.3 Shell core and shell-mold manufacturing machines.
- 122.4 Equipment used for extrusion, compression molding and injection molding of plastics. The use of mold release products or lubricants is not exempt unless the VOC content of these materials is less than or equal to 1 percent, by weight, or unless the total facility-wide uncontrolled VOC emissions from the use of these materials are less than 150 lb/yr.
- 122.5 Die casting machines.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-123 Exemption, Liquid Storage and Loading Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 123.1 Storage tanks and storage vessels having a capacity of less than 260 gallons.
- 123.2 Tanks, vessels and pumping equipment used exclusively for the storage or dispensing of any aqueous solution which contains less than 1 percent (wt) organic compounds. Tanks and vessels storing the following materials are not exempt.
 - 2.1 Sulfuric acid with an acid strength of more than 99.0% by weight.
 - 2.2 Phosphoric acid with an acid strength of more than 99.0% by weight.
 - 2.3 Nitric acid with an acid strength of more than 70.0% by weight.
 - 2.4 Hydrochloric acid with an acid strength of more than 30.0% by weight.
 - 2.5 Hydrofluoric acid with an acid strength of more than 30.0% by weight.
 - 2.6 More than one liquid phase, where the top phase contains more than one percent VOC (wt).
- 123.3 Containers, reservoirs, tanks or loading equipment used exclusively for:
 - 3.1 Storage or loading of liquefied gases.
 - 3.2 Storage or loading of organic liquids or mixtures containing organic liquids; where the initial boiling point of the organics is greater than 302°F and exceeds the actual storage temperature by at least 180°F. This exemption does not apply to the storage or loading of asphalt or asphalt emulsion with a sulfur content equal to or greater than 0.5 wt%.
 - 3.3 The storage or loading of petroleum oils with an ASTM D-93 (PMCC) flash point of 130°F or higher, when stored or loaded at a temperature at least 36°F below the flash point.
 - 3.4 The storage or loading of lubricating oils.
 - 3.5 The storage of fuel oils with a gravity of 40 API or lower and having a capacity of 10,000 gallons or less.

- 3.6 The storage or loading of liquid soaps, liquid detergents, tallow, or vegetable oils, waxes or wax emulsions.
 - 3.7 The storage of asphalt or asphalt emulsion with a sulfur content of less than 0.5 wt%. This does not include the storage of asphalt cutback with hydrocarbons having an initial boiling point of less than 302°F.
 - 3.8 The storage of wine, beer or other alcoholic beverages.
 - 3.9 The storage of organic salts or solids in an aqueous solution or suspension, provided that no liquid hydrocarbon layer forms on top of the aqueous phase.
 - 3.10 The storage or loading of fuel oils with a gravity of 25 API or lower.
 - 3.11 The storage and/or transfer of an asphalt-water emulsion heated to 150°F or less.
- 123.4 Tank seal replacement. For any tank subject to Regulation 8, Rule 5, any new seal must comply with the applicable provisions of Regulation 8, Rule 5, and the District must receive written notification of the tank source number and seal type at least three days prior to the installation.

(Adopted 10/19/83; Amended 7/11/84; 7/17/91; 6/7/95; 5/17/00)

2-1-124 Exemption, Semiconductor Manufacturing: Semiconductor fabrication area(s) at a facility which complies with all of the following are exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 124.1 Net solvent usage is less than 20 gallons of VOC per year on a facility wide basis; or uncontrolled VOC emissions to the atmosphere resulting from the usage of solvent are less than 150 pounds per year of VOC on a facility wide basis, and
- 124.2 Maskant and/or coating usage is less than 30 gallons per year, on a facility wide basis; or uncontrolled VOC emissions from the application of maskant and coatings are less than 150 pounds per year on a facility wide basis.

(Adopted 10/19/83; Amended 1/9/85; 4/16/86; 7/17/91; 6/7/95; 10/20/99; 5/17/00)

2-1-125 Exemption, Printed Circuit Board Manufacturing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 125.1 Equipment used exclusively for:
 - 1.1 Plating of printed circuit boards.
 - 1.2 Buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding or turning of printed circuit boards.
 - 1.3 Soldering. This section does not exempt fluxing and finger cleaning (see Section 2-1-118.4).

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-126 Exemption, Testing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 126.1 Equipment used for hydraulic or hydrostatic testing.
- 126.2 Bench scale laboratory equipment or processes used exclusively for chemical or physical analyses or experimentation, quality assurance and quality control testing, research and development, or similar bench scale equipment, excluding pilot plants.
- 126.3 Equipment used for inspection of metal products.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-127 Exemption, Chemical Processing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 127.1 Equipment used exclusively for the dyeing or stripping (bleaching) of textiles provided that only solutions containing less than one percent VOC (wt) are used.
- 127.2 Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy.
- 127.3 Containers, reservoirs, or tanks used exclusively for electrolytic plating with, or electrolytic polishing of, or electrolytic stripping of the following metals: aluminum, brass, bronze, cadmium, copper, iron, nickel, tin, zinc and precious metals.
- 127.4 Containers, reservoirs, or tanks used exclusively for etching (not chemical milling), except where ammonia or ammonium-based etchants are used.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-128 Exemption, Miscellaneous Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 128.1 Comfort air conditioning or comfort ventilating systems which are not designed to remove air contaminants generated by or released from specific units of equipment.
- 128.2 Refrigeration units except those used as, or in conjunction with, air pollution control equipment.
- 128.3 Vacuum producing devices in laboratory operations which are used exclusively in connection with other equipment which is exempted by this Rule, and vacuum producing devices which do not remove or convey air contaminants from another source.
- 128.4 Water cooling towers and water cooling ponds not used for evaporative cooling of process water, or not used for evaporative cooling of water from barometric jets or from barometric condensers.
- 128.5 Natural draft hoods, natural draft stacks or natural draft ventilators.
- 128.6 Vacuum cleaning system used exclusively for industrial commercial or residential housekeeping purposes.
- 128.7 Equipment used to liquefy or separate oxygen, nitrogen or the rare gases from the air.
- 128.8 Equipment used exclusively to compress or hold dry natural gas, excluding drivers.
- 128.9 Equipment used exclusively for bonding lining to brake shoes.
- 128.10 Equipment used exclusively for the manufacture of water emulsions of waxes, greases or oils.
- 128.11 Brazing, soldering or welding equipment.
- 128.12 Pharmaceutical manufacturing equipment with annual VOC emissions less than 150 pounds per source. Material working and handling equipment such as mills, grinders, blenders, granulators, tablet presses, capsule fillers, packagers, and conveyors are only exempt if the source also processes less than 100 tons per year of pharmaceutical products.
- 128.13 Equipment used exclusively to blend or package cosmetics.
- 128.14 Any wastewater (oil-water) separator, as defined in Regulation 8, Rule 8, which processes less than 200 gallons per day of waste water containing organic liquids.

- 128.15 Exploratory drilling activities for methane recovery at waste disposal sites, for natural gas or for oil. Production wells for the above operations are not exempt.
- 128.16 Passive aeration of soil, only if:
 - 16.1 The duration of the passive aeration operation will not exceed three months, and
 - 16.2 The soil is not being used as a cover material at a landfill.
- 128.17 Ozone generators which produce less than 1 pound per day of ozone.
- 128.18 Any source or operation which exclusively uses consumer products regulated by the California Air Resources Board (California Code of Regulations Title 17, Article 2, Sections 94507-94517).
- 128.19 Any source or operation deemed by the APCO to be equivalent to a source or operation which is expressly exempted by Sections 2-1-113 through 128.
- 128.20 Wastewater pumping stations where no treatment is performed, excluding any drivers.
- 128.21 Modification, replacement, or addition of components that have only fugitive emissions during routine operation (e.g. valves, flanges, pumps, compressors, relief valves, process drains) at existing permitted equipment at petroleum refineries, chemical plants, bulk terminals or bulk plants, provided that:
 - 21.1 the modification, replacement or addition of the components will not result in any increase in emissions of any source at the facility (other than the fugitive emissions from the components being modified, replaced or added) in such a manner as to result in a modification of such source as defined in Section 2-1-234 (e.g., through debottlenecking of a source);
 - 21.2 the total allowable fugitive emissions from all additional components installed pursuant to this exemption at a given process unit during any consecutive twelve month period do not exceed 10 lb/day (or, for components that are not associated with a process unit, the total allowable fugitive emissions from all additional components installed at the facility that are not associated with a process unit during any twelve-month period do not exceed 10 lb/day), based on the maximum fugitive emissions rate allowed under District regulations;
 - 21.3 the components installed satisfy the "typical control technology" listed in the BACT/TBACT Workbook;
 - 21.4 the components meet applicable requirements of Regulation 8 rules; and
 - 21.5 fugitive emissions from the components are included when calculating emissions from the equipment on which the components are installed for purposes of applying District regulations to that equipment (e.g., BACT and offsets requirements).
- 128.22 Fuel cells that use phosphoric acid, molten carbonate, proton exchange membrane, solid oxide or equivalent technologies.
- 128.23 Structure demolition that does not involve asbestos or asbestos containing materials.

(Adopted 10/19/83; Amended 7/16/86; 7/17/91; 6/7/95; 5/17/00; 11/15/00; 12/21/04)

2-1-129 Major Facility Review: Notwithstanding the exemptions listed in this section, every source exempted by this Rule shall be included in any application for a synthetic minor or major facility review permit required by Regulation 2, Rule 6.

(Adopted 12/3/93; Amended 2/1/95; 5/17/00)

2-1-130 Effect of Explanatory Notes: The explanatory notes that are included in italics following certain provisions in Regulation 2 are intended to help readers better understand the regulatory context of these provisions. They are not intended to be binding as regulatory requirements. Where such notes are provided, it is the text of the regulatory provision itself, and not the text of the notes, that establishes the binding legal requirements of the provision.

2-1-200 DEFINITIONS

2-1-201 [Deleted December 19, 2012]

2-1-202 Complete Application: An application that contains all of the information required under Regulation 2-1-402.

(Amended 7/17/91; 11/20/91; 5/17/00; 12/21/04)

2-1-203 Fugitive Emissions: Fugitive emissions are all emissions from unintended openings in process equipment, emissions occurring from miscellaneous activities relating to the operation of a facility, and those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.

(Adopted October 19, 1983)

2-1-204 [Deleted December 19, 2012]

2-1-205 [Deleted December 19, 2012]

2-1-206 [Deleted December 19, 2012]

2-1-207 Organic Compound, Non-Precursor (NPOC): The following are considered non-precursor organic compounds:

methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 1,1,2,2,3-pentafluoropropane (HFC-245ca); 1,1,2,3,3-pentafluoropropane (HFC-245ea); 1,1,1,2,3-pentafluoropropane (HFC-245eb); 1,1,1,3,3-pentafluoropropane (HFC-245fa); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1-chloro-1-fluoroethane (HCFC-151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C₄F₉OCH₃ or HFE-7100); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OCH₃); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C₄F₉OC₂H₅ or HFE-7200); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OC₂H₅); methyl acetate, 1,1,1,2,2,3,3-

heptafluoro-3-methoxy-propane (n-C₃F₇OCH₃, HFE-7000), 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500), 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea), methyl formate (HCOOCH₃), (1) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300); propylene carbonate; dimethyl carbonate; and perfluorocarbon compounds which fall into these classes:

- (i) Cyclic, branched, or linear, completely fluorinated alkanes;
- (ii) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- (iii) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- (iv) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

In addition, any compound designated as having a negligible contribution to photochemical reactivity by the U.S. Environmental Protection Agency as published in the Federal Register shall be considered a Non-Precursor Organic Compound.

(Amended 7/17/91; 6/15/94)

2-1-208 Organic Compound, Precursor (POC): Any organic compound as defined in Regulation 1-233, excepting the non-precursor organic compounds as defined in Section 2-1-207.

(Adopted 3/17/82; Amended 7/17/91)

2-1-209 [Deleted December 19, 2012]

2-1-210 Start-Up Period: The period of time between initial operation and the issuance or denial of a permit to operate of a source or facility.

(Adopted October 19, 1983)

2-1-211 CEQA: The California Environmental Quality Act, Public Resources Code Section 21000 *et seq.*

(Adopted July 17, 1991)

2-1-212 EIR: Environmental Impact Report, as defined in Public Resources Code Section 21061.

(Adopted 7/17/91; Amended 5/17/00)

2-1-213 Facility: Any source, building, structure or installation that emits or may emit any air pollutant; or any aggregation of such sources, buildings, structures or installations that are (i) located on one or more contiguous or adjacent properties; (ii) are under common ownership or control; and (iii) are considered to be in the same major industrial grouping (identified by the first two digits of the applicable code in *The Standard Industrial Classification Manual*). For purposes of this definition:

213.1 A Support Facility as defined in Section 2-1-242 is considered to be in the same major industrial grouping as the facility it supports, regardless of what code may nominally apply under *The Standard Industrial Classification Manual*.

213.2 A source is considered to be under control of the owner or operator of a facility if it is owned, operated or maintained by an agent or contractor acting on behalf of the facility owner or operator, unless it remains at the facility for less than 12 consecutive months (or, in the case of multiple temporary sources that are used in succession at the facility to serve the same function at the same facility source, the total time period that all such temporary sources remain at the facility is less than 12 consecutive months).

(Adopted 11/3/93; Amended 12/21/04; 12/06/17)

- 2-1-214 Federally Enforceable:** All limitations and conditions that are enforceable by the Administrator of the U. S. EPA, including but not limited to (i) requirements developed pursuant to 40 CFR Parts 60 (NSPS), 61 (NESHAPS), 63 (HAP), 70 (State Operating Permit Programs) and 72 (Permits Regulation, Acid Rain); (ii) requirements contained in the State Implementation Plan (SIP) that are applicable to the District; (iii) District regulations approved pursuant to 40 CFR Part 51, Subpart I (NSR); (iv) requirements in any operating permit issued under an EPA-approved program that is a part of the SIP and expressly requires adherence to any permit issued under such program, including requirements of any District permit condition (excluding conditions that are not enforceable by the Administrator of the U.S. EPA); and (v) requirements in federal consent decrees that are enforceable by the Administrator of the U.S. EPA.
(Adopted November 3, 1993)
- 2-1-215 Hazardous Air Pollutant (HAP):** Any pollutant that is listed pursuant to Section 112(b) of the federal Clean Air Act.
(Adopted 11/3/93; Amended 5/17/00)
- 2-1-216** [Deleted December 19, 2012]
- 2-1-217 Potential to Emit:** The maximum capacity of a source or facility to emit a pollutant based on its physical and operational design. Any physical or operational limitation on the capacity of the source or facility to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as a part of its design only if the limitation, or the effect it would have on emissions, is enforceable by the District or EPA (or both). A source or facility that exceeds an enforceable limitation is considered to have a potential to emit that is unconstrained by any such exceeded limit.
(Adopted 11/3/93; Amended 5/17/00)
- 2-1-218 Regulated Air Pollutant:** Except for purposes of major facility review in connection with Regulation 2, Rule 6, for which the definition in Section 2-6-222 applies, a regulated air pollutant is any air pollutant that is subject to a regulation.
(Adopted 11/3/93; Amended 5/17/00)
- 2-1-219** [Deleted December 19, 2012]
- 2-1-220** [Deleted December 19, 2012]
- 2-1-221 Source:** Any article, machine, equipment, operation, contrivance or related groupings of such which may produce and/or emit air pollutants.
(Adopted June 7, 1995)
- 2-1-222 Toxic Air Contaminant (TAC):** An air pollutant that may cause or contribute to an increase in mortality or in serious illness or that may pose a present or potential hazard to human health. For the purposes of this rule, TACs consist of the substances listed in Table 2-5-1 of Regulation 2, Rule 5.
(Adopted 6/7/95; Amended 5/17/00; 6/15/05)
- 2-1-223 Year, Month and Day:** Unless otherwise specified by regulation or by permit condition, a year shall be any rolling 12-month period, a month shall be a calendar month, and a day shall be a calendar day.
(Adopted June 7, 1995)
- 2-1-224 Responsible Laboratory Management Practices:** For the purposes of meeting the laboratory exemption of Section 2-1-113.2.12, Responsible Laboratory Management Practices include all of the following measures for minimizing the emissions of toxic air contaminants:
- 224.1 Open container procedures involving materials that contain volatile toxic air contaminants (TACs) shall be avoided where feasible.

- 224.2 Open container storage of volatile hazardous chemical wastes shall be avoided.
- 224.3 Training for laboratory employees handling hazardous materials shall include information about minimizing the emissions of volatile TACs. These employees shall be directed to avoid open container procedures involving volatile TACs where feasible, and to avoid open container storage of hazardous chemical waste.
- 224.4 Fume hoods shall be posted with notices reminding employees to avoid open container procedures using volatile TACs where feasible. Laboratories shall be inspected periodically, but not less than annually, to confirm that these notices are present.
- 224.5 Laboratory fume hoods shall be monitored periodically to assure proper face velocity.
- 224.6 Evaporation of any hazardous chemical waste containing TACs as a means of disposal shall be expressly forbidden.

(Adopted June 7, 1995)

2-1-225 [Deleted December 19, 2012]

2-1-226 **Statewide Portable Equipment Registration Program:** A uniform system for statewide registration and regulation of portable internal combustion and associated equipment, implemented by the Air Resources Board pursuant to Section 41750 et seq. of the Health and Safety Code.

(Adopted October 7, 1998)

2-1-227 **Substantial Use:** Substantial use of an Authority to Construct consists of one or more of the following: purchase or acquisition of the equipment that constitutes the source; ongoing construction activities other than grading or installation of utilities or foundations; a contract or commitment to complete construction of the source within two years.

(Adopted October 7, 1998)

2-1-228 **Particulate Matter (PM):** Any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 microns.

(Adopted October 7, 1998)

2-1-229 **PM₁₀:** Particulate matter with aerodynamic diameter smaller than or equal to a nominal 10 microns. PM₁₀ emissions shall include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures.

(Adopted October 7, 1998)

2-1-230 **Functionally Equivalent:** Performing the same, or equivalent, function as the object of comparison. A functionally equivalent replacement source performs the same function for the process as the source being replaced, although emissions and other characteristics may differ. A replacement that performs additional functions is not considered to be functionally equivalent.

(Adopted October 7, 1998)

2-1-231 **Semiconductor Fabrication Area:** A physically identifiable area in a semiconductor manufacturing facility where one or more specific operations in the fabrication of semiconductors or related solid state devices occurs and the equipment used to perform those operations. The semiconductor fabrication area shall not include crystal growth, circuit separation, or encapsulation. All semiconductor fabrication equipment may be grouped into a single fabrication area, or multiple fabrication areas may be established to correspond to product lines or clean room environments.

(Adopted October 20, 1999)

- 2-1-232 New Source:** Any source that has not been in existence before, including any source that meets at least one of the following criteria (except sources that lose a permit exemption or exclusion in accordance with Regulation 2-1-424):
- 232.1 Any source constructed or proposed to be constructed after March 7, 1979, but which never had a valid District authority to construct or permit to operate.
 - 232.2 Any source which was not in operation for a period of one year or more and did not hold a valid District permit to operate during this period of non-operation, occurring after March 7, 1979.
 - 232.3 Any relocation of an existing source to a non-contiguous property, unless such relocation is authorized under a permit to operate at multiple locations pursuant to Section 2-1-413.
 - 232.4 Any replacement of a source, including an identical replacement of a source, occurring after March 7, 1979, regardless of when the original source was constructed.
 - 232.5 Any replacement of an identifiable source within a group of sources permitted together under a single source number for the purpose of District permitting convenience.
 - 232.6 "Rebricking" of a glass furnace where changes to the furnace design result in a change in heat generation or absorption.

(Adopted May 17, 2000; Amended 12/06/17)

- 2-1-233 Alter:** To make any physical change, change in the method of operation, or other similar change at an existing source that may affect air pollutant emissions and that does not qualify as a modification under the criteria set forth in Section 2-1-234. The APCO may impose permit conditions in an authority to construct or permit to operate for an alteration to ensure that the change authorized by the authority to construct or permit to operate will not result in a modification under Section 2-1-234. Other forms of the word alter, including altered and alteration, shall be defined based on the meaning of the root word "alter".

(Adopted 5/17/00; Amended 11/15/00)

- 2-1-234 Modify:** To make any physical change, change in method of operation, change in throughput or production, or other similar change at an existing source, that results in an increase in emissions that is either of the following:

- 234.1 Increase in Potential To Emit: An increase in the source's daily or annual potential to emit, determined according to the definition in Section 2-1-217 and the following requirements.

- 1.1 Any legally enforceable limitation on a source's operations that has the effect of limiting emissions may be taken into account in determining a source's potential to emit, as provided for in Section 2-2-217. Such limits may include direct limitations on the source's emissions and surrogate limits on operating conditions such as production rate or capacity that have the effect of limiting emissions. An hourly emissions limit may be multiplied by 24 to determine daily potential to emit and a daily emissions limit may be multiplied by 365 to determine annual potential to emit, unless the source cannot operate at its full permitted limit for 24 hours per day or 365 days per year or there is some other reason why short-term permit limits do not accurately represent longer-term potential to emit. A permit limit that applies to combined emissions from multiple sources does not establish an individual source's potential to emit, unless the limit

imposes an effective, legally enforceable limitation specifically on the emissions from the individual source.

- 1.2 For sources whose emissions are not limited by any legally enforceable limitation (or that cannot physically operate to the full extent of such limitation), the source's potential to emit shall be determined by the source's actual physical ability to emit air pollution. A source's potential to emit shall be determined by the most relevant and reliable technical information available regarding the source's operation, which may include design information, engineering specifications, or other information. A source's potential to emit shall take into account any limitation on the effective capacity of the source as a result of the capacity of any upstream or downstream process that acts as a "bottleneck" (i.e., a limit on the ability of the source to operate at maximum capacity).
- 1.3 For emissions toxic air contaminants and hazardous air pollutants, a change is not a modification unless the increase in the source's potential to emit results in an increase in cancer risk (as defined in Regulation 2-5-206) greater than 1.0 in a million (10^{-6}) or an increase in chronic hazard index (as defined in Regulation 2-5-208) greater than 0.20. An increase in emissions of less than the trigger levels specified in Table 2-5-1 in Regulation 2, Rule 5 shall be presumed not to cause an increase in cancer risk of greater than 1.0 in a million or an increase in chronic hazard index of greater than 0.20.

234.2 Increase Over Actual Emissions Baseline: An increase that is a "major modification" under either of the following definitions:

- 2.1 Non-Attainment NSR Pollutants: For NO_x, VOC, PM_{2.5}, and SO₂, a "major modification" as defined in 40 C.F.R. section 51.165(a)(1)(v);
- 2.2 Other Federal NSR Pollutants: For other pollutants, a "major modification" as defined in 40 C.F.R. section 52.21(b)(2)(i).

The following provisions shall apply for purposes of implementing and applying this Subsection 234.2:

- 2.3 For purposes of determining whether an increase in emissions constitutes a "major modification" under Subsections 234.2.1 and/or 234.2.2, the definitions in 40 C.F.R. sections 51.165(a)(1)(i)-(xlvi) and 52.21(b)(1)-(52), and the applicability provisions in 40 C.F.R. sections 51.165(a)(2)(ii)(A)-(F) and 52.21(a)(2)(ii)-(iv), are incorporated by reference and shall be used in implementing and applying this Subsection 234.2. The term "Administrator" as used in these provisions shall be interpreted to mean the Administrator of the U.S. Environmental Protection Agency in 40 C.F.R. sections 52.21(b)(3), (b)(17), (b)(37)(i), (b)(43), (b)(48)(ii)(c), and (b)(49)-(51), and in all referenced provisions in 40 C.F.R. section 51.165; and it shall be interpreted to mean the APCO in all other provisions.
- 2.4 For any project at a "major stationary source" as defined in 40 C.F.R. sections 51.165(a)(1)(iv) or 52.21(b)(1) that (i) does not result in an increase in potential to emit as specified in subsections 234.1.1 through 234.1.3, and (ii) does not constitute a "major modification" under the definitions in subsections 234.2.1 and 234.2.2 above based on the calculation methods specified in 40 C.F.R. sections 51.165(a)(1)(xxviii)(B)(1)-(3) and 52.21(b)(41)(ii)(a)-(c), the

owner/operator of such project shall comply with the documentation, monitoring, recordkeeping, and reporting requirements set forth in 40 C.F.R. sections 51.165(a)(6)(i)-(vi) and 52.21(r)(6)(i)-(vi) for each pollutant for which there is a reasonable possibility that the project may result in a significant emissions increase within the meaning of 40 C.F.R. sections 51.165(a)(6)(vi) and 52.21(r)(6)(vi).

2.5 The owner/operator of any project that is required to maintain any documentation pursuant to Subsection 234.2.4 above shall make such documentation available for review upon request by the APCO, EPA, or any member of the public on the same terms as applicable under the requirements contained in 40 C.F.R. section 70.4(b)(3)(viii).

Other forms of the word modify, including modified and modification, shall be defined based on the meaning of the root word "modify".

(Adopted 5/17/00; Amended 11/15/00; 6/15/05; 12/06/17)

2-1-235 [Deleted, December 19, 2012]

2-1-236 [Deleted, December 19, 2012]

2-1-237 **BACT/TBACT Workbook:** District guidelines setting forth emission limitations and/or control technologies constituting BACT and TBACT for a number of source types or categories.

(Adopted June 15, 2005)

2-1-238 **Clean Air Act:** The federal Clean Air Act, as amended in 1990, including the implementing regulations.

(Adopted June 15, 2005)

2-1-239 **Agricultural Source:** A source of air pollution, or group of such sources located on the same property or on contiguous properties under common ownership or control, used in the production of crops or the raising of fowl or animals; but excluding any source or group of sources at a facility that maintains domesticated animals in corrals, pens, or other restricted areas for commercial purposes, and feeds them by means other than grazing, in numbers equal to or exceeding any of the following thresholds on any day: 1,000 milk-producing dairy cows; 3,500 beef cattle; 7,500 calves, heifers, or other cattle; 100,000 turkeys; 650,000 chickens other than laying hens; 650,000 laying hens; 3,000 swine; 15,000 sheep, lambs, or goats; 2,500 horses; 650,000 ducks; or 30,000 rabbits or other animals.

(Adopted July 19, 2006; Amended 12/06/17)

2-1-240 **Graphic Arts Operation:** Any gravure, flexographic printing, digital printing, screen printing, letterpress, and lithographic printing operation; any associated coating laminating, and adhesive operation to produce a printed product; and the use of solvents for any surface preparation and cleanup for any operation stated above.

(Adopted November 19, 2008)

2-1-241 **PM_{2.5}:** Particulate matter with aerodynamic diameter smaller than or equal to a nominal 2.5 microns. PM_{2.5} emissions shall include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures.

2-1-242 **Support Facility:** A facility that conveys, stores, or otherwise significantly assists in the production of the principal product of another facility. Per Section 2-1-213, a support facility is considered part of the principal facility that it supports for permitting purposes under Regulation 2.

2-1-300 **STANDARDS**

2-1-301 Authority to Construct: Any person who, after July, 1972, puts in place, builds, erects, installs, modifies, modernizes, alters or replaces any article, machine, equipment or other contrivance, the use of which may cause, reduce or control the emission of air contaminants, shall first secure written authorization from the APCO in the form of an authority to construct. Routine repairs, maintenance, or cyclic maintenance that includes replacement of components with identical components is not considered to be an alteration, modification or replacement for the purpose of this Section unless the APCO determines the changes to be non-routine. The use or operation of the source shall initiate the start-up period in accordance with Section 2-1-411.

(Amended 3/17/82; 10/19/83; 7/17/91; 5/17/00)

2-1-302 Permit to Operate: Before any person, as described in Section 2-1-401, uses or operates any article, machine, equipment or other contrivance, the use of which may cause, reduce or control the emission of air contaminants, such person shall first secure written authorization from the APCO in the form of a permit to operate.

302.1 Permit to Operate, MFR: Any facility subject to the requirements of Regulation 2, Rule 6, Major Facility Review, shall comply with the permitting requirements included in that Rule in addition to securing a permit to operate under this Rule.

302.2 Permit to Operate, Accelerated Permitting Program: Unless subject to any of the provisions of Sections 2-1-316 through 319, a temporary permit to operate may be obtained to authorize operation of a new source or a modification or alteration of an existing source under this Section pending full review for the following categories of operation:

2.1 A new source or a modification of an existing source if the following conditions are satisfied:

1.1 The source will not have the potential to emit POC, NPOC, NO_x, SO₂, PM_{2.5}, PM₁₀, or CO in an amount of 10 pounds or more on any day, determined without taking into account the effect of any abatement device or equipment; or the source has been pre-certified under Section 2-1-415; and

1.2 The source will not have the potential to emit toxic air contaminants in an amount that exceeds any of the trigger levels set forth in Table 2-5-1 of Regulation 2, Rule 5, determined without taking into account the effect of any abatement device or equipment; and

1.3 The source is not subject to the public notice requirements of Section 2-1-412.

2.2 An abatement device that is a replacement for an existing abatement device, provided that the replacement will not increase the potential to emit any regulated air pollutant from the abatement device and the source(s) whose emissions it abates.

2.3 An alteration of an existing source, as defined in Section 2-1-233.

An applicant seeking a permit for a new, modified or altered source that is in any of the preceding categories may apply for a temporary permit to operate under the Accelerated Permitting Program by submitting (i) a permit application form and source data form(s) properly filled out with all required information; (ii) payment of applicable fees (the minimum permit fee required to install and operate each source); (iii) a statement explaining which of the categories in subsections 2.1 through 2.3 above the source is in; (iv) a

certification that the source meets all of the requirements of that category; (v) a certification that the source is not subject to Sections 2-1-316 through 2-1-319; and (vi) a certification that the applicant has reviewed all applicable New Source Performance Standards and has determined that the application will comply. The APCO shall issue a temporary Permit to Operate promptly upon determining that the application contains all of the elements required by (i)-(vi) of the preceding sentence. The owner or operator of the source may begin construction or operation of the source, or of the modification or alteration of the source, immediately upon receipt of the temporary Permit to Operate. The APCO shall complete a full review of the application and take final action in accordance with Section 2-1-408 within the time period provided for in that section. Any applicable offset requirements under Regulation 2, Rule 2, Sections 302 and 303 shall be satisfied before final permit issuance. The temporary Permit to Operate shall cease to be effective upon final action by the APCO under Section 2-1-408 (or if the permit application is canceled or withdrawn prior to such final action). During periods that the source is operating under the temporary Permit to Operate, the operator shall keep records sufficient to demonstrate that emissions do not exceed applicable qualifying levels for the Accelerated Permitting Program as set forth in subsections 2.1 through 2.3 above.

- 302.3 Permit to Operate, Temporary Operation: A temporary permit may be obtained to allow an operator to test equipment, processes, or new formulations. A temporary permit may also be obtained for a temporary source which replaces critical equipment during scheduled maintenance. The APCO may issue a non-renewable temporary Permit to Operate a temporary operation at any source, subject to the following:
- 3.1 The proposed operation will comply with all requirements of Regulation 1 and Regulations 5 through 12.
 - 3.2 The permit shall expire 3 months after issuance.
 - 3.3 The operator shall provide offsets, at a ratio of 1.15 to 1, for all increased emissions of NO_x, POC, SO₂, PM_{2.5}, and PM₁₀ resulting from the use of the temporary permit.
 - 3.4 The operator shall certify that the temporary operation is for one of the following purposes:
 - 4.1 Equipment testing
 - 4.2 Process testing, including new formulations
 - 4.3 Temporary replacement of an existing permitted source with an identical or functionally equivalent source
 - 3.5 The operator shall comply with the provisions of Regulation 2-2-301, except that the cost-effectiveness analysis shall consider the short duration of the operation.

(Amended 11/3/93; 6/7/95; 10/7/98; 11/15/00)

2-1-303 Fees: Persons subject to this Regulation shall pay the fees required, as set forth in Regulation 3.

2-1-304 Denial, Failure to Comply With Applicable Requirements: The APCO shall deny an authority to construct or a permit to operate if the APCO finds that the subject of the application would not or does not comply with any emission limitations or other regulations of the District (including but not limited to the BACT and offsets requirements in Regulations 2-2-301 through 2-2-303), or with applicable permit conditions or federal or California laws or regulations, or if any required fees have not

been paid. Such denial shall not be based solely on the type of construction or design of equipment.

(Amended March 17, 1982)

2-1-305 Conformance with Authority to Construct: A person shall not put in place, build, erect, install, modify, modernize, alter or replace any article, machine, equipment, or other contrivance for which an authority to construct has been issued except in a manner substantially in conformance with the authority to construct. If the APCO finds, prior to the issuance of a permit to operate, that the subject of the application was not built substantially in conformance with the authority to construct, the APCO shall deny the permit to operate.

(Amended December 21, 2004)

2-1-306 Mandated Reductions Not Applicable: Emission reductions resulting from requirements of federal, state or District laws, rules or regulations shall not be banked or allowed as emission offsets or emission reduction credits unless a complete application for such banking or emission reduction credits was filed with the District at least 90 days prior to the adoption date of such laws, rules or regulations. Only emission reduction credits exceeding the emission reductions required by measures described in the Air Quality Management Plan or required by permits or orders; and reductions achieved by measures not specified in the Air Quality Management Plan shall be banked or allowed as emission offsets or emission reduction credits.

(Amended 10/7/81; 7/17/91; 6/15/94)

2-1-307 Failure to Meet Permit Conditions: A person shall not operate any article, machine, equipment or other contrivance, for which an authority to construct or permit to operate has been issued, in violation of any permit condition imposed pursuant to Section 2-1-403.

(Adopted 3/17/82; Amended 7/17/91)

2-1-308 Fugitive Emissions: Fugitive emissions shall be included as emissions from a source or facility except as required under this Regulation.

(Adopted 10/19/83; Amended 7/17/91)

2-1-309 Canceled Application: The APCO may cancel an application for an authority to construct and a permit to operate if, within 90 days after the application was deemed incomplete, the applicant fails to furnish the requested information or pay all appropriate fees. The 90 day period may be extended for an additional 90 days upon receipt of a written request from the applicant and written approval thereof by the APCO. The APCO shall notify the applicant in writing of a cancellation, and the reasons therefore. A cancellation shall become effective 10 days after the applicant has been notified. The cancellation shall be without prejudice to any future applications.

(Adopted April 6, 1988)

2-1-310 Applicability of CEQA: Except for permit applications which will be reviewed as ministerial projects under Section 2-1-311 or which are exempt from CEQA pursuant to Section 2-1-312, all proposed new and modified sources for which an authority to construct must be obtained from the District shall be reviewed in accordance with the requirements of CEQA.

310.1 For those District permit applications which must be reviewed in accordance with the requirements of CEQA, the District will not normally be a Lead Agency under CEQA. Rather, pursuant to CEQA, the Lead Agency will normally be an agency with general governmental powers, such as a city or county, rather than a special purpose agency such as the District.

310.2 The issuance of an authority to construct and of a permit to operate for the same new or modified source or stationary source are considered to be parts of the same project for the purposes of CEQA.

310.3 The APCO shall not authorize, on an interim basis or otherwise, the installation or operation of any proposed new or modified source, the permitting of which is subject to the requirements of CEQA, until all of the requirements of CEQA have been satisfied.

(Adopted 7/17/91; Amended 10/21/92)

2-1-311 Ministerial Projects: An application for a proposed new or modified source or stationary source will be classified as ministerial and will accordingly be exempt from the CEQA requirement of Section 2-1-310 if the District's engineering evaluation and basis for approval or denial of the permit application for the project is limited to the criteria set forth in Section 2-1-428 of this rule and to the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook. The method for determining whether a given permit application will be classified as ministerial is set forth in Section 2-1-427.

(Adopted 7/17/91; Amended 10/7/98)

2-1-312 Other Categories of Exempt Projects: In addition to ministerial projects, the following categories of projects subject to permit review by the District will be exempt from the CEQA review, either because the category is exempted by the express terms of CEQA (subsections 2-1-312.1 through 312.9) or because the project has no potential for causing a significant adverse environmental impact (subsections 2-1-312.10 and 312.11). Any permit applicant wishing to qualify under any of the specific exemptions set forth in this Section 2-1-312 must include in its permit application CEQA-related information in accordance with subsection 2-1-426.1. In addition, the CEQA-related information submitted by any permit applicant wishing to qualify under subsection 2-1-312.11 must demonstrate to the satisfaction of the APCO that the proposed project has no potential for resulting in a significant environmental effect in connection with any of the environmental media or resources listed in Section II of Appendix I of the State CEQA Guidelines.

312.1 Applications to modify permit conditions for existing or permitted sources or facilities that do not involve any increases in emissions or physical modifications.

312.2 Permit applications to install air pollution control or abatement equipment.

312.3 Permit applications for projects undertaken for the sole purpose of bringing an existing facility into compliance with newly adopted regulatory requirements of the District or of any other local, state or federal agency.

312.4 Permit applications submitted by existing sources or facilities pursuant to a loss of a previously valid exemption from the District's permitting requirements.

312.5 Permit applications submitted pursuant to the requirements of an order for abatement issued by the District's Hearing Board or of a judicial enforcement order.

312.6 Permit applications relating exclusively to the repair, maintenance or minor alteration of existing facilities, equipment or sources involving negligible or no expansion of use beyond that previously existing.

312.7 Permit applications for the replacement or reconstruction of existing sources or facilities where the new source or facility will be located on the same site as the source or facility replaced and will have substantially the same purpose and capacity as the source or facility replaced.

- 312.8 Permit applications for cogeneration facilities which meet the criteria of Section 15329 of the State CEQA Guidelines.
- 312.9 Any other project which is exempt from CEQA review pursuant to the State CEQA Guidelines.
- 312.10 Applications to deposit emission reductions in the emissions bank pursuant to Regulation 2, Rule 4 or Regulation 2, Rule 9.
- 312.11 Permit applications for a proposed new or modified source or sources or for process changes which will satisfy the "No Net Emission Increase" provisions of District Regulation 2, Rule 2, and for which there is no possibility that the project may have any significant environmental effect in connection with any environmental media or resources other than air quality. Examples of such projects include, but are not necessarily limited to, the following:
 - 11.1 Projects at an existing stationary source for which there will be no net increase in the emissions of air contaminants from the stationary source and for which there will be no other significant environmental effect;
 - 11.2 A proposed new source or stationary source for which full offsets are provided in accordance with Regulation 2, Rule 2, and for which there will be no other significant environmental effect;
 - 11.3 A proposed new source or stationary source at a small facility for which full offsets are provided from a small facility bank established by the APCO pursuant to Regulation 2-4-414, and for which there will be no other significant environmental effect;
 - 11.4 Projects satisfying the "no net emission increase" provisions of District Regulation 2, Rule 2 for which there will be some increase in the emissions of any toxic air contaminant, but for which the District staff's health risk screening analysis shows that the project will not result in a cancer risk (as defined in Regulation 2-5-206) greater than 1.0 in a million (10^{-6}) and will not result in a chronic hazard index (as defined in Regulation 2-5-208) greater than 0.20, and for which there will be no other significant environmental effect.

(Adopted 7/17/91; Amended 5/17/00; 12/21/04; 6/15/05)

2-1-313 Projects Not Exempt From CEQA Review: Notwithstanding the exemptions from CEQA review set forth in Section 2-1-312, such exemptions shall not apply to any project covered by the categories set forth in subsections 2-1-312.1 through 312.9 where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances, or due to cumulative impacts of successive projects of the same type in the same place over time. Such projects shall be reviewed in accordance with the requirements of CEQA.

(Adopted 7/17/91; Amended 6/15/05)

2-1-314 Case-by-Case CEQA Determinations: Notwithstanding the requirement of Section 2-1-311, the District shall, for any permit applications which were deemed complete by the District on or before July 17, 1991, review said permit applications on a case-by-case basis in order to determine whether the District's evaluation of the permit application will involve any element of discretion. If as a result of this case-by-case-review, the District determines that the evaluation of the permit application will not involve any element of discretion on its part, then the application may be treated as a ministerial project so long as all of the following conditions are met:

- 314.1 The District makes a specific written finding to this effect as part of its determination that the permit application is complete;

314.2 The District will merely apply the law to the facts as presented in the permit application; and

314.3 The District's evaluation of the permit application and its decision regarding whether to issue the permit will be limited to the criteria set forth in Section 2-1-428.

(Adopted July 17, 1991)

2-1-315 Denial, Failure to Mitigate Significant Adverse Environmental Impacts: For any application for which the District is a Lead Agency under CEQA, where significant adverse environmental impacts have been identified in the District's review of, or in the course of the public comment period on, said application, the APCO shall deny an authority to construct to such new or modified stationary source, as proposed, unless:

315.1 The applicant agrees to implement or carry out such available alternatives or mitigation measures which would, to the extent feasible, avoid or substantially lessen any such significant adverse environmental impacts as a condition for issuance of an authority to construct; or

315.2 The APCO finds that any such available, feasible alternatives or mitigation measures are within the responsibility and jurisdiction of another public agency, and such measures have been adopted by such other agency, or can and should be adopted by such other agency; or

315.3 The APCO finds that there are no feasible alternatives or measures to substantially mitigate the unavoidable adverse environmental effects associated with the project, but that the benefits of the project outweigh such unavoidable adverse environmental effects, and the APCO states in writing the reasons and overriding considerations to support the issuance of the authority to construct based on the Final EIR and other information in the record notwithstanding the unavoidable adverse environmental effects associated with the project.

(Adopted November 20, 1991)

2-1-316 New or Modified Sources of Toxic Air Contaminants or Hazardous Air Pollutants: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302.

316.1 If a new or modified source emits one or more toxic air contaminants in quantities that exceed the trigger levels listed in Table 2-5-1 of Regulation 2-5 and the source did not have a valid exemption from Regulation 2-1-302 when the source was constructed or modified, then the source shall be subject to the requirements of Sections 2-1-301 and 302, unless the owner or operator of the source can demonstrate to the satisfaction of the APCO that the source:

1.1 Will comply with the TBACT requirement of Regulation 2-5-301 (if applicable); and

1.2 Will comply with the project risk limits of Regulation 2-5-302 (if applicable).

316.2 If a new or modified source, or group of related sources in a proposed construction or modification will emit 2.5 or more tons per year of any single hazardous air pollutant or 6.25 or more tons per year of any combination of hazardous air pollutants, then the source or group of sources shall be subject to the requirements of Sections 2-1-301 and 302.

(Adopted 4/16/86; Amended 7/17/91; Renumbered and Amended 6/7/95; Amended 5/17/00; 6/15/05)

2-1-317 Public Nuisance Sources: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302. If any exempt source receives two or more public nuisance violations, under Regulation 1, Section 301 or Section 41700 of the California Health & Safety Code, within any consecutive 180-day period, then the source shall be subject to the requirements of Section 2-1-301 and 302. Such a source will be treated as loss of exemption source under Section 2-1-414, and will be subject to the annual permit to operate fee specified in Regulation 3. This section does not apply to a source that is exempt per section 2-1-113.

(Adopted 6/7/95; Amended 5/17/00)

2-1-318 Hazardous Substances: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302. If a new or modified source at a facility in one of the 28 categories listed in Section 169(1) of the Clean Air Act that emits 100 tons per year of any PSD Pollutant as defined in Section 2-2-223, or at a facility not listed in any such category that emits 250 tons per year or more of any PSD Pollutant as defined in Section 2-2-223, emits any of the following air contaminants in excess of the quantities listed below, then it is subject to the requirements of Sections 2-1-301 and 302.

318.1 0.6 ton per year of lead,

318.2 0.007 ton per year of asbestos (excepting demolition, renovation, and waste disposal),

318.3 0.0004 ton per year of beryllium,

318.4 0.1 ton per year of mercury,

318.5 1 ton per year of vinyl chloride,

318.6 3 tons per year of fluorides,

318.7 7 tons per year of sulfuric acid mist, and

318.8 10 tons per year of reduced sulfur compounds (including hydrogen sulfide).

(Adopted 10/19/83; Renumbered and Amended 6/7/95; Amended 5/17/00)

2-1-319 Source Expressly Subject to Permitting Requirements: Notwithstanding any exemption contained in Section 2-1-103 or Sections 2-1-114 through 2-1-128, any source meeting any of the following criteria shall be subject to the requirements of Section 2-1-302:

319.1 The emission rate of any regulated air pollutant (except greenhouse gases) from the source is greater than 5 tons per year, after abatement.

319.2 The source is subject to the requirements of Section 2-1-316, 317, or 318.

(Adopted May 17, 2000)

2-1-320 Compliance With Material Representations Made In Connection With Permit Applications: In addition to the explicit conditions contained in an authority to construct and/or permit to operate, the owner and operator of a source of air pollutant emissions shall construct and operate the source in conformance with any representations made or information submitted to the APCO in connection with the application for such authority to construct and/or permit to operate, provided such representations or information were material to the APCO's decision to issue the authority to construct and/or permit to operate. Construction or operation of the source not in conformance with such material representations or information shall be a violation of this Regulation.

2-1-321 Compliance With Provisions of State Implementation Plan and Other Requirements of Local, California and Federal Law: Issuance of an authority to

construct and/or permit to operate for a facility under this Rule shall not relieve the owner and operator of the facility from the responsibility to comply fully with all applicable provisions of the state implementation plan for California and all other requirements under local, California and federal law.

2-1-400 ADMINISTRATIVE REQUIREMENTS

2-1-401 Persons Affected: Any person who has been granted or requires an authority to construct shall secure a permit to operate. Any person who is not required to obtain an authority to construct and who is required to obtain a permit to operate shall secure a permit to operate. In addition, the following shall apply for a permit to operate for any source which is not subject to an exemption per Sections 2-1-103, 105, or 113 through 2-1-129:

- 401.1 On or before July 1, 1980, persons who operate a facility causing emissions of 2.5 tons per year or more of a regulated air pollutant.
- 401.2 On or before July 1, 1980, persons who operate gasoline terminals, bulk plants and facilities that dispense gasoline for sale or dispense more than 60,000 gallons of gasoline per year.
- 401.3 Persons who operate coating, adhesive, dipping, laminating, printing, screening, masking, electrodeposition, resist application, or similar source or equipment at any facility whose coating, adhesive, dipping, laminating, printing, screening, masking, electrodeposition, resist application, or similar source or equipment consume greater than 30 gallons of coating and emit 150 pounds of VOC per year or more on a facility wide basis, resulting from the applications of coatings. Upon request of the applicant, the APCO may group coating operations which individually emit less than 150 lb/yr into a single facility-wide source, or other convenient grouping.
- 401.4 Persons who operate surface preparation and cleaning equipment or operations which use unheated solvent solutions containing more than 10 percent VOC and which contain more than 1 gallon of solvent or have a liquid surface area of more than 1 ft.², including wipe cleaning operations with a net solvent usage greater than 20 gallons per year, and that emit 150 pounds of VOC per year or more, on a facility-wide basis. Upon request of the applicant, the APCO may group wipe cleaning operations into a single facility-wide source, or other convenient groupings.
- 401.5 Persons who plan to modify an existing source or install a new source which qualifies for the Accelerated Permitting Program in Section 2-1-106 shall first submit a complete permit application, in accordance with Section 2-1-302.2.
- 401.6 Persons who operate a source that is subject to either loss of exemption or exclusion per section 2-1-414 or 2-1-424.
- 401.7 Persons who operate a source constructed after July 1, 1972.
- 401.8 On or before July 1, 2005, any person who operates a crematorium for the cremation of human remains.

(Amended 4/16/86; 1/7/87; 7/17/91; 6/7/95; 10/7/98; 5/17/00; 12/21/04)

2-1-402 Applications: Every application for an authority to construct or a permit to operate shall be submitted to the APCO on the forms specified, and shall contain all of the following information:

- 402.1 Sufficient information for the APCO to determine the emissions from the sources that are the subject of the application, and to quantify emissions from

the sources of any emission reduction credits that will be relied upon as part of the application.

- 402.2 Any information requested by the APCO in order to determine the air quality impact from sources that are the subject of the application.
- 402.3 All applicable fees, as described in Regulation 3.
- 402.4 If the application is subject to the New Source Review requirements of Regulation 2, Rule 2, all information required under Section 2-2-401.
- 402.5 CEQA-related information that satisfies the requirements of Section 2-1-426.
- 402.6 A certification stating whether the source triggers the requirements of Section 2-1-412.
- 402.7 A specific designation of any information contained in the application that the applicant asserts is trade secret pursuant to Section 6254.7 of the Government Code. The applicant shall submit two copies of each page containing trade secret information. One copy shall be clearly labeled "Trade Secret," and each trade secret item shall be clearly marked. The second copy shall be clearly labeled "Public Copy," and each trade secret item shall be redacted. The applicant shall include, for each item which it asserts to be a trade secret, a statement signed by a responsible representative of the applicant identifying that portion of Government Code Section 6254.7(d) upon which the assertion is based and a brief statement setting forth the basis for this assertion.
- 402.8 Any other information requested by the APCO as necessary to determine whether the new, modified or altered source will comply with applicable regulatory requirements.

The application must contain sufficient information to enable the APCO to make a decision or a preliminary decision on the application and/or on any exemptions authorized by this Regulation. The APCO may consult with appropriate local and regional agencies to determine whether the application conforms with adopted plans and with local permit requirements.

2-1-403 Permit Conditions: Except as to permit applications reviewed in accordance with Section 2-1-311, the APCO may impose any permit condition that he deems reasonably necessary to insure compliance with federal or California law or District regulations. For any permit application which was reviewed as a ministerial project in accordance with Section 2-1-311, the APCO shall only impose permit conditions as set forth in the District's Permit Handbook for the type of source being permitted. The APCO may require the installation of devices for measurement or analysis of source emissions or ground-level concentrations of air contaminants.

(Amended 7/17/91; 10/7/98)

2-1-404 Changes in Throughput and Hours of Operation: After a permit to operate has been issued, in accordance with subsections 2-1-401.1 through 401.4, changes in hours of operation, fuels, process materials or throughput are allowed only if emissions resulting from such changes are not of such quantity as would cause denial of an authority to construct after an air quality permit analysis made pursuant to the provisions of Rule 2 of this Regulation. "Change" is the use of a process or fuel not used in the prior 12 months, or a throughput level higher than the highest level in the prior 12 months or total monthly operating hours higher than any month in the prior 12 months.

- 404.1 The holder of a permit to operate shall advise the APCO not more than 30 days after any changes in hours of operation, fuels, process materials or throughput which might increase emissions.

404.2 The APCO shall act to revoke the permit to operate of any person who fails to comply with the requirements of this Section.

(Amended July 17, 1991)

2-1-405 Posting of Permit to Operate: A copy of the permit to operate, including all relevant permit conditions, shall be accessible to personnel who operate the equipment for which the permit has been issued. These documents shall be included on site in the operator's manual, or shall be accessible to the operators electronically.

(Amended 5/17/00; 11/15/00)

2-1-406 Transfer: An authority to construct or a permit to operate shall not be transferable from one facility to another. An authority to construct or a permit to operate shall not be transferable from one person to another without obtaining written permission of the APCO.

2-1-407 Authority to Construct Expiration: An authority to construct shall expire two years after the date of issuance, unless the authority to construct has been renewed. Upon receipt of a written request and any required fees prior to the expiration of the authority to construct, the APCO shall renew the authority to construct in writing if the APCO determines that the renewal complies with this section and that the holder of the authority to construct is not violating any provision or condition of the authority. If the APCO does not act on such a request prior to expiration of the authority to construct, the authority shall remain in effect until the APCO has acted to approve or deny the renewal request (up to a maximum of an additional 12 months).

407.1 The following requirements shall apply to renewals:

- 1.1 Except as provided in Sections 2-1-407.2 and 407.3, an authority to construct may be renewed one time for an additional two years.
- 1.2 Except for renewals pursuant to Section 2-1-407.3, renewal is contingent upon meeting the current BACT and offset requirements of Regulation 2-2-301, 302 and 303.
- 1.3 Except as provided in Sections 2-1-407.2 and 407.3, an authority to construct that has been renewed shall expire four years after the date of original issuance.

407.2 If the authority to construct was issued pursuant to an environmental impact report (EIR) that explicitly covered a construction period longer than four years, the authority to construct shall, upon request by the applicant, be renewed for additional two-year terms throughout the construction period covered by the EIR.

407.3 If substantial use of the authority to construct has begun, either during the initial term or during a renewal term, the authority to construct shall, upon request by the applicant, be renewed for additional two-year terms until the permit to operate is issued, or, if a term of less than two years is requested, for such term as is requested.

(Amended 7/17/91; Amended 10/7/98; 6/1/05)

2-1-408 Action on Applications: Except for applications subject to Section 2-1-412, the publication and public notice requirements of Section 2-2-404 or Section 2-10-402, or to the provisions of Rule 6 of this Regulation, the APCO shall notify the applicant in writing of approval, approval with conditions, or denial of the application within 35 working days of receipt of a completed application, unless the time is extended with the written consent of the applicant.

408.1 Notwithstanding this 35-working-day limit, the APCO shall not take final action for any project for which an Environmental Impact Report or a Negative Declaration has been prepared until a Final EIR for that project has been

certified or a Negative Declaration for that project has been approved, and the APCO has considered the information in that Final EIR or Negative Declaration. For cases in which the 35 working-day time period has elapsed, the APCO shall take final action on the application within 30 days after the certification of the Final EIR or approval of the Negative Declaration, or after final resolution of any appeals from such certification or approval. This subsection shall not apply to any project that is exempt from the District's CEQA requirements pursuant to Section 2-1-311 or 2-1-312. Any substantive change to an application which occurs after the evaluation period has begun shall allow the APCO to start a new completeness review period, and to reset the 35 working-day limit after the application has been deemed complete.

(Amended 11/1/89; 7/17/91; 11/20/91; 11/3/93; 6/7/95; 10/7/98; 12/21/04; 7/19/06)

2-1-409 Regulations in Force Govern: The decision as to whether an authority to construct shall be granted or denied shall be based on federal, state and District BACT, offset, TBACT, and project risk regulations or standards in force on the date the application is declared by the APCO to be complete.

(Amended June 15, 2005)

2-1-410 Appeal: The following actions of the APCO may be appealed:

410.1 In accordance with Section 42302 of the Health and Safety Code an applicant for an authority to construct which has been denied may request, within 30 days after receipt of the written notice to deny, the Hearing Board of the District to hold a hearing on whether or not the authority to construct was properly denied.

410.2 In accordance with Section 42302.1 of the Health and Safety Code, within 30 days of any decision of the APCO, pertaining to the issuance of an authority to construct, any aggrieved person who, in person or through a representative, appeared, submitted written testimony, or otherwise participated in the action before the District may request the Hearing Board of the District to hold a public hearing to determine whether the authority to construct was properly issued or for an order modifying or reversing that decision. Such appeals shall be filed in writing and contain a summary of the issues to be raised. The Hearing Board shall consider the appeal at a public hearing within 30 days of the filing of the appeal. The Hearing Board may reverse or modify the decision of the APCO if it determines that the decision was erroneous.

410.3 In accordance with Section 40724.6(g) of the Health and Safety Code, a permit holder of a large confined animal facility may appeal any District determination or decision made under Regulation 2, Rule 10, in accordance with Section 2-1-410.2.

(Amended 7/17/91; 11/20/91; 5/17/00; 7/19/06)

2-1-411 Permit to Operate, Final Action: The APCO shall take final action to approve, approve with conditions, or disapprove a permit to operate a source subject to this rule within 90 days after the initial date of the start-up period of the new or modified source, unless such time period is extended with the written concurrence of the APCO and the applicant. An authority to construct authorizes operation of the source during the start-up period. All conditions, specific or implied, of the authority to construct are in effect during the entire start-up period.

411.1 Notwithstanding the above, final action taken on permits issued pursuant to Rule 6 of this Regulation shall be in accordance with the provisions of Section 2-6-410.

- 411.2 A permit approved under this section must be signed by the permit holder or by a person authorized to sign on behalf of the permit holder.

(Adopted 10/19/83; Amended 7/17/91; 11/3/93; 10/7/98; 12/21/04)

2-1-412 Public Notice, Schools: Prior to approving an application for an authority to construct or permit to operate for a new or modified source located within 1000 feet of the outer boundary of a K-12 schoolsite and which results in the increase in emissions of any substance into the ambient air which has been identified by the California Air Resources Board or the APCO as a toxic air contaminant or a hazardous air contaminant or which is on the list required to be prepared pursuant to subdivision (a) of Section 25532 or Section 44321 subsections (a) to (f) inclusive of the Health and Safety Code, the APCO shall:

- 412.1 Prepare a public notice in which the proposed new or modified source, and the proposed emissions, are fully described.
- 412.2 Distribute the notice, prepared in accordance with subsection 2-1-412.1 at the expense of the applicant, to the parents or guardians of children enrolled in any school within one-quarter mile of the source and to each address within a radius of 1000 feet of the source. This notice shall be distributed at least 30 days prior to the date final action on the application is to be taken by the APCO. The APCO shall review and consider all comments received during the 30 days after the notice is distributed, and shall include written responses to the comments in the permit application file prior to taking final action on the application.
- 412.3 Failure of any person to receive the notice shall not affect the validity of the authority to construct or permit to operate issued by the APCO, if the APCO or applicant responsible for giving the notice has made a good faith effort to follow the procedures for giving the notice prescribed by law.

(Adopted 11/1/89; Amended 10/7/98; 5/17/00)

2-1-413 Permits for Operation of Equipment at Multiple Locations Within the District: Any person required to obtain an authority to construct and/or permit to operate under Sections 2-1-301 and/or 302 for a source that may be operated at multiple locations within the District can apply for a single multiple-location permit that will allow the source to operate at more than one location in the District. The APCO shall issue the permit, upon payment of standard filing, initial and permit to operate fees as set forth in Regulation 3, if the source satisfies all of the following requirements:

- 413.1 The source will not emit more than 10 tons per year of any regulated air pollutant, including POC, CO, NO_x, PM_{2.5}, PM₁₀, NPOC or SO₂, but excluding greenhouse gases. For PM_{2.5} and PM₁₀, fugitive particulate emissions from haul road traffic shall not be counted toward the annual limit.
- 413.2 The source will comply with all applicable provisions of Regulation 2, Rule 5.
- 413.3 The source will not be operated within 1000 feet of the outer boundary of any K-12 school site, unless the applicable notice requirements of Health and Safety Code Section 42301.6 have been met.
- 413.4 Operation of the source will not cause a public nuisance per Regulation 1-301.
- 413.5 The operation must be exempt from CEQA, or must be covered by a chapter in the District's Permit Handbook.
- 413.6 The equipment will not cause a Synthetic Minor Facility to exceed a federally enforceable emission limit.

413.7 The source will not remain at the same facility for more than 12 consecutive months following initial operation (or, in the case a source that is used in seasonal operations that last less than 12 months, for more than the full length of a normal operating season). If multiple temporary sources are used in succession at the facility to serve the same function at the same facility source, the total time period that all such temporary sources remain at the facility is counted towards the 12-month (or operating season) limit.

If the source no longer satisfies any of these requirements, it shall be subject to the requirements of Regulation 2, Rules 1, 2, and 5, as if it were a new source.

(Adopted June 7, 1995; Amended 12/06/17)

2-1-414 Loss of Exemption, Public Nuisance: Any source subject to Section 2-1-317 shall be subject to permit conditions deemed necessary by the District to minimize the potential for future violations. If the owner/operator can demonstrate that the source has neither received a public nuisance violation nor received a confirmed complaint for a two year period after the permit was issued, then the owner/operator may submit a written petition to the APCO to remove the permit requirement. Such a petition is subject to APCO approval.

(Adopted June 7, 1995)

2-1-415 Source Pre-Certification Procedure: Any person may submit a written request to pre-certify a source as complying with applicable BACT requirements, for the purposes of qualifying the source for the Accelerated Permitting Program under Section 2-1-302.2.1.1. Such a request will be evaluated within 60 days of receipt of the information listed below. The APCO may also independently pre-certify a source. The APCO shall maintain a list of pre-certified equipment, and shall make this list available to industry through the Public Information & Education Division. A pre-certification request shall include all of the following:

415.1 A complete description of the source, including make, model number, rated capacity and emission calculations at maximum operating rate;

415.2 Applicable BACT requirements;

415.3 Proposed permit conditions governing operation of the source; and

415.4 Applicable fees, as described in Regulation 3, Section 323.

(Adopted June 7, 1995)

2-1-416 Temporary Amnesty for Unpermitted Sources: The APCO has the authority to declare an amnesty period, during which the District may waive all or part of the penalty fees, including late fees and retroactive permit fees, for sources that are currently operating without valid Permits to Operate.

(Adopted 6/7/95; 12/21/04)

2-1-420 Suspension: The APCO may suspend a permit if, within a reasonable time, the holder of the permit willfully fails or refuses to furnish requested information, analyses, plans or specifications relating to emissions from the source for which the permit was issued. The APCO shall serve notice in writing of a suspension, and the reasons therefor, on the holder of the permit. A suspension shall become effective 5 days after notice has been served.

2-1-421 Appeal from Suspension: Within 10 days after the receipt of the notice of suspension, the permit holder may request the Hearing Board to hold a hearing to determine whether or not the permit was properly suspended.

2-1-422 Revocation: The APCO may request the Hearing Board to hold a hearing to determine whether an authority to construct and/or permit to operate should be revoked if it is found that the holder of an authority to construct or permit to operate is

violating any applicable order, rule or regulation of the District, or is violating any provision or condition of the authority to construct or permit to operate.

(Amended May 17, 2000)

2-1-423 Hearings: Within 30 days after receipt of requests submitted pursuant to Sections 2-1-421 and 422, the Hearing Board shall hold a hearing as provided by Section 42308 of the California Health and Safety Code and may take action as authorized by Section 42309 of the California Health and Safety Code.

(Amended July 17, 1991)

2-1-424 Loss of Exemption or Exclusion: Any person who operates a source that does not require a District permit because of a regulatory exemption or exclusion, but which becomes subject to a District permit requirement because it loses its exemption or exclusion as a result of changes in federal, California or District laws or regulations, shall submit a complete permit application, as defined Section 2-1-202, for the subject source within 90 days of written notification by the APCO of the need for a permit. A person who holds a valid permit to operate for the subject source need not reapply.

(Adopted 4/16/86; Amended 6/7/95; 10/7/98; 7/19/06; 12/06/17)

2-1-425 Sources of Toxic Air Contaminants: Any person who does not hold a valid permit to operate in accordance with Section 2-1-401 and emits, in quantities determined to be appropriate by the APCO, any toxic air contaminant, shall within 90 days of written notice by the APCO of the need for a permit to operate, complete a permit application for the subject source, in accordance with the applicable requirements of Section 2-1-202 or Section 2-1-302.2.

(Amended June 7, 1995)

2-1-426 CEQA-Related Information Requirements: Unless a project for which an authority to construct is sought is exempt from the District's CEQA requirements pursuant to Section 2-1-311 or 2-1-312 of this Rule, applicants for authorities to construct shall provide, as part of a complete application, the following CEQA-related information:

- 426.1 A preliminary environmental study which shall describe the proposed project and discuss any potential significant adverse environmental impacts, alternatives to the project, and any necessary mitigation measures to minimize adverse impacts. The preliminary environmental study shall include all activities involved in the project and shall not be limited to those activities affecting air quality. In preparing the preliminary environmental study, the applicant may utilize the Environmental Information Form in Appendix H of the State CEQA Guidelines or an equivalent format specified by the APCO. (see also Appendix G, Significant Effects.) The preliminary environmental study shall list all other local, state and federal governmental agencies that require permits for the project and indicate any environmental documentation required by such agencies; or
- 426.2 When an agency other than the District is to be the Lead Agency under CEQA, either:
 - 2.1 A Draft or Final Environmental Impact Report prepared by or under the supervision of the Lead Agency; or
 - 2.2 A contract for the preparation of a Draft Environmental Impact Report executed by the Lead Agency together with the Initial Study prepared by the Lead Agency; or
 - 2.3 A Negative Declaration prepared by the Lead Agency; or
 - 2.4 A Notice of Preparation of a Draft EIR prepared by the Lead Agency;
 - 2.5 A copy of the Initial Study prepared by the Lead Agency, or

- 2.6 A commitment in writing from another agency indicating that it has assumed the role of Lead Agency for the project in question.

(Adopted 11/20/91; Amended 10/7/98)

2-1-427 Procedure for Ministerial Evaluations: The District shall review each permit application prior to finding that it is complete in order to determine whether its evaluation of the permit application is covered by the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook. If the District determines that its evaluation of the permit application is covered by specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook, the District's evaluation of that permit application will be classified as ministerial and the engineering evaluation of the permit application by the District will be limited to the use of said specific procedures, fixed standards and objective measurements. For such projects, the District will merely apply the law to the facts as presented in the permit application, and the District's decision regarding whether to issue the permit will be based only on the criteria set forth in Section 2-1-428 and in the District's Permit Handbook and BACT/TBACT Workbook.

(Adopted 11/20/91; Amended 10/7/98)

2-1-428 Criteria for Approval of Ministerial Permit Applications: If the District classifies a permit application as ministerial pursuant to Section 2-1-427, and as a result of its evaluation of that permit application, the District determines that all of the following criteria are met, the issuance by the District of an Authority to Construct for the proposed new or modified source will be a mandatory ministerial duty.

- 428.1 The proposed new or modified source will comply with all applicable provisions of the District's Rules and Regulations and with all applicable provisions of state and federal law and regulations which the District has the duty to enforce;
- 428.2 The emissions from the proposed project can be calculated using standardized emission factors from published governmental sources, District source test results, established formulas from published engineering and scientific handbooks, material safety data sheets or other similar published literature, manufacturer's warranties or other fixed standards as set forth in the District's Permit Handbook and BACT/TBACT Workbook;
- 428.3 Where Best Available Control Technology is required, BACT for the proposed new or modified source can be determined based on the latest edition of the ARB's BACT/LAER Clearinghouse, on the District's own compilations of BACT levels for specific types of sources as set forth in the District's Permit Handbook and BACT/TBACT Workbook or on a more stringent BACT level proposed by the project proponent; and
- 428.4 If the proposed new or modified source involves the shutdown of an existing source, the Reasonably Available Control Technology applicable to the source to be shut down can be determined from existing provisions of the District's Rules and Regulations or from the District's own compilations of BACT levels for specific types of sources as set forth in District's Permit Handbook and BACT/TBACT Workbook.
- 428.5 For proposed new and modified sources that are subject to Regulation 2, Rule 5, the project meets the project risk requirement of Regulation 2-5-302.
- 428-6 Where Best Available Control Technology for Toxics (TBACT) is required pursuant to Regulation 2-5-301, TBACT for the proposed new or modified source can be determined based on TBACT determinations in the District's

BACT/TBACT Workbook, an EPA MACT standard, a CARB ATCM, or a more stringent TBACT level proposed by the applicant that is applicable to the specific source type or source category being evaluated.

In addition, when the District has issued an authority to construct for a proposed new or modified source as a ministerial project, the issuance of the permit to operate for that source will also be a mandatory ministerial duty if the source will meet all the conditions imposed in connection with the issuance of the authority to construct and all applicable laws, rules and regulations enforced by the District.

(Adopted 11/20/91; Amended 10/7/98; 6/15/05)

2-1-429 Federal Emissions Statement: The owner or operator of any facility that emits or may emit oxides of nitrogen or volatile organic compounds shall provide the APCO with a written statement, in such form as the APCO prescribes, showing actual emissions of oxides of nitrogen and volatile organic compounds from that facility. At a minimum the emission statement shall contain all of the information contained in the Air Resources Board's Emission Inventory Turn Around Document as described in Instructions for the Emission Data System Review and Update Report. The statement shall also contain a certification by a responsible official of the company or facility that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. Effective November 1, 1994, the statement shall be submitted to the District each year with the annual permit renewal. The APCO may waive this requirement for any class or category of facilities that emit less than 25 tons per year of oxides of nitrogen and volatile organic compounds, each taken separately, if the District provides the Air Resources Board with emission inventories of facilities emitting greater than 10 tons per year of either oxides of nitrogen or volatile organic compounds based on the use of emission factors acceptable to the Air Resources Board and the U.S. Environmental Protection Agency (EPA). A current list of classes and categories of facilities for which this requirement has been waived by the APCO will be kept by the District and made available upon request. Also, for purposes of reporting emission data to the Air Resources Board and to the EPA, the District will provide calendar year and peak ambient ozone season data determined through weighted averaging of current and prior year (if available) company/facility reported certified information. This Section is required by the provisions of Section 182(a)(3)(B) of the Clean Air Act.

(Adopted 11/4/92; Amended 6/15/94; 6/7/95; 12/21/04)

2-1-430 Maintenance of the Permit Handbook and BACT/TBACT Workbook: The APCO shall publish and maintain the Permit Handbook and BACT/TBACT Workbook as needed to reflect the current procedure for review and issuance of permits, and the most recent determination of BACT/TBACT for a given source category.

(Adopted October 7, 1998)

2-1-431 Date of Completion: The APCO shall deem an application to be complete on the date that the information and fees required to complete the application were received by the District.

(Adopted May 17, 2000)

2-1-432 Determination of Complete Application: Except for an application which is subject to the publication and public comment requirements of Section 2-2-404, the APCO shall determine whether an application for an authority to construct is complete not later than 15 working days following receipt of the application, or after a longer time period agreed upon by both the applicant and the APCO. If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying the information that is required. Upon receipt of any resubmittal

of the application a new 15 working day period to determine completeness shall begin. For an application which is subject to the publication and public comment requirements of Section 2-2-404 or Section 2-10-402, the completeness review period(s) shall be 30 days. The application shall be deemed complete on the date of receipt of all information required for completeness. Upon determination that the application is complete, the APCO shall notify the applicant in writing. If applicable, such written notification shall include the District's determination that its evaluation of the application will be covered by the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and that the District's evaluation of that permit application will be classified as ministerial and will accordingly be exempt from CEQA review. Thereafter only information regarding offsets, or information to clarify, correct or otherwise supplement the information submitted in the application may be requested.

(Adopted 12/ 21/04; Amended 6/19/06)

2-1-500 MONITORING AND RECORDS

2-1-501 Monitors: Continuous emission monitors required pursuant to Section 2-1-403 shall comply with the provisions of Volume V of the Manual of Procedures.

(Adopted March 17, 1982)

2-1-502 Burden of Proof: Any person asserting that a source is exempt from the requirements of Regulation 2, Rule 1, Section 301 and/or 302, shall, upon the request of the APCO, provide substantial credible evidence proving to the APCO that the source meets all requirements necessary to qualify for the exemption.

(Adopted May 17, 2000)

2-1-600 MANUAL OF PROCEDURES

2-1-601 Engineering Permitting Procedures: The specific procedures for the engineering evaluation of particular types of sources as well as specific fixed standards and objective measurements upon which the District will rely in its evaluation of ministerial permit applications are set forth in the District's Permit Handbook and BACT/TBACT Workbook.

(Adopted 7/17/91; Amended 10/7/98)

2-1-602 CEQA Guidelines: The District's Guidelines for Environmental Processes under CEQA for those cases in which the District assumes the role of Lead Agency are set forth in Volume VII to the District's Manual of Procedures and in the Permit Handbook.

(Adopted 11/20/91; Amended 6/7/95)

2-1-603 Particulate Matter Measurements: PM_{2.5} and PM₁₀ shall be measured as prescribed in EPA Methods 201A and 202 (for measurements of emissions from specific sources) and in 40 C.F.R. Parts 50, 53 and 58 (for measurements of ambient concentrations). If such test methods cannot be used because the physical characteristics of the emissions being measured render such methods inappropriate (e.g., because of the emissions' high moisture content or high temperature), then another appropriate test method may be used upon prior written approval of the APCO and EPA.

(Adopted December 19, 2012)

2-1-604 Determining Compliance With Historical PM₁₀ and PM_{2.5} Emission Limits: For purposes of determining a source's compliance with any PM₁₀ or PM_{2.5} emission limit established as a permit condition pursuant to Regulation 2 prior to August 31, 2016,

the condensable portion of the source's PM₁₀ or PM_{2.5} emissions shall not be included, unless there is an affirmative indication that such condensable portion was intended to be included at the time the permit condition was adopted.

(Adopted December 19, 2012)

2-1-605 Finality of Historical PM₁₀ and PM_{2.5} Regulatory Determinations: Regulatory determinations regarding the applicability of or compliance with any of the requirements of Regulation 2 made before August 31, 2016, shall be final and shall not be invalid because they did not take into account the condensable portion of a source's PM_{2.5} or PM₁₀ emissions. Such historical determinations include (but are not limited to) prior determinations whether BACT and offsets requirements apply, prior determinations of the amount of a facility's cumulative increase, and prior determinations whether Title V permit requirements applied to a facility's operation. All such determinations made on or after August 31, 2016, shall include the condensable portion per the requirements of Sections 2-1-229 and 2-1-241, including (but not limited to) determinations regarding whether an existing facility's ongoing operations are subject to any applicable operating requirements such as Title V Major Facility Review requirements.

(Adopted December 19, 2012)

Regulation 2, Rule 1
Permit / Exemption Flow Chart

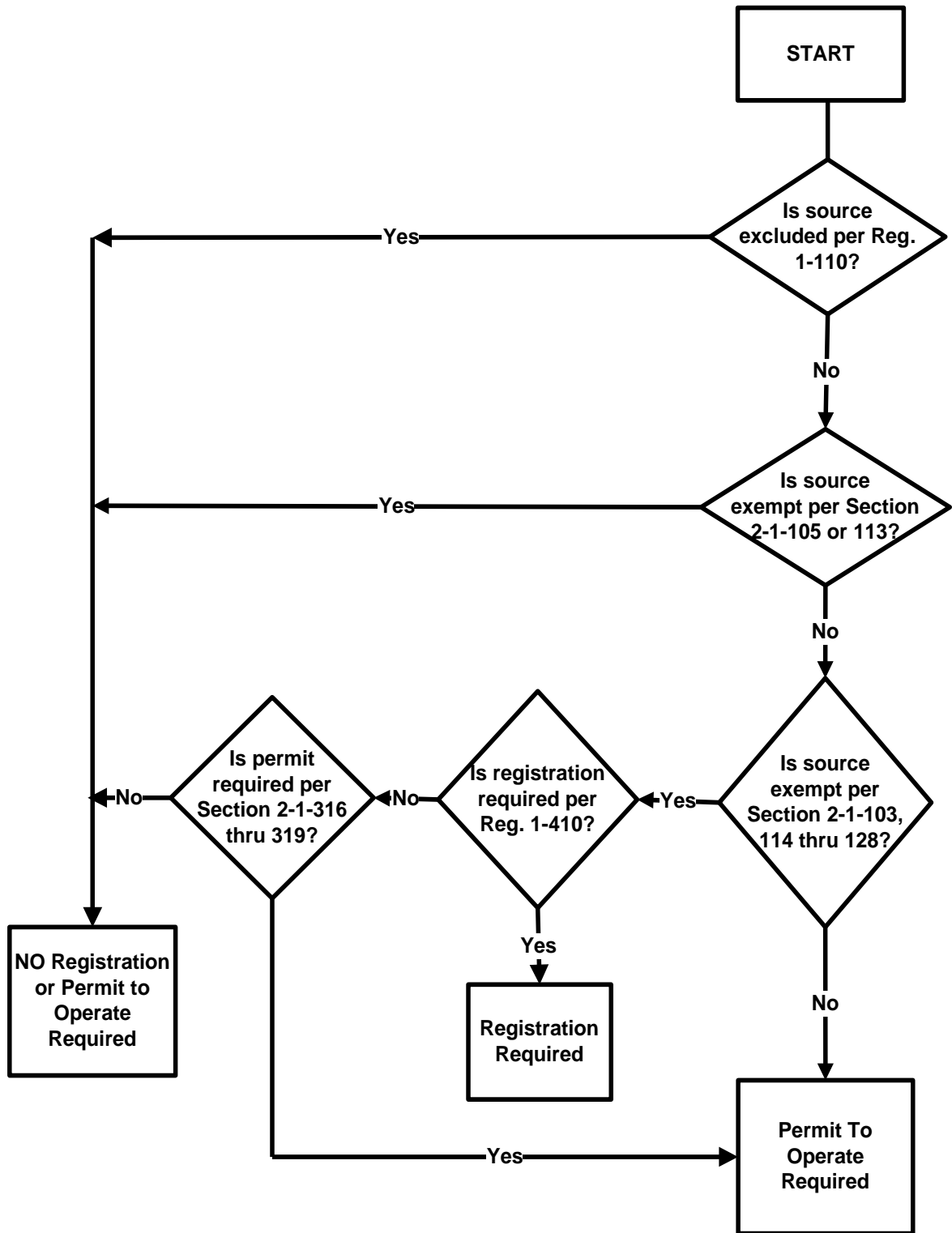


Figure 2-1-101

**REGULATION 2
PERMITS
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NEW SOURCE REVIEW**

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REGULATION 2
PERMITS
RULE 2
NEW SOURCE REVIEW

(Adopted December 19, 2012)

2-2-100 GENERAL

2-2-101 Description: This Rule applies to all new and modified sources that are subject to the requirements of Section 2-1-301 and/or 2-1-302. The purpose of this Rule is to implement the New Source Review provisions of the federal and California Clean Air Acts (including the federal non-attainment New Source Review, Prevention of Significant Deterioration, and Minor New Source Review provisions) and the no-net-increase requirements of the California Health and Safety Code, among other requirements.

2-2-102 Exemption, Emissions From Operation of Abatement Devices And Techniques: The BACT requirements of Section 2-2-301 shall not apply to emissions of secondary pollutants that are the direct result of the use of an abatement device or emission reduction technique implemented to comply with the BACT or BARCT requirements for control of another pollutant. However, the APCO shall require the use of Reasonably Available Control Technology (RACT) for control of emissions of such pollutants.

2-2-103 Incorporation by Reference of Federal PSD Provisions: Where federal PSD provisions in 40 C.F.R. Section 52.21 are incorporated by reference in this Rule, all associated procedures, definitions, and other regulatory provisions in the Code of Federal Regulations applicable for implementing such provisions are also incorporated by reference and shall be followed and applied by the APCO in implementing such provisions, including but not limited to all of the implementing definitions set forth in 40 C.F.R. Section 52.21(b), which include the definitions in Sections 52.21(b)(13) (baseline concentration), 52.21(b)(14) (major source baseline date), 52.21(b)(15) (baseline area), 52.21(b)(18) (secondary emissions), and 52.21(b)(50) (subject to regulation). Where such regulatory provisions are incorporated by reference, the incorporation is to the version of that regulatory provision in effect upon December 19, 2012.

2-2-200 DEFINITIONS

2-2-201 Deleted December 6, 2017

2-2-202 Best Available Control Technology (BACT): An emission limitation, control device, or control technique applied at a source that is the most stringent of:

202.1 The most effective emission control device or technique that has been successfully utilized for the type of equipment comprising such a source; or

202.2 The most stringent emission limitation achieved by an emission control device or technique for the type of equipment comprising such a source; or

202.3 The most effective control device or technique or most stringent emission limitation that the APCO has determined to be technologically feasible for a

source, taking into consideration cost-effectiveness, any ancillary health and environmental impacts, and energy requirements; or

202.4 The most effective emission control limitation for the type of equipment comprising such a source that is contained in an approved implementation plan of any state, unless the applicant demonstrates to the satisfaction of the APCO that such limitation is not achievable.

Under no circumstances shall BACT be less stringent than any emission control required by any applicable provision of federal, state or District laws, rules or regulations.

2-2-203 Best Available Retrofit Control Technology (BARCT): An emission limitation that has been adopted or proposed to be adopted as part of the current Clean Air Plan approved by the District pursuant to the California Clean Air Act of 1988 as implementing the maximum degree of emissions reduction achievable by a class or category of source, taking into account environmental, energy and economic impacts.

2-2-204 California Coastal Waters: The area bounded by (i) the coast of the State of California and (ii) the line established by starting at the point on the California coast at the California-Oregon border, and proceeding:

- thence to 40.0°N, 125.5°W;
- thence to 39.0°N, 125.5°W;
- thence to 38.0°N, 124.0°W;
- thence to 37.0°N, 123.5°W;
- thence to 36.0°N, 122.5°W;
- thence to 35.0°N, 121.5°W;
- thence to 34.0°N, 120.5°W;
- thence to 33.0°N, 119.5°W;
- thence to 32.5°N, 118.5°W;

and thence to an ending point on the California coast at the California-Mexico border.

2-2-205 Class I Area: Point Reyes National Seashore and any other area designated as a Class I Area under Part C of the Clean Air Act. All other areas in the District are Class II Areas.

2-2-206 Contemporaneous: Occurring (i) within a five year period of time immediately prior to the date of a complete application for an authority to construct or permit to operate for a source; or (ii) on or after the date of a complete application for an authority to construct or permit to operate but prior to initial operation of the source (or for a source that is a replacement unit, as defined in 40 C.F.R. Section 51.165(a)(1)(xxi), that will replace an existing source in whole or in part, with respect to emission reduction credits being generated by the shutdown of the existing source being replaced, 90 days after initial operation of the replacement unit).

2-2-207 Creditable: For purposes of determining the net emissions increase associated with a new or modified source (or group of sources) under Section 2-2-220, an emission increase or decrease is creditable if it has not been relied on by a permitting agency in issuing a PSD permit, including a federal PSD permit or an authority to construct applying the PSD provisions of Sections 2-2-304 through 2-2-307, which permit is still in effect at the time of initial operation of the source(s).

2-2-208 Cumulative Increase: The increase in the potential to emit a pollutant authorized by an authority to construct or permit to operate measured against prior actual or potential emissions, less any contemporaneous onsite emission reduction credits credited to the authority to construct or permit to operate, calculated in accordance with the procedures set forth in Section 2-2-607.

- 2-2-209 Cumulative Increase Baseline Date:** April 5, 1991, for all pollutants except PM_{2.5}; and August 31, 2016, for PM_{2.5}.
- 2-2-210 District BACT Pollutant:** Precursor organic compounds (POC), non-precursor organic compounds (NPOC), oxides of nitrogen (NO_x), sulfur dioxide (SO₂), PM₁₀, PM_{2.5}, and carbon monoxide (CO).
- 2-2-211 Emission Reduction Credit:** Emission reductions associated with a physical change, change in method of operation, change in throughput or production, or other similar change at a source that are in excess of the reductions required by applicable regulatory requirements, and that are real, permanent, quantifiable, and enforceable, as calculated in accordance with Section 2-2-605.
- 2-2-212 Federal Land Manager:** With respect to any lands in the United States, the Secretary of the department with authority over such lands, or a subordinate acting under the authority of such Secretary.
- 2-2-213** Deleted December 6, 2017
- 2-2-214 Greenhouse Gases (GHGs):** The air pollutant that is defined in 40 C.F.R. Section 86.1818-12(a), which is a single air pollutant made up of a combination of the following six constituents: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHG emissions shall be measured as CO₂ equivalent emissions (CO₂e) according to the methodology set forth in 40 C.F.R. Section 52.21(b)(49)(ii) for determining whether the emissions constitute a PSD pollutant as defined in Section 2-2-223, are a regulated NSR pollutant as defined in 40 C.F.R. Section 52.21(b)(50), or constitute significant emissions as defined in Section 2-2-227.1.
- 2-2-215 Hazardous Air Pollutant (HAP):** Any pollutant that is listed pursuant to Section 112(b) of the federal Clean Air Act.
- 2-2-216 Indian Governing Body:** The governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.
- 2-2-217 Major Facility:** For purposes of the New Source Review requirements of Regulation 2, Rule 2, a major facility is a facility that has the potential to emit 100 tons per year or more of POC, NO_x, SO₂, PM₁₀, PM_{2.5}, and/or CO. Fugitive emissions shall be included in calculating the facility's potential to emit under this Section as provided in Section 2-2-611. A physical change at a facility that does not otherwise qualify as a major facility is a new major facility if the change would constitute a major facility by itself.
- 2-2-218 Major Modification*:** A new source as defined in Section 2-1-232, or a modified source as defined in Section 2-1-234, or any combination of such new and modified sources at a facility that are part of a single common project, that (i) are or will be located at an existing major facility and (ii) will cause an increase in emissions of a pollutant for which the facility is a major facility, calculated according to Section 2-2-604, of the following amounts or more:
- | | |
|---------------------|-------------------|
| POC: | 40 tons per year |
| NO _x : | 40 tons per year |
| SO ₂ : | 40 tons per year |
| PM ₁₀ : | 15 tons per year |
| PM _{2.5} : | 10 tons per year |
| CO: | 100 tons per year |

**Note that the term "Major Modification" is not used in Regulation 2, Rule 2 for purposes of applying the Rule's PSD requirements. The term "PSD Project" is used instead to define new facilities and modifications to existing facilities that are subject to the Rule's PSD requirements. See Section 2-2-224.*

- 2-2-219 Net Air Quality Benefit:** A net improvement of air quality as determined by the APCO resulting from emission reduction credits impacting the same general area affected by the new or modified source and which will be consistent with reasonable further progress towards the attainment of the applicable air quality standard.
- 2-2-220 Net Emissions Increase:** For purposes of applying the PSD provisions and NAAQS Protection requirements of this Rule, a net emissions increase from a new source or modified source (or group of such sources) is the sum of the new emissions from the new source(s) and/or the increase in emissions from the modified source(s), plus any other creditable contemporaneous emissions increases at the facility calculated according to Section 2-2-604, less any other creditable contemporaneous emissions decreases at the facility calculated according to Section 2-2-604.
- 2-2-221 Offsets:** Offsets are any of the following:
- 221.1 banked emission reduction credits approved in accordance with District Regulation 2, Rule 4; or
 - 221.2 banked emission reduction credits from adjacent Districts if the applicant demonstrates that the requirements of Clean Air Act Section 173(c)(1) (42 U.S.C. Section 7503(c)(1)) and Health and Safety Code Section 40709.6 have been met or do not apply;
- that are provided to compensate for cumulative increases in emissions pursuant to Section 2-2-302 or 2-2-303.
- 2-2-222 Pollutant-Specific Basis:** A term used to describe a regulatory requirement governing multiple pollutants. If a regulatory requirement applies on a pollutant-specific basis, the requirement applies only for the individual pollutant(s) for which a source or facility meets the relevant applicability criteria, and does not apply for pollutant(s) for which the source or facility does not meet the relevant applicability criteria.
- 2-2-223 PSD Pollutant:** Any Regulated NSR Pollutant as defined in EPA's PSD Regulations at 40 C.F.R. Section 52.21(b)(50), except pollutants for which the San Francisco Bay Area has been designated as non-attainment of a California or National Ambient Air Quality Standard. If a pollutant is subject to both federal and California ambient air quality standards, the pollutant shall be treated as a PSD Pollutant for (and only for) the ambient air quality standard(s) for which the San Francisco Bay Area has not been designated as non-attainment.
- 2-2-224 PSD Project:** A new source as defined in Section 2-1-232, or a modified source as defined in Section 2-1-234, or a combination of such new or modified sources that are part of a single common project, that meets all of the following criteria:
- 224.1 Major PSD Facility: The source(s) are or will be located at a facility that has the potential to emit 100 tons or more per year of any Regulated NSR Pollutant as defined in 40 C.F.R. Section 52.21(b)(50)* (including fugitive emissions) if it is in one of the 28 categories listed in Section 169(1) of the Clean Air Act, or 250 tons or more per year of any Regulated NSR Pollutant as defined in 40 C.F.R. Section 52.21(b)(50)* (with fugitive emissions included only as specified in Section 2-2-611) if it is not in a listed category; and
 - 224.2 Significant Increase in Emissions of PSD Pollutant: The new emissions from the new source(s) and/or the increase in emissions from the modified

source(s) calculated according to Section 2-2-604 constitute significant emissions of any PSD pollutant as defined in Section 2-2-227.1; and

224.3 **Significant Net Increase in Emissions of PSD Pollutant:** The net emissions increase associated with the new or modified source(s), as defined in Section 2-2-220, constitute significant emissions of any PSD pollutant as defined in Section 2-2-227.1.

Any physical change or change in method of operation that takes place at a facility that does not meet the Major PSD Facility criteria specified in subsection 224.1, but which change would constitute a Major PSD Facility under the criteria in subsection 224.1 by itself, is a PSD Project.

**Note that GHG emissions are not included for purposes of applying the 100/250 ton-per-year major PSD facility threshold in Section 2-2-224.1. GHGs are not a Regulated NSR Pollutant under 40 C.F.R. § 52.21(b)(50) unless they are emitted from a facility that exceeds the 100/250 ton-per-year major PSD threshold for some other pollutant besides GHGs.*

2-2-225 Reasonably Available Control Technology (RACT): For sources that are to continue operating, RACT is the lowest emission limit that can be achieved by the specific source by the application of control technology taking into account technological feasibility and cost-effectiveness, and the specific design features or extent of necessary modifications to the source. For sources which are or will be shut-down, RACT is the lowest emission limit that can be achieved by the application of control technology to similar, but not necessarily identical categories of sources, taking into account technological feasibility and cost-effectiveness of the application of the control technology to the category of sources only and not to the shut-down source.

2-2-226 Related Sources: Two or more sources where the operation of one is dependent upon, supports or affects the operation of the other(s).

2-2-227 Significant: The term “significant” has the following meanings when used in the following contexts:

227.1 For determining whether an increase in emissions of a PSD pollutant is “significant” for purposes of the PSD provisions of this Rule, the increase is significant:

- 1.1 if it exceeds the values specified in the following table, or for a PSD pollutant that is not listed in the following table, if it is greater than zero; or
- 1.2 if it is from a source that is or would be located within 10 kilometers of a Class I area, and it would have an impact in such Class I area equal to or greater than 1 µg/m³ (24-hour average).

227.2 For determining whether an increase in emissions is “significant” for purposes of the NAAQS Protection Requirement in Section 2-2-308 and the public notice requirement in Section 2-2-404, the increase is significant if it exceeds the values specified in the following table.

Pollutant	Significant Emissions Rate	
	kg/yr	(ton/yr)
Carbon monoxide	90,500	(100)
Nitrogen oxides	36,200	(40)
Sulfur dioxide	36,200	(40)
Total particulate matter	22,680	(25)

PM ₁₀	13,575	(15)
PM _{2.5} *	9050	(10)
VOC*	36,200	(40)
GHGs**	67,875,000**	(75,000**)
Lead	530	(0.6)
Fluorides	2720	(3)
Sulfuric Acid Mist	6350	(7)
Hydrogen Sulfide	9050	(10)
Total Reduced Sulfur	9050	(10)
Reduced Sulfur Compounds	9050	(10)
Municipal waste combustor organics	3.2 x 10 ⁻³	(3.5 x 10 ⁻⁶)
Municipal waste combustor metals	13,575	(15)
Municipal waste combustor acid gases	36,200	(40)
Municipal solid waste landfill emissions	45,250	(50)

**Pollutants for which the Bay Area is designated as non-attainment of a NAAQS are not subject to the PSD requirements in Sections 2-2-304 through 2-2-307 by operation of 40 C.F.R. Section 52.21(i)(2). PM_{2.5} and VOC (as an ozone precursor) are therefore not subject to these PSD requirements as long as the Bay Area remains non-attainment for any PM_{2.5} or ozone NAAQS, respectively.*

***Per Section 2-2-214, emissions of GHGs are measured as CO₂e for purposes of determining whether an emissions increase exceeds this significance threshold. Per Section 2-2-223 and 40 C.F.R. Sections 52.21(b)(50)(iv) and 52.21(b)(49)(iv), increases in GHG emissions of less than 75,000 tons per year CO₂e are excluded from the definition of PSD pollutant and are not subject to the PSD requirements of Regulation 2, Rule 2.*

2-2-228 Federal Major NSR Source: A new major stationary source as defined in 40 C.F.R. section 51.165(a)(1)(iv), or a major modification as defined in 40 C.F.R. section 51.165(a)(1)(v).

2-2-229 Federal Offsets Baseline Shortfall: For purposes of the offsets equivalence demonstration provisions in Sections 2-2-412 and 2-2-415, the difference between:

229.1 The amount of offsets required for the Authority to Construct and/or Permit to Operate using the District's baseline calculation procedures under District Regulation 2, Rule 2; and

229.2 The amount of offsets that would be required under the federal baseline calculation procedures applicable under 40 C.F.R. section 51.165, including (but not limited to) the actual emissions baseline provision in 40 C.F.R. section 51.165(a)(3)(ii)(J).

A Federal Offsets Baseline Shortfall shall apply only in cases where (i) the amount of offsets required for the Authority to Construct and/or Permit to Operate is calculated using the baseline provision in Section 2-2-606.2 for modified sources for which offsets have previously been provided, and (ii) all of the previously-provided offsets were provided more than five years before the completeness date of the application for the Authority to Construct and/or Permit to Operate.

- 2-2-230 Federal Surplus-at-Time-of-Use Shortfall:** For purposes of the offsets equivalence demonstration provisions in Sections 2-2-412 and 2-2-415, the difference between:
- 230.1 The amount of emission reduction credit provided in banking certificates surrendered in connection with an Authority to Construct and/or Permit to Operate in order to satisfy offsets requirements under Sections 2-2-302 and/or 2-2-303; and
- 230.2 The amount of emission reduction credit that would be associated with the emission reductions for which the banking certificates were issued if the emission reduction credit calculation for each emission reduction under Sections 2-2-605 and 2-2-603 is performed using an adjusted baseline emissions rate pursuant to subsection 2-2-603.6 that is based on the most stringent of any of the following regulations that is in effect at the time the banking certificate is surrendered for use as an offset: (i) any District regulation required for purposes of federal attainment demonstration requirements, (ii) any District regulation, or state regulation applicable to sources within the District, approved into the California State Implementation Plan, or (iii) any federal New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants.

- 2-2-231 Equivalence Credit:** For purposes of making the offsets equivalence demonstration pursuant to Section 2-2-412, emission reductions generated after November 15, 1990, that are any of the following:
- 231.1 Offsets: Emission reductions reflected in banking certificates from the District's emissions bank (or from an adjacent air district's bank pursuant to Section 2-2-221.2 or an earlier version of that provision governing the use of banked credits from an adjacent district) that were provided as offsets in connection with an Authority to Construct and/or Permit to Operate issued for a new source or modification that was not a Federal Major NSR Source.
- 231.2 Onsite Contemporaneous Emission Reduction Credits: Onsite contemporaneous emission reduction credits that were credited pursuant to Section 2-2-607.2 (or an earlier version of that provision governing the use of onsite contemporaneous emission reduction credits) in calculating the amount of offsets required in connection with an Authority to Construct and/or Permit to Operate issued for a new source or modification that was not a Federal Major NSR Source, provided that the emission reductions have not been used to net out of major NSR applicability under Section 2-1-234.2.1.
- 231.3 Orphan PM_{2.5} Emission Reductions: For PM_{2.5}, emission reductions that (i) occurred more than 5 years before the date of the equivalence demonstration, (ii) satisfy the requirements to be real, permanent, quantifiable, and enforceable sufficient to constitute Emission Reduction Credits under the definition set forth in Section 2-2-211, and (iii) have not been the subject of a request to bank the reductions in a banking application submitted under Regulation 2, Rule 4, or a request to use the reductions as a contemporaneous onsite emission reduction credits in connection with a New Source Review permit application under Regulation 2, Rule 2.
- An emission reduction can qualify as an Equivalence Credit only if sufficient records exist to verify that the reduction meets the definition of an Equivalence Credit.

2-2-300 STANDARDS

2-2-301 Best Available Control Technology Requirement: An authority to construct and/or permit to operate for a new or modified source shall require BACT to control emissions of District BACT pollutants under the following conditions:

301.1 New Source: An authority to construct and/or permit to operate for a new source shall require BACT to control emissions of a District BACT pollutant if the source will have the potential to emit that pollutant in an amount of 10.0 or more pounds on any day as defined in Regulation 2-1-217;

301.2 Modified Source: An authority to construct and/or permit to operate for a modified source shall require BACT to control emissions of each District BACT pollutant for which the source is “modified” as defined in Section 2-1-234 for which:

2.1 the source, after the modification, will have the potential to emit that pollutant in an amount of 10.0 or more pounds on any day as defined in Regulation 2-1-217; and

2.2 the modification will result in an increase in emissions of that pollutant above baseline levels calculated pursuant to Section 2-2-604.

The BACT requirements in this Section shall apply on a pollutant-specific basis.

2-2-302 Offset Requirements, Precursor Organic Compounds and Nitrogen Oxides: Before the APCO may issue an authority to construct or permit to operate for a new or modified source at any facility that will have the potential to emit more than 10 tons per year of NO_x or POC after the new or modified source is constructed (including emissions from cargo carriers per Section 2-2-610), offsets must be provided according to the following requirements:

302.1 If the facility will have the potential to emit more than 10 tons per year but less than 35 tons per year of NO_x or POC after the new or modified source is constructed, offsets must be provided at a 1:1 ratio for any un-offset cumulative increase in emissions at the facility and any related sources since the baseline date determined in accordance with Section 2-2-608.

1.1 The APCO shall provide any required offsets from the Small Facility Banking Account in the District’s Emissions Bank in accordance with Section 2-4-414, unless the Small Facility Banking Account is exhausted or the applicant (or any entity controlling, controlled by, or under common control with the applicant) owns or controls offsets.

1.2 If the Small Facility Banking Account is exhausted, or if the applicant owns or controls offsets, the applicant shall provide any required offsets.

1.3 A permit limit for which offsets have been provided from the Small Facility Banking account may not be higher than the source’s maximum physical/design capacity to emit air pollutants, and may not be higher than is reasonably necessary to satisfy the applicant’s operational requirements (including sufficient flexibility to allow for future changes in operational requirements).

302.2 If the facility will have the potential to emit 35 tons per year or more of NO_x or POC after the new or modified source is constructed, the applicant shall:

2.1 Reimburse the Small Facility Banking Account for any cumulative increase for which offsets were previously provided from the Small Facility Banking Account; and

2.2 Provide federally-enforceable offsets at a 1.15:1 ratio for any un-offset cumulative increase in emissions at the facility and any related sources since the baseline date determined in accordance with Section 2-2-608.

302.3 An applicant may reimburse the Small Facility Banking Account under subsection 302.2.1 by reducing the cumulative increase associated with the permitting action(s) for which the District provided the Small Facility Banking Account credits. To do so, the applicant must request a lower emissions limit in a permit for which the Small Facility Banking Account credits were provided. Upon approval by the APCO, the amount by which the applicant must reimburse the Small Facility Banking Account shall be reduced by the difference between the old permit limit and the new permit limit.

302.4 The offset requirements in this Section shall be applied on a pollutant-specific basis.

2-2-303 Offset Requirements, PM_{2.5}, PM₁₀ and Sulfur Dioxide: Before the APCO may issue an authority to construct or permit to operate for a new or modified source at a facility that will have the potential to emit 100 tons per year or more of PM_{2.5}, PM₁₀ or sulfur dioxide after the new or modified source is constructed (including emissions from cargo carriers per Section 2-2-610), the applicant shall provide offsets according to the following requirements:

303.1 If the un-offset cumulative increase in emissions of PM_{2.5}, PM₁₀ or sulfur dioxide at the facility and any related sources since the baseline date determined in accordance with Section 2-2-608 exceeds 1 ton per year, the applicant shall provide offsets at a 1:1 ratio for the un-offset cumulative increase since the baseline date.

303.2 NO_x and/or sulfur dioxide offsets may be provided in place of PM₁₀ offsets required under subsection 303.1 at offset ratios determined by the APCO to result in a net air quality benefit. Any approval of the use of NO_x and/or sulfur dioxide offsets under this subsection shall be based on an analysis specific to the individual facility for which the determination is made, which shall include adequate modeling; and any such approval shall be granted only after public notice and an opportunity for public comment and with EPA concurrence.

303.3 Any NO_x and/or sulfur dioxide offsets provided in place of PM₁₀ offsets must be provided in addition to any NO_x and/or sulfur dioxide offsets required independently as a result of the source's NO_x and/or sulfur dioxide emissions.

303.4 The offset requirements in this Section shall be applied on a pollutant-specific basis.

2-2-304 PSD BACT Requirement: An authority to construct for a PSD Project shall require federal PSD Best Available Control Technology as defined in Section 169(3) of the federal Clean Air Act ("federal PSD BACT") for each PSD pollutant for which the net increase in emissions from the PSD Project will be significant as defined in Section 2-2-227.1. If federal PSD BACT is required for a pollutant under this Section, the authority to construct shall require federal PSD BACT for each new or modified source for which there will be an increase in emissions of that pollutant by any amount, calculated in accordance with Section 2-2-604. The APCO shall impose federal PSD BACT in an authority to construct subject to this Section according to and in satisfaction of all of the requirements applicable to federal PSD BACT under

40 C.F.R. Section 52.21(j), including any applicable exemptions from that Section's requirements under 40 C.F.R. Section 52.21(i).

2-2-305

PSD Source Impact Analysis Requirement: The APCO shall not issue an authority to construct for a PSD Project unless the APCO determines, for each PSD pollutant for which the net increase in emissions from the PSD Project will be significant as defined in Section 2-2-227.1, that the net increase in emissions from the PSD Project will not cause or contribute to a violation of (i) any applicable ambient air quality standard for such pollutant or (ii) any applicable PSD increment for such pollutant, as set forth in 40 C.F.R. Section 52.21(c). The APCO shall make such determination in accordance with the following procedures:

- 305.1 Pre-application Air Quality Analysis: The applicant shall prepare and submit an analysis of ambient air quality in the area that the PSD Project would affect for each PSD pollutant for which the net increase in emissions allowed by the authority to construct will be significant. The applicant's analysis shall be prepared according to and shall satisfy all of the requirements applicable to air quality analyses for federal PSD permitting under 40 C.F.R. Section 52.21(m)(1), including any applicable exemptions from that Section's requirements under 40 C.F.R. Section 52.21(i).
- 305.2 PSD Source Impact Analysis: The applicant shall demonstrate, for each PSD pollutant for which the net increase in emissions allowed by the authority to construct will be significant, that the net increase in emissions of such pollutant will not cause or contribute to a violation of (i) any applicable California or National Ambient Air Quality Standard for such pollutant or (ii) any applicable PSD increment for such pollutant, as set forth in 40 C.F.R. Section 52.21(c). The applicant's analysis and demonstration shall be prepared according to and shall satisfy all of the requirements applicable to PSD source impact analyses for federal PSD permitting under 40 C.F.R. Section 52.21(k), including any applicable exemptions from that Section's requirements under 40 C.F.R. Section 52.21(i).
- 305.3 Air Quality Models: All estimates of ambient concentrations required under this Section shall be based on applicable air quality models, databases, and other requirements specified in Appendix W of Part 51 of Title 40 of the Code of Federal Regulations (Guideline on Air Quality Models). Where an air quality model specified in Appendix W is inappropriate, the model may be modified or another model substituted upon written approval by EPA and written approval by the APCO after public notice and opportunity for public comment under the procedures set forth in Section 2-2-404. Where modeling is conducted solely to evaluate compliance with a California air quality standard, any APCO-approved model may be used.
- 305.4 APCO Determination: The APCO shall determine, based on the applicant's submissions and any other relevant information, whether any net emissions increases of PSD pollutants that the authority to construct will authorize in significant amounts would cause or contribute to a violation of (i) any applicable California or National Ambient Air Quality Standard for such pollutant or (ii) any applicable PSD increment for such pollutant, as set forth in 40 C.F.R. Section 52.21(c), for any PSD pollutant. In making this determination, the APCO shall use the same procedures and be subject to the same requirements as are applicable to the Administrator for issuing federal PSD permitting under 40 C.F.R. Section 52.21(k), including any

applicable exemptions that Section's requirements under 40 C.F.R. Section 52.21(i).

2-2-306 PSD Additional Impacts Analysis Requirements: Before issuing an authority to construct for a PSD Project, the APCO shall conduct the following additional impact analyses:

- 306.1 Visibility, Soils & Vegetation Impact Analysis: The applicant shall prepare and submit an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the PSD Project and any commercial, residential, industrial, and other growth associated with the PSD Project. The applicant's analysis shall be prepared according to and shall satisfy all of the requirements applicable to air quality analyses for federal PSD permitting under 40 C.F.R. Section 52.21(o)(1), including any applicable exemptions that Section's requirements under 40 C.F.R. Section 52.21(i). The analysis need not address impacts on vegetation having no significant commercial or recreational value.
- 306.2 Associated Growth Analysis: The applicant shall prepare and submit an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the PSD Project. The applicant's analysis shall be prepared according to and shall satisfy all of the requirements applicable to air quality analyses for federal PSD permitting under 40 C.F.R. Section 52.21(o)(2), including any applicable exemptions that Section's requirements under 40 C.F.R. Section 52.21(i).
- 306.3 APCO Review: The APCO shall review the applicant's additional impact analyses to ensure that they are complete and accurately reflect the circumstances associated with the PSD Project.

2-2-307 Consideration of Class I Area Impacts: If, within 30 days after receiving notice under Section 2-2-404 of a preliminary decision to issue an authority to construct for (i) a new major facility or a major modification of a major facility for NO_x, VOC, SO₂ or PM_{2.5} or (ii) a PSD Project, the Federal Land Manager with responsibility for administering any Class I Area provides the APCO with a demonstration that emissions from the project would have an adverse impact on the air quality-related values of the Class I Area (including visibility), the APCO shall promptly review and consider such demonstration. If the APCO concurs with such demonstration, or if the APCO concludes based on an independent review of the analysis submitted under Section 401.4 that the project will have such adverse impact, the APCO shall, after consultation with the Federal Land Manager and the applicant, deny the application for an authority to construct. If the APCO finds that such demonstration does not establish to the APCO's satisfaction that the project would have such adverse impact, the APCO shall explain its decision (or give notice of where such explanation can be obtained) in any subsequent notice of a public hearing held under Section 2-2-404.7.

2-2-308 NAAQS Protection Requirement: The APCO shall not issue an authority to construct for a new or modified source that will result in a significant net increase in emissions of any pollutant for which a National Ambient Air Quality Standard has been established unless the APCO determines, based upon a demonstration submitted by the applicant, that such increase will not cause or contribute to an exceedance of any National Ambient Air Quality Standard for that pollutant. Such demonstration shall be made using the procedures for PSD Air Quality Impact Analyses set forth in subsections 2-2-305.1 through 2-2-305.4. Such demonstration shall not be required for ozone. A PSD Air Quality Impact Analysis and determination

for a new or modified source that satisfies the requirements of Section 2-2-305 shall satisfy the requirements of this Section for all pollutants included in such analysis.

2-2-309 Compliance Certification: The APCO shall not issue an authority to construct for a new major facility or a major modification of an existing major facility unless the applicant provides a list, certified under penalty of perjury, of all major facilities within the state of California owned or operated by the applicant or by any entity controlling, controlled by, or under common control with the applicant and demonstrates by certifying under penalty of perjury that they are either in compliance, or on a schedule of compliance, with all applicable state and federal emission limitations and standards. The APCO may request the applicant to provide any technical information used by the applicant to certify compliance.

2-2-310 Denial, Failure to Meet Permit Conditions: The APCO shall deny a permit to operate for a source if, after providing written notification to the applicant and an opportunity to remedy any violation, the source is operating in violation of any condition specified in the authority to construct, or if any other source used to provide emission reduction credits for the source that is owned or operated by the applicant is operating in violation of any permit condition limiting emissions such that the required emission reduction credits are not actually being provided.

2-2-400 ADMINISTRATIVE REQUIREMENTS

2-2-401 Application: An application for an authority to construct under this Rule shall conform to the requirements of District Regulation 2-1-402, and shall include the following:

- 401.1 A detailed description of the proposed new source(s) or modification(s) for which the authority to construct is sought, including at a minimum (i) a description of the nature, location, design capacity, and typical operating schedule of the source(s) or modification(s), including specifications and drawings showing its design and plant layout, and (ii) a detailed schedule for construction of the source(s) or modification(s).
- 401.2 All information necessary for the APCO to determine whether the application satisfies the requirements of this Rule, including but not limited to (i) a demonstration of how the application satisfies applicable BACT standards under Sections 2-2-301 and 2-2-304, and (ii) the PSD analyses and demonstrations required under Sections 2-2-305 and 2-2-306, if applicable.
- 401.3 CEQA-related information required under Section 2-1-426; and for a new major facility, and for a modification to a major facility that will increase emissions by more than 100 tons per year of carbon monoxide, 40 tons per year of precursor organic compounds, nitrogen oxides, or sulfur dioxide, or 10 tons per year of PM_{2.5}, an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source that demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.
- 401.4 If the application is for (i) a new major facility or a major modification of major facility for NO_x, VOC, SO₂ or PM_{2.5} or (ii) a PSD Project, and the project may have an impact on air quality related values (including visibility) within any Class I area(s), the application shall include an analysis of potential impacts to air quality related values (including visibility) in such Class I area(s) for review and consideration by the Federal Land Manager of such Class I

area(s). The determination of whether a project may have an impact on air quality related values (including visibility) within a Class I Area shall be made according to the guidelines adopted by the Federal Land Managers' Air Quality Related Values Work Group in its Phase I Report—Revised (2010), Natural Resource Report NPS/NRPC/NRR—2010/232.

401.5 Any other information requested by the APCO.

2-2-402 Notice to EPA and Federal Land Manager of Receipt of Permit Applications:

When the APCO receives a complete application for an Authority to Construct for a PSD Project, the APCO shall transmit a copy of the complete application to EPA Region IX. If the APCO receives a complete application for a project that requires an analysis of any Class I area impacts under Section 2-2-401.4, the APCO shall transmit a copy of the complete application to the Federal Land Manager(s) with responsibility for the Class I Area(s) involved within 30 days of receipt and at least 60 days prior to holding any public hearing on such application, and shall include the applicant's analysis of the anticipated impacts on air quality related values (including visibility) in such Class I area(s). In addition, the APCO shall also notify such Federal Land Manager(s) if the APCO receives any advance notification of any such application.

2-2-403 Authority to Construct, Preliminary Decision: If an application for an Authority to Construct is subject to the public notice and comment requirements of Section 2-2-404, the APCO shall make a preliminary decision as to whether an authority to construct shall be approved, or denied. The APCO shall make such preliminary decision within 90 days following the acceptance of the application as complete, provided that any fees required in accordance with Regulation 3 are paid; or within a longer time period if necessary to complete any PSD impact analyses required under Sections 2-2-305 and 2-2-306, if necessary to complete any CEQA analyses if the District is the CEQA Lead Agency, or if consented to by the applicant.

2-2-404 Publication of Notice and Opportunity for Public Comment: If the application is for (i) a new major facility or a major modification of an existing major facility, (ii) any new facility, or a modification of any existing facility, that will involve an increase in emissions of CO, NO_x, SO₂, PM₁₀, PM_{2.5}, VOC, or lead, calculated in accordance with Section 2-2-604, in an amount that is significant as defined in Section 2-2-227.2, or (iii) a PSD Project, the APCO shall provide notice of the preliminary decision made under Section 2-2-403 according to the following procedures:

404.1 The APCO shall publish a notice stating the preliminary decision of the APCO and inviting written public comment on it. The notice shall state the location of the information available pursuant to Section 2-2-405, the procedures and deadlines for submitting written public comments, and the opportunity for requesting a public hearing pursuant to subsection 404.7.

404.2 If the application is for a PSD Project, the notice shall also state the degree of PSD increment consumed if a PSD increment consumption analysis has been conducted.

404.3 The APCO shall publish the notice prominently on the District's internet website in a manner that will provide the public with routine and ready access; and if the application is for a new major facility or a major modification of an existing major facility, or for a PSD Project, the APCO shall also publish the notice prominently in at least one newspaper of general circulation within the District.

- 404.4. The APCO shall transmit a copy of the notice to ARB; EPA Region IX; adjacent air districts; the chief executive(s) of the city and county where the facility is located; the California State Lands Commission; any Indian Governing Body whose lands may be affected by the new or modified source(s) that is the subject of the notice; any person who requests such specific notification in writing; and, if the application is for a project that requires an analysis of any Class I area impacts under Section 2-2-401.4, the Federal Land Manager(s) with responsibility for the Class I Area(s) involved.
- 404.5 If the District is the CEQA Lead Agency with respect to the application, the APCO shall also ensure that the applicable CEQA notice and comment requirements are followed with respect to any CEQA document.
- 404.6 The APCO shall provide a period of at least 30 days following publication of the notice required under this Section for members of the public to submit written comments, and may extend the public comment period for good cause.
- 404.7 The APCO may elect to hold a public meeting to receive written and verbal comments from the public during the public comment period if the APCO finds that a public meeting is warranted and would substantially enhance public participation in the decision-making process. If the APCO elects to hold a public meeting, the APCO shall provide at least 30 days public notice of such meeting in the same manner as is required for the notice of preliminary decision, and the public comment period under Section 2-2-404.6 shall be extended, at a minimum, until the end of the public meeting.

2-2-405 Public Inspection: If an application for an Authority to Construct is subject to the public notice and comment requirements of Section 2-2-404, the APCO shall make available for public inspection, at District headquarters, the information submitted by the applicant, the APCO's preliminary decision to grant or deny the authority to construct including any proposed conditions and the reasons therefore, and any other relevant information on which the APCO's preliminary decision is based. Any such information shall also be transmitted, upon request, to ARB and EPA Region IX. In making information available for public inspection, the APCO shall consider any claims by the applicant regarding the confidentiality of trade secrets, as designated by the applicant prior to submission, in accordance with Section 6254.7 of the California Government Code.

2-2-406 Authority to Construct, Final Action: If an application for an Authority to Construct is subject to the public notice and comment requirements of Section 2-2-404, the APCO shall consider all public comments received and shall take final action on the application: (i) within 60 days after the close of the public comment period, or within 30 days after final approval of a CEQA Negative Declaration or Environmental Impact Report for the project (if applicable), whichever is later; and (ii) if the application is for a PSD Project, no later than one year after receipt of the complete application (unless a longer period is necessary and is consented to by the applicant). At the time of such final action, the APCO shall:

- 406.1 Prepare and make publicly available a written response to any public comments received explaining how the APCO has considered such comments in making a final decision; and
- 406.2 Provide written notice of the final decision to the applicant, ARB, EPA Region IX, any person who submitted comments during the public comment period or requested written notice of the final action, and, if the District is a Lead

Agency under CEQA, in accordance with all applicable CEQA public notice and comment requirements.

2-2-407 Issuance, Permit to Operate: Before issuing a permit to operate for a source subject to the requirements of this Rule, the APCO shall ensure that the following requirements have been met:

407.1 The APCO shall ensure that all conditions specified in the authority to construct have been and are being complied with, or in the case of conditions with a future compliance date, that such conditions are reasonably expected to be complied with by the applicable compliance date.

407.2 If the permit is for a source for which the applicant complied with the offset provisions of Sections 2-2-302 or 2-2-303 with emission reduction credits generated after the application date:

2.1 The APCO shall ensure that such emission reduction credits took effect or will take effect no later than initial operation of the source (or, for a source that is a replacement unit, as defined in 40 C.F.R. Section 51.165(a)(1)(xxi), that will replace an existing source in whole or in part, with respect to emission reduction credits being generated by the shutdown of the existing source being replaced, no later than 90 days after initial operation of the replacement unit); and

2.2 The APCO shall ensure that such emission reduction credits shall be maintained throughout the operation of the source.

2-2-408 Permit to Operate, Final Action: The APCO shall take final action to approve, approve with conditions, or disapprove a permit to operate a source subject to this Rule within 90 days after start-up of the new or modified source, unless such time period is extended with the written concurrence of the applicant.

2-2-409 Source Obligation, Relaxation of Enforceable Conditions: At such time as the applicability of any requirement of this Rule would be triggered by an existing source or facility, solely by virtue of a relaxation of any enforceable limitation on the capacity of the source or facility to emit a pollutant, then the requirements of this Rule shall apply to the source or facility in the same way as they would apply to a new or modified source or facility otherwise subject to this Rule.

2-2-410 Permit Conditions: The APCO may include any permit condition in an authority to construct or permit to operate that the APCO determines is necessary to ensure compliance with this Rule, including but not limited to conditions controlling the operation of the source, of its abatement equipment, or of sources used to generate emission reduction credits to comply with Sections 2-2-302 or 2-2-303. Such conditions may have a future effective date and may be made conditional on the results of source tests, ground level monitors or public complaints.

2-2-411 Offset Refunds: The APCO may refund offsets provided for an authority to construct or permit to operate, and waive any associated banking fees, under the following circumstances:

411.1 Where an applicant has provided offsets in excess of those required for an authority to construct or permit to operate, the APCO shall upon request of the applicant refund the difference between the amount of offsets provided and the amount of offsets required, as long as such request is made within 2 years of issuance of the authority to construct or within 6 months of issuance of the permit to operate.

411.2 Whenever a source for which the owner or operator has provided offsets is not constructed (or is constructed but never operated), and the authority to

construct for the source has expired or has been surrendered by the applicant, the APCO shall upon request of the applicant refund the offsets provided in connection with the authority to construct, as long as such request is made within 2 years of issuance or renewal of the authority to construct.

2-2-412 Demonstration of NO_x, POC and PM_{2.5} Offset Program Equivalence: By March 1 of each year, or by a later date approved by EPA, the APCO shall prepare and submit to EPA, and publish prominently on the District's website, an analysis demonstrating that the District's New Source Review program has obtained at least as many NO_x, POC and PM_{2.5} offsets in total as would have been required under the federal offsets provisions set forth in 40 C.F.R. section 51.165 for the Federal Major NSR Sources (as defined in Section 2-2-228) permitted by the District during the previous calendar year. The demonstration shall be based on the following information:

412.1 Calculation of Offsets Shortfall for Each Federal Major NSR Source: The APCO shall calculate the offsets shortfall for each Federal Major NSR Source permitted during the previous calendar year, which shall be the sum of the Federal Offsets Baseline Shortfall as defined in Section 2-2-229 (if any) and the Federal Surplus-at-Time-of-Use Shortfall as defined in Section 2-2-230 (if any).

412.2 Calculation of Total Offsets Shortfall for All Federal Major NSR Sources: The APCO shall sum the offsets shortfalls calculated pursuant to subsection 412.1 (if any) for all for all Federal Major NSR Sources permitted during the previous calendar year to obtain the total offsets shortfall for the year.

412.3 Identification of Equivalence Credits Sufficient to Cover Total Offsets Shortfall: The APCO shall identify Equivalence Credits sufficient to equal or exceed the amount of the total offsets shortfall calculated pursuant to subsection 412.2 (if any), subject to the following requirements.

3.1 The APCO shall not include any Equivalence Credits that were relied on in a prior equivalence demonstration for an earlier year.

3.2 All Equivalence Credits used in the equivalence demonstration must be adjusted to reflect any (i) District regulation required for purposes of federal attainment demonstration requirements, (ii) District requirement, or a state requirement applicable to sources within the District, approved into the California State Implementation Plan, or (iii) federal New Source Performance Standard or Maximum Achievable Control Technology Standard, that is adopted or promulgated between the date the Equivalence Credit was generated and the date it is used for purposes of the equivalence demonstration. The APCO shall make such adjustments in accordance with an EPA-approved surplus-at-time-of-use adjustment methodology.

2-2-413 No Net Increase Status Report: The APCO shall publish, in conjunction with the triennial update of the Clean Air Plan (CAP), a report demonstrating that the District's permitting program complies with the no-net-increase requirements of Section 40919(b) of the Health and Safety Code. This report shall demonstrate that sufficient offsets have been provided, as required by Section 2-2-302, for all permits issued during the previous three year CAP period. This report shall be forwarded to the California Air Resources Board, Stationary Source Division, for approval.

- 2-2-414 BACT Workbook:** The APCO shall publish and periodically update a BACT Workbook specifying the BACT requirements for commonly permitted sources. BACT will be determined for a source on a case-by-case basis, using the workbook as a guidance document, as the most effective control device or technique or most stringent emission limitation that meets the requirements of Section 2-2-202.
- 2-2-415 Additional Offset Requirements Where District Has Not Demonstrated NO_x, POC or PM_{2.5} Offset Program Equivalence:** If the APCO has not submitted the equivalence demonstration required by Section 2-2-412 by March 1 (or other EPA-approved date), the APCO shall require additional offsets for any subsequent Authority to Construct and/or Permit to Operate for a Federal Major NSR Source sufficient to make up for (i) any Federal Offsets Baseline Shortfall calculated pursuant to Section 2-2-229 and (ii) any Federal Surplus-at-Time-of-Use Shortfall calculated pursuant to Section 2-2-230. The APCO shall not issue an Authority to Construct or Permit to Operate for any Federal Major NSR Source unless the applicant has provided sufficient additional offset credits to make up for the shortfalls identified in the preceding sentence for that particular Authority to Construct or Permit to Operate. The APCO shall continue to require additional offsets sufficient to make up for such shortfalls for all Authorities to Construct and Permits to Operate for Federal Major NSR Sources issued after March 1 (or other EPA-approved date) until such time as the District has made the required equivalence demonstration for every year since 2017. The requirement to provide additional offsets under this Section shall apply on a pollutant-specific basis for each pollutant for which the APCO has not made the required equivalence demonstration.
- 2-2-500 MONITORING AND RECORDS**
- 2-2-501 Post-Construction Monitoring:** The APCO may require as a condition in an authority to construct that the owner or operator of a facility for which the authority to construct is issued must conduct such ambient air quality monitoring as the APCO determines is necessary to determine the effect that emissions from the facility may have, or are having, on air quality in the area.
- 2-2-600 MANUAL OF PROCEDURES**
- 2-2-601 Ambient Air Quality Monitoring:** Ambient air quality monitoring required pursuant to this Rule shall be conducted in accordance with the methods prescribed in the Manual of Procedures, Volume VI., and 40 C.F.R. Part 58, Appendix B.
- 2-2-602 Good Engineering Practice (GEP) Stack Height:** Stack heights beyond what is consistent with good engineering practices shall not be allowed for purposes of air quality modeling undertaken as part of any air quality analysis prepared in connection with an application for an authority to construct as required by Sections 2-2-305 through 2-2-308. This requirement does not limit the actual height of a stack, as long as good engineering practice stack heights are used in any such modeling analyses. Good engineering practice stack height shall be determined according to 40 C.F.R. Section 52.100(ii) and EPA's *Guideline for Determining Good Engineering Practice Stack Height*, EPA Publication No. EPA-450/4-80-023R (June 1985).
- 2-2-603 Baseline Emissions Calculation Procedures:** The following methodology shall be used to determine a source's baseline emissions for purposes of calculating an

emissions increase or decrease from a source under Sections 2-2-604.2, 2-2-605.2, and 2-2-606.3:

603.1 Determine Baseline Period Ending Date: The date on which the baseline period ends is determined as follows:

- 1.1 For determining the amount of an emissions increase from a new or modified source, the baseline period ends on the date on which the application for authority to construct/permit to operate the new or modified source is determined to be complete.
- 1.2 For determining the amount of a contemporaneous emissions increase under Section 2-2-220 for a physical change or change in the method of operation of a source that was not a modification of the source, the baseline period ends on the date the change was first implemented at the source.
- 1.3 For determining the amount of a contemporaneous onsite emission reduction credit or a contemporaneous emissions decrease under Section 2-2-220, the baseline period ends on the date on which the emission reduction becomes enforceable.
- 1.4 For determining the amount of an emission reduction credit for which a banking certificate is sought under Regulation 2, Rule 4, the baseline period ends the date on which the banking application is determined to be complete.

603.2 Determine Baseline Period: The baseline period is determined as follows:

- 2.1 For all pollutants other than greenhouse gases, the baseline period is the three-year period immediately preceding the baseline period ending date established under subsection 603.1.
- 2.2. For greenhouse gases, the baseline period is determined as follows:
 - 2.2.1 For a new source, the baseline period is a period with zero throughput and emissions. For such sources, baseline emissions and adjusted baseline emissions are zero for all purposes under Section 2-2-603.
 - 2.2.2 For an existing source that first operated less than 24 months before the date on which the application for authority to construct/permit to operate is determined to be complete, the baseline period is a period with maximum potential throughput and emissions. For such sources, baseline emissions and adjusted baseline emissions are the source's pre-existing potential to emit for all purposes under Section 2-2-603.
 - 2.2.3 For a modification to an existing electric utility steam generating unit as defined in 40 C.F.R. Section 51.166(b)(30) that has operated for 24 months or more prior to the date of application, the baseline period is any period of 24 consecutive months selected by the applicant within the 5-year period immediately preceding the baseline period ending date established under subsection 603.1, or other such time period that the APCO determines is more representative of normal source operation. For evaluating emissions from multiple sources, the same 24-month baseline period shall be used for all sources.

2.2.4 For a modification to any existing source other than an electric utility steam generating unit as defined in 40 C.F.R. Section 51.166(b)(30) that has operated for 24 months or more prior to the date of application, the baseline period is any period of 24 consecutive months selected by the applicant within the 10-year period immediately preceding baseline period ending date established under subsection 603.1. For evaluating emissions from multiple sources, the same 24-month baseline period shall be used for all sources.

603.3 Determine Baseline Throughput: Baseline throughput is the lesser of: (i) the actual average annual throughput during the baseline period; or (ii) the average permitted annual throughput during the baseline period, if limited by permit condition. If the applicant does not have sufficient verifiable records of the source's operation to substantiate its throughput during any portion(s) of the baseline period, the applicant is not entitled to credit for throughput during any such portion(s). Throughput shall be based on the source's operational parameter that correlates most closely to the source's emissions.

603.4 Determine Baseline Emissions: Baseline emissions are the actual average annual emissions during the baseline period (excluding any emissions that exceed any regulatory or permit limits). If the applicant does not have sufficient verifiable records of the source's operation to substantiate the emission rate during any portion(s) of the baseline period, the applicant is not entitled to credit for emissions during any such portion(s).

603.5 Determine Baseline Emissions Rate: The baseline emission rate is the emission rate per unit of throughput during the baseline period, calculated by dividing the source's baseline emissions by its baseline throughput.

603.6 Determine Adjusted Baseline Emissions Rate: The adjusted baseline emission rate shall be determined by adjusting the baseline emission rate downward, if necessary, to reflect the most stringent of RACT, BARCT, and applicable federal and District rules and regulations in effect or contained in the most recently adopted Clean Air Plan; except that for purposes of determining whether a source or group of sources constitutes a PSD Project under Section 2-2-224, the adjusted baseline emission rate shall not be adjusted downward to a greater extent than required under the provisions of 40 C.F.R. Sections 51.166(b)(47)(i)(b) and 51.166(b)(47)(ii)(b) & (c).

603.7 Determine Adjusted Baseline Emissions: The adjusted baseline emissions is the adjusted baseline emissions rate multiplied by the baseline throughput (except where otherwise specified under sections 2-2-603.2.2.1 or 2-2-603.2.2.2).

2-2-604 Emission Increase/Decrease Calculation Procedures, New Sources and Changes at Existing Sources: The amount of any emissions increase (or decrease) associated with a new source, or with a physical change, change in the method of operation, change in throughput or production, or other similar change at an existing source, shall be calculated according to the following procedures:

604.1 New Source: The emissions increase associated with a new source is the source's potential to emit.

604.2 Change to Existing Source: The emissions increase (or decrease) associated with a physical change, change in the method of operation, change in throughput or production, or other similar change at an existing source

(including a permanent shutdown of the source) shall be calculated as the difference between: (i) the source's potential to emit after the change; and (ii) the source's adjusted baseline emissions before the change, calculated in accordance with Section 2-2-603.

2-2-605 Emission Reduction Credit Calculation Procedures: The amount of emission reduction credits associated with a physical change, change in method of operation, change in throughput or production, or other similar change at a source shall be calculated according to the following procedures:

605.1 Eligibility for Credit: To qualify as emission reduction credits, the emission reductions associated with any such change: (i) must be enforceable through permit conditions; through relinquishment of the source's permit; through physical removal of the source such that reinstallation would require a new permit under Regulation 2; or in the case of source shutdown where no permit is required for the source being shut down, through an alternative legally-enforceable mechanism; and (ii) must be real, permanent, quantifiable, and in excess of any reductions required by applicable regulatory requirements. Emissions that were offset with credits from the Small Facility Banking Account cannot be used to generate emission reduction credits.

605.2 Calculating Amount of Credit: The amount of emission reduction credit associated with such a change shall be calculated as the difference between: (i) the source's adjusted baseline emissions before the change calculated pursuant to Section 2-2-603; and (ii) the source's potential to emit after the change.

2-2-606 Potential-to-Emit (PTE) Increase Calculation Procedures for Purposes of Determining Cumulative Increase: For purposes of calculating cumulative increase under Section 2-2-607, the increase in a source's potential to emit associated with an authority to construct and/or permit to operate for the source shall be calculated according to the following procedures:

606.1 New Source: For a new source, the increase in potential to emit is the source's full potential to emit.

606.2 Modified Source – Offsets Previously Provided: For a modified source, if offsets have previously been provided for the source's emissions, then the increase in potential to emit associated with the modification is the difference between:

- 2.1 the source's potential to emit after the modification; and
- 2.2 the source's potential to emit before the modification, adjusted downward, if necessary, to reflect the most stringent of RACT, BARCT, and applicable federal and District rules and regulations in effect or contained in the most recently adopted Clean Air Plan

606.3 Modified Source – Offsets Not Yet Provided: For a modified source, if offsets have not previously been provided for the source's emissions, then the increase in potential to emit associated with the modification is the difference between:

- 3.1 the source's potential to emit after the modification; and
- 3.2 the source's adjusted baseline emissions before the modification calculated in accordance with Section 2-2-603.

For purposes of calculating the cumulative increase associated with a source, the source's emissions shall include emissions from cargo carriers (other than motor vehicles) associated with the source as specified in Section 2-2-610.

2-2-607 Cumulative Increase Calculation Procedures: The cumulative increase in emissions associated with an authority to construct and/or permit to operate for a source shall be calculated as:

607.1 Project Emissions Increase: the increase in potential to emit associated with the authority to construct/permit to operate determined in accordance with Section 2-2-606; minus

607.2 Contemporaneous Onsite Emission Reduction Credits: any contemporaneous onsite emission reduction credits at the facility calculated in accordance with Section 2-2-605 that are credited to the authority to construct/permit to operate.

The cumulative increase associated with an authority to construct/permit to operate issued in the past shall be determined using the increase in potential to emit and contemporaneous onsite emissions reductions credits calculated at the time of issuance of the authority to construct/permit to operate. Emission reduction credits may not be double-counted (e.g., an emission reduction credit may not be applied to the cumulative increase calculation for more than one authority to construct/permit to operate).

2-2-608 Facility Un-Offset Cumulative Increase Calculation Procedures: For purposes of applying the emission offset provisions of Sections 2-2-302 and 2-2-303, a facility's un-offset cumulative increase in emissions since the baseline date shall be calculated using the following procedures:

608.1 Project Cumulative Increase: The cumulative increase from the project being permitted shall be determined in accordance with Section 2-2-607.

608.2 Prior Un-Offset Cumulative Increase: For each previous authority to construct/permit to operate issued for the facility, and for any related source as defined in Section 2-2-226, after the cumulative increase baseline date as specified in Section 2-2-209 (but excluding any authority to construct/permit to operate issued because a source lost its permit exemption per Section 2-1-424 and any authority to construct/permit to operate for a source that has been permanently removed from service), the un-offset cumulative increase shall be determined by:

2.1 Calculating the cumulative increase associated with each previous authority to construct/permit to operate issued for the facility, and for any related source as defined in Section 2-2-226, determined in accordance with Sections 2-2-607; and

2.2 Subtracting any offsets provided in connection with the authority to construct/permit to operate (including any offsets provided from the District's Small Facility Banking Account).

608.3 Facility Un-Offset Cumulative Increase: The facility's un-offset cumulative increase shall be determined by adding (i) the project cumulative increase calculated according to Section 2-2-608.1 and (ii) the un-offset cumulative increase from each previous authority to construct/permit to operate issued for the facility, and for any related source as defined in Section 2-2-226, after the cumulative increase baseline date as specified in Section 2-2-209 (but excluding any authority to construct/permit to operate issued because a source lost its permit exemption per Section 2-1-424 and any authority to construct/permit to operate for a source that has been permanently removed from service) calculated according to Section 2-2-608.2. Offsets shall be

provided for the facility's un-offset cumulative increase multiplied by the applicable offset ratio specified in Section 2-2-302 and 2-2-303.

- 2-2-609 Official Record of Cumulative Increases and Offsets:** The APCO may establish and maintain a database or other accounting document to record the cumulative increase (including project cumulative increase and associated emission reduction credits) and offsets associated with each authority to construct/permit to operate issued for a facility. In calculating the un-offset cumulative increase associated with a previous authority to construct/permit to operate under Section 2-2-608.2, the APCO may rely on the data specified in such document as conclusive, unless the APCO has information that indicates that some other data is more accurate. Records of cumulative increase and offsets shall be updated as necessary to ensure that they are current and accurate.
- 2-2-610 Facility Emissions Calculation Procedures, Cargo Carriers:** For purposes of applying the offset requirements of Sections 2-2-302 and 2-2-303, a facility's potential to emit and cumulative increase shall be calculated including emissions from cargo carriers (other than motor vehicles) associated with the sources at the facility. When applying these offset requirements, facilities that include cargo loading or unloading from cargo carriers other than motor vehicles shall include the cargo carriers as part of the source that receives or loads the cargo. Accordingly, all emissions from such cargo carriers while operating in the District, or within California Coastal Waters up to 11 nautical miles (12.66 statute miles) from the Golden Gate Bridge (and any additional areas of California Coastal Waters adjacent to the District if cargo carrier emissions in such areas would have a substantial impact on air quality within the District), shall be included as part of the source's emissions. Emissions from cargo carriers shall not be included for purposes of applying any other provisions of this Regulation, including the BACT and PSD requirements.
- 2-2-611 Emission Calculation Procedures, Fugitive Emissions:** Any fugitive emissions from a source shall be included in calculating the source's emissions for all purposes under this Rule; except that for purposes of determining whether a facility's emissions exceed the 100/250 ton per year thresholds in Section 2-2-217 (for a "Major Facility") and Section 2-2-224.1 (the first element in the definition of "PSD Project"), fugitive emissions shall be included only if the facility is in one of the 28 categories listed in Section 169(1) of the Clean Air Act or is in any other stationary source category that was being regulated under section 111 or 112 of the Clean Air Act as of August 7, 1980.

1/14/80

REGULATION 2 - PERMITS

RULE 3 - POWER PLANTS

2-3-100 GENERAL

2-3-101 Description: This Rule contains special provisions relating to the procedures for the review and standards for the approval of authorities to construct power plants within the District, for which a Notice of Intention (NOI) or Application for Certification (AFC) has been accepted by the California Energy Commission (Commission).

2-3-200 DEFINITIONS

2-3-201 Determination of Compliance: A decision by the APCO, made following a review of applicable data, conducted in a manner that is identical to the review conducted to establish the eligibility of a person to receive an authority to construct a stationary source subject to Rule 2 of this Regulation.

2-3-300 STANDARDS

2-3-301 Authority to Construct a Power Plant: An authority to construct a power plant shall be issued only upon the issuance by the APCO of a Determination of Compliance, and the submittal of the Determination of Compliance to the Commission.

2-3-302 Permit to Operate a Power Plant: The APCO shall issue a permit to operate a power plant if the applicant has received certification pursuant to an AFC and, after construction, the power plant is in compliance with all conditions of the certificate and the authority to construct.

V/14/80

2-401 NOI Proceedings: Within 14 days of receipt of a NOI, the APCO shall notify the ARB and the Commission of the District's intention to participate in the NOI proceedings. If the District chooses to participate in the NOI proceedings, the APCO shall prepare and submit a report to the ARB and the Commission prior to the conclusion of the nonadjudicatory hearings specified in Section 25509.5 of the Public Resources Code. That report shall include, at a minimum:

401.1 A preliminary specific definition of BACT for the proposed power plant.

401.2 A preliminary discussion of whether there is substantial likelihood that the requirements of District Regulations can be satisfied by the proposed power plant.

401.3 A preliminary list of conditions which the proposed power plant must meet in order to comply with District regulations.

2-3-402 AFC Proceedings: Upon receipt of an AFC, the APCO shall determine whether the information contained therein is sufficient to undertake a Determination of Compliance review. If not, the APCO shall, within 20 days of receipt of the AFC, so inform the Commission and the AFC shall be considered incomplete and returned to the applicant for resubmittal. The APCO may also request from the applicant any information necessary for the completion of the Determination of Compliance review. If the information is not supplied, the APCO may petition the presiding Commissioner for an order directing the applicant to provide such information.

1/14/80

- 2-3-403 Preliminary Decision: Within 180 days of accepting an AFC as complete, the APCO shall conduct a Determination of Compliance review and make a preliminary decision as to whether the proposed power plant meets the requirements of District regulations. If so, the APCO shall make a preliminary determination of conditions to be included in the Certificate, including specific BACT requirements and a description of mitigation measures to be required.
- 2-3-404 Public Notice, Comment and Public Inspection: The preliminary decision made pursuant to Section 2-3-403 shall be subject to the public notice, public comment and public inspection requirements contained in Section 2-2-406 and 407 of Rule 2.
- 2-3-405 Determination of Compliance, Issuance: Within 240 days of the acceptance of the AFC as complete, the APCO shall issue and submit to the Commission a Determination of Compliance. If the Determination of Compliance cannot be issued, the APCO shall so advise the Commission. When the AFC is approved by the Commission, the APCO shall ascertain whether the Certificate contains all applicable conditions. If so, the APCO shall grant an authority to construct.

**REGULATION 2
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**REGULATION 2
PERMITS
RULE 4
EMISSIONS BANKING**

(Adopted March 7, 1984)

2-4-100 GENERAL

2-4-101 Banking: The banking of emission reduction credits is intended to provide a mechanism for sources to obtain offsets under the New Source Review regulations contained in Regulation 2, Rule 2 of the District and is not intended to recognize any pre-existing vested right to emit air pollutants.

(Amended June 15, 1994)

2-4-200 DEFINITIONS

2-4-201 Emission Reduction Credit: As defined in Section 2-2-211.

(Amended 7/17/91; 6/15/94; 10/7/98; 12/19/12)

2-4-202 Deleted May 17, 2000

2-4-203 Bankable Pollutants: Emission reduction credits of the following pollutants may be deposited in the emissions bank: precursor organic compounds, non-precursor organic compounds, particulate matter, PM₁₀, PM_{2.5}, sulfur dioxide, nitrogen oxides, and carbon monoxide.

(Amended 7/17/91; 6/15/94; 12/19/12)

2-4-204 Reasonably Available Control Technology: As defined in Regulation 2-1-209.

(Amended July 17, 1991)

2-4-300 STANDARDS

2-4-301 Bankable Reductions: An applicant may bank emission reductions if and only if the APCO determines (i) that the reductions satisfy all of the criteria necessary to constitute Emission Reduction Credits as defined in Section 2-2-211, including but not limited to the requirements that the reductions are real, permanent, quantifiable, and enforceable, and are calculated in accordance with Section 2-2-605; and (ii) that banking the reductions is not prohibited by Section 2-4-303. The APCO may include a condition in an authority to construct involving reductions pursuant to subsections 2-4-301.1, 301.2, or 301.5, stating that the emission reduction shall be eligible for banking after being demonstrated by source test or other means acceptable to the APCO, including emission factors. Any regulatory change adopted 90 or more days after a complete application for an authority to construct shall not affect the potential for bank deposits resulting from reductions at sources covered by that authority to construct. The following are examples of bankable reductions:

301.1 Emission reduction credits resulting from the installation of a level of control greater than required by regulation are bankable, including installation of BACT where BACT is not required.

301.2 Emission reduction credits due to the installation of different processes or equipment which emit less than the previous process or equipment that performed the same function.

301.3 Emission reduction credits due to the effective operation and maintenance of abatement equipment if the applicant accepts a condition on the permit specifying a lower level of emissions than otherwise required by District regulations.

301.4 Emission reduction credits resulting from switching to a fuel which results in less emissions, provided the applicant agrees to a condition on the appropriate permit specifying the fuel to be used in the future.

301.5 Emission reduction credits of fugitive emissions if the reductions are quantified by source tests or other methods approved by the APCO.

- 301.6 Other emission reduction credits, such as 1) limitations on the type or quantity of fuel burned, 2) solvent recovery projects, and 3) limitations on throughput.

(Amended 7/17/91; 6/15/94; 12/19/12; 12/6/2017)

2-4-302 Bankable Reductions for Closures: Emission reduction credits not prohibited by Section 2-4-303 are bankable. The following restrictions apply:

- 302.1 Closure of sources, where the reduction is permanent at the source, but it is unclear whether the reduction will be replaced by an emissions increase elsewhere within the District, are bankable only if the applicant accepts a condition restricting use of the deposits to offsetting emission increases in the same or closely related industries. For example, the closure of public utility power generation facilities could be bankable if use is restricted to offsetting emission increases from other power generation facilities (including resource recovery and cogeneration facilities). Closure of petroleum or petroleum product storage tanks at refineries could be bankable if use is restricted to offsetting emission increases at other petroleum or petroleum products storage tanks, or to offset emission increases at the associated refinery.

- 302.2 Issuance of a Banking Certificate for emission reductions resulting from a closure cancels the permit to operate. The reduction shall be enforceable through a condition in the Banking Certificate and through enforcement of Regulation 2-1-302 pertaining to operating without a permit.

(Amended 7/17/91; 6/15/94; 5/17/00; 12/6/2017)

2-4-303 Limitations on Deposits: The following cannot be banked:

- 303.1 Emission reduction credits achieved during periods in which a moratorium on banking deposits is in effect pursuant to Section 2-4-410. After removal of the moratorium, they may subsequently be banked. The period of the moratorium shall not be considered "normal operation" for the purpose of determining the bankable emissions.

- 303.2 Emission reductions from closure of sources where the demand for the services or product would merely shift to other sources in the District, with little or no decrease in emissions basin-wide.

2.1 The APCO may, at his or her discretion, require submittal of data to document that reductions from the closure of such types of operations will not result in such a shift, and could therefore be banked.

2.2 Only the net reduction (if any) shall be banked for shutdowns of manufacturing operations where the operation is being transferred elsewhere within the same stationary source or to a different stationary source owned by the applicant within the District.

- 303.3 Emission reductions due to the shutdown or closure of sources or the installation of controls on sources excluded from District regulations pursuant to Regulation 1-110 or exempt from permit requirements pursuant to Regulation 2-1.

- 303.4 Transfer of ownership of an emission source if the source remains operable and within the District.

- 303.5 Emission reductions at facilities belonging to companies which have received unreimbursed offsets from the Small Facility Emissions Bank. Once these offsets have been reimbursed, the remaining emission reductions may be banked.

(Amended 7/17/91; 6/15/94; 10/7/98; 5/17/00)

2-4-304 Limitations on Use of Deposits: Emission reduction credits may not be used to:

- 304.1 Exempt a source from Best Available Control Technology (BACT) requirements contained in subsections 2-2-301.1 and 301.2 of Regulation 2.

- 304.2 Exempt a source from emission limitations established in Regulation 10 (New Source Performance Standards).

- 304.3 Exempt a source from any other air pollution control requirements whatsoever of Federal, State, or District laws, rules and regulations.

(Amended 7/17/91; 6/15/94)

2-4-305 Use of Withdrawals: Bank deposits may be withdrawn by the depositor or by any other person to whom they have been transferred by the depositor for use in meeting the requirements to obtain offsets specified in Rule 2 of this Regulation.

(Amended July 17, 1991)

2-4-400 ADMINISTRATIVE REQUIREMENTS

2-4-401 Banking Application: An application to deposit or re-evaluate an emission reduction in the emissions bank shall be submitted on forms specified by the APCO. No banking application shall be accepted from a stationary source for pollutants which are the subject of a variance, abatement order or other similar formal order, until compliance with the emission limitations which are the subject of the variance or order is achieved.

(Amended December 19, 2012)

2-4-402 Complete Banking Application: The APCO shall determine whether a banking application is complete not later than 30 calendar days following receipt of the application, or after a longer time period agreed upon in writing by both the applicant and the APCO. If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying the information that is required. The applicant shall have 90 days to submit the requested information. Upon receipt of all requested information, a new 30 day period to determine completeness shall be initiated. If, at the end of 90 days, no data is submitted or the application is still incomplete, the APCO may cancel the banking application with written notification to the applicant. Upon a determination that the application is complete, the APCO shall notify the applicant in writing. Thereafter, only information to clarify, correct, or otherwise supplement the information submitted in the application, may be requested. Withdrawal of a banking application by an applicant shall result in cancellation of the application; any re-submittal may be evaluated using a new application completion date.

(Amended 7/17/91; 6/15/94; 5/17/00)

2-4-403 Preliminary Decision: Within 60 days following the acceptance of a banking application as complete, which is not subject to the publication, public comment and inspection requirements of Section 2-4-405, or, with the consent of the applicant, such longer period as may be agreed upon, the APCO shall make a preliminary decision and notify the applicant in writing as to whether the APCO intends to approve, conditionally approve, or deny the application.

(Amended July 17, 1991)

2-4-404 Preliminary Decision, Major Deposits: Within 90 days following the acceptance of a banking application as complete, which is subject to the publication, public comment and inspection requirements of Section 2-4-405, or, with the consent of the applicant, such longer period as may be agreed upon, the APCO shall make a preliminary decision and notify the applicant in writing as to whether the APCO intends to approve, conditionally approve, or deny the application.

(Adopted July 17, 1991)

2-4-405 Publication, Public Comment and Inspection: Before approving the banking of any emission reduction in excess of 40 tons per year of any pollutant, the re-evaluation of PM₁₀ emission reduction credits under Section 2-4-416 resulting in an increase of more than 40 tons per year or before declaring a moratorium on further banking of emission reductions, the APCO shall cause to be published in at least one newspaper of general circulation within the District, and be sent to any individual submitting a written request to the APCO for notification, a notice stating the preliminary decision of the APCO to approve the banking of emission reductions or to declare a moratorium on further banking of emission reductions and inviting written public comment. The APCO shall make available for public inspection at District headquarters the information submitted by the applicant, the APCO's analysis, and the preliminary decision to grant or deny the banking application, including the reason therefore and any proposed conditions. The confidentiality of trade secrets shall be considered in accordance with Section 6254.7 of the Government Code. Such information shall also be transmitted to adjacent air pollution control districts, the California Air Resources Board, and the U.S. EPA.

(Renumbered, Amended 7/17/91; Amended 12/19/12)

2-4-406 Public Meeting: During the 30-day period following the date of publication, which may be extended by the APCO, the APCO may, based on the receipt of written comments, elect to hold a public meeting to receive oral and written comments from the public. After considering all such comments, the APCO shall, within 30 days of the close of the comment period, make a final decision concerning such banking.

(Renumbered July 17, 1991)

- 2-4-407 Banking Certificate:** The APCO shall issue a banking certificate within 30 days of the issuance of the preliminary decision for an approved deposit not subject to Section 2-4-405, or within 30 days of the close of the public comment period if the banking application is approved. The certificate shall identify the owner of the certificate, the quantity of the emission reduction credits of each pollutant for deposit in the emissions bank in tons per year, the location of the facility at which the reduction was created, any conditions on use of the emission reduction credits, and any other data deemed appropriate by the APCO.
- (Renumbered, Amended 7/17/91; Amended 6/15/94)*
- 2-4-408 Appeal to the Hearing Board, Banking:** Any person dissatisfied with the decision of the APCO regarding the approval or disapproval of an application for banking air contaminants may appeal that decision within 30 calendar days in accordance with the provisions of Regulation 2-1-410.
- (Renumbered, Amended 7/17/91; Amended 5/17/00)*
- 2-4-409 Protection and Duration of Deposits:** Deposits are permanent until used by the depositor or any party to whom the depositor has transferred the deposit. Changes in offset ratios shall not apply to emission reduction credits already used. After issuance of the Banking Certificate confirming the deposit, subsequent changes in regulations to require the type of reduction banked shall not reduce or eliminate the deposit.
- (Renumbered 7/17/91; Amended 6/15/94)*
- 2-4-410 Moratorium on Banked Emissions:** If the APCO determines that additional mandatory emission reductions will be necessary to attain an ambient air quality standard, the APCO may declare a full or partial moratorium on banking deposits of the applicable air contaminant, after opportunity for public comment as provided in Sections 2-4-405 and 406. Such a moratorium shall be lifted after the APCO determines that the Bay Area Air Quality Plan demonstrates attainment of such standards.
- (Renumbered, Amended July 17, 1991)*
- 2-4-411 Banking Register:** The District shall maintain a "banking register", which shall consist of a record of all deposits, deposit applications, withdrawals, and transactions. A summary of the data in the banking register shall be available to the public upon request and the District emission inventory shall explicitly include all outstanding deposits appearing in the summary as current existing emissions.
- (Renumbered, Amended July 17, 1991)*
- 2-4-412 Withdrawal Procedures for Deposits:** The following are procedures to be used for the withdrawal of banked emission reduction credits:
- 412.1 Deposits shall be withdrawn in accordance with the offset ratios in effect at the time of withdrawal as specified in Regulations 2-2-302 and 303.
 - 412.2 The owner of record shown in the District's banking register shall surrender the Banking Certificate in order to withdraw the banked emission reduction credit. If the entire deposit is used, the District shall retain the Certificate; if the deposit is partially used, the District shall retain the old Certificate and issue a new Certificate identifying the remaining portion of the deposit.
 - 412.3 If the deposit is transferred for later use, the owner of record shall submit the old Certificate signed by the owner of record and by the new owner; the District shall retain the old Certificate, issue a new Certificate in the name of the new owner for the amount transferred, and issue a new Certificate to the existing owner for any portion not transferred.
 - 412.4 If the deposit is transferred for use in an application for an authority to construct which requires offsets, the owner of record shall submit the old Certificate signed by the owner of record and by the new owner; the District shall retain the old Certificate, issue a new Certificate to the owner of record for any portion of the deposit not transferred, and identify use of the deposit in the authority to construct issued to the user of the deposit. No Certificate shall be issued to the user.
 - 412.5 For any transferred deposit, the creator of the deposit shall continue to have enforceable conditions in the appropriate permits to operate to assure permanency of the emission reduction and shall be held liable for compliance with those conditions; the user of any transferred bank deposit shall not be held liable for any failure of the creator to comply with District requirements.

(Renumbered, Amended 7/17/91; Amended 6/15/94)

2-4-413 Annual Report, Banking: The APCO shall provide an annual report to the Board of Directors on all banking transactions which have occurred during the preceding year.

(Renumbered July 17, 1991)

2-4-414 Small Facility Banking Account: The APCO may establish a small facility banking account and grant offsets. The APCO may fund the Small Facility Banking Account by deposit of unclaimed emission reductions resulting from source or facility closures, and by a small facility growth allowance established in the Clean Air Plan adopted by the District. In no event, may the APCO grant offsets in an amount that exceeds the amount contained in the Small Facility Banking Account. Allocation of credits shall conform to the requirements of Section 40919(a)(2) of the Health and Safety Code. If an applicant holds banked emission reduction credits, those credits must be used as a source of offsets prior to the APCO approving offsets from the small facility banking account (this includes bankable emission reduction credits held by other District facilities owned by the applicant). For the purposes of determining the amount of offsets granted by the APCO, any banked emission reduction credits that have been sold during the three years preceding a complete permit application shall be considered to be held by the applicant. Allocations from the small facility banking account cannot be transferred or banked by the recipient.

(Adopted 7/17/91; Amended 6/15/94; 10/7/98; 5/17/00; 12/21/04)

2-4-415 Military Base Closure Banking Account: The APCO shall establish a banking account for each military facility or base subject to termination of military operations. The APCO shall, in accordance with the provisions of this rule, bank the emission reduction credits for each military facility or base. The designated base reuse commission shall be entitled to the use of the banked emission reduction credits for projects within the jurisdiction of the base reuse commission, provided that the emission reduction credits have not been banked by the military facility or base.

(Adopted June 15, 1994)

2-4-416 Re-evaluating PM₁₀ Emission Reduction Credits: The owner of PM₁₀ banked emission reduction credits (ERCs) that were approved but not used prior to December 19, 2012 may request the District to re-evaluate those banked ERCs for the purpose of: converting PM₁₀ to PM₁₀ and PM_{2.5}; and/or including the condensable portion of PM₁₀ that was not included in the original evaluation.

(Adopted December 19, 2012)

2-4-600 MANUAL OF PROCEDURES

2-4-601 Emission Calculation Procedures: The emission calculation procedures contained in Regulation 2-2-600 shall be applicable to this Rule.

(Amended July 17, 1991)

2-4-602 Calculation Procedure for Converting Filterable PM₁₀ to Filterable PM_{2.5}: Existing PM₁₀ emission reduction credits can be converted to PM_{2.5} by multiplying the amount of PM₁₀ by a District-approved conversion factor, based on the type of source that originally generated the PM₁₀ credits. Acceptable conversion factors may include, but are not necessarily limited to the following:

- 602.1 For common source categories, the District will maintain a list of PM₁₀ to PM_{2.5} conversion factors in the Permit Handbook;
- 602.2 A comparison of AP-42 or other generally accepted emission factors for PM₁₀ and PM_{2.5};
- 602.3 Source specific emission test data comparing PM₁₀ and PM_{2.5} emission rates;
- 602.4 Emission test data comparing PM₁₀ and PM_{2.5} emission rates from a similar source.

(Adopted December 19, 2012)

2-4-603 Calculation Procedure for Including Condensable PM₁₀ or PM_{2.5}: The adjustment to add condensable (back-half) particulate to an existing credit will be based on the following:

- 603.1 The applicant must demonstrate the original credits were based solely on filterable particulate;
- 603.2 The applicant must identify the ratio of filterable to condensable PM₁₀ and provide supporting documentation;

- 603.3 The amount of condensable PM₁₀ will be determined by multiplying the amount of original filterable PM₁₀ by the ratio from section 2-4-603.2;
- 603.4 The condensable portion of PM₁₀ will be reduced if necessary, based on data that indicates a lower filterable PM₁₀ emission rate than was used in the original evaluation.
- 603.5 The original amount of filterable PM₁₀ will not be adjusted.

(Adopted December 19, 2012)

Both approvals
combined
2/28/94
3/21/95

REGULATION 2
PERMITS
RULE 6
MAJOR FACILITY REVIEW
(Adopted November 3, 1993)

~~2-6-100 GENERAL~~

~~2-6-101 **Description:** The purpose of this rule is to implement the operating permit requirements of Title V of the federal Clean Air Act as amended in 1990. This rule shall apply to major facilities, phase II acid rain facilities, subject solid waste incinerator facilities, and any facility in a source category designated by the Administrator of the EPA as requiring a Title V permit. This rule also provides a means by which facilities may avoid the Title V requirements by limiting their potential to emit such that they are not major facilities. This rule shall not alter any other requirements of applicable federal, state, or District orders, rules or regulations.~~

~~2-6-110 **Exemption, Asbestos:** Any demolition or renovation of an asbestos-containing source that requires a permit solely because it is subject to Regulation 11, Rule 2, Asbestos Demolition, Renovation, and Manufacturing, is exempt from this regulation.~~

~~2-6-111 **Exemption, Wood Heaters:** Any wood heater that requires a permit solely because it is subject to Regulation 10, Subpart AAA, is exempt from this regulation.~~

~~2-6-112 **Exemption, Motor Vehicles:** Engines used to propel motor vehicles, as defined in the California Vehicle Code, are exempt from this regulation.~~

~~2-6-200 DEFINITIONS~~

~~2-6-201 **Administrative Permit Amendment:** A nonsubstantive amendment to a major facility review permit. Such amendments include, but are not necessarily limited to, the following: changes in recordkeeping format that are not relaxations of applicable requirements, the correction of typographical errors, the identification of administrative changes at a facility (such as a replacement of the facility's responsible official or a change in ownership or operational control of the facility which involves no physical or operational changes to the facility), or the imposition of new or more frequent emission monitoring requirements.~~

~~2-6-202 **Applicable Requirements:** Air quality requirements with which a facility must comply pursuant to the District's regulations, codes of California statutory law, the federal Clean Air Act, other provisions of the United States Code, and the Code of Federal Regulations.~~

~~2-6-203 **Clean Air Act:** The federal Clean Air Act, as amended in 1990, including the implementing regulations.~~

~~2-6-204 **Designated Facility:** Any facility, other than a major facility, phase II acid rain facility, or subject solid waste incinerator facility, as defined by this rule, that falls within a source category designated as subject to the requirements of Title V of the federal Clean Air Act by the EPA Administrator after the effective date of this rule.~~

~~2-6-205 **Early Reduction Demonstration:** A 90% reduction in hazardous air pollutants or a 95% reduction in particulate hazardous air pollutants achieved pursuant to Section 112(i)(5) of the federal Clean Air Act.~~

~~2-6-206 **Facility:** Any property, building, structure, or installation (or any aggregation of facilities) located on one or more contiguous or adjacent properties and under common ownership or control of the same person that emits or may emit any air pollutant and is considered a single major industrial grouping (identified by the first two-digits of the applicable code in *The Standard Industrial Classification Manual*). In addition, facilities whose operations include cargo loading or unloading from cargo carriers other than motor vehicles shall include the cargo carriers as part of the source which receives or loads the cargo. Accordingly, all emissions from such carriers while operating in the District, or within California Coastal Waters adjacent to the District, shall be included as part of the source emissions.~~

206.1 Notwithstanding the definition in Section 2-6-206 above, the emissions related to cargo carriers will not be included when determining applicability of the requirements of Sections 2-6-301 and 310.

2-6-207 Federally Enforceable: All limitations and conditions which are enforceable by the Administrator of the U. S. EPA, including requirements developed pursuant to 40 CFR Parts 60 (NSPS), 61 (NESHAPS), 63 (HAP), 70 (State Operating Permit Programs), and 72 (Permits Regulation, Acid Rain), requirements contained in the State Implementation Plan (SIP) that are applicable to the District, any District permit requirements established pursuant to 40 CFR 52.21 (PSD) or District regulations approved pursuant to 40 CFR Part 51, Subpart I (NSR), and any operating permits issued under an EPA-approved program that is a part of the SIP and expressly requires adherence to any permit issued under such program.

~~**2-6-208 Fossil Fuel:** Natural gas, petroleum, and coal, or any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat.~~

~~**2-6-209 Fugitive Emissions:** All emissions from unintended openings in process equipment, emissions occurring from miscellaneous activities relating to the operation of a facility, and emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.~~

2-6-210 Hazardous Air Pollutant: Any pollutant that is listed pursuant to Section 112(b) of the Clean Air Act.

~~**2-6-211 Independent Power Production Facility:** A facility that generates electricity and fulfills the following conditions:~~

~~211.1 The facility must be nonrecourse project-financed as defined in 10 CFR 715;~~

~~211.2 The facility must sell 80 percent or more of its electrical output at wholesale;~~

~~211.3 Direct public utility ownership of the equipment must not exceed 50 percent;~~

~~211.4 The facility must have commenced operation after November 14, 1990; and~~

~~211.5 The facility must be required to hold allowances under Title IV of the Clean Air Act.~~

2-6-212 Major Facility: For the purposes of Regulation 2, Rule 6, a major facility is either of the following:

212.1 Major Facility (Regulated Air Pollutants): A facility that has the potential to emit 100 tons per year or more of any regulated air pollutant. For fugitive emissions of said pollutants, only those from facility categories listed in 40 CFR 70.2 "Definitions - Major source (2)" shall be included in determining whether the facility is a major facility. Once any facility is determined to be a major facility, all fugitive emissions from the facility shall be included in calculating the facility's emissions.

212.2 Major Facility (Hazardous Air Pollutants): A facility that has the potential to emit 10 tons per year or more of a single hazardous air pollutant, 25 tons per year or more of a combination of hazardous air pollutants, or such lesser quantity as the EPA Administrator may establish by rule. All fugitive emissions of hazardous air pollutants are included in determining a facility's potential to emit. For radionuclides, the definition of a major facility shall be specified by the EPA Administrator by rule.

2-6-213 Major Facility Review (MFR): Plantwide review of sources, emissions, and regulatory requirements at facilities including, but not limited to, major facilities, phase II acid rain facilities, subject solid waste incinerator facilities, and designated facilities, which are potentially subject to the permitting requirements of Regulation 2, Rule 6 and of Title V of the Clean Air Act.

2-6-214 Major Facility Review Permit: An operating permit issued to a major facility, phase II acid rain facility, subject solid waste incinerator facility, or designated facility, pursuant to the requirements of this rule.

~~**2-6-215 Minor Permit Modification:** Any modification to a federally enforceable condition on a major facility review permit which~~

~~215.1 is not a significant permit modification; and~~

~~215.2 is not an administrative permit amendment; and~~

~~215.3 does not violate any applicable requirement which is federally enforceable.~~

~~**2-6-216 Operating Scenarios:** All modes of facility operation to be permitted, including normal operating conditions, start-up, and shutdown. This shall include all planned or reasonably~~

~~foreseeable process, feed, and product changes. Operating scenarios must meet all applicable requirements.~~

~~2-6-217 **Phase II Acid Rain Facility:** A facility that includes fossil-fueled combustion equipment that is used to generate electricity for sale as designated below:~~

~~217.1 A facility with a fossil-fueled combustion device that serves a generator with a nameplate capacity over 25 MW except cogeneration facilities, qualifying facilities, independent power production facilities, or solid waste incinerator facilities as described below;~~

~~1.1 A facility with a fossil-fueled combustion device that commenced commercial operation after November 14, 1990 and that serves a generator with a nameplate capacity under 25 MW is a Phase II acid rain facility unless the facility complies with and obtains an exemption per 40 CFR 72.7.~~

~~217.2 A cogeneration facility with a fossil-fueled combustion device that sells more than 219,000 MW-hrs annually and more than one-third of its potential electric output capacity to any utility power distribution system, unless it is a qualifying facility or an independent power plant;~~

~~217.3 A solid waste incinerator that burns fossil fuels for 20 percent or more (on a BTU basis) of the total energy input during any calendar year; or~~

~~217.4 A qualifying facility or an independent power plant that does not meet both of the following conditions:~~

~~4.1 Possession as of November 15, 1990 of qualifying power purchase commitments to sell at least 15 percent of its total planned net output capacity; and~~

~~4.2 The net output capacity of the equipment cannot exceed 130 percent of the planned net output capacity.~~

~~217.5 The following are not Phase II Acid Rain Facilities:~~

~~5.1 Simple combustion turbines that commenced operation before November 15, 1990;~~

~~5.2 A fossil-fueled combustion device built before November 15, 1990, and that did not, as of November 15, 1990, and does not currently, serve a generator with a nameplate capacity of greater than 25 MW;~~

~~5.3 A fossil-fueled combustion device that, during 1985, and as of November 15, 1990, and currently, does not serve a generator that produced or produces electricity for sale; and~~

~~5.4 A fossil-fueled combustion device that commenced commercial operation on or after November 15, 1990, and serves a generator with a capacity not greater than 25 MW, burns fuel with a sulfur content that is less than 0.05 percent, and that complies with the requirements of 40 CFR 72.7.~~

~~2-6-218 **Potential to Emit:** The maximum capacity of a facility to emit a pollutant, based on its physical and operational design. Any physical or operational limitation on the capacity of the facility to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as a part of its design only if the limitation, or the effect it would have on emissions, is federally enforceable.~~

~~2-6-219 **Preconstruction Permit or Review:** A permit authorizing either construction or a review of construction plans prior to construction, including~~

~~219.1 An authority to construct permit issued pursuant to District Regulation 2, Rule 1;~~

~~219.2 An authority to construct permit issued pursuant to District Regulation 2, Rule 2;~~

~~219.3 A preconstruction review to determine the ability of a proposed source or source modification to comply with applicable New Source Performance Standards pursuant to District Regulation 10;~~

~~219.4 A preconstruction review conducted prior to a significant modification to a major facility review permit for a physical or operational change that would be prohibited by an existing federally enforceable condition;~~

~~219.5 A preconstruction review conducted prior to a physical or operational change to a synthetic minor facility that would increase the facility's potential to emit to above the~~

~~threshold for a major facility. Such review must be associated with an application for a major facility review permit for said facility.~~

~~2-6-220 **Qualifying Facility:** One of two types of power-generating facilities pursuant to Title 16, Section 796, of the United States Code:~~

~~220.1 A cogeneration facility that is not owned by a public utility and is certified by the Federal Energy Regulatory Commission as a qualifying facility; or~~

~~220.2 A power production facility that is not owned by a public utility, has an output capacity not greater than 80 MW, uses biomass, waste, renewable resources, geothermal resources, solar energy, wind energy, or any combination of the above as its primary energy source, and is certified by the Federal Energy Regulatory Commission as a qualifying facility.~~

~~2-6-221 **Qualifying Power Purchase Agreement:** Defined in 40 CFR 72.2.~~

~~2-6-222 **Regulated Air Pollutant:** The following air pollutants (as defined in Regulation 1) are regulated:~~

~~222.1 Nitrogen oxides and volatile organic compounds;~~

~~222.2 Any pollutant for which a national ambient air quality standard has been promulgated;~~

~~222.3 Any Class I or Class II ozone depleting substance subject to a standard promulgated under Title VI of the Clean Air Act; and~~

~~222.4 Any pollutant that is subject to any standard promulgated under Section 111 of the Clean Air Act.~~

~~222.5 Any pollutant that is subject to any standard promulgated under Section 112 of the Clean Air Act.~~

~~2-6-223 **Responsible Official:** The responsible official will vary depending upon the type of facility, and shall be designated as follows:~~

~~223.1 Corporation: The responsible official shall be a president, secretary, treasurer, or vice president in charge of a principal business function or shall otherwise be a duly authorized representative if:~~

~~1.1 the representative is responsible for the overall operation of the facility, and~~

~~1.2 either the duly authorized representative is responsible for the operation of facilities that employ more than 250 persons or that have gross annual sales or expenditures exceeding \$25 million in 1980 dollars or the APCO has approved a petition from the original responsible official to allow the duly authorized representative to be the responsible official.~~

~~223.2 Partnership or Sole Proprietorship: general partner or proprietor.~~

~~2.1 Partnership of Corporations: The responsible official shall be the responsible official of any of the partner corporations.~~

~~223.3 Municipality, State, Federal, or Other Public Agency: The principal executive officer or ranking elected official.~~

~~223.4 Phase II Acid Rain Facilities: The designated representative pursuant to 40 CFR 72.20 through 72.25.~~

~~2-6-224 **Schedule of Compliance:** A schedule of remedial measures issued by the District's Hearing Board, including an enforceable sequence of actions leading to compliance with all federally enforceable applicable requirements.~~

~~2-6-225 **Severability Clause:** A statement in a permit issued under this rule that, in the case of a challenge to any part of the permit by EPA, the facility's owner or operator, or any other person, the remaining parts of the permit will remain valid.~~

~~2-6-226 **Significant Permit Modification:** Any modification to a federally enforceable condition contained in a major facility review permit that can be defined as follows:~~

~~226.1 The incorporation of a change considered a major modification under 40 CFR Parts 51 (NSR) or 52 (PSD);~~

~~226.2 The incorporation of a change considered a modification under in 40 CFR Parts 60 (NSPS), 61 (NESHAPS), or Section 112 of the Clean Air Act (HAP);~~

~~226.3 Any significant change or relaxation of any applicable monitoring, reporting or recordkeeping condition;~~

~~226.4 The establishment of or change to a permit term or condition allowing a facility to avoid an applicable requirement, including:~~

~~4.1 a federally enforceable emission limit assumed in order to avoid classification as a modification under any provision of Title I of the federal Clean Air Act, or~~

~~4.2 an alternative hazardous air pollutant emission limit pursuant to Section 112(i)(5) of the Clean Air Act;~~

~~226.5 The establishment of or change to a case-by-case determination of any emission limit or other standard;~~

~~226.6 The establishment of or change to a facility-specific determination for ambient impacts, visibility analysis, or increment analysis on portable sources; or~~

~~226.7 The incorporation of any requirement promulgated by the U. S. EPA under the authority of the Clean Air Act provided that three or more years remain on the permit term.~~

~~2-6-227 **Simple Combustion Turbine:** Rotary engine driven by a gas under pressure that is created by the combustion of any fuel, including combined cycle engines, and excluding engines with auxiliary firing.~~

~~2-6-228 **Source:** Any article, machine, equipment, operation, contrivance or related groupings of such that may produce and/or emit any regulated air pollutant or hazardous air pollutant.~~

~~2-6-229 **Subject Solid Waste Incinerator Facility:** Any source that burns solid waste material (except hazardous waste as defined by RCRA) from commercial, industrial, or general public sources for which a New Source Performance Standard (NSPS) has been promulgated.~~

~~2-6-230 **Synthetic Minor Facility:** A facility which, by imposition of facilitywide federally enforceable permit conditions, has its potential to emit limited to below the threshold levels for a major facility as defined by Section 2-6-212 and is not otherwise required to apply for a major facility review permit under Regulation 2, Rule 6.~~

~~2-6-231 **Synthetic Minor Operating Permit:** A District operating permit which has been modified to include conditions imposing facilitywide federally enforceable emission limits, has been duly noticed to the public, and has been submitted to EPA, thereby making the facility a synthetic minor facility as defined by Regulation 2, Rule 6. As a District permit, a synthetic minor operating permit is subject to all the provisions of District Regulations 1, 2, and 3, including but not limited to permitting, compliance, and fee requirements.~~

~~2-6-232 **Synthetic Minor Operating Permit Modification:** A modification to a federally enforceable term or condition of a synthetic minor operating permit that establishes a facilitywide emission limit or that specifies the recordkeeping requirements necessary to verify ongoing compliance with a facilitywide emission limit. (Adopted February 1, 1995)~~

~~2-6-233 **Permit Shield:** A provision in a major facility review permit that identifies and justifies specific federally enforceable regulations and standards which are not applicable to a source or group of sources. Enforcement actions and litigation may not be initiated against the source or group of sources covered by the shield based on those identified regulatory and statutory provisions. (Adopted February 1, 1995)~~

~~2-6-234 **Program Effective Date:** The date EPA specifies, through publication of final approval in the Federal Register, that the District's Major Facility Review Program becomes effective. (Adopted February 1, 1995)~~

~~2-6-300 STANDARDS~~

~~2-6-301 **Major Facility Review Requirement:** Any major facility as defined in Section 2-6-212 shall undergo major facility review in accordance with the requirements of this rule.~~

~~2-6-302 **Major Facility Review Requirements for Phase II Acid Rain Facilities:** Any Phase II acid rain facility shall undergo major facility review in accordance with the requirements of this rule, whether or not such facility is classified as a major facility under Section 2-6-212.~~

~~302.1 After January 1, 2000, all Phase II acid rain facilities shall comply with the requirements of Sections 405, 406, 408, 409, 411, and 412 of the Clean Air Act.~~

~~2-6-303 **Major Facility Review Requirements for Subject Solid Waste Incinerator Facilities:** Any subject solid waste incinerator facility shall undergo major facility review in accordance with the~~

~~requirements of this rule, whether or not such facility is classified as a major facility under Section 2-6-212.~~

~~303.1 Any relevant Standard of Performance for New Stationary Sources that is adopted by EPA and incorporated by reference into District Regulation 10 shall apply to existing solid waste incinerators as well as to new or modified solid waste incinerators in the District and shall be included in the major facility review permits for such sources.~~

~~2-6-304 **Major Facility Review Requirement for Designated Facilities:** Any designated facility shall undergo major facility review in accordance with the requirements of this rule, whether or not such facility is classified as a major facility under Section 2-6-212.~~

~~2-6-305 **Operational Flexibility:** A facility may make a change to the facility or operation without requiring a major facility review permit revision in accordance with the procedures and restrictions set forth in Section 2-6-417 if the change is not a modification pursuant to Title I of the Clean Air Act and does not exceed any emissions allowable under federally enforceable provisions of the permit. Such change shall in no way affect the obligation of the permittee to comply with any applicable requirement including the requirement to obtain an Authority to Construct under Rule 2-1. This provision shall not apply to the phase II acid rain portion of any facility subject to this Rule. (Amended February 1, 1995)~~

~~2-6-306 **Emissions Trading:** The APCO shall allow emissions trading within a facility that has a major facility review permit in accordance with the procedures and restrictions set forth in Section 2-6-418 if the change is not a modification pursuant to Title I of the Clean Air Act and does not exceed any emissions allowable under the permit. This emission trading provision shall in no way affect the obligation of the permittee to comply with any applicable requirement including the requirement to obtain an Authority to Construct under Rule 2-1. This provision shall not apply to the phase II acid rain portion of any facility subject to this Rule.~~

~~2-6-307 **Non-compliance, Major Facility Review:** Any facility subject to the requirements of this regulation that is not in compliance with any federally enforceable permit condition, any federally enforceable applicable requirement set forth in its major facility review permit, or the requirement to apply for a major facility review permit is in violation of the Clean Air Act and may be subject to enforcement action, permit termination, permit revocation and reissuance, and/or denial of a permit renewal. Moreover, a facility subject to major facility review which has not submitted a timely and complete permit application by the deadlines set forth in Section 2-6-404 may not operate. (Amended February 1, 1995)~~

~~2-6-308 **Major Facility Review and Other District Permitting Requirements:** Submittal of a complete application or an administrative permit amendment request in accordance with this rule shall in no way affect, and shall not constitute compliance with, the requirements for authorities to construct and permits to operate as set forth in Regulation 2, Rules 1 and 2.~~

~~2-6-309 **Prohibited Modifications:** A person shall not modify any source or operation covered by a major facility review permit issued under this rule unless such modification is either: (1) included in an operating scenario addressed in the permit; (2) authorized under this rule; or (3) permitted by the APCO pursuant to an application for a modification to the permit.~~

~~2-6-310 **Synthetic Minor Operating Permit Requirement:** Any major facility which elects to accept facilitywide federally enforceable permit conditions such that the facility becomes a synthetic minor facility, and is not otherwise subject to major facility review, shall apply for a synthetic minor operating permit. Any facility which files false information with the District in order to obtain a synthetic minor operating permit is in violation of the Clean Air Act and District Regulations and may be subject to enforcement action.~~

~~2-6-311 **Non-compliance, Synthetic Minor Facilities:** Any facility subject to the requirements of a synthetic minor operating permit that is not in compliance with any federally enforceable permit condition set forth in its synthetic minor operating permit is in violation of the Clean Air Act and may be subject to enforcement action, permit termination, permit revocation and reissuance, and/or denial of a permit renewal. (Amended February 1, 1995)~~

~~2-6-400~~ ~~ADMINISTRATIVE REQUIREMENTS~~

- ~~2-6-401~~ **Facilities Affected:** The following categories of facilities are subject to the requirements of Regulation 2, Rule 6:
- 401.1 Major facilities
 - 401.2 Phase II acid rain facilities
 - 401.3 Subject solid waste incinerator facilities
 - 401.4 Designated facilities
 - 401.5 Synthetic minor facilities
- ~~2-6-402~~ **Fees:** Any facility subject to the requirements of this rule shall pay any applicable fees specified in District Regulation 3, Fees, including Schedule P.
- ~~2-6-403~~ **Application for Major Facility Review Permit, Permit Renewal, or Permit Modification:** The responsible official for any major facility, phase II acid rain facility, subject solid waste incinerator facility, or designated facility shall apply for a major facility review permit, permit renewal, or permit modification in accordance with all the requirements of this rule.
- 403.1 Notwithstanding the requirements set forth in this rule, a major facility that is not otherwise subject to major facility review shall not be required to apply for a federally enforceable operating permit (i.e., an MFR permit or a synthetic minor operating permit) until three years from the program effective date provided that its actual emissions are below all the following thresholds:
- 1.1 50 tons per year of any regulated air pollutant;
 - 1.2 70% of the major facility threshold of any single hazardous air pollutant; and
 - 1.3 15 tons per year of any combination of hazardous air pollutants.
- For the purpose of this subsection, "actual emissions" shall be the maximum emissions for any consecutive 12-month period ending on or after January 1, 1992, based on the facility's annual reports to the District detailing throughputs of process materials, throughputs of materials stored and usages of materials, and shall be calculated using emission factors approved by the APCO. The provisions of this subsection shall not apply to any facility that has explicitly permitted emission levels at or above any threshold for a major facility as defined in section 2-6-212 regardless of its actual emissions.
(Amended February 1, 1995)
- ~~2-6-404~~ **Timely Application for a Major Facility Review Permit:** The responsible official for a facility subject to the requirements of Section 403 of Regulation 2, Rule 6, shall submit an application for a major facility review permit to the APCO in a timely manner as described below:
- 404.1 The initial application for a major facility review permit shall be received by the APCO within 12 months after the facility becomes subject to Regulation 2, Rule 6.
 - 404.2 An application for a five-year renewal of the terms and conditions of a major facility review permit shall be received by the APCO at least 6 months but no earlier than 12 months prior to the date on which the five-year period for the validity of the terms and conditions of the permit expires.
 - 404.3 An application for a significant permit modification shall be received by the APCO within 12 months of commencing an operation associated with a significant permit modification. Where an existing federally enforceable major facility review permit condition would prohibit such change in operation, the responsible official must request preconstruction review and obtain a major facility review permit revision before commencing the change.
 - 404.4 An application for a minor permit modification shall be received by the APCO prior to commencing any operation associated with the minor permit modification.
 - 404.5 A phase II acid rain facility shall apply for a major facility review permit in accordance with the deadlines in Sections 404.1 and 404.7 of this rule. An initial application for the phase II acid rain portion of a major facility review permit shall be received by the APCO by January 1, 1996.
 - 404.6 After EPA has approved Regulation 2, Rule 6, any major facility subject to Section 112(j) of the federal Clean Air Act must submit an application for a major facility review permit no later than 18 months after the date the U. S. Environmental Protection Agency

fails to promulgate any emission standard listed pursuant to Clean Air Act Section 112(c)(1) according to the schedule promulgated under Clean Air Act Section 112(e).

- 404.7 Notwithstanding subsection 2-6-404.1 above, the initial application from any existing facility subject to the permitting requirements of Regulation 2, Rule 6, that has less than 50 District permitted sources shall be received by the APCO within three months from the program effective date. The initial application from any existing facility subject to the permitting requirements of Regulation 2, Rule 6, that has 50 or more District permitted sources shall be received by the APCO within twelve months from the program effective date. (Amended February 1, 1995)

~~2-6-405 Complete Application for a Major Facility Review Permit: All applications for an initial major facility review permit, for a significant modification to an existing major facility review permit, and for a five-year renewal of the terms and conditions of a major facility review permit shall contain the following information in addition to the information required by Regulation 2-1-202:~~

- ~~405.1 All relevant BAAQMD permit application forms;~~
- ~~405.2 A description of the facility's processes and products (by Standard Industrial Classification Code) including any associated with an operating scenario identified by the facility;~~
- ~~405.3 A statement certifying that any fee required by District Regulation 3 has been paid;~~
- ~~405.4 Identification and description of:~~
- ~~4.1 each permitted source at the facility~~
- ~~4.2 each source or other activity that is exempt from the requirement to obtain a permit or excluded from District rules or regulations under Regulation 2, Rule 1, and a citation of the section of the rule under which it is exempted or excluded;~~
- ~~405.5 A list, including citation and description, of all applicable requirements for each source;~~
- ~~405.6 A calculation and summary of annual emissions (including all fugitive emissions) of all regulated air pollutants and any air pollutant for which the facility is major, for each permitted, exempt or excluded source, or any other activity, that emits:~~
- ~~6.1 Two or more tons per year of any single regulated air pollutant;~~
- ~~6.2 1,000 or more pounds per year of any single hazardous air pollutant~~
- ~~The above emission calculations shall also be submitted for any alternate operating scenarios that are submitted with the application;~~
- ~~405.7 A description of the compliance status of the facility with respect to all applicable federal, state, and District air quality requirements;~~
- ~~405.8 A compliance statement as follows:~~
- ~~8.1 A statement that the facility will continue to comply with all applicable requirements with which it is currently in compliance;~~
- ~~8.2 A statement that the facility will meet all applicable requirements on a timely basis as requirements become effective during the permit term and a narrative of how the facility will achieve compliance with all applicable requirements if the facility is not currently doing so; and~~
- ~~8.3 A copy of any schedule of compliance applicable to the facility's operations regarding air quality which has been issued by the District's Hearing Board, the California Air Resources Board, or any court of competent jurisdiction;~~
- ~~405.9 A compliance certification by a responsible official of the facility that under penalty of perjury, the application forms and all accompanying reports and other required compliance certifications are true, accurate, and complete; and~~
- ~~405.10 All information required by Volume II of the District's Manual of Procedures.~~
- ~~Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall submit the supplementary facts or corrected information upon becoming aware of such failure or incorrect submittal. In addition, the applicant must provide additional information as necessary to address any requirements that become applicable.~~

~~(Amended February 1, 1995)~~

~~2-6-406 **Application for a Minor Permit Modification:** An application for a minor permit modification to a major facility review permit shall contain:~~

- ~~406.1 A description of the proposed change, the emissions resulting from the proposed change, and any new applicable requirements that will apply if the change occurs;~~
- ~~406.2 A draft permit including the proposed change;~~
- ~~406.3 A request by the responsible official that the minor modification procedures be used;~~
- ~~406.4 A certification by the responsible official that the proposed change is a minor modification as defined in Section 2-6-215; and~~
- ~~406.5 All documents or information required by Section 2-6-405 as they pertain to sources affected by the minor modification.~~

~~A facility that has submitted an application for a minor modification must comply with the proposed permit terms and conditions. If the facility fails to comply with the proposed terms during the time that the application is being processed, then the existing permit terms and conditions may be enforced against it.~~

~~2-6-407 **Application Shield:** An existing facility shall not be subject to enforcement action for not possessing a major facility review permit if the facility fulfills the following three conditions:~~

- ~~407.1. The facility has filed with the APCO a complete and timely application for an initial major facility review permit or for a five-year renewal of an existing major facility review permit;~~
- ~~407.2. The APCO has not acted on the application; and~~
- ~~407.3. The facility has honored all requests from the APCO for further information relating to the application by the date specified in writing of the request.~~

~~2-6-408 **Completeness Determination:** The APCO shall determine whether a major facility review permit application is complete as follows:~~

- ~~408.1 Application for an initial permit, for a five-year renewal or for a significant permit modification: The APCO shall determine completeness no later than 60 calendar days following receipt of the application. Unless the APCO requests additional information or otherwise notifies the applicant of incompleteness within 60 days of receipt of the application, the application shall be deemed complete.~~
- ~~408.2 An application for a minor permit modification: The APCO shall determine completeness within 30 days of receipt of the application. Unless the APCO requests additional information or otherwise notifies the applicant of incompleteness within 30 days of receipt of the application, the application shall be deemed complete. The District will determine whether the modification qualifies as a minor modification during the 30-day period.~~

~~After an application is deemed complete, the APCO may request in writing additional information necessary to evaluate or take final action on the permit. The facility shall have until the date specified in writing to respond to these requests.~~

~~2-6-409 **Permit Content:** A major facility review permit shall contain the following information and provisions:~~

- ~~409.1 A listing of all federal, state and District air quality requirements, emission limitations, permit conditions and operational or throughput standards or limits applicable to the facility, and a reference to the origin of each such requirement;~~
- ~~409.2 All applicable requirements for monitoring, recordkeeping and reporting, including applicable test methods and analysis procedures, as well as requirements for testing, monitoring, reporting and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Where the applicable requirement does not require periodic monitoring or testing, the permit shall contain periodic monitoring sufficient to yield reliable data from the relevant time periods that is representative of the source's compliance with the permit;~~
- ~~409.3 A restatement of the requirement of District Regulation 1-440 that the facility's owner or operator must provide the APCO with reasonable access to the premises of the facility;~~
- ~~409.4 A restatement of the requirement of District Regulation 1-441 and of Section 2-6-501 that the facility's owner or operator must provide the information, records, and reports requested or specified by the APCO;~~

- ~~409.5 A severability clause to ensure the continued validity of permit requirements in the event of a challenge to any portion of the permit;~~
- ~~409.6 The duration of the major facility review permit, not to exceed five years;~~
- ~~409.7 A statement that: (a) the owner or operator of the facility must comply with all permit conditions and limitations set forth in the major facility review permit; (b) an application for a change in the permit by the owner or operator of the facility does not revoke or limit the applicability of any permit condition in the permit; (c) the major facility review permit does not convey a property right or exclusive privilege; and (d) the facility must keep a record in a contemporaneous log when the facility changes any aspect of its operations from one permitted scenario to another;~~
- ~~409.8 Provisions specifying the conditions under which the permit may be reopened for cause and modified, revoked, reissued, or terminated, prior to the end of the term;~~
- ~~409.9 A statement of compliance;~~
- ~~409.10 A schedule of compliance, including a requirement for progress reports consistent with the schedule of compliance to be prepared at least semi-annually;~~
- ~~409.11 Terms and conditions for reasonably anticipated operating scenarios;~~
- ~~409.12 If included in the permit application and approved by the APCO, terms and conditions for any permit shield;~~
- ~~409.13 A provision for payment of fees required by Regulation 3;~~
- ~~409.14 An identification of those terms and conditions of the permit which are not federally enforceable because they are not derived from any requirement of the Clean Air Act;~~
- ~~409.15 For phase II acid rain facilities, all acid rain provisions of a permit shall be contained in a separate and complete section of the permit. This section shall contain a permit condition prohibiting emissions exceeding the allowances that a facility holds under Title IV of the Clean Air Act;~~
- ~~409.16 Any terms and conditions for emissions trading approved under Section 2-6-418; and~~
- ~~409.17 All requirements and provisions pertaining to major facility review permits as set forth in Volume II of the District's Manual of Procedures. (Amended February 1, 1995)~~

2-6-410

Final Action for Initial Permit Issuance, Five-Year Renewal, Reopenings, and Revisions:

The APCO shall take final action on each major facility review permit application as follows:

- ~~410.1 The APCO shall take final action on an application for an initial permit, a significant permit modification, or a permit renewal within eighteen months after receipt of an application that has been deemed complete. No permit shall be issued until after all required EPA and public review. If a facility submits a timely and complete application for renewal, all terms and conditions of the permit shall remain in effect until the renewal permit has been issued or denied.~~
- ~~410.2 The APCO shall take action to issue or deny a minor permit modification within 90 days of receipt of the application or within 15 days after the end of the EPA Administrator's 45-day review, whichever is later;~~
- ~~410.3 After the APCO has reopened an existing permit for cause, pursuant to Section 2-6-415, the APCO shall take final action to modify, revoke and reissue, or terminate that permit within 12 months after the date on which the permit is formally reopened.~~
- ~~410.4 The APCO shall take final action on an application containing an early reduction demonstration within nine months after the APCO determines that the application is complete.~~
- ~~410.5 Submittal of applications for, and the permitting, revision, and reopenings of the acid rain portion of a major facility review permit shall occur in accordance with the deadlines set forth in Title IV of the Clean Air Act and the regulations promulgated thereunder.~~
- ~~410.6 Notwithstanding the deadline set forth in subsection 410.1 above, for existing facilities that become subject to MFR on the date that the program receives EPA approval, the APCO shall take final action on one-third of initial applications from such facilities annually over a period not to exceed three years from the program effective date.~~

~~(Amended February 1, 1995)~~

~~2-6-411~~ **Reports to EPA and Public Petitions for Major Facility Review Permits:** For all initial applications, five-year renewals, and proposed minor and significant permit modifications pursuant to this Rule, the APCO shall submit to EPA for review and comment each application or application summary, proposed permit, and each final major facility review permit. This EPA review shall be subject to the following:

- ~~411.1~~ EPA shall have 45 days from receipt of the proposed permit to review the proposed terms and conditions and to accept or object to them in writing.
- ~~411.2~~ If EPA objects to the proposed terms and conditions of a permit within the specified 45-day period, the APCO shall not issue the permit. If the APCO does not submit appropriate revisions that address EPA's objections within 60 days after being notified of EPA's objection, EPA may issue, revise or deny the permit.
- ~~411.3~~ If EPA does not object to the proposed terms and conditions of a major facility review permit within the specified 45-day period, any person dissatisfied with the proposed terms and conditions may petition EPA to reconsider the matter within 60 days thereafter. Any such petition must be based on objections raised during the public comment period on the proposed permit, unless the petitioner demonstrates that it was impracticable to do so or that the grounds for the objection arose after the close of the original public comment period.
 - ~~3.1~~ If the APCO has not yet issued a proposed permit, the APCO shall resolve the issue prior to issuing the permit. If the APCO is unable to satisfy EPA's objection within 60 days of being notified thereof, EPA may issue, revise or deny the permit.
 - ~~3.2~~ If the APCO has issued the permit following the 45-day EPA comment period but before receipt of an EPA objection based on public petition, the permit may be reopened for cause by the APCO in accordance with Section 2-6-415, or by the EPA in accordance with 40 CFR 70.7(g). In such event, the requirements of the permit shall remain in effect while the EPA or the APCO determines whether to modify, terminate, or revoke and reissue the permit.
- ~~411.4~~ If the proposed permit has been modified after EPA has reviewed and approved it, the APCO shall submit the modified proposed permit to EPA for a new 45-day review, in accordance with the provisions for the original 45-day review.

(Amended February 1, 1995)

~~2-6-412~~ **Public Participation, Major Facility Review Permit Issuance:** The APCO shall notify the public in advance of any proposed initial issuance, significant modification or five-year renewal of a major facility review permit, in accordance with the following procedures:

- ~~412.1~~ The APCO shall publish a notice in a major newspaper in the area where the facility is located and send the notice to persons on a mailing list (including those who have requested in writing to be on such list);
- ~~412.2~~ The notice shall identify by name and address the facility, the permittee and the permitting authority. The notice shall include information about the operation to be permitted, any proposed change in emissions, a District source for further information, a brief description of the comment procedures, and a description of procedures to request a hearing. If the APCO has scheduled a hearing, the notice shall contain the time and place of the hearing;
- ~~412.3~~ The notice shall provide at least 30 days for public comment and shall give notice of any public hearing at least 30 days prior to the hearing; and
- ~~412.4~~ The APCO shall keep a record of the commenting persons and the issues raised in all such comments for five years.

~~2-6-413~~ **Administrative Permit Amendment Procedures:** The APCO may make administrative permit amendments as follows:

- ~~413.1~~ Regulations promulgated under Title IV of the Clean Air Act shall govern administrative permit amendments to the acid rain portion of any permit.
- ~~413.2~~ The APCO shall take final action on an administrative permit amendment no later than 60 days from the receipt of the request, provided that the APCO determines that the amendment is covered under Section 2-6-201.

~~413.3 The APCO shall submit a copy of the revised permit to EPA.~~

~~413.4 The facility may implement the changes covered by the administrative permit amendment immediately upon submittal of the request.~~

~~413.5 Any request for a change in ownership shall include a written agreement between the parties to the transaction which specifies the date of transfer of the permit.~~

~~2-6-414 **Minor Permit Modification Procedures:** The APCO shall take action on applications for minor permit modifications as follows:~~

~~414.1 The APCO shall notify EPA of the proposed minor permit modification within 5 working days of the APCO determination that the application is complete.~~

~~414.2 The APCO shall act on the proposed minor modification within 90 days of receipt of an application or 15 days after the end of EPA's 45-day review period, whichever is later, or with the consent of the applicant for such longer period as may be agreed upon.~~

~~414.3 If prior to taking action on a proposed minor modification the APCO determines that the proposed modification should be reviewed as a significant modification, the APCO shall revise the draft permit modification accordingly and shall submit this version to the EPA. In any such event, the provisions of Section 2-6-412 shall apply to all further consideration of the proposed modification.~~

~~2-6-415 **Reopening for Cause:** Proceedings to reopen and reissue a major facility review permit shall follow the same procedures that apply to the issuance of an initial major facility review permit and shall affect only those parts of the permit for which cause to reopen exists. Except in the case of an emergency, the APCO shall provide to the facility a notice of intent to reopen the permit at least 30 days in advance of the proposed reopening date. The APCO shall reopen and revise a major facility review permit under the following circumstances:~~

~~415.1 Additional requirements become applicable to a major facility having three or more years remaining before that facility's next scheduled major facility review. The APCO shall complete a reopening within 18 months after promulgation of the applicable requirement. (Reopening is not required if the effective date of the additional requirement is later than the date on which that facility's next scheduled major facility review is due);~~

~~415.2 Additional requirements become applicable to phase II acid rain facilities under the acid rain program. Upon approval by the EPA, excess emissions offset plans developed under this program shall be incorporated into the permit;~~

~~415.3 The APCO determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or~~

~~415.4 The APCO determines that the permit must be revised or revoked to assure compliance with the applicable requirements.~~

~~2-6-416 **Term for Major Facility Review:** Once a major facility review permit is issued to a facility, except insofar as the permit must be reopened in accordance with Section 2-6-415, the terms and conditions of that permit shall remain valid for a period of five years from the date of issuance. At the conclusion of every such five-year period, the APCO must review the terms and conditions of a major facility review permit in the same way as an application for an initial major facility review permit.~~

~~416.1 The issuance of a modification to an existing major facility review permit at any time during the course of the five-year period for which the terms and conditions of that permit are valid shall not affect or extend the five-year period.~~

~~416.2 A facility subject to this rule shall continue to provide throughput update information as required by the District and to pay the annual fee required by Regulation 3, Schedule P.~~

~~2-6-417 **Operational Flexibility Procedures:** A facility shall give written notice to the APCO of any changes made to the facility, pursuant to Section 2-6-305 - Operational Flexibility. The notice shall be received by the APCO at least 30 days prior to the change. The notice shall contain a description of the change, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The facility and the District shall each attach such notice to its copy of the permit.~~

~~2-6-418 **Emissions Trading Procedures:** The responsible official for a facility may propose that an emissions trading provision be included in its major facility review permit. The APCO shall include an emissions trading provision in the major facility review permit in accordance with the applicable procedures for final action (depending on whether the proposed provision is included in an initial application or in an application for a minor or significant permit modification) if the procedures and restrictions specified below have been followed:~~

- ~~418.1 The responsible official submits the proposal in the initial application, in a permit renewal application, or in an application for a significant modification;~~
- ~~418.2 The proposed emissions trading provision does not contravene any applicable requirement;~~
- ~~418.3 The proposal includes an emissions cap allowing for the trading of emissions increases and decreases, permit conditions, recordkeeping requirements and replicable procedures for determining compliance with applicable requirements;~~
- ~~418.4 The proposed emissions trades are quantifiable and federally enforceable; and~~
- ~~418.5 Once the emissions trading provisions have been incorporated into the permit, the facility notifies the APCO in writing at least seven days prior to a trade. The notification shall state when the trade will occur, what change in emissions will result, and how the trade will comply with the emission trading provisions. (Amended February 1, 1995)~~

~~2-6-419 **Availability of Information:** The contents of permit applications, compliance plans, emissions or compliance monitoring reports, and compliance certification reports shall be available to the public, subject to the restrictions of the District's Administrative Code, Section 41. The contents of the permit shall be available to the public and shall not be subject to the above restrictions.~~

~~2-6-420 **Application for a Synthetic Minor Operating Permit:** A facility which elects to accept federally enforceable permit conditions to limit its potential to emit to below the thresholds for a major facility, and is not otherwise required to obtain a major facility review permit under this rule, shall apply for a synthetic minor operating permit in accordance with the requirements of this rule. If for any reason the facility plans a physical or operational change which would increase its potential to emit such that it would exceed any threshold for a major facility, the facility shall become subject to major facility review and shall apply for a major facility review permit in accordance with the requirements of this rule. (Amended February 1, 1995)~~

~~2-6-421 **Timely Application for a Synthetic Minor Operating Permit:** An application for a synthetic minor operating permit or synthetic minor operating permit modification shall be submitted in a timely manner as described below:~~

- ~~421.1 An existing major facility which elects to apply for a synthetic minor operating permit in order to avoid a requirement to obtain a major facility review permit shall apply for and receive a synthetic minor operating permit prior to the date by which it would have to apply for a major facility review permit.~~
- ~~421.2 Any facility not subject to the requirements of Regulation 2, Rule 6, may apply for a synthetic minor operating permit at any time, in accordance with Section 2-6-422.~~
- ~~421.3 A facility seeking a synthetic minor operating permit modification (as defined by section 2-6-232) may apply for the modification at any time in accordance with section 2-6-422.~~
- ~~421.4 For a modification to a synthetic minor operating permit which will not change any federally enforceable term or condition of the permit that establishes a facilitywide emission limit or that specifies the recordkeeping requirements necessary to verify ongoing compliance with a facilitywide emission limit, an application must be received by the APCO in accordance with the requirements of Regulation 2, Rule 2, New Source Review.~~
- ~~421.5 For a physical or operational change to a synthetic minor facility which would increase the facility's potential to emit to a level above that of a major facility, the facility must undergo preconstruction review and apply for a major facility review permit prior to commencing the change, in accordance with the requirements of Regulation 2, Rule 6.~~
- ~~421.6 Renewals of synthetic minor operating permits shall be made in accordance with the requirements of Section 3-207.~~

421.7 Notwithstanding subsection 2-6-421.1 above, an application for a synthetic minor operating permit for an existing major facility with emissions greater than those described in subsection 2-6-403.1, and that elects to become a synthetic minor facility, shall be received by the APCO no later than nine months from the date Regulation 2, Rule 6, is adopted by the District Board. (Amended February 1, 1995)

2-6-422

Complete Application for a Synthetic Minor Operating Permit: An application for a synthetic minor operating permit or for a synthetic minor operating permit modification (as defined by section 2-6-232) shall contain the following:

422.1 All relevant BAAQMD permit application forms;

422.2 A statement certifying payment of any fee required by District Regulation 3, including Schedule P;

422.3 Identification and description of all existing sources at the facility, including sources that are exempt from permits under Regulation 2, Rule 1;

422.4 A calculation (following the protocol set forth in the Manual of Procedures, Volume II, Part 3, subsection 2.2.2.c) of annual and monthly maximum emissions of regulated air pollutants and hazardous air pollutants from the facility. All fugitive emissions of hazardous air pollutants shall be included. For fugitive emissions of regulated air pollutants, only those from facility categories listed in the Manual of Procedures, Volume II, Part 3, Section 1 shall be included;

422.5 Proposed federally enforceable permit conditions to limit facilitywide emissions to below the thresholds for a major facility; and

422.6 Proposed federally enforceable permit conditions imposing recordkeeping and reporting requirements sufficient to determine ongoing compliance. (Amended February 1, 1995)

2-6-423

District Procedures for Synthetic Minor Operating Permits: The APCO shall take action on applications for synthetic minor operating permits and for synthetic minor operating permit modifications as follows:

423.1 **Completeness:** The APCO shall determine if the application is complete within 30 days of receipt, or within a longer time period as agreed upon by both the applicant and the APCO.

423.2 **Permit Content:** The synthetic minor operating permit shall contain all information and provisions pertaining to synthetic minor operating permits as set forth in Volume II of the District's Manual of Procedures including:

2.1 Permanent, quantifiable and practically enforceable permit conditions limiting the facility's potential to emit to no greater than 95 tons per year of any regulated air pollutant, 9 tons per year of any single hazardous air pollutant, and 23 tons per year of any combination of hazardous air pollutants, including any required production limits based on short time periods not to exceed one month as proposed in the July 13, 1993, Federal Register, 37789; and

2.2 Federally enforceable permit conditions requiring monitoring, recordkeeping, and reporting sufficient to determine compliance with the emission limits set forth in subsection 423.2.1.

423.3 **Public Participation:** Prior to any determination by the APCO that a facility may be issued a synthetic minor operating permit, the APCO shall notify the public in accordance with the following procedures:

3.1 The APCO shall publish a notice in a major newspaper in the area where the facility is located.

3.2 The notice shall provide at least 30 days for public comment.

3.3 The notice shall state that permit conditions for the facility will be modified to provide a facilitywide emission limit in accordance with Section 2-6-310 and shall include information as to how the public may obtain copies of the permit conditions associated with the limit, any information regarding the modification submitted by the owner or operator of the facility, the APCO's analysis of this information, and of the effect, if any, of the modification on air quality.

423.4 Reports to EPA: The APCO shall provide to EPA a copy of each proposed and final synthetic minor operating permit. EPA shall have a 30 day review period as described in Volume II of the District's Manual of Procedures.

423.5 Final Action: The APCO shall take final action on a synthetic minor operating permit within 180 days following the acceptance of the application as complete or 90 days after the program effective date, whichever is later. (Amended February 1, 1995)

~~2-6-500 MONITORING AND RECORDS~~

~~2-6-501 Recordkeeping: The APCO may require that the owner or operator of any facility subject to this rule keep any records that are relevant or necessary to enable the APCO to determine emissions from the facility. The facility shall keep such records on site for five years from the date of entry and shall make the records available to the APCO upon request.~~

~~2-6-502 Monitoring Reports: Every six months, the facility shall prepare and submit to the District any monitoring reports required by the major facility review permit. A responsible official shall certify all such reports under penalty of perjury. In addition to the reporting requirements set forth in Regulation 1, subsection 522.7 and Section 542, the facility shall promptly identify and report to the APCO all monitored excesses and any other deviations from the requirements of the permit.~~

~~2-6-600 MANUAL OF PROCEDURES~~

~~2-6-601 Major Facility Review Permit Procedures: The specific procedures for application submittals, the engineering evaluation and the required permit content for major facility review permits are set forth in Volume II of the District's Manual of Procedures.~~

~~2-6-602 Synthetic Minor Operating Permit Procedures: The specific procedures for the engineering evaluation and the required permit content for synthetic minor operating permits are set forth in Volume II of the District's Manual of Procedures.~~

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Reg 4 +
Table 1

REGULATION 4 - AIR POLLUTION EPISODE PLAN

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REGULATION 4

AIR POLLUTION EPISODE PLAN

4-100 GENERAL

4-101 Description: The Air Pollution Episode plan is a system designed to reduce levels of air contaminants which may reach or have reached the level which may be harmful to health, and to protect that portion of the population at risk. This Regulation establishes control and advisory procedures when specified levels have been reached at each of three stages.

4-300 STANDARDS

4-301 Preplanned Abatement Strategies: Any person responsible for the emission of 90.6 metric tons (100 tons) per year or more of air contaminants for which a California or Federal ambient air quality standard is established shall submit a Stationary Source Curtailment Plan and a Traffic Abatement Plan to the APCO for approval.

301.1 The plans shall be submitted to the APCO within 60 days of the effective date of the regulation. If disapproved by the APCO, the plan must be resubmitted within 30 days of notice of disapproval. Such plans shall include information on the nature and quantity of air contaminants being emitted and the method and amount of reduction which will be achieved during each stage of the Air Pollution Episode Plan described in Sections 4-302, 4-304 and 4-305, and such additional information as the APCO may require in accordance with State Air Resources Board Executive Order G-63 dated January 23, 1976.

4-302 Air Pollution Advisory/Alert: A District-wide Alert shall be declared by the APCO when the concentration of pollutants as

specified for this stage in Table I is reached or predicted in any area of the District. At the same time, an Air Pollution Advisory shall be declared in the specifically affected areas so persons with respiratory or cardiac problems and the general public may take suitable action. Notification of such an Advisory/Alert shall be made by the APCO to the following:

302.1 Public officials.

302.2 Persons operating any facility or activity subject to 4-301, Preplanned Abatement strategies.

302.3 Public health, safety and emergency agencies.

302.4 News media, the population at risk and the general public.

4-303 Abatement Actions: When an Advisory/Alert is declared, the following abatement actions shall be put into effect throughout the District:

303.1 All open burning shall be prohibited.

303.2 The use of incinerators for the disposal of solid waste shall be limited to the hours between 1700 and 2200 PST.

303.3 Lancing or soot-blowing required for fuel burning equipment shall be limited to the hours between 1700 and 2200 PST.

303.4 Preplanned abatement strategies required under Section 4-301 shall be initiated.

303.5 All persons operating motor vehicles shall be requested to eliminate all but essential driving.

303.6 Other Air Pollution Alert actions as required by the APCO in accordance with the latest California Air Pollution Emergency Plan adopted by the ARB.

4-304 Air Pollution Warning: A District-wide Warning shall be declared by the APCO when the concentration of pollutants specified for

this stage in Table I is reached or predicted in any area of the District. When a Warning is declared, the following abatement action shall be put into effect:

304.1 The abatement actions required by Sections 4-301 and 4-303.

304.2 The operations, services, and hours of business of all government, industrial and commercial facilities not subject to Section 4-301 shall be limited to the operations, services and hours of business customarily maintained on Sundays, as certified by the persons responsible for such facilities.

304.3 Other Air Pollution Warning actions as required by the APCO in accordance with the latest California Air Pollution Emergency Plan adopted by the ARB.

4-305 Air Pollution Emergency: A District-wide Emergency shall be declared by the APCO when the concentration of pollutants specified for this stage in Table I is reached in any area of the District. When an Emergency is declared, the following abatement actions shall be put into effect:

305.1 The abatement actions required by Sections 4-301, and 4-303.

305.2 All recreational and non-emergency commercial and industrial facilities shall be closed. Sewage treatment plants, power generating facilities or other facilities necessary to maintain the public health are deemed to be emergency facilities.

305.3 The APCO shall notify the ARB that a state of local emergency exists and that appropriate action may be taken by the Governor under the Emergency Services Act to prohibit the use of all motor vehicles except for emergencies, or any other action deemed warranted.

305.4 Other Air Pollution Emergency actions as required
by the APCO in accordance with the latest California
Air Pollution Emergency Plan adopted by the ARB.

4-400 ADMINISTRATIVE REQUIREMENTS

- 4-401 Termination of Episode Stages: The APCO shall terminate each Episode Stage when the concentration of air contaminants falls below and is expected to remain below the concentration specified for that stage in Table I. Notification of such termination shall be made to the public and to those persons and facilities listed in 4-302.
- 4-402 Communications: The APCO may require a facility subject to Section 4-301 to acquire and maintain a selective radio call receiver for the purpose of receiving a declaration of an Alert, Warning or Emergency from the District. The selective radio call receiver must be in conformance with specifications established by the APCO.
- 4-403 Meteorological Forecasts: The APCO shall maintain a weather watch, incorporating national weather service analysis, forecasts and regional advisories with District contaminant and weather monitoring data, to provide timely notice of conditions likely to result in reaching any episode stage criteria.
- 4-404 Enforcement: The APCO shall ensure that a source inspection plan is implemented upon the declaration of any episode stage.

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REGULATION 4
TABLE 1
EPISODE STAGE CRITERIA

Contaminant	Averaging time	Stage I Advisory Alert	Stage II Warning	Stage III Emergency
Oxidant, as Ozone	1 hr.	0.20 ppm	0.35 ppm	0.50 ppm
Oxidant in combination with sulfur dioxide	1 hr.	0.20 ppm*	0.35 ppm*	0.50 ppm*
Carbon Monoxide	1 hr.	40 ppm	75 ppm	100 ppm
	4 hrs.	25 ppm	45 ppm	60 ppm
	8 hrs.	15 ppm	30 ppm	40 ppm
Sulfur Dioxide	1 hr.	0.5 ppm	1.0 ppm	2.0 ppm
	24 hrs.	0.2 ppm	0.7 ppm	0.9 ppm
PM ₁₀	24 hrs.	350 ug/m ³	420 ug/m ³	500 ug/m ³
Sulfate in combination with oxidant	24 hrs. (sulfate)		25 ug/m ³	
	1 hr. (oxidant)		0.20 ppm	

*These levels shall apply when the oxidant concentration and the sulfur dioxide concentration each exceed 0.10 ppm, one hour average, and shall be determined by adding the oxidant and sulfur dioxide concentrations.

If excessive concentrations of pollutants for which criteria have not been established occur or are predicted to occur, appropriate abatement actions shall be taken by the affected APCD after consultation with the ARB.

REGULATION 5 OPEN BURNING

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**REGULATION 5
OPEN BURNING**

3-10-98

5-100 GENERAL

5-101 Description: This Regulation forbids open burning within the District with certain exceptions. (Amended November 2, 1994)

5-110 Exemptions: The following fires are exempt from this Regulation:

110.1 Fires set only for cooking of food for human beings. Fires set for recreational purposes using only clean dry wood or charcoal, and a small amount of firestarter.

110.2 Fires burning as safety flares or for the combustion of waste gases.

110.3 The use of flame cultivation when the burning is performed with LPG or natural gas-fired burners designed and used to kill seedling grass and weeds in orchards, vineyards and field crops and the growth is such that the combustion will not continue without the burner.

110.4 Fires set for the purposes of fire training using one gallon or less of flammable liquid per fire. (Amended December 19, 1990; November 2, 1994)

5-111 Conditional Exemptions: The following special conditions must be met for fires allowed by Sections 401.1 through 401.18 unless specifically exempted or further restricted in that Section, and shall be complied with during any burning permitted under those Sections.

111.1 No burning shall take place before sunrise.

111.2 No additional materials or fuel shall be ignited nor shall any material or fuels be added to any fire after two hours before sunset.

111.3 No material or fuel shall be ignited, nor shall any material or fuel be added to any fire when the wind velocity is less than five (5) miles per hour except for crossfiring, or when the wind direction at the site shall be such that the direction of smoke drift is toward a populated area in order to minimize local nuisances caused by smoke and particulate fallouts.

111.4 All piled material shall have dried for a minimum of 60 days prior to ignition.

111.5 All material to be burned shall be reasonably free of dirt or soil.

111.6 Piled material shall be limited to a base area not to exceed 25 square yards and the height shall be at least 2/3 of the average width of the pile.

111.7 Ignition material shall be limited to those listed by the State Director of Forestry, as follows: orchard torches; drip torches; pressurized diesel torches; propane or LPG torches; commercial petroleum gel materials, pressurized or solid (napalm or blivets); commercial safety fuses; commercial type ignition grenades, e.g. Fenner, etc.; fuses; commercial fuse lighters and matches. All fires shall be ignited so as to burn as rapidly as possible within conditions of safety and minimum pollution.

111.8 Ignition shall be initiated at or near the top of the piled material. No additional material, except ignition material, shall be added to the fire.

111.9 Tonnage, volume or acreage of material burned on any given day and/or at any specified site is subject to limitations set by the APCO, but may not exceed any limits set by the ARB.

(Amended December 19, 1990; November 2, 1994)

5-200 DEFINITIONS

5-201 Agricultural Fire: A fire used for the purpose of initiating, continuing or maintaining agriculture as a gainful occupation. Fuels are limited to materials grown on the site and shall not include feed or fertilizer containers, finished or treated wood, plastic or rubber products, plumage, hides, fur, offal or fecal material or refuse from plant or animal processing other than from initial crop harvesting, pruning or attrition of forest, fruit and nut trees, vines and cane crops. (Amended November 2, 1994)

- 5-202 **Fire:** Any combustion of combustible materials of any type outdoors in the open, not in any enclosure, where the products of combustion are not directed through a flue.
- 5-203 **Flue:** Any duct or passages for air, gases, or the like, such as a stack or chimney.
- 5-204 **Gainful Occupation:** Any occupation from which there is proof of gross profit or loss as evidenced by tax receipts, sales slips or other such documents.
- 5-205 **Deleted December 19, 1990**
- 5-206 **Permissive Burn Day:** Any day that is so declared by the APCO when, in his opinion, air pollution caused by open burning will not adversely affect ambient air quality or downwind population. In declaring such permissive burn days, the meteorological criteria established by the ARB for the San Francisco Bay Area Air Basin shall be used as a guideline. (Amended November 2, 1994)
- 5-207 **Treated Brush:** Material which has been felled, crushed or uprooted with mechanical equipment, or has been desiccated with herbicide.
- 5-208 **Hazardous Material:** For purposes of this Regulation, combustible or flammable material which may pose a fire or explosion hazard including natural vegetation or other native growth cleared away to maintain a firebreak around any building or structure to comply with Section 4291 of the State Public Resources Code to reduce the risk of a wildfire. This term does not apply to waste propellants, explosives, pyrotechnics and their associated contaminated wastes regulated under subsection 5-401.14.
(Adopted March 17, 1982; Amended December 19, 1990; November 2, 1994)
- 5-209 **Public Fire Official:** An officer of a public agency charged with the responsibilities of setting or allowing fires. Public fire official includes but is not limited to, local, state, and federal officers. (Adopted December 19, 1990)
- 5-210 **Contraband:** Any illegal or prohibited good that has been confiscated by a public law enforcement agency, including but not limited to explosives, pyrotechnics and illegal drugs. (Adopted December 19, 1990; Amended November 2, 1994)
- 5-211 **Contaminated Waste:** For the purposes of this regulation, material which becomes contaminated during the manufacture of propellants, explosives and pyrotechnics, including but not limited to articles of clothing, plastic implements and sheeting. (Adopted December 19, 1990)
- 5-212 **Stubble:** The remaining stalk, stem, or trunk of a herbaceous plant or cereal grass (primarily oats, wheat and hay) after harvest of a field crop. (Adopted November 2, 1994)
- 5-213 **Prescribed Burning:** The planned, controlled application of fire to vegetation to achieve a specific natural resource management objective(s) on land areas selected in advance of that application. The fire is conducted within the limits of a burn plan and prescription that describes both the acceptable range of weather, moisture, fuel, and fire behavior parameters to achieve the desired effects. (Adopted November 2, 1994)
- 5-214 **Backfiring:** A field crop burn ignition technique where the fire is ignited at the downwind side of the burn area, so that the fire must burn into the wind towards the fuel source. (Adopted November 2, 1994)
- 5-215 **Stripfiring:** A field crop burn ignition technique where the fire is ignited in parallel strips by walking straight through the burn area into the wind. (Adopted November 2, 1994)
- 5-216 **'X' or Crossfiring:** A field crop burn ignition technique where the fire is ignited in two semi-circle arch patterns that almost intersect in the middle of the burn area. The first fire is lit by walking into the wind from the downwind side. The second fire is lit by walking with the wind from the headwind side of the field. This technique is used during light (less than five miles per hour) and variable winds only. (Adopted November 2, 1994)
- 5-217 **Property:** A single parcel of real property, as determined by the County Assessor. The term also includes contiguous parcels under the same ownership. (Adopted November 2, 1994)
- 5-218 **APCO:** The Air Pollution Control Officer of the Bay Area Air Quality Management District or the designee thereof. (Adopted November 2, 1994)

- 5-219 **ARB:** The Air Resources Board of the State of California.
(Adopted November 2, 1994)
- 5-220 **District:** The Bay Area Air Quality Management District. (Adopted November 2, 1994)
- 5-300 **STANDARDS**
- 5-301 **Prohibition of Fires:** Except as provided in this regulation:
- 301.1 A person shall not ignite, cause to be ignited, permit to be ignited, or suffer, allow, or maintain any fires within the District.
- 301.2 No burning shall take place within the District on other than a permissive burn day.
(Amended November 2, 1994)
- 5-400 **ADMINISTRATIVE REQUIREMENTS**
- 5-401 **Allowable Fires:** The following fires may be allowed on permissive burn days:
- 401.1 **Disease and Pest:** Fires set for the purpose of disease and pest prevention. The fire must be set or allowed by the Agricultural Commissioner of the County in the performance of official duty. Prior reporting pursuant to Section 5-406 must be made to the APCO, by the person setting the fire.
(Amended December 19, 1990; November 2, 1994)
- 401.2 **Crop Replacement:** Agricultural fires set for the purpose of establishing an agricultural crop in a location which formerly contained another type of agricultural crop or natural growth. The fire must be set or allowed by the public fire official having jurisdiction, in the performance of official duty, and must be necessary for the crop replacement to proceed. Fires are limited to a period beginning October 1 and ending April 30; however, upon the determination of the APCO that heavy winter rainfall has prevented such burning, the burn period may be extended to no later than June 30.
(Amended December 19, 1990; November 2, 1994)
- 401.3 **Orchard Pruning and Attrition:** Agricultural fires set for the purpose of disposal of periodic prunings and attrition losses from fruit trees, nut trees, vineyards and cane fruits. Fires must be set or allowed by the public fire official having jurisdiction, in the performance of official duty, and must be necessary to maintain and continue the growing of the fruit trees, vineyards and cane fruits as a gainful occupation. Fires are limited to a period beginning November 1 and ending April 30; however, upon the determination of the APCO that heavy winter rainfall has prevented such burning, the burn period may be extended to no later than June 30.
(Amended March 15, 1981; December 19, 1990; November 2, 1994)
- 401.4 **Double Cropping Stubble:** Agricultural fires set for the purpose of disposal of grain stubble from agricultural land from which both grain and vegetable crops are harvested during the same calendar year. Fires must be set or allowed by a public fire official having jurisdiction, in the performance of official duty, and must be necessary to remove the grain stubble and straw before a field vegetable crop can be planted. All material to be burned shall be free of visible surface moisture. No fires shall take place before 10:00 a.m. local time on any day. Fires are limited to a period beginning June 1 and ending August 31. (Amended December 19, 1990; November 2, 1994)
- 401.5 **Stubble:** Agricultural fires set for the purpose of disposal of stubble and straw. Fires must be set or allowed by a public fire official having jurisdiction, in the performance of official duty, and must be necessary to maintain and continue the growing of field crops as a gainful occupation. Fire ignition techniques shall be limited to backfiring, stripfiring, and 'X' or crossfiring unless an alternate technique is approved by the APCO where a specific field condition is determined not to lend itself to these techniques in a given year. All material to be burned shall be free of visible surface moisture. After 0.15 inches or more rainfall, the material must pass the "crackle" test pursuant to

Section 5-601 prior to burning. No fires shall take place before 10:00 a.m. local time on any day. Fires are limited to a period beginning September 1 and ending December 31. Outside of Sonoma County, no more than 100 acres of any property shall be burned in a single day. Within Sonoma County, no person shall conduct a burn without a prior acreage burning allocation from the APCO and no more than 500 acres total of all properties shall be burned in a single day. In addition, no more than 100 acres of any property shall be burned in a single day. If by 12:00 p.m. the daily 500 acre burn acreage limitation has not been allocated, up to 200 acres of any property may be burned in a single day provided:

- a. the additional acreage burning allocation has been approved by the APCO; and
- b. no more than two fields exceeding 100 acres total are burned simultaneously on the same property.

(Amended December 19, 1990; November 2, 1994)

401.6 Hazardous Material: Any fires set for the purpose of the prevention or reduction of a fire hazard, including the disposal of dangerous materials. The fires must be set or allowed by any public fire official, in the performance of official duty. The fire must, in the opinion of such officer, be necessary, and the fire hazard not able to be abated by any other means. However, fires may be conducted to dispose of materials to comply with Section 4291 of the Public Resources Code provided all of the following conditions are satisfied:

- a. only natural vegetation or other native growth may be burned;
- b. the amount of material to be burned shall be greater than 5 cubic yards cleared annually from a single property;
- c. the material is burned where it was grown without being moved to a different location unless approved by the APCO;
- d. available alternatives to burning such as shredding, chipping, composting, disking, plowing, and harrowing are not feasible; and
- e. the material, if ignited accidentally, would result in a fire of such magnitude as to immediately threaten life or adjacent improved property or resources and require an excessive fire suppression effort.

Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire. (Amended December 19, 1990; November 2, 1994)

401.7 Fire Training: Fires set for the purpose of instruction of either public or industrial employees in fire fighting methods. The fire must be set or allowed by the public officer having jurisdiction, and must be, in his opinion, necessary. Notwithstanding contrary provisions of Section 5-111, a fire fighting agency may set one fire per quarter calendar year for the purpose of training volunteer or seasonal fire fighters. This may be done on other than a permissive burn day if the APCO is notified at least two weeks in advance. Prior reporting pursuant to Section 5-406 must also be made to the APCO for other fire training by the person setting the fire.

(Amended December 19, 1990; November 2, 1994)

401.8 Flood Debris: Fires set for the purpose of removing wood and vegetation debris deposited by flood waters. The fire must be set or allowed by the public fire official having jurisdiction, in the performance of official duty, and must be necessary for the continuing or maintaining of agriculture as a gainful occupation. Fires are limited to a period beginning October 1 and ending May 31. (Amended December 19, 1990; November 2, 1994)

401.9 Irrigation Ditches: Fires set for the purpose of controlling growth of vegetation in irrigation ditches and canals. The fire must be set or allowed by a public fire official having jurisdiction, in the performance of official duty, and must, in the opinion of such officer, be necessary. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.

(Amended December 19, 1990; November 2, 1994)

401.10 Flood Control: Fires set for the purpose of disposal of material which is lying or growing within natural channels or flood control channels. The fire must be set or allowed by a public official in charge of flood control activities. The fire must, in the opinion of such official, be a necessary incident to the clearing and maintenance of water courses and flood control channels for preventing or eliminating a flood hazard. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.

(Amended December 19, 1990; November 2, 1994)

401.11 Range Management: Fires set for the purpose of range management and grazing. The fire must be set or allowed by the State Director of Forestry, or public fire official, and must be necessary to maintain and continue the grazing of animals as a gainful occupation. Brush to be burned shall be treated at least six months prior to burn if determined to be technically feasible by the State Director of Forestry or public fire official. Unwanted trees over 6 inches in diameter shall be felled prior to burn and dried for a minimum of six months. Feasibility shall be subject to the approval of the APCO. Sections 5-111.1 and 5-111.6 may be waived by the State Director of Forestry or fire official when determined necessary in the public interest. Fires are limited to a period beginning July 1 and ending April 30. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.

(Amended December 19, 1990; November 2, 1994)

401.12 Forest Management: Fires set for the purpose of removing forest debris and for forest management. The fire must be set or allowed by a public fire official having jurisdiction, in the performance of official duty, and must, in his opinion, be necessary. Sections 5-111.1 and 5-111.6 may be waived by the fire official when deemed necessary in the public interest. All materials shall be piled or windrowed unless deemed poor practice by the fire official. Fires are limited to a period beginning November 1 and ending April 30.

(Amended December 19, 1990; November 2, 1994)

401.13 Wildlife Management: Fires set for the purpose of improvement of lowland and marsh for wildlife and game habitat. The fire must be declared necessary by the California Department of Fish and Game. No such fire may be allowed on a given piece of land more than once in any 2 year period. The California Department of Fish and Game shall provide the APCO such information as may be deemed necessary by the APCO to verify the necessity of each burn and land area burning frequencies. No fires shall take place before 10:00 a.m., nor shall fires take place on any material added to an existing fire after 3:00 p.m. local time on any day. Fires are limited to a period beginning February 1 and ending March 31, and a period beginning September 1 and ending October 15; however, upon the determination of the APCO in consultation with the California Department of Fish and Game and the Solano County Mosquito Abatement District, that heavy winter rainfall has prevented such burning, the burn period beginning February 1 and ending March 31 may be extended to no later than June 30. Outside of the Suisun Resource Conservation District (SRCD), no more than 100 acres of any property shall be burned in a single day. For fires conducted within the boundaries of the SRCD:

- a. no person shall conduct a burn without a prior acreage burning allocation from the Solano County Sheriffs' Dispatch;
- b. during the Fall burning period, total daily acreage to be burned shall be determined by the APCO, but in no case shall the total allocation exceed 300 acres. In addition, no more than 100 acres of any property and no more than 100 acres of all properties designated by the same SRCD hundred-series ownerships shall be burned;
- c. during the Spring burning period, no more than 600 acres total of all properties shall be burned in a single day.

- (Amended March 15, 1981; May 20, 1981; August 1, 1983; November 2, 1994)
- 401.14 Waste Propellants, Explosives and Pyrotechnics: Until January 1, 1997, fires set for the purpose of disposing of waste propellants, explosives, or pyrotechnics including associated contaminated wastes generated at manufacturing facilities shall be allowed. The fires must be set or allowed by the public fire official having jurisdiction, in the performance of official duty. The fires must be necessary and the waste not able to be disposed of by any means other than open burning. No material shall be imported from off-site for disposal. The total combined amount of waste material burned per facility shall not exceed 24,000 pounds (12 tons) in calendar year 1995 and 20,000 pounds (10 tons) in calendar year 1996. In addition, the total combined amount of waste material burned per facility shall not exceed 6,000 pounds per day (3 tons/day). Any person seeking to set fires under this provision shall also comply with the requirements of Section 5-405. If the requirements of subsection 5-405.4 are not satisfied, such fires shall be prohibited as of January 1, 1996. (Adopted December 19, 1990; Amended November 2, 1994)
- 401.15 Contraband: Fires set for the purpose of disposing of contraband. The fire must be set or allowed by any peace officer or public fire official, in the performance of official duty. The fire must, in the opinion of such officer, be necessary and the material not be able to be disposed of by any other means. Prior reporting must be made to the APCO by the person setting the fire pursuant to Section 5-406.
- (Adopted December 19, 1990; Amended November 2, 1994)
- 401.16 Wildland Vegetation Management: Prescribed burning by a state or federal agency, or through a cooperative agreement or contract involving the state or federal agency, conducted on land predominately covered with chaparral, trees, coastal scrub, or standing brush. Any person seeking to set fires under this provision shall comply with the requirements of Section 5-408 and receive approval by the APCO in writing prior to any burn. This fire may be done on other than a permissive burn day, as defined in Section 5-206, if approved by the APCO pursuant to subsection 5-408.2.
- (Adopted November 2, 1994)
- 401.17 Filmmaking: Fires set as part of commercial film or video production activities for motion pictures and television. The fire shall be set or allowed by the public fire official having jurisdiction, in the performance of official duty. Any person seeking to set fires under this provision shall comply with the requirements of Section 5-409 and receive APCO approval in writing at least 10 working days prior to the burn. This fire may be done on other than a permissive burn day, as defined in Section 5-206, if approved by the APCO pursuant to subsection 5-409.2.
- (Adopted November 2, 1994)
- 401.18 Public Exhibition: Fires set as part of a planned civic event designed to educate or otherwise benefit the public. The fire shall be set or allowed by the public fire official having jurisdiction, in the performance of official duty. Any person seeking to set fires under this provision shall receive APCO approval in writing at least 10-working days prior to the burn.

(Adopted November 2, 1994)

5-402 Deleted November 2, 1994

5-403 Agricultural Land Use: Debris from land clearing shall not qualify under subsections 5-401.1, 5-401.2, 5-401.3, 5-401.4 or 5-401.5 unless applicant certifies, under penalty of perjury, that said land is to remain in agricultural use for a gainful occupation for a period of one year subsequent to the burning, and that applicant has not caused or contributed to the need for the burning of the material for any reason other than the promotion of agricultural use of the land for a gainful occupation. However, the County Agricultural Commission may waive this Section by certifying that burning of the material under subsection 5-401.1 is, in his opinion, the only safe method of disposal. Failure to comply with the conditions of this Section shall be considered a

violation of this Regulation. Each pile burned in violation shall be cited as a separate offense. (Amended November 2, 1994)

5-404 Emergency Waivers: A public officer authorized under subsections 5-401.1, 5-401.6 and 5-401.10 to grant permission for open burning may grant waivers from subsections 5-111.1 through 5-111.9 when, in his judgment, such emergency or summary action is necessary for the public safety. When such action is taken, the authorizing authority shall certify the following in a report to the APCO within 10 calendar days following the burning: a description and quantity of the material burned and an explanation of the reasons for granting the permission.

(Amended November 2, 1994)

5-405 Propellants, Explosives and Pyrotechnics Compliance Schedule: Any person seeking to dispose of waste material within the provisions of 5-401.14 shall comply with the following:

405.1 By April 1, 1994 and thereafter annually submit a report to the APCO that shall contain the following information:

- (a) Review of alternative technology for the use, treatment, and/or disposal of waste propellants, explosives and pyrotechnics, other than open burning which minimize the impact on air quality.
- (b) Schedule and steps that have been taken and will be taken for the development and implementation of alternative use, treatment, and/or disposal methods to comply with subsection 5-401.14.
- (c) Waste minimization efforts.
- (d) Documentation of efforts to obtain U.S. Department of Transportation (DOT) hazard classification and approval to ship each different type of waste material, by formulation reference, that has not been previously approved for shipping. Such documentation shall be maintained on a monthly basis and be made available to the APCO upon request.

405.2 Open burning records must be maintained as per Section 5-501.

405.3 Verbal notification shall be given prior to each open burn.

405.4 By January 1, 1996, submit to the APCO an application for an Authority-to-Construct and submit to the California Department of Toxic Substances Control a permit application, for any on-site waste treatment system equipment necessary to comply with the January 1, 1997 prohibition of waste propellant, explosives, and pyrotechnics fires pursuant to subsection 5-401.14.

405.5 The installation of an on-site waste treatment system shall be completed and in operation no later than January 1, 1997. In addition, any off-site treatment or disposal method shall be implemented no later than January 1, 1997.

(Adopted December 19, 1990; Amended November 2, 1994)

5-406 Prior District Notification; Disease and Pest, Fire Training, Flood Control, Irrigation Ditches, Range Management, Hazardous Material, and Contraband: The person setting the fire shall provide written, facsimile or verbal notification to the District prior to the burn. If notification is made verbally by telephone, there must be a written confirmation of this action sent to the APCO within 5 calendar days. For structural fire training, written notification shall be made to the APCO at least 10 working days prior to the burn pursuant to the requirements of Regulation 11-2-401.3 (Asbestos Demolition, Renovation and Manufacturing).

(Adopted December 19, 1990; Amended November 2, 1994)

5-407 Deleted November 2, 1994

5-408 Prescribed Burn Requirements: Any person seeking to conduct prescribed burning pursuant to Section 5-401.16 shall comply with the following requirements:

408.1 Submit a prescribed burn plan to the APCO for review at least 30 calendar days prior to the proposed burning that provides the following information:

- a. location and specific objectives of each proposed burn;
- b. acreage or tonnage, type, and arrangement of vegetation to be burned;
- c. directions and distances to nearby sensitive receptor areas;

- d. fuel condition, combustion and meteorological prescription elements for the project;
 - e. projected schedule and duration of project ignition, combustion, and burn down;
 - f. specifications for monitoring and of verifying critical parameters;
 - g. specifications for disseminating project information;
 - h. certification by a resource ecologist, biologist, or forester that the proposed burning is necessary to achieve the specific management objective(s) of the burn plan; and
 - i. smoke management plan.
- 408.2 Permission to burn on other than a permissive burn day shall be governed by the 48-hour forecast issued by the APCO.
- 408.3 Prior to ignition, notify the APCO on the day of each burn.
- 408.4 Within 30 calendar days following completion of the burn project, provide the total acreage, volume or tonnage of vegetation actually burned.

(Adopted November 2, 1994)

5-409 Filmmaking Burn Petition: Any person seeking to conduct a fire pursuant to Section 5-401.17 shall comply with the following requirements:

- 409.1 Submit an open burning petition to the APCO that provides the following information, as applicable:
- a. date(s) and specific location(s) of each proposed burn;
 - b. type and quantity (tonnage, acreage, or volume) of each material to be burned;
 - c. the projected fuel use rate in BTU per hour, if known, calculated using the higher heating value of each fuel; and
 - d. the burn duration.
- 409.2 Permission to burn on other than a permissive burn day shall be subject to written approval of the open burning petition by the APCO.
- 409.3 Prior to ignition, notify the APCO on the day of each burn.
- 409.4 If the APCO grants written approval, such approval shall be available at the burn location for inspection by the APCO, upon request.

5-500 MONITORING AND RECORDS

5-501 Open Burning Records: Any person subject to 5-405 shall comply with the following requirements:

- 501.1 A person shall maintain records on a monthly basis that provide the following information:
- a. date of burn
 - b. amount and identification of each type of material burned, by formulation reference and the expected U.S. Department of Transportation hazard classification
 - c. wind speed and direction
 - d. start time and duration of burn.
- 501.2 Such records shall be retained and available for inspection by the APCO for 24 months.
- 501.3 The open burn records shall be submitted to the APCO on a yearly basis.

(Adopted December 19, 1990; Amended November 2, 1994)

5-600 MANUAL OF PROCEDURES

5-601 Appraisal of Field Crop Fuel Moisture; The "Crackie" Test: Any person who wants to conduct an evaluation of fuel moisture in field crop stubble or straw remaining after harvest pursuant to subsection 5-401.5 shall satisfy the following criteria prior to burning:

- 601.1 Sampling: To ensure representative sampling, sample in accordance with the following requirements:
- a. obtain samples from several different areas of the field

- b. select some samples from underneath the straw mat including the bottom layer
 - c. a handful of sample material is considered a sufficient size to test.
- 601.2 Evaluation: The field is considered dry enough to burn, or passes the "crackle" test when:
- a. each sample is tested just prior to burning
 - b. each sample tested makes an audible "crackle" when it is bent sharply.
 - c. If the sample does not pass the test, then the area from which the sample was selected cannot be burned until such material is considered dry enough to burn. (Adopted November 2, 1994)

REGULATION 6
PARTICULATE MATTER AND VISIBLE EMISSIONS
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REGULATION 6

PARTICULATE MATTER AND VISIBLE EMISSIONS

6-100 GENERAL

- 6-101 **Description:** The purpose of this Regulation is to limit the quantity of particulate matter in the atmosphere through the establishment of limitations on emission rates, concentration, visible emissions and opacity.
- 6-110 **Exemption, Temporary Sandblasting Operations:** Temporary Sandblasting operations are exempt from the provisions of this Rule. Such operations are subject to the provisions of Regulation 12, Rule 4. (Adopted July 11, 1990)
- 6-111 **Exemption, Open Outdoor Fires:** The limitations of this rule shall not apply to emissions arising from open outdoor fires. (Adopted December 19, 1990)

6-200 DEFINITIONS

- 6-201 **Exhaust Gas Volume:** The volume of gases discharged from an operation; or an emission point.
- 6-202 **Particulate Matter:** Any material which is emitted as liquid or solid particles, or gaseous material which becomes liquid or solid particles at the testing temperatures specified in the Manual of Procedures, excluding uncombined water.
- 6-203 **Process Weight:** The total weight of all material introduced into an operation, excluding liquids and gases used solely as fuels, air which is not consumed as a reactant, and combustion air.
- 6-204 **Process Weight Rate:** A rate established as follows:
- 204.1 For continuous or long-run steady-state operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portions thereof.
 - 204.2 For cyclical or batch operations, the total process weight for a period which covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such period. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this section, that interpretation which results in the minimum value for allowable emission shall apply.

6-300 STANDARDS

- 6-301 **Ringelmann No. 1 Limitation:** Except as provided in Sections 6-303, 6-304 and 6-306, a person shall not emit from any source for a period or periods aggregating more than three minutes in any hour, a visible emission which is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree. (Amended July 11, 1990)
- 6-302 **Opacity Limitation:** Except as provided in Sections 6-303, 6-304 and 6-306, a person shall not emit from any source for a period or periods aggregating more than three minutes in a any hour an emission equal to or greater than 20% opacity as perceived by an opacity sensing device, where such device is required by District regulations. (Amended July 11, 1990)
- 6-303 **Ringelmann No. 2 Limitation:** A person shall not emit for a period or periods aggregating more than three minutes in any hour, a visible emission which is as dark or darker than No. 2 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree, nor shall said emission, as perceived by an opacity sensing device in good working order, where such device is

required by District regulations, be equal to a greater than 40% opacity, from the following sources:

- 303.1 Internal combustion engines of less than 25 liters (1500 in³) displacement, or any engine used solely as a standby source of motive power;
- 303.2 Laboratory equipment used exclusively for chemical or physical analyses or experimentation;
- 303.3 Portable brazing, soldering or welding equipment;
- 303.4 Deleted July 11, 1990

(Amended January 5, 1983, July 11, 1990)

- 6-304 **Tube Cleaning:** During tube cleaning, and except for three minutes in any one hour, a person shall not emit from any heat transfer operation using fuel at a rate of not less than 148 GJ (140 million BTU) per hour, a visible emission as dark or darker than No. 2 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree, or equal to or greater than 40% opacity as perceived by an opacity sensing device in good working order. The aggregate duration of such emissions in any 24 hour period shall not exceed 6.0 minutes per 1055 GJ (one billion BTU) gross heating value of fuel burned during such 24 hour period.
- 6-305 **Visible Particles:** A person shall not emit particles from any operation in sufficient number to cause annoyance to any other person, which particles are large enough to be visible as individual particles at the emission point or of such size and nature as to be visible individually as incandescent particles. This Section 6-305 shall only apply if such particles fall on real property other than that of the person responsible for the emission.
- 6-306 **Diesel Piledriving Hammers:** Piledriving hammers powered by diesel fuel shall comply with one of the following standards:
 - 306.1 A person shall not emit from any diesel piledriving hammer for a period or periods aggregating more than four minutes during the driving of a single pile, a visible emission which is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
 - 306.2 A person shall not emit from any diesel piledriving hammer for a period or periods aggregating more than four minutes during the driving of a single pile, a visible emission which is as dark or darker than No. 2 on the Ringelmann Chart or of such opacity as to obscure an observer's view to an equivalent or greater degree provided that the operator utilizes kerosene, smoke suppressing fuel additives and synthetic lubricating oil, and the requirements of Section 6-503 are satisfied. (Adopted July 11, 1990)
- 6-310 **Particulate Weight Limitation:** A person shall not emit from any source particulate matter in excess of 343 mg per dscm (0.15 gr. per dscf) of exhaust gas volume.
 - 310.1 **Incineration or Salvage Operations.** For the purposes of 6-310, the actual measured concentration of particulate matter in the exhaust gas from any incineration operation or salvage operation shall be corrected to the concentration which the same quantity of particulate matter would constitute in the exhaust gas minus water vapor corrected to standard conditions, containing 12% CO₂ by volume, and as if no auxiliary fuel had been used.
 - 310.2 **Gas-fired Pathological Waste Incinerators.** The particulate emissions from gas-fired pathological waste incinerators, where emissions are not mingled with emissions from incineration of general wastes, shall be corrected as specified in Section 6-310.1 except that correction for auxiliary fuel shall not be required.
 - 310.3 **Heat Transfer Operation.** For the purposes of 6-310, the actual measured concentration of particulate matter in the exhaust from any heat transfer operation shall be corrected to the concentration which the same quantity of particulate matter would constitute in the exhaust gas minus water vapor, corrected to standard conditions, containing 6% oxygen by volume.

6-311 **General Operations:** In addition to the limitation of Section 6-310, a person shall not discharge into the atmosphere from any general operation particulate matter from any emission point, at a rate in excess of that specified in Table 1 for the process weight rate indicated. This section shall not apply to fuel-fired indirect heat exchangers.

TABLE 1

ALLOWABLE RATE OF EMISSIONS BASED ON PROCESS WEIGHT RATE

Process wt rate = P		Emission = E	
kg/hour	lbs/hour	kg/hour	lbs/hour
250	550	0.8	1.8
300	660	0.9	2.0
400	880	1.1	2.4
500	1100	1.3	2.9
1000	2205	2.1	4.6
2000	4410	3.3	7.3
3000	6615	4.3	9.5
4000	8820	5.2	11.0
5000	11020	6.0	13.0
10000	22045	9.6	21.0
20000	44090	15.2	33.0
over 26000	57320	18.1	40.0

(interpolation formula deleted May 21, 1980. See page 605 for formulae.)

Interpolation in kg/hr

$$E \text{ in kg/hr} = 0.02 P^{0.67} \text{ in kg/hr}$$

The interpolation of the data in this Table shall be accomplished by the use of the equation $E = 0.022P^{0.67}$, where E = rate of emission in kg/hour, not to exceed 18.1 kg/hour and P = process weight rate in kg/hour.

interpolation in lbs/hr

$$E \text{ in lbs/hr} = 4.10 P^{0.67} \text{ in lbs/hr}$$

6-320 **Sulfuric Acid Manufacturing Plants:** A person shall not emit from any operation manufacturing sulfuric acid using as a principal raw material any sulfur-containing material, any emission having a concentration of SO_3 or H_2SO_4 , or both, expressed as 100% H_2SO_4 , exceeding 92 mg per dscm (0.04 gr. per dscf) of exhaust gas volume.

6-330 **Sulfur Recovery Units:** A person shall not emit from any operation manufacturing sulfur, using as a principal raw material any sulfur-containing material, any emission having a concentration of SO_3 or H_2SO_4 , or both, expressed as 100% H_2SO_4 , exceeding 183 mg dscm (0.08 gr. dscf) of exhaust gas volume.

6-400 ADMINISTRATIVE REQUIREMENTS

6-401 **Appearance of Emissions:** Every person responsible for an emission (except from as fired heat transfer operations regulated by Sections 6-301, 6-303 and 6-304) shall have and maintain means whereby the operator of the plant shall be able to know the appearance of the emission at all times.

6-500 MONITORING AND RECORDS

- 6-501 Sampling Facilities and Instruments Required:** Persons subject to this regulation shall provide sampling facilities and install instruments as required pursuant to the provisions of Sections 1-501, 1-520 and 1-521 of Regulation 1.
- 6-502 Data, Records and Reporting:** Persons monitoring emissions in accordance with the requirements of Sections 1-520 and 1-521 of Regulation 1 shall keep records, report emission excesses and provide summaries of data collected as required by Regulation 1.
- 6-503 Records:** A person responsible for the operation of a diesel pile-driving hammer who chooses to comply with subsection 6-306.2 shall maintain and have available for inspection records which establish the use of kerosene, smoke suppressing fuel additives and synthetic lubricating oil. (Adopted July 11, 1990)

6-600 MANUAL OF PROCEDURES

- 6-601 Particulate Matter, Sampling, Sampling Facilities, Opacity Instruments and Appraisal of Visible Emissions:** The MOP contains the testing temperature for the determination of the presence of particulate matter, procedures relating to the siting of sampling facilities, source test procedures, opacity instrument specifications, calibration and maintenance requirements, and the procedure for appraising visible emissions.

**REGULATION 8
ORGANIC COMPOUNDS
RULE 1
GENERAL PROVISIONS**

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REGULATION 8
ORGANIC COMPOUNDS
RULE 1
GENERAL PROVISIONS
(Adopted January 1, 1980)

8-1-100 GENERAL

8-1-101 Description: The purpose of this Regulation is to limit the emission of organic compounds to the atmosphere. Certain organic compounds may also be subject to the requirements of Regulations 11 or 12. (Amended March 17, 1982)

8-1-110 Exemptions: The following shall be exempted from the provisions of this regulation:

110.1 Any structure designed and used exclusively as a dwelling for not more than two families, provided that this exclusion does not apply to the application of an architectural coating.

110.2 Any internal combustion engine.

110.3 Any operation or group of operations which are related to each other by being a part of a continuous process, or a series of such operations on the same process material, which are subject to Regulation 8, Rule 2 or Rule 4, and for which emissions of organic compounds are reduced at least 85% on a mass basis. Where such reduction is achieved by incineration, at least 90% of the organic carbon shall be oxidized to carbon dioxide.

110.4 Stationary storage tanks having a capacity of less than 1.0 m³ (260 gal.).

110.5 Any stationary storage tank installed prior to January 4, 1967 which is not used for storage of gasoline to be dispensed to internal combustion engine fuel tanks, and is either less than 7.6 m³ (2000 gal.) capacity or an underground tank with an offset fill line.

110.6 Deleted May 4, 1988.

110.7 Any emission of organic compounds where the person responsible for such emission demonstrates to the satisfaction of the APCO that the emission contains ethane and if the ethane were not present the emission would not violate any standard. (Adopted March 17, 1982)

8-1-200 DEFINITIONS

8-1-201 Organic Compound: Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate. (Amended June 17, 1981, March 17, 1982)

8-1-202 Organic Liquids: All precursor organic compounds which contain hydrogen and which would exist as liquids at actual conditions of use or storage. (Amended March 17, 1982)

8-1-203 Petroleum Refinery Complex: Any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants or other products through distillation of petroleum or through redistillation, cracking, rearrangement or reforming of unfinished petroleum derivatives. (Renumbered March 17, 1982)

8-1-204 Process Unit Turnaround: Any non-emergency unit shutdown, for the purpose of repair, maintenance or inspection, and subsequent start-up. (Renumbered March 17, 1982)

- 8-1-205 Submerged Fill Pipe:** Any discharge pipe or nozzle which meets either of the following conditions:
 205.1 Where the tank is filled from the top, the discharge pipe or nozzle is totally submerged when the liquid level is 15 cm.(6 in.) from the bottom of the tank.
 205.2 Where the tank is filled from the side, the discharge pipe or nozzle is totally submerged when the liquid level is 45 cm. (18 in.) from the bottom of the tank. (Renumbered March 17, 1982)
- 8-1-206 True Vapor Pressure:** The pressure exerted when an organic liquid is in equilibrium with its own vapor expressed in bars. True vapor pressure may be found by referring to applicable nomographs in American Petroleum Institute Bulletin No. 2517. (Renumbered March 17, 1982)
- 8-1-207 Volatile Organic Compound (VOC):** Any organic compound which would be emitted during use, application, curing or drying of a solvent or surface coating. (Amended March 17, 1982; June 15, 1994)
- 8-1-208 Organic Compound, Non-Precursor:** Methylene chloride, 1,1,1, trichloroethane, 1,1,2 trichlorotrifluoroethane (CFC-113), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), dichlorotetrafluoroethane (CFC-114), dichlorodifluoromethane (CFC-22) chloropentafluoroethane (CFC-115), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,2,2-tetrafluoroethane (HFC-134), 1,1,1-trifluoroethane (HFC-134a), 1,1-difluoroethane (HFC-152a), trifluoromethane (CFC-23); and perfluorocarbons which fall into these classes:
 (1) Cyclic, branched, or linear completely fluorinated alkanes;
 (2) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations,
 (3) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations, and
 (4) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
 (Adopted March 17, 1982, Amended June 15, 1994)
- 8-1-209 Deleted June 15, 1994**
- 8-1-300 STANDARDS**
- 8-1-320 Surface Preparation; Clean-up; Coating, Ink, Paint Removal:** Effective August 1, 1988 a person shall not use open containers for the storage or disposal of cloth or paper impregnated with organic compounds that are used for surface preparation, clean-up, or coating, ink, or paint removal. (Adopted May 18, 1988)
- 8-1-321 Closed Containers:** Effective August 1, 1988 a person shall not store spent or fresh organic compounds to be used for surface preparation, clean-up, or coating, ink, or paint removal, in open containers. (Adopted May 18, 1988)
- 8-1-322 Spray Equipment Clean-up Limitation:** Effective August 1, 1988 a person shall not use organic compounds for the clean-up of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. (Adopted May 18, 1988)
- 8-1-600 MANUAL OF PROCEDURES**
- 8-1-601 Analysis of Sample:** Samples of organic compounds as defined in Subsection 110.6 shall be analyzed for vapor pressure as prescribed in the Manual of procedures, Volume III, Method 13. (Adopted March 17, 1982)

8-1-602

Determination of Emissions: Emissions of organic compounds as specified in Subsection 8-1-110.3 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 referenced test methods exceed the standards of the rule.

(Adopted March 17, 1982, Amended June 15, 1994)

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ORGANIC COMPOUNDS
RULE 2
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REGULATION 8
ORGANIC COMPOUNDS
RULE 2
MISCELLANEOUS OPERATIONS

9/28/94

8-2-100 GENERAL

8-2-101 Description: The purpose of this Rule is to reduce emissions of precursor organic compounds from miscellaneous operations. (Amended March 17, 1982)

8-2-110 Exemption, Natural Gas: Emissions from any operations consisting entirely of natural gas, provided best modern practices are used, are exempt from this Rule.

8-2-111 Exemption, Preparation of Food: Emissions from the preparation of food for human consumption provided best modern practices are used, are exempt from this Rule.

8-2-112 Exemption, Cold Reduction Equipment Used in Metal Forming: The emissions from any cold reduction equipment used in metal forming are exempt from this rule provided the cooling oil introduced in the cold reduction system is not less than 90 percent (by weight) normal paraffins of a carbon number 12 or higher and that such oil shall have a Reid vapor pressure not greater than 52 mm Hg (1.0 psia).

(Amended September 2, 1981)

8-2-113 Exemption, Blind Changing: Emissions from blind changing are exempt from this Rule, providing best modern practices are used. (Amended March 17, 1982)

8-2-114 Exemption, Miscellaneous Plants: Emissions from cooling towers, railroad tank cars, marine vessels and crude oil production operations are exempt from this Rule, provided best modern practices are used.

8-2-115 Exemption, Equipment: The following equipment is exempt from this Rule, provided best modern practices are used:

- 115.1 Presses used for the curing of rubber products or plastic products.
- 115.2 Ovens used exclusively for the curing of plastics which are concurrently being vacuum held to a mold or for the softening or annealing of plastics.
- 115.3 Ovens used exclusively for the curing of vinyl plastisols by the closed mold curing process.
- 115.4 Equipment used exclusively for the melting or applying of wax.
- 115.5 Equipment used exclusively for the packaging of lubricants and greases.
- 115.6 Equipment used exclusively for the manufacture of water emulsions of waxes, greases or oils.
- 115.7 Vacuum producing devices in laboratory operations or which are used exclusively in connection with other equipment which is excluded or exempted by this Regulation.
- 115.8 Vacuum producing devices which do not remove or convey air contaminants from another source.
- 115.9 Porcelain enameling furnaces, porcelain enameling drying ovens, vitreous enameling furnaces or vitreous enamel drying ovens.
- 115.10 All printing presses other than rotogravure printing presses.
- 115.11 Equipment used exclusively for bonding lining to brake shoes.
- 115.12 Equipment used for hydraulic and hydrostatic testing.
- 115.13 Ovens and furnaces used for heat treating and annealing metals.
- 115.14 Oil quench tanks used for tempering heated metals.
- 115.15 Crucible type or pot type furnaces with a brimful capacity of less than 450 in³ of molten metal.
- 115.16 Space heating and heat transfer operations using gas fuel and rated at less than one million BTU's per hour.
- 115.17 Equipment used exclusively for steam cleaning.

1/28/17

- 8-2-116 Exemption, Equipment or Exhaust System:** The following equipment or any exhaust system or collector exclusively serving such equipment is exempt from this Rule providing best modern practices are used:
- 116.1 Ovens used exclusively for curing potting materials or for castings made with epoxy resins.
 - 116.2 Equipment used for compression molding or injection molding of plastics.
 - 116.3 Dipping operations for coating objects with oils, waxes, or greases.
 - 116.4 Dipping operations for applying coatings of natural or synthetic resins which contain no organic solvents.
 - 116.5 Unheated solvent dispensing containers, unheated solvent rinsing containers, or unheated coating dip tanks, all of 100 gal. capacity or less.
 - 116.6 Kilns used for firing ceramic ware, heated exclusively by natural gas, liquefied petroleum gas, electricity or any combination thereof.
 - 116.7 Shell core and shell molding machines.
 - 116.8 Die casting machines.
 - 116.9 Laboratory equipment used exclusively for chemical or physical analyses and bench scale laboratory equipment.

8-2-200 DEFINITIONS

8-2-201 Miscellaneous Operations: Any operation other than those limited by the other Rules of this Regulation 8 and the Rules of Regulation 10.

8-2-202 Total Carbon: Organic compounds calculated as total carbon shall be determined as follows:

- 202.1 Total carbon of an individual organic compound is equal to the ppm of that compound in an emission multiplied by the number of carbon atoms present in the molecule.
- 202.2 Total carbon in an emission is the sum of the total carbon of all of the individual organic compounds present in the effluent. 1,1,1, trichloroethane, methylene chloride, methane and chlorofluorocarbons shall not be included in the calculation of total carbon.

8-2-300 STANDARDS

8-2-301 Miscellaneous Operations: A person shall not discharge into the atmosphere from any miscellaneous operation an emission containing more than 6.8 kg. (15 lbs.) per day and containing a concentration of more than 300 PPM total carbon on a dry basis. (Amended May 21, 1980)

8-2-600 MANUAL OF PROCEDURES

8-2-601 Determination of Compliance: Emissions of organic compounds as specified in Section 8-2-301 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 referenced test methods exceed the standards of this rule.

(Adopted March 17, 1982, Amended June 15, 1994)

**REGULATION 8
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REGULATION 8
ORGANIC COMPOUNDS
RULE 3
ARCHITECTURAL COATINGS

(Adopted March 1, 1978)

8-3-100 GENERAL

8-3-101 Description: The purpose of this Rule is to limit the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the District.

(Amended November 21, 2001)

8-3-102 Applicability: Except as provided in Section 8-3-110, this Rule is applicable to any person who supplies, sells, offers for sale, or manufacturers any architectural coating for use within the District, as well as any person who applies or solicits the application of any architectural coating within the District.

(Adopted November 21, 2001)

8-3-103 Severability: If a court of competent jurisdiction issues an order that any provision of this rule is invalid, it is the intent of the Board of Directors of the District that other provisions of this rule remain in full force and affect, to the extent allowed by law.

(Adopted November 21, 2001)

8-3-110 Exemptions: This rule does not apply to:

110.1 Any architectural coating that is sold or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging;

110.2 Any aerosol coating product; or

110.3 Any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less.

(Amended, Renumbered November 21, 2001)

8-3-111 Deleted November 21, 2001

8-3-112 Deleted January 8, 1986

8-3-113 Deleted November 21, 2001

8-3-114 Deleted November 21, 2001

8-3-200 DEFINITIONS

8-3-201 Adhesive: Any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

(Adopted November 21, 2001)

8-3-202 Aerosol Coating Product: A pressurized coating product containing pigments or resins that dispense product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marketing applications. Aerosol coating products are subject to District Regulation 8, Rule 49 or the provisions of 17 California Code of Regulations 94520 *et seq.*

(Adopted November 21, 2001)

8-3-203 Antenna Coating: A coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.

(Adopted November 21, 2001)

8-3-204 Antifouling Coating: A coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered with both the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136, *et seq.*) and with the California Department of Pesticide Regulation.

(Adopted November 21, 2001)

8-3-205 Appurtenances: Any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lampposts; partitions; pipes and piping systems; rain-gutters and down-spouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.

(Adopted November 21, 2001)

8-3-206 Architectural Coatings: A coating to be applied to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purpose of this rule.

(Amended, Renumbered November 21, 2001)

8-3-207 Bitumens: Black or brown materials including, but not limited to, asphalt, tar, pitch and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

(Renumbered 5/18/83; Amended, Renumbered 11/21/01)

8-3-208 Bituminous Roof Coating: A coating which incorporates bitumens that is labeled and formulated exclusively for roofing.

(Amended November 21, 2001)

8-3-209 Bituminous Roof Primer: A primer which incorporates bitumens that is labeled and formulated exclusively for roofing.

(Amended November 21, 2001)

8-3-210 Bond Breakers: A coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-211 Clear Brushing Lacquers: Clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush, and which are labeled as specified in subsection 8-3-401.5.

(Adopted November 21, 2001)

8-3-212 Clear Wood Coatings: Clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.

(Adopted November 21, 2001)

8-3-213 Coating: A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.

(Adopted November 21, 2001)

8-3-214 Colorant: A concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating after packaging in sale units to produce the desired color.

(Adopted November 21, 2001)

8-3-215 Concrete Curing Compound: A coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-216 Dry Fog Coating: A coating labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

(Adopted November 21, 2001)

8-3-217 Exempt Compound: A compound identified by the US EPA as having a negligible contribution to photochemical reactivity. Compounds exempt for the purposes of this Rule are listed in subsection 8-3-261.1.

(Adopted November 21, 2001)

- 8-3-218 Faux Finishing Coating:** A coating labeled and formulated as a stain or glaze to create artistic effects including, but not limited to, dirt, old age, smoke damage, and simulated marble and wood grain.
(Adopted November 21, 2001)
- 8-3-219 Fire-Resistive Coating:** An opaque coating labeled and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing assemblies of structural materials into compliance with federal, state, and local building code requirements. The fire-resistive coating and the testing agency must be approved by building code officials. The fire-resistive coating shall be tested in accordance with ASTM Designation E 119-98, incorporated by reference in subsection 8-3-606.2.
(Adopted November 21, 2001)
- 8-3-220 Fire-Retardant Coating:** A coating labeled and formulated to retard ignition and flame spread, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing building and construction materials into compliance with federal, state, and local building code requirements. The fire-retardant coating and the testing agency must be approved by building code officials. The fire-retardant coating shall be tested in accordance with ASTM Designation E 84-99, incorporated by reference in subsection 8-3-606.1.
(Renumbered 5/18/81; Amended, Renumbered 11/21/01)
- 8-3-221 Flat Coating:** A coating that is not defined under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in subsection 8-3-606.3.
(Adopted November 21, 2001)
- 8-3-222 Floor Coating:** An opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, and other horizontal surfaces which may be subject to foot traffic.
(Adopted November 21, 2001)
- 8-3-223 Flow Coating:** A coating labeled and formulated exclusively for use by electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units.
(Adopted November 21, 2001)
- 8-3-224 Form-Release Compound:** A coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some other material other than concrete.
(Adopted November 21, 2001)
- 8-3-225 Graphic Arts Coating or Sign Paint:** A coating labeled and formulated for hand application by artists using brush or roller techniques to indoor and outdoor signs (excluding structural components) and murals, including lettering enamels, poster colors, copy blockers, and bulletin enamels.
(Amended, Renumbered 5/18/83, 11/21/01)
- 8-3-226 High-Temperature Coating:** A high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).
(Adopted November 21, 2001)
- 8-3-227 Industrial Maintenance Coating:** A high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to substrates exposed to one or more of the following extreme environmental conditions listed in subsections 8-3-227.1 through 227.5, and labeled as specified in subsection 8-3-401.4:
- 227.1 Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;
 - 227.2 Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;
 - 227.3 Repeated exposure to temperatures above 121°C (250°F);

- 227.4 Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents; or
227.5 Exterior exposure of metal structures and structural components.

(Amended, Renumbered 5/18/83; Amended 1/8/86; Amended, Renumbered 11/21/01)

8-3-228 Lacquer: A clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film.

(Amended, Renumbered 5/18/83, 11/21/01)

8-3-229 Low-Solids Coating: A coating containing 0.12 kilogram or less of solids per liter (1 pound or less of solids per gallon) of coating material.

(Adopted 11/4/98; Amended, Renumbered 11/21/01)

8-3-230 Magnesite Cement Coating: A coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

(Adopted November 21, 2001)

8-3-231 Mastix Texture Coating: A coating labeled and formulated to cover holes and minor cracks, and to conceal surface irregularities, and applied in a single coat of at least 10 mils (0.010 inch) dry film thickness.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-232 Metallic Pigmented Coating: A coating containing at least 48 grams of elemental metallic pigment per liter of coating as applied (0.4 pounds per gallon), when tested in accordance with South Coast Air Quality Management District Method 318-95, incorporated by reference in subsection 8-3-606.4.

(Renumbered 5/18/83; Amended, Renumbered 11/21/01)

8-3-233 Multi-Color Coating: A coating that is packaged in a single container and that exhibits more than one color when applied in a single coat.

(Renumbered 5/18/83; Amended, Renumbered 11/21/01)

8-3-234 Nonflat Coating: A coating that is not defined under any other definition in this rule and that registers a gloss of 15 or greater on an 85-degree meter and 5 or greater on a 60-degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in subsection 8-3-606.3.

(Adopted 9/1/82; Amended, Renumbered 11/21/01)

8-3-235 Nonflat – High Gloss Coating: A nonflat coating that registers a gloss of 70 or above on a 60 degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in subsection 8-3-606.3.

(Adopted November 21, 2001)

8-3-236 Non-Industrial Use: Non-industrial use means any use of architectural coatings except in the construction or maintenance of any of the following: facilities used in the manufacturing of goods and commodities; transportation infrastructure, including highways, bridges, airports and railroads; facilities used in mining activities, including petroleum extraction; and utilities infrastructure, including power generation and distribution, and water treatment and distribution systems.

(Adopted November 21, 2001)

8-3-237 Post-Consumer Coating: A finished coating that would have been disposed of in a landfill, having completed its usefulness to a consumer, and does not include manufacturing wastes.

(Adopted November 21, 2001)

8-3-238 Pre-Treatment Wash Primer: A primer that contains a minimum of 0.5 percent by acid, by weight, when tested in accordance with ASTM Designation D 1613-96, incorporated by reference in subsection 8-3-606.5, that is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

(Adopted November 21, 2001)

8-3-239 Primer: A coating labeled and formulated for application to a substrate to provide a firm bond between the substrate and subsequent coats.

(Adopted November 21, 2001)

8-3-240 Quick-Dry Enamel: A nonflat coating that is labeled as specified in subsection 8-3-401.8 and that is formulated to have the following characteristics:

- 240.1 Is capable of being applied directly from the container under normal conditions with ambient temperatures between 16°C and 27°C (60°F and 80°F);
- 240.2 When tested in accordance with ASTM Designation D 1640-95, incorporated by reference in subsection 8-3-606.6, sets to touch in 2 hours or less, is tack free in 4 hours or less, and dries hard in 8 hours or less by the mechanical method test; and
- 240.3 Has a dried film gloss of 70 or above on a 60-degree meter.

(Adopted 9/1/82; Amended, Renumbered 5/18/83, 11/21/01)

8-3-241 Quick Dry Primer, Sealer, and Undercoater: A primer, sealer, or undercoater that is dry to touch in 30 minutes and can be recoated in 2 hours when tested in accordance with ATSM D 1640-95, incorporated by reference in subsection 8-3-606.6.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-242 Recycled Coating: An architectural coating formulated such that not less than 50 percent of the total weight consists of secondary and post-consumer coating, with not less than 10 percent of the total weight consisting of post-consumer coating.

(Adopted November 21, 2001)

8-3-243 Residential: Areas where people reside or lodge, including, but not limited to, single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels, and hotels.

(Adopted November 21, 2001)

8-3-244 Roof Coating: A non-bituminous coating labeled and formulated exclusively for application to roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat and ultraviolet radiation. Metallic pigmented roof coatings which qualify as Metallic Pigmented Coating shall not be considered to be in this category, but shall be considered to be in the Metallic Pigmented Coating category.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-245 Rust Preventative Coating: A coating formulated for non-industrial use to prevent the corrosion of metal surfaces and labeled as specified in subsection 8-3-401.6.

(Adopted November 21, 2001)

8-3-246 Sanding Sealer: A clear or semi-transparent wood coating labeled and formulated for application to bare wood to seal the wood and to provide a coat that can be abraded to create a smooth surface for subsequent applications of coatings. A sanding sealer that also meets the definition of a lacquer is not included in this category, but is included in the lacquer category.

(Adopted November 21, 2001)

8-3-247 Sealer: A coating labeled and formulated for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.

(Adopted November 21, 2001)

8-3-248 Secondary Coating (Rework): A fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value, but does not include excess virgin resources of the manufacturing process.

(Adopted November 21, 2001)

8-3-249 Shellac: A clear or opaque coating formulated solely with the resinous secretions of the lac beetle (*Laccifer lacca*), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction.

(Amended, Renumbered 5/18/83, 11/21/01)

8-3-250 Shop Application: Application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing coatings).

(Adopted November 21, 2001)

8-3-251 Solicit: To require for use or to specify, by written or oral contract.

(Adopted November 21, 2001)

8-3-252 Specialty Primer, Sealer and Undercoater: A coating labeled as specified in subsection 8-3-401.7 and that is formulated for application to a substrate to seal fire,

smoke or water damage; to condition excessively chalky surfaces; or to block stains. An excessively chalky surface is one that is defined as having a chalk rating of four or less as determined by ASTM Designation D 4214-98, incorporated by reference in subsection 8-3-606.7.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-253 Stain: A clear, semitransparent, or opaque coating labeled and formulated to change the color of a surface but not conceal the grain pattern or texture.

(Renumbered 5/18/83; Amended, Renumbered 11/21/01)

8-3-254 Swimming Pool Coating: A coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals.

(Adopted November 21, 2001)

8-3-255 Swimming Pool Repair And Maintenance Coating: A rubber based coating labeled and formulated to be used over existing rubber based coatings for the repair and maintenance of swimming pools.

(Adopted November 21, 2001)

8-3-256 Temperature-Indicator Safety Coating: A coating labeled and formulated as a color-changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

(Adopted November 21, 2001)

8-3-257 Tint Base: An architectural coating to which colorant is added after packaging in sale units to produce a desired color.

(Adopted November 21, 2001)

8-3-258 Traffic Marking Coating: A coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to curbs, berms, driveways, parking lots, sidewalks, and airport runways.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-259 Undercoater: A coating labeled and formulated to provide a smooth surface for subsequent coats.

(Adopted November 21, 2001)

8-3-260 Varnish: A clear or semi-transparent wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction on exposure to air. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish.

(Amended, Renumbered 5/18/83; Amended 1/8/86; Amended, Renumbered 11/21/01)

8-3-261 Volatile Organic Compound (VOC): Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of an architectural coating.

261.1 For purposes of calculating VOC content of a coating, any water or the following non-precursor organic compounds:

acetone

methyl acetate

parachlorobenzotrifluoride (PCBTF)

cyclic, branched or linear, completely methylated siloxanes (VMS)

shall not be considered to be part of the coating.

261.2 For the purposes of calculating VOC content of a low solids coating, any water or non-precursor organic compound listed in subsection 8-3-261.1 shall be considered part of the coating, but shall not be considered part of the VOC content of the coating.

(Adopted 12/20/95; Amended 11/4/98; Amended, Renumbered 11/21/01)

8-3-262 VOC Content: The calculation to determine the VOC content of a coating is found in the Manual of Procedures, Volume III, Laboratory Methods 21, 22 and 31.

(Adopted November 21, 2001)

8-3-263 Waterproofing Sealer: A coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water.

(Amended, Renumbered 5/18/83, 11/21/01)

8-3-264 Waterproofing Concrete/Masonry Sealer: A clear or pigmented film-forming coating that is labeled and formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining.

(Adopted November 21, 2001)

8-3-265 Wood Preservative: A coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with both the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code (U.S.C.) Section 136, *et seq.*) and with the California Department of Pesticide Regulation.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-300 STANDARDS

8-3-301 VOC Content Limits: Except as provided in Sections 8-3-302, 303, 307, and 308, no person shall: (i) manufacture, blend, or repackage for sale within the District; (ii) supply, sell, or offer for sale within the District; or (iii) solicit for application or apply within the District, any architectural coating with a VOC content in excess of the corresponding limit specified in the following table. Limits are expressed in grams of VOC per liter of coating as thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to the tint bases. "Manufacturer's maximum recommendation" means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

<u>Coating Category</u>	<u>Limit</u>	<u>Effective 1/1/2003</u>	<u>Effective 1/1/2004</u>
Flat Coatings	250	100	
Nonflat Coatings	250	150	
Nonflat – High Gloss Coatings	250		
Specialty Coatings:			
Antenna Coatings	530		
Antifouling Coatings	420	400	
Bituminous Roof Coatings	300		
Bituminous Roof Primers	350		
Bond Breakers	600 ⁽²⁾	350	
Clear Wood Coatings:			
Clear Brushing Lacquer	680		
Lacquer (including lacquer sanding sealer)	680	550 ⁽¹⁾	
Sanding sealer	550	350	
Varnish	350		
Concrete Curing Compounds	350		
Dry Fog Coatings	400 ⁽²⁾		
Faux Finishing Coatings	350		
Fire Resistive Coatings	450 ⁽²⁾	350	
Fire Retardant Coatings:			
Clear	850 ⁽²⁾	650	
Opaque	450 ⁽²⁾	350	
Floor Coatings	400	250	
Flow Coatings	420		
Form-Release Compounds	250		
Graphic Arts Coatings (Sign Paints)	500 ⁽²⁾		
High Temperature Coatings	420		
Industrial Maintenance Coatings	420		250
Low Solids Coatings	120		
Magnesite Cement Coatings	450		

<u>Coating Category</u>	<u>Limit</u>	<u>Effective 1/1/2003</u>	<u>Effective 1/1/2004</u>
Mastic Texture Coatings	300 ⁽²⁾		
Metallic Pigmented Coatings	500 ⁽²⁾		
Multi-Color Coatings	580 ⁽²⁾	250	
Pre-Treatment Wash Primers	420		
Primers, Sealers, and Undercoaters	350	200	
Quick-Dry Enamels	400	250	
Quick-Dry Primers, Sealers, Undercoaters	450 ⁽²⁾	200	
Recycled Coatings	250		
Roof Coatings	250 ⁽²⁾		
Rust Preventative Coatings	420	400	
Shellacs:			
Clear	730 ⁽²⁾		
Opaque	550 ⁽²⁾		
Specialty Primers, Sealers and Undercoaters	350		
Stains	350	250	
Swimming Pool Coatings	600 ⁽²⁾	340	
Swimming Pool Repair and Maintenance Coatings	600 ⁽²⁾	340	
Temperature-Indicator Safety Coatings	550		
Traffic Marking Coatings	250	150	
Waterproofing Concrete/Masonry Sealers	400		
Waterproofing Sealers	400	250	
Wood Preservatives:			
Above ground	350		
Below ground	550 ⁽²⁾	350	

⁽¹⁾ A person may add up to 10 percent by volume of VOC to a lacquer to avoid blushing of the finish provided that, (i) the relative humidity at the time of coating application is greater than 70%, (ii) the temperature at the time of coating application is below 18°C (65°F), (iii) the lacquer contains acetone, and (iv) the lacquer contains no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition.

⁽²⁾ VOC limit effective April 1, 2002.

(Amended 9/1/82, 5/18/83, 1/8/86, 9/3/86, 11/4/98; Amended, Renumbered 11/21/01)

8-3-302 Most Restrictive VOC Limits: If anywhere on the container of any architectural coating or any label or sticker affixed to the container, or in any sales, advertising or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in the table in Section 8-3-301, then the most restrictive VOC limit shall apply. This Section does not apply to the following coating categories:

- 302.1: Antenna coatings,
- 302.2: Antifouling coatings,
- 302.3: Bituminous roof coatings,
- 302.4: Fire-retardant coatings,
- 302.5: Flow coatings,
- 302.6: High temperature coatings,
- 302.7: Industrial maintenance coatings,
- 302.8: Lacquer coatings (including lacquer sanding sealers),
- 302.9: Low-solids coatings,
- 302.10: Metallic pigmented coatings,

- 302.11: Pretreatment wash primers,
- 302.12: Shellacs,
- 302.13: Specialty primers, sealers and undercoaters,
- 302.14: Temperature-indicator safety coatings, and
- 302.15: Wood preservatives.

(Adopted 4/17/86; Amended 1/8/86; Amended, Renumbered 11/21/01)

8-3-303 Sell-Through of Coatings: Any coating manufactured prior to the January 1, 2003 or January 1, 2004 effective dates that does not comply with the VOC limits effective on those dates may be supplied, offered for sale, or sold for up to three years after the effective dates provided that (i) the coating was in compliance with the VOC limits in effect at the time of manufacture, and (ii) the date or date-code is displayed on the coating container as required by subsection 8-3-401.1. Any coating subject to this Section may be applied at any time after the effective dates.

303.1 Until January 1, 2008, any coating included in an approved Averaging Program that does not comply with the VOC limits in Section 8-3-301 may be supplied, offered for sale or sold for up to three years after the end of the compliance period specified in the approved Averaging Program provided that either the statement: "This product is subject to architectural coatings averaging provisions in California" or a substitute symbol specified by the Executive Officer of the California Air Resources Board is displayed on the coating container. Any coating subject to this subsection may be applied at any time after the period specified in the Averaging Program.

(Adopted November 21, 2001)

8-3-304 Painting Practices: All architectural coating containers shall be closed when not in use. "In use" is the active application of contents to a surface by pouring, siphoning, brushing, rolling, padding, ragging or other means. Architectural coating containers include but are not limited to, drums, buckets, cans, pails, trays and any other application containers. Containers of any VOC-containing materials used for thinning or cleanup shall also be closed when not in use.

(Adopted November 21, 2001)

8-3-305 Prohibition of Excess Thinning: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in Section 8-3-301.

(Adopted November 21, 2001)

8-3-306 Rust Preventative Coatings: Effective January 1, 2004, a person shall only apply and solicit the application of rust preventative coatings for non-industrial uses, unless such coatings comply with the VOC limit for industrial maintenance coating as specified in Section 8-45-301.

(Adopted November 21, 2001)

8-3-307: Coatings Not Listed in Section 8-3-301: Any coating that does not meet any of the definitions for a specialty coating listed in Section 8-3-301 shall be classified as a flat, nonflat or nonflat high gloss coating, based on it's gloss, as defined in Section 8-3-221, 234 or 235, and the corresponding VOC limit shall apply.

(Adopted November 21, 2001)

8-3-308: Averaging Compliance Option: Effective January 1, 2003, in lieu of compliance with the specified VOC limits in Section 8-3-301, any of the following coatings may be averaged by the manufacturer such that their actual cumulative emissions over a compliance period not to exceed one year, as calculated from sales of the designated coatings, are less than or equal to the cumulative emissions that would have been allowed under the specified VOC limits, provided that, (i) the manufacturer complies with the provisions of the Manual of Procedures, Volume I, Number 7, and, (ii) the manufacturer maintains and makes available inspection records for at least three years after the end of each compliance period:

- 307.1 Bituminous roof coatings,
- 307.2 Flats,
- 307.3 Floor coatings,
- 307.4 Industrial maintenance coatings,

- 307.5 Nonflats,
- 307.6 Primers, sealers, and undercoaters,
- 307.7 Quick-dry enamels,
- 307.8 Quick-dry primers, sealers, and undercoaters,
- 307.9 Roof coatings,
- 307.10 Rust preventative coatings,
- 307.11 Stains, and
- 307.12 Waterproofing sealers.

This Section and Volume I, Number 7 of the Manual of Procedures: Averaging Provision for Architectural Coatings, shall be effective only until January 1, 2005, after which this compliance option shall no longer be allowed.

(Adopted November 21, 2001)

8-3-309 Limited Allowance, Industrial Maintenance Coatings: Effective January 1, 2004, industrial maintenance coatings with a VOC content of greater than 250 grams VOC per liter but no greater than 340 grams VOC per liter may be manufactured, sold, offered for sale, solicited, and applied in the District provided the user of the coating, or manufacturer or seller on behalf of the user, has petitioned the APCO for use of the coating as per Section 8-3-402 and has received written approval. The APCO shall not approve any petition if the approval, when combined with approvals granted previously during the calendar year, would result in excess emissions of greater than 10 tons per year. Excess emissions are emissions greater than those that would result from an equal volume of coating at the VOC limit of 250 grams per liter. This Section shall not apply to industrial maintenance coatings offered for sale to the general public.

(Adopted November 21, 2001)

8-3-400 ADMINISTRATIVE REQUIREMENTS

8-3-401 Container Labeling Requirements: Each container for any coating subject to this Rule shall display all the information in subsection 8-3-401.1 through 401.3, and, as applicable, the information in subsection 8-3-401.4 through 401.9:

- 401.1 **Date Code:** On the label, lid or bottom; the date the coating was manufactured, or a date code representing the date. If the manufacturer uses a date code, an explanation of each code must be filed with the Executive Officer of the Air Resources Board and be made available to the Air Pollution Control Officer on request.
- 401.2 **Thinning Recommendation:** On the label or lid; a statement of the manufacturer's recommendation regarding thinning of the coating so as not to exceed the VOC limit listed in Section 8-3-301. This requirement does not apply to the thinning of coatings with water. If thinning prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.
- 401.3 **VOC Content:** On the container; the maximum or actual VOC content of the coating, as supplied, including the VOC content at maximum thinning as recommended by the manufacturer. VOC content shall be displayed as grams VOC per liter of coating. VOC content may be calculated using product formulation data or shall be determined using the test method specified in Section 8-3-601, 602 or 604.
- 401.4 **For Industrial Maintenance Coatings:** On the label or lid; one or more of the following: (i) "For Industrial Use Only," (ii) "For Professional Use Only," (iii) "Not For Residential Use," or (iv) "Not Intended For Residential Use" shall be prominently displayed.
- 401.5 **For Clear Brushing Lacquers:** Effective January 1, 2003, "For Brush Application Only," and "This Product Must Not Be Thinned Or Sprayed" shall be prominently displayed on the label.
- 401.6 **For Rust Preventative Coatings:** Effective January 1, 2003, "For Metal Substrates Only" shall be prominently displayed on the label.

- 401.7 For Specialty Primers, Sealers, and Undercoaters: Effective January 1, 2003, one of the following: (i) For Blocking Stains, (ii) For Fire-Damaged Substrates, (iii) For Smoke-Damaged Substrates, (iv) For Water-Damaged Substrates, or, (v) For Excessively Chalky Surfaces shall be prominently displayed on the label.
- 401.8 For Quick Dry Enamels: Effective January 1, 2003, "Quick Dry" and the dry hard time shall be prominently displayed on the label.
- 401.9 For Nonflat – High Gloss Coatings: Effective January 1, 2003, "High Gloss" shall be prominently displayed on the label.

(Amended 3/17/82, 12/1/82, 5/18/83, 1/8/86; Amended, Renumbered 11/21/01)

8-3-402 Petition, Limited Allowance for Industrial Maintenance Coatings: A person seeking to use the limited allowance for industrial maintenance coatings as per Section 8-3-309 shall comply with the following requirements:

- 402.1 The petitioner shall certify that complying coatings able to meet the job performance requirements are not available.
- 402.2 The petition shall contain the following information, as applicable: (i) job requirements, and job and site description, (ii) volume of coating required, and, (iii) maximum VOC content of coating to be applied.
- 402.3 If the APCO grants written approval, the approval shall contain volume and allowable VOC content conditions. Until written approval is granted and received by the petitioner, all provisions of this Rule shall apply.

(Adopted November 21, 2001)

8-3-500 MONITORING AND RECORDS

8-3-501 Reporting Requirements: Each manufacturer of the following products shall submit a report to the Executive Officer of the California Air Resources Board on or before April 1 of each calendar year beginning in the year 2004. The report shall contain the following information for the preceding calendar year, but need only be submitted once each year for all districts:

- 501.1 Clear Brushing Lacquers: Number of gallons of clear brushing lacquers sold in California and the method used to calculate California sales.
- 501.2 Rust Preventative Coatings: Number of gallons of rust preventative coatings sold in California and the method used to calculate California sales.
- 501.3 Specialty Primers, Sealers and Undercoaters: Number of gallons of specialty primers, sealers and undercoaters as defined in Section 8-3-252 sold in California and the method used to calculate California sales.
- 501.4 Toxic Compounds: For coatings that contain methylene chloride or perchloroethylene, (i) product brand name and a copy of product label with legible usage instructions, (ii) product category as defined by this Rule to which the product belongs, (iii) total sales in California during the calendar year to the nearest gallon, and (iv) volume percentage, to the nearest 0.10%, of methylene chloride or perchloroethylene in the coating.
- 501.5 Recycled Coatings: Number of gallons of recycled coatings distributed in California and the method used to calculate California distribution. In addition, each manufacturer shall submit a certification of their status as a Recycled Paint Manufacturer, but need only submit a certification once.
- 501.6 Bituminous Coatings: Number of gallons of bituminous roof coatings and bituminous roof primers sold in California and the method used to calculate California sales.

(Adopted November 21, 2001)

8-3-600 MANUAL OF PROCEDURES

8-3-601 Determination of Compliance, Air-Dried Water Reducible Coatings: The means by which compliance of air-dried, water reducible coatings is determined are found in the Manual of Procedures, Volume III, Method 21.

(Amended 3/17/82, 5/18/83)

8-3-602 Determination of Compliance, Air-Dried Solvent Based Coatings: The means by which compliance of air-dried, solvent based coatings is determined are found in the Manual of Procedures, Volume III Method 22.

(Amended 3/17/82, 5/18/83)

8-3-603 Deleted November 21, 2001

8-3-604 Determination of Compliance, Low Solids Architectural Coatings: The means by which compliance of low solids architectural coatings is determined are found in the Manual of Procedures, Volume III, Method 31.

(Adopted November 4, 1998)

8-3-605 Determination of Compliance, Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of U.S. Environmental Protection Agency Method 24 (40 CFR 59, subpart D, Appendix A). This method has not been approved for methacrylate multicomponent coatings used for purposes other than as traffic marking coatings or for other classes of multicomponent coatings.

(Adopted November 21, 2001)

8-3-606 Incorporated Test Methods: The following test methods are incorporated by reference herein, and shall be used to test coatings subject to provisions of this Rule:

606.1 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM Designation E 84-99, "Standard Test Method for Surface Burning Characteristics of Building Materials," (see Section 8-3-220, Fire-Retardant Coating).

606.2 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM Designation E 119-98, "Standard Test Methods for Fire Tests of Building Construction Materials," (see Section 8-3-219, Fire-Resistive Coating).

606.3 Gloss Determination: The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), "Standard Test Method for Specular Gloss," (see Section 8-3-221, 234, 235 and 240, Flat Coating, Nonflat Coating, Nonflat High Gloss Coating, and Quick-Dry Enamels).

606.4 Metal Content of Coatings: The metallic content of a coating shall be determined by South Coast Air Quality Management District Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction," South Coast Air Quality Management District "Laboratory Methods of Analysis for Enforcement Samples," (see Section 8-3-232, Metallic Pigmented Coating).

606.5 Acid Content of Coatings: Measurement of acid content of Pre-Treatment Wash Primers shall be determined by ASTM Designation D 1613-96, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products," (see Section 8-3-238, Pre-Treatment Wash Primers).

606.6 Drying Times: The set-to-touch, dry-hard, dry-to-touch, and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature, " (see Section 8-3-240 and 241, Quick-Dry Enamel and Quick-Dry Primer, Sealer, and Undercoater). The tack-free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95.

606.7 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D 4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films," (see Section 8-3-252, Specialty Primer, Sealer, and Undercoater).

606.8 Exempt Compounds – Siloxanes: The quantity of cyclic, branched, or linear completely methylated siloxanes shall be analyzed by the Manual of Procedures, Volume III, Laboratory Method 43: "Determination of Volatile

Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials,” (see Section 8-3-261, Volatile Organic Compounds).

- 606.9 Exempt Compounds – Parachlorobenzotrifluoride (PCBTF): The quantity of parachlorobenzotrifluoride shall be analyzed by the Manual of Procedures, Volume III, Laboratory Method 41, “Determination of Volatile Organic Compounds in Solvent-Based Coatings and Related Materials Containing Parachlorobenzotrifluoride (see Section 8-3-261, Volatile Organic Compound).
- 606.10 Exempt Compounds – Methyl Acetate: The quantity of methyl acetate shall be determined by ASTM Method D-6133-00: “Standard Test Method for Acetone, PCBTF, Methyl Acetate or t-Butyl Acetate Content of Solvent-Reducible and Water Reducible Paints, Coatings, Resins, and Raw Materials by Direct Injection Into a Gas Chromatograph.” (see Section 8-3-261, Volatile Organic Compound).

(Adopted November 21, 2001)

**REGULATION 8
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**REGULATION 8
ORGANIC COMPOUNDS
RULE 4
GENERAL SOLVENT AND SURFACE COATING OPERATIONS**

8-4-100 GENERAL

8-4-101 Description: The purpose of this Rule is to limit emissions of volatile organic compounds from the use of solvents and surface coatings in any operation other than those specified by other Rules of this Regulation 8. The provisions of this Rule shall apply, but are not limited to, model making, printed circuit board manufacturing and assembly, electrical and electronic component manufacturing, surface coating of test panels, training facilities where the application of coating is for training purposes, stencil coatings, low usage coating activities exempt from other Regulation 8 Rules, coatings specifically exempt from other Regulation 8 Rules or solvent usage not specified by other Regulation 8 Rules.

(Amended 3/17/82; 5/15/96; 10/16/02)

8-4-110 Deleted May 15, 1996

8-4-111 Deleted December 5, 1990

8-4-112 Deleted May 15, 1996

8-4-113 Exemption, Specified Operations: This Rule shall not apply to operations that are subject to the requirements of other Rules of this Regulation 8, or which comply with appropriate limitations of those Rules prior to their effective dates.

8-4-114 Exemption, Aerosol Cans: The provisions of this Rule shall not apply to surface coating operations using non-refillable aerosol containers. Such coating is subject to the provisions of Regulation 8, Rule 49 or to the California Air Resources Board aerosol coating product regulation found in Title 17 of the California Code of Regulations, beginning at Section 94520.

(Adopted 6/20/90; Amended 10/16/02)

8-4-115 Exemption, Film Cleaners: This rule shall not apply to film cleaning operations that use 1,1,1-trichloroethane exclusively.

(Adopted May 15, 1996)

8-4-116 Limited Exemption, Specific Surface Preparation and Cleaning Operations: The surface preparation standards in Section 8-4-313 shall not apply to (i) the surface preparation of electrical and electronic components, precision optics, or numismatic dies; (ii) stripping of cured inks, coatings and adhesives or cleaning of resin, coating, ink and adhesive mixing, molding and application equipment; or, (iii) surface preparation associated with research and development operations; medical device or pharmaceutical manufacturing operations; performance testing to determine coating, adhesive or ink performance; or testing for quality control or quality assurance purposes.

(Adopted October 16, 2002)

8-4-117 Limited Exemption, Operations Subject to Specific Rules: The surface preparation standards in Section 8-4-313 shall not apply to surface preparation of material subject to the following Regulation 8 surface coating rules or made subject to Rule 4 by specific exemption or reference in any of the following rules:

- 117.1 Rule 3: Architectural Coating
- 117.2 Rule 11: Metal Container, Closure and Coil Coating
- 117.3 Rule 12: Paper, Fabric and Film Coating
- 117.4 Rule 13: Light and Medium Duty Motor Vehicle Assembly Plants
- 117.5 Rule 14: Surface Coating of Metal Furniture and Large Appliances
- 117.6 Rule 19: Surface Coating of Miscellaneous Metal Parts and Products
- 117.7 Rule 20: Graphic Arts Printing and Coating Operations
- 117.8 Rule 23: Coating of Flat Wood Paneling and Wood Flat Stock
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- 117.10 Rule 29: Aerospace Assembly and Component Coating Operations
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- 117.16 Rule 43: Marine Vessel Coating
- 117.17 Rule 45: Motor Vehicle and Mobile Equipment Coating Operations
- 117.18 Rule 50: Polyester Resin Operations

(Adopted October 16, 2002)

8-4-118 Limited Exemption, Production Machinery: Until June 1, 2004, moving and working surfaces of machinery used for product development and in production are not required to comply with the surface preparation standards in Section 8-4-313.

(Adopted October 16, 2002)

8-4-200 DEFINITIONS

8-4-201 Deleted May 15, 1996

8-4-202 Deleted May 15, 1996

8-4-203 Deleted May 15, 1996

8-4-204 Deleted May 15, 1996

8-4-205 Deleted May 15, 1996

8-4-206 Organic Solvents: Organic liquids which are used as diluents, thinners, dissolvers, viscosity reducers, cleaning agents, or for other similar uses, but does not include those used as fuel, antiseptics or anesthetics.

(Renumbered March 17, 1982)

8-4-207 Surface Coating: Any paint, lacquer, varnish, ink, adhesive or similar material.

(Renumbered March 17, 1982)

8-4-208 Deleted May 15, 1996

8-4-209 Deleted May 15, 1996

8-4-209 Deleted May 15, 1996

8-4-210 Deleted May 15, 1996

8-4-211 Key System Operating Parameter: An air pollution abatement equipment operating parameter, such as temperature, flow rate or pressure, that indicates operation of the abatement equipment within manufacturer specifications, and compliance with the standards of this regulation.

(Adopted 6/1/94; Amended 5/15/96)

8-4-212 Solvent Cleaning Operation: The removal of uncured adhesives, inks, coatings, and contaminants including: dirt, soil, and grease from parts, products, tools, machinery, equipment, and general work areas.

(Adopted May 15, 1996)

8-4-213 Source: Any article, machine, equipment, operation, contrivance or related groupings of such which may produce and/or emit air pollutants as specified by the permit to operate.

(Adopted May 15, 1996)

8-4-214 Volatile Organic Compound (VOC): Any organic compound of carbon (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use of a solvent or other material.

214.1 For purposes of calculating VOC content of a coating, any water or any of the following non-precursor organic compounds:

- acetone
 - methyl acetate
 - parachlorobenzotrifluoride (PCBTF)
 - cyclic, branched or linear, completely methylated siloxanes (VMS)
- shall not be considered part of the coating.

214.2 For the purposes of calculating the VOC content of cleanup and surface preparation solvent, any water or the non-precursor organic compounds listed in subsection 8-4-214.1, above, shall be considered part of the volume of the solvent but shall not be considered part of the VOC content of the solvent.

(Adopted 5/15/96; Amended 10/16/02)

- 8-4-215 Printed Circuit Board Manufacturing and Assembly:** A printed circuit board is an electronic component designed for interconnecting other electronic components. It consists of a deposited conductive material on an insulating surface. When additional components are added to the printed circuit board, it is known as an assembly.
(Adopted May 15, 1996)
- 8-4-216 Test Panel:** A panel used to evaluate coating performance.
(Adopted May 15, 1996)
- 8-4-217 Training Facility:** Any facility which applies coatings for training purposes without receiving compensation for the coating application.
(Adopted May 15, 1996)
- 8-4-218 Stencil Coatings:** Coatings that are applied by template in order to add designs, letters and/or numbers to the products.
(Adopted May 15, 1996)
- 8-4-219 Model Making:** A prototype or product design that is used as a pattern.
(Adopted May 15, 1996)
- 8-4-220 Surface Preparation:** The cleaning of surfaces prior to coating, further treatment, sale, or intended use. Solvent cleaning operations subject to and in compliance with Regulation 8, Rule 16: Solvent Cleaning Operations, are not subject to this Rule.
(Adopted October 16, 2002)
- 8-4-221 Approved Emission Control System:** A system for reducing emissions to the atmosphere, consisting of an abatement device and a collection system, which achieves the abatement efficiency specified in the applicable standards at all times during the operation and meets the requirements of Regulation 2, Rule 1.
(Adopted October 16, 2002)
- 8-4-222 Electrical and Electronic Components:** Components and assemblies of components that generate, convert, transmit, or modify electrical energy. Electrical and electronic components include, but are not limited to, wires, windings, stators, rotors, magnets, contacts, relays, printed circuit boards, printed wire assemblies, wiring boards, integrated circuits, resistors, capacitors and transistors. Cabinets in which electrical and electronic components are housed are not considered electrical and electronic components.
(Adopted October 16, 2002)
- 8-4-223 Precision Optics:** The optical elements used in electro-optical devices that are designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes of light energy levels.
(Adopted October 16, 2002)
- 8-4-224 Medical Device:** An instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar article, including any component or accessory that is, (i) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of diseases, or (ii) is intended to affect the structure or any function of the body, or (iii) is defined in the National Formulary or the United States Pharmacopoeia or any supplement to it.
(Adopted October 16, 2002)
- 8-4-225 Medical Device and Pharmaceutical Manufacturing Operations:** Medical devices; pharmaceutical products; and associated manufacturing and product handling equipment and material, work surfaces, maintenance tools and room surfaces that are subject to US FDA current Good Manufacturing/Laboratory Practice, or CDC/NIH guidelines for biological disinfection of surfaces.
(Adopted October 16, 2002)
- 8-4-226: Pharmaceutical Products:** A preparation or compound, which includes any drug, analgesic, decongestant, antihistamine, cough suppressant, vitamin, mineral or herb supplement intended for human or animal consumption and used to cure, mitigate or treat disease or improve or enhance health.
(Adopted October 16, 2002)
- 8-4-300 STANDARDS**
- 8-4-301 Deleted May 15, 1996**

- 8-4-302 Solvents and Surface Coating Requirements:** A person shall not use solvents or apply surface coatings unless one or more of the following requirements are satisfied:
- 302.1 A person shall not emit more than 4,533 kg (5 tons) of volatile organic compounds (VOC) from any source during any calendar year; or
 - 302.2 Emissions are controlled by an approved emission control system with an overall abatement efficiency of 85% on a mass basis. If reduction is achieved by incineration, at least 90% by weight of the organic compound emissions shall be oxidized to carbon dioxide; or
 - 302.3 The coating operation uses a coating with a VOC content less than or equal to 420 grams per liter (3.5 lb/gal) of coating as applied.

(Amended 3/17/82; 6/1/94; 5/15/96; 10/16/02)

8-4-303 Deleted June 1, 1994

8-4-304 Deleted May 15, 1996

8-4-310 Deleted May 15, 1996

8-4-311 Deleted May 15, 1996

8-4-312 Solvent Evaporative Loss Minimization: Unless emissions to the atmosphere are controlled by an approved emission control system with an overall abatement efficiency of at least 85%, any person using organic solvent for surface preparation and cleanup or any person mixing, using or disposing of organic solvent:

- 312.1 Shall use closed containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.
- 312.2 Shall not use organic solvent for the cleanup of spray equipment, including paint lines, with a VOC content in excess of 50 g/l (0.42 lb/gal) unless either, (i) solvent is pressurized through spray equipment with atomizing air off or dispensed from a small non-atomizing container, and collected and stored in a closed container until recycled or properly disposed of offsite, or (ii) a spray gun washer subject to and in compliance with the requirements of Regulation 8, Rule 16 is used.
- 312.3 Shall close containers of solvent or coating when not in use.

(Adopted 5/15/96; Amended 10/16/02)

8-4-313 Surface Preparation Standards: Effective June 1, 2003, no person shall use a solvent with a VOC content that exceeds 50 g/l (0.42 lbs/gal), as applied, for surface preparation in any operation subject to this Rule unless emissions to the atmosphere are controlled to an equivalent level by an approved emission control system with an overall abatement efficiency of at least 85 percent.

(Adopted October 16, 2002)

8-4-500 MONITORING AND RECORDS

8-4-501 Recordkeeping Requirements: Any person using coatings or solvents subject to this Rule shall:

- 501.1 Maintain a current list of coatings and solvents in use that provide all of the data necessary to evaluate compliance, such as VOC content and mix ratios of coatings, catalysts and reducers and density and VOC content of solvent.
- 501.2 Record on an annual basis the quantity of coating applied.
- 501.3 Record the air pollution abatement equipment key system operating parameters on a daily basis.
- 501.4 Record, on a monthly basis, coating usage for coatings subject to subsection 8-4-302.3 and solvents used for surface preparation and clean up.
- 501.5 Records shall be retained and available for inspection by the APCO for the previous 24 -month period.

(Adopted 6/1/94; Amended 5/15/96; 10/16/02)

8-4-502 Burden of Proof: The burden of proof of eligibility for exemption pursuant to Section 8-4-115 is on the applicant. Persons seeking an exemption shall maintain adequate records and furnish them to the APCO upon request.

(Adopted May 15, 1996)

8-4-600 MANUAL OF PROCEDURES

8-4-601 Deleted June 1, 1994

8-4-602 Determination of Emissions: Emissions of volatile organic compounds as specified in Section 8-4-302, 312 and/or 313 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 referenced test methods exceed the standards of this rule. Emissions resulting from the drying of products for the first 12 hours after their removal from any operation, and emissions from clean-up solvent, shall be included when determining compliance with this Rule.

(Amended 3/17/82; 6/1/94; 5/15/96; 10/16/02)

8-4-603 Analysis of Samples: Samples of volatile organic compounds as specified in Section 8-4-302 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 21 or 22. Samples of volatile organic compounds as specified in Section 8-4-312 and/or 313 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 31 for the determination of VOC.

(Adopted 6/1/94; Amended 5/15/96; 10/16/02)

8-4-604 Analysis of Exempt Compounds: Samples of PCBTF, VMS, and methyl acetate shall be analyzed by the Manual of Procedures, Volume III, Method 41, 43 and by ASTM Method D-6133-00, respectively.

(Adopted October 16, 2002)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 5
STORAGE OF ORGANIC LIQUIDS**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 5
STORAGE OF ORGANIC LIQUIDS**

(Adopted January 1, 1978)

8-5-100 GENERAL

8-5-101 Description: The purpose of this Rule is to limit emissions of organic compounds from storage tanks.

Note: New storage tanks may also be subject to Regulation 10 and storage tanks located at bulk plants may also be subject to the requirements of Regulation 8, Rule 6 or Rule 33.

(Amended 9/4/85; 5/4/88; 1/20/93)

8-5-110 Exemptions: This Rule does not apply to emissions from the following sources:

- 110.1 Storage tanks having a capacity of less than 1.0 m³ (264 gal).
- 110.2 Any storage tank installed prior to January 4, 1967, which is not used for storage of gasoline to be dispensed to internal combustion engine fuel tanks, and is either of a capacity of less than 7.6 m³ (2,008 gal), or an underground tank with an offset fill line.
- 110.3 Any above ground gasoline tank of 7.6 m³ (2,008 gal) or less capacity installed and in service prior to January 9, 1976, and equipped with a submerged fill pipe.

(Amended 5/4/88; 1/20/93; 11/27/02)

8-5-111 Limited Exemption, Tank Removal From and Return to Service: The requirements of Sections 8-5-304, 305, 306, 307 and 320 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service provided that the following is accomplished:

- 111.1 The operator provides notice to the APCO. This notification shall identify the specific requirement for which an exemption is necessary and explain how the planned or performed activities necessarily prevent compliance with those requirements. The notification requirement may be satisfied in any one of the following ways:
 - 1.1 Three days prior to such work being done, written notice is received by the APCO;
 - 1.2 Telephone notification is made to the APCO prior to such work being done, and written notice is received by the APCO within three days after such work has been done.
- 111.2 The tank is in compliance prior to notification. The written notice shall contain a statement that, to the best knowledge of the person providing notification, the tank is in compliance, and the basis for that knowledge.
- 111.3 When the floating roof is resting on the leg supports, the process of filling, emptying, and refilling shall be continuous and shall be accomplished as rapidly as possible.
- 111.4 Vapor recovery shall be used on tanks so equipped during filling and emptying procedures.
- 111.5 Emissions shall be minimized during the period of exemption. As much product as possible shall be drained before any hatches are opened, and tank degassing equipment and an associated approved emission control system shall be connected and operating as soon as possible.
- 111.6 Written notice is not required when returning a tank to service after the above listed work has been completed.
- 111.7 The requirements of Section 8-5-328 are satisfied.

(Amended 1/20/93; 12/15/99; 11/27/02)

8-5-112 Limited Exemption, Tanks in Operation: The requirements of Sections 8-5-304, 305, 306, 307 and 8-5-320 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal if the following is accomplished:

- 112.1 The operator shall provide notification to the APCO. This notification shall identify the affected tank and the specific requirement for which an exemption is necessary, shall explain how the planned or performed activities necessarily prevent compliance with those requirements, and shall describe the measures to be taken to minimize emissions. For secondary seal installations, the type of installed seal shall be specified. The notification requirement may be satisfied as follows:
- 1.1 Three days prior to such work being done, written notice is received by the APCO; or
 - 1.2 Except for secondary seal replacements, which are subject to subsection 8-5-112.1.1, telephone notification is made to the APCO prior to such work being done, and written notice is received by the APCO within three days after such work has been done.
- 112.2 The tank is in compliance with all District Regulations prior to the commencement of the work and is certified in accordance with Section 8-5-404.
- 112.3 Product shall be moved neither in nor out of the storage tank and emissions shall be minimized.
- 112.4 The time of exemption allowed under this Section does not exceed 7 days.

(Adopted 9/4/85; Amended 5/4/88; 1/20/93; 12/15/99; 11/27/02)

8-5-113 Deleted May 4, 1988

8-5-114 Deleted May 4, 1988

8-5-115 Deleted May 4, 1988

8-5-116 Exemption, Gasoline Storage Tanks at Gasoline Dispensing Facilities: The provisions of this Rule shall not apply to any underground gasoline storage tank located at a gasoline dispensing facility subject to the requirements of Regulation 8, Rule 7.

(Adopted January 20, 1993)

8-5-117 Exemption, Low Vapor Pressure: The provisions of this Rule, except for Section 8-5-307, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 25.8 mm Hg (0.5 psia) as determined by Sections 8-5-602 or 604.

(Adopted 1/20/93; Amended 11/27/02)

8-5-200 DEFINITIONS

8-5-201 Abatement Efficiency: A comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without an approved emission control system, expressed as a percentage. Baseline emissions shall be calculated using the criteria in API Bulletin 2518.

(Amended 1/20/93; 11/27/02)

8-5-202 Storage Tank: Any container, reservoir, or tank used for the storage of organic liquids, excluding tanks which are permanently affixed to mobile vehicles such as railroad tank cars, tanker trucks or ocean vessels.

(Adopted 9/4/85; Amended 11/27/02)

8-5-203 Deleted November 27, 2002

8-5-204 Organic Liquid: Any organic compound that exists as a liquid at actual conditions of use or storage.

(Adopted 9/4/85; Amended 1/20/93)

8-5-205 Gasoline: Petroleum distillates used as motor fuel with a Reid vapor pressure greater than 4.0 psia.

(Adopted 9/4/85; Amended 5/4/88)

8-5-206 Gas Tight: A concentration of organic compounds, measured 1 cm or less from any source, of less than 100 ppm (expressed as methane) above background, for any point or item, except for pressure vacuum valves and atmospheric pressure relief devices; and less than 500 ppm (expressed as methane) above background, for pressure vacuum valves and atmospheric pressure relief devices only.

(Adopted 5/4/88; Amended 1/20/93; 11/27/02)

8-5-207 Approved Emission Control System: A system for reducing emissions to the atmosphere that consists of a collection system and an abatement device, which is

approved in writing by the APCO and achieves the overall abatement efficiency specified in the applicable standards section.

(Adopted 1/20/93; Amended 11/27/02)

- 8-5-208 Degassing:** The process of removing organic gases from a tank.
(Adopted January 20, 1993)
- 8-5-209 External Floating Roof Tank:** An open top tank with a storage vessel cover consisting of a double deck or pontoon single deck which rests upon and is supported by the liquid being contained.
(Adopted January 20, 1993)
- 8-5-210 Internal Floating Roof Tank:** A tank with a floating cover or roof which rests upon or is floated upon the liquid being contained, and which also has a fixed roof on top of the tank shell to shield the floating roof from wind, rain and other elements. An external floating roof tank which is retrofitted with a geodesic dome or other fixed roof shall be considered to be an internal floating roof tank for the purposes of this rule.
(Adopted 1/20/93; Amended 11/27/02)
- 8-5-211 True Vapor Pressure:** The vapor pressure of a liquid at storage temperature.
(Adopted 1/20/93; Amended 11/27/02)
- 8-5-212 Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.
(Adopted January 20, 1993)
- 8-5-213 Viewport:** An accessible opening in the fixed roof of an internal floating roof tank that measures at least 0.75 meters (30 inches) on each side or at least 0.75 meters (30 inches) in diameter.
(Adopted January 20, 1993)
- 8-5-214 Gauge Float:** A device to indicate the level of liquid within a tank. The float rests on the liquid surface inside a well in the tank.
(Adopted December 15, 1999)
- 8-5-215 Guidepole:** An anti-rotation device that is fixed to the top and bottom of a tank, passing through a well in a floating roof. Guidepoles may be solid or be equipped with slots or holes for gauging purposes.
(Adopted December 15, 1999)
- 8-5-216 Zero Gap Pole Wiper Seal:** A seal with no gap exceeding 0.06 inches between the guidepole or gauge well and pole wiper seal.
(Adopted December 15, 1999)
- 8-5-217 Decommissioning:** The removal of all organic liquid and gases from a storage tank with the intent of no longer using the tank for storage of organic liquids or gases.
(Adopted November 27, 2002)
- 8-5-218 Stock Change:** The removal of organic liquids from a tank prior to refilling the tank with a different organic liquid.
(Adopted November 27, 2002)
- 8-5-219 Tank Cleaning:** The process of washing or rinsing the interior of a storage tank, or removing sludge, or rinsing liquid from a storage tank.
(Adopted November 27, 2002)
- 8-5-220 Temporary Removal From Service:** The removal of organic liquid from a storage tank for tank cleaning, stock change, tank repair, roof repair, or removal of contaminated stock, followed by return to service.
(Adopted November 27, 2002)
- 8-5-221 Liquid Balancing:** The process of reducing the vapor pressure of the contents of a tank by adding lower-vapor pressure liquid without breaking tank vacuum, and, for floating roof tanks, without landing the floating roof on its supports.
(Adopted November 27, 2002)

8-5-300 STANDARDS

- 8-5-301 Storage Tanks Control Requirements:** A person shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified by the table below for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.

Tank Capacity	True Vapor Pressure of Tank Organic Contents		
	>0.5 to ≤1.5 psia	>1.5 to <11 psia	≥ 11 psia
≥1.0 m ³ to ≤37.5 m ³ (≥264 gallons to ≤9,906 gallons), aboveground only	Submerged fill pipe, internal floating roof, external floating roof, or approved emission control system	Pressure vacuum valve, internal floating roof, external floating roof, or approved emission control system	Pressure tank or approved emission control system
>37.5 m ³ to <75 m ³ (>9,906 gallons to <19,803 gallons), aboveground only	Submerged fill pipe, internal floating roof, external floating roof, or approved emission control system	Pressure vacuum valve, internal floating roof, external floating roof, or approved emission control system	Pressure tank or approved emission control system
≥75 m ³ to <150 m ³ (≥19,803 gallons to <39,626 gallons)	Submerged fill pipe, internal floating roof, external floating roof, or approved emission control system	Internal floating roof, external floating roof, or approved emission control system	Pressure tank or approved emission control system
≥150 m ³ (≥39,626 gallons)	Internal floating roof, external floating roof, or approved emission control system	Internal floating roof, external floating roof, or approved emission control system	Pressure tank or approved emission control system

(Amended, Renumbered 9/4/85; Amended 5/4/88; 1/20/93; 12/15/99; Amended, Renumbered 11/27/02)

8-5-302 Requirements for Submerged Fill Pipes: A submerged fill pipe must meet either of the following requirements:

- 302.1 Where the tank is filled from the top, the end of the discharge pipe or nozzle must be totally submerged when the liquid level is 15 cm (6 in.) from the bottom of the tank.
- 302.2 Where the tank is filled from the side, the discharge pipe or nozzle must be totally submerged when the liquid level is 46 cm (18 in.) from the bottom of the tank.

(Adopted 9/4/85; Amended, Renumbered 11/27/02)

8-5-303 Requirements for Pressure Vacuum Valves: A pressure vacuum valve must meet the following requirements:

- 303.1 The pressure vacuum valve must be set to either a pressure within 10% of the maximum allowable working pressure of the tank, or at least 25.8 mm Hg (0.5 psig) pressure.
- 303.2 The pressure vacuum valve must be properly installed, properly maintained, and in good operating order, and must remain in a gas tight condition except when operating pressure exceeds the valve set pressure.

(Amended 9/4/85; 5/4/88; 1/20/93; Amended, Renumbered, 11/27/02)

8-5-304 Requirements for External Floating Roofs: An external floating roof must meet the following requirements:

- 304.1 The floating roof fittings must meet the requirements of Section 8-5-320.
- 304.2 The floating roof must be equipped with a primary seal that meets the requirements of Section 8-5-321.
- 304.3 The floating roof must be equipped with a secondary seal that meets the requirements of Section 8-5-322.
- 304.4 The floating roof must rest on the surface of the liquid tank contents, must be properly installed and maintained, and must be in good operating condition. There shall be no liquid tank contents on top of either the primary or secondary seal, or on top of the floating roof (this requirement does not apply to liquid which clings to the inside tank walls as the tank is drained, or to liquid which drips from the tank walls onto the seals).

(Amended, Renumbered 9/4/85; Amended 5/4/88; 1/20/93; Amended, Renumbered 11/27/02)

- 8-5-305 Requirements for Internal Floating Roofs:** An internal floating roof must meet the following requirements:
- 305.1 For a tank with seals installed on or before February 1, 1993, the tank must be equipped with one of the following:
- 1.1 A liquid mounted primary seal, mounted in full contact with the liquid in the annular space between the tank shell and floating roof,
 - 1.2 A metallic shoe primary seal, or
 - 1.3 A vapor mounted primary and a secondary seal
- If sections of seal with a total length equal to or greater than the diameter of the tank are replaced at one time, or if sections of seal with a total cumulative length equal to or greater than 50% of the total seal circumference are replaced over time, then the seal shall be considered to be newly installed and subject to subsection 8-5-305.2.
- 305.2 For a tank with seals installed after February 1, 1993, the tank must be equipped with a liquid mounted or metallic shoe primary seal that meets the requirements of Section 8-5-321 and a secondary seal that meets the requirements of Section 8-5-322.
- 305.3 Internal floating roof tanks which are placed into service or de-gassed after February 1, 1993 shall be equipped with at least 3 viewing ports in the fixed roof of the tank. This requirement shall not apply to external floating roof tanks retrofitted with domes or other fixed roofs after February 1, 1993, as long as the dome consists of translucent panels through which sufficient light passes to allow inspection of the floating roof seal.
- 305.4 The floating roof fittings must meet the requirements of Section 8-5-320.
- 305.5 The floating roof must rest on the surface of the liquid tank contents, must be properly installed and maintained, and must be in good operating condition. There shall be no liquid tank contents on top of either the primary or secondary seal, or on top of the floating roof (this requirement does not apply to liquid which clings to the inside tank walls as the tank is drained, or to liquid which drips from the tank walls onto the seals).
- (Amended, Renumbered 9/4/85; Amended 5/4/88; 1/20/93; Amended, Renumbered 11/27/02)*
- 8-5-306 Requirements for Approved Emission Control Systems:** An Approved Emission Control System must be gas tight. It must also provide an abatement efficiency of at least 95% by weight, except as allowed by subsection 8-5-328.1.2.
- (Amended 1/20/93; Amended, Renumbered 11/27/02)*
- 8-5-307 Requirements for Pressure Tanks and Blanketed Tanks:** A pressure tank must be maintained in a gas tight condition and must maintain working pressures sufficient at all times to prevent organic vapor or gas loss to the atmosphere. Effective July 1, 2003, tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition.
- (Adopted 9/4/85; Amended 5/4/88; 1/20/93; Amended, Renumbered 11/27/02)*
- 8-5-310 Deleted May 4, 1988**
- 8-5-311 Deleted November 27, 2002**
- 8-5-312 Deleted January 20, 1993**
- 8-5-313 Deleted January 20, 1993**
- 8-5-314 Deleted January 20, 1993**
- 8-5-320 Tank Fitting Requirements:** The fittings on any floating roof storage tank subject to Section 8-5-304 or 305 shall meet the following conditions:
- 320.1 Deleted November 27, 2002.
- 320.2 All openings through the floating roof, except pressure-vacuum valves and vacuum breaker vents, shall provide a projection below the liquid surface to prevent belching of liquid and reduce escaping organic vapors.
- 320.3 All openings through the floating roof, except floating roof legs, shall be equipped with a gasketed cover, seal or lid, which shall at all times be in a closed position and shall meet either of the following requirements, as applicable, except as provided in subsections 8-5-320.4, 320.5 or 320.6.
- 3.1 The gasketed cover, seal or lid shall have no measurable gap exceeding 0.32 cm (1/8 in.), except when the opening is in use.

- 3.2 For inaccessible openings on internal floating roof tanks, there shall be no visible gaps as viewed from the fixed roof manway or viewports, except when the opening is in use.
- 320.4 Solid sampling or gauging wells, and similar fixed projections through a floating roof such as an anti-rotational pipe, shall meet the following conditions:
 - 4.1 The well shall provide a projection below the liquid surface.
 - 4.2 The well shall be equipped with a cover, seal or lid, which shall at all times be in a closed position with no gap exceeding 0.32 cm (1/8 in.), except when the well is in use.
 - 4.3 The gap between the well and the roof shall be added to the gaps measured to determine compliance of the secondary seal and in no case shall exceed 1.3 cm (1/2 in.).
- 320.5 Slotted sampling or gauging wells, and similar fixed projections through a floating roof such as an anti-rotational pipe, shall meet the following conditions:
 - 5.1 The well shall provide a projection below the liquid surface.
 - 5.2 The well shall be equipped with the following: a sliding cover, a cover gasket, a pole sleeve, pole wiper and an internal float and float wiper designed to minimize the gap between the float and the well, provided that the gap shall in no case exceed 1/2 in., or shall be equipped with a well gasket, a zero gap pole wiper seal and a pole sleeve that projects below the liquid surface.
 - 5.3 The gap between the well and the roof shall be added to the gaps measured to determine compliance of the secondary seal and in no case shall exceed 1.3 cm (1/2 in.).
- 320.6 Any emergency roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least 90% of the area of the opening.

(Amended 9/4/85; 5/4/88; 1/20/93; 12/15/99; 11/27/02)

8-5-321 Primary Seal Requirements: A person shall not operate a storage tank equipped with a primary seal subject to the requirements of Section 8-5-304 or 305 unless such tank meets the following conditions:

- 321.1 There shall be no holes, tears, or other openings in the primary seal fabric which allow the emission of organic vapors.
- 321.2 The seal shall be either a metallic shoe or a liquid mounted type, except as provided in subsection 8-5-305.1.3.
- 321.3 Metallic-shoe-type seals shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 61 cm (24 in.) for external floating roofs and 18 inches for internal floating roofs above the stored liquid surface.
 - 3.1 The geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least 46 cm (18 in.) in the vertical plane above the liquid surface.
 - 3.2 For welded tanks, no gap between the tank shell and the primary seal shall exceed 3.8 cm (1-1/2 in.). No continuous gap greater than 0.32 cm (1/8 in.) shall exceed 10% of the circumference of the tank. The cumulative length of all primary seal gaps exceeding 1.3 cm (1/2 in.) shall be not more than 10% of the circumference, and the cumulative length of all primary seal gaps exceeding 0.32 cm (1/8 in.) shall be not more than 40% of the circumference.
 - 3.3 For riveted tanks, no gap between the tank shell and the primary seal shall exceed 6.4 cm (2-1/2 in.). The cumulative length of all primary seal gaps exceeding 3.8 cm (1-1/2 in.) shall be not more than 10% of the circumference.
- 321.4 For resilient-toroid-seal equipped tanks, no gap between the tank shell and the primary seal shall exceed 1.3 cm (1/2 in.). The cumulative length of all gaps exceeding 0.32 cm (1/8 in.) shall be not more than 5% of the circumference.

(Amended 1/20/93; 12/15/99; 11/27/02)

- 8-5-322 Secondary Seal Requirements:** A person shall not operate a storage tank equipped with a secondary seal subject to the requirements of Sections 8-5-304 or 305, unless such tank meets the following conditions:
- 322.1 There shall be no holes, tears, or other openings in the secondary seal fabric which allow the emission of organic vapors.
 - 322.2 The secondary seal shall allow easy insertion of probes up to 3.8 cm (1-1/2 in.) in width in order to measure gaps in the primary seal.
 - 322.3 No gap between the tank shell and the secondary seal shall exceed 1.3 cm (1/2 in.). The cumulative length of all secondary seal gaps exceeding 0.32 cm (1/8 in.) shall be not more than 5% of the circumference of the tank.
 - 322.4 For riveted tanks, the secondary seal shall consist of at least two sealing surfaces, such that the sealing surfaces prevent the emission of organic compounds around the rivets. Serrated sealing surfaces are allowable if the length of serration does not exceed 15.2 cm (6 in.).
 - 322.5 For welded external floating roof tanks with seals installed after September 4, 1985 or welded internal floating roof tanks with seals installed after February 1, 1993, no gap between the tank shell and the secondary seal shall exceed 1.5 mm (0.06 in.). The cumulative length of all secondary seal gaps exceeding 0.5 mm (0.02 in.) shall be not more than 5% of the circumference of the tank excluding gaps less than 5 cm (1.79 in.) from vertical weld seams. If sections of seal with a total length equal to or greater than the diameter of the tank are replaced at one time, or if sections of seal with a total cumulative length equal to or greater than 50% of the total seal circumference are replaced over time, then the seal shall be considered to be newly installed for the purpose of this section.
 - 322.6 The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal.

(Amended 1/20/93; 11/27/02)

8-5-323 Deleted January 20, 1993

8-5-324 Deleted January 20, 1993

8-5-325 Deleted January 20, 1993

8-5-326 Deleted May 4, 1988

8-5-327 Deleted May 4, 1988

8-5-328 Tank Degassing Requirements:

- 328.1 For tanks larger than 75 m³, the emissions of organic compounds resulting from degassing shall be controlled by one of the following methods:
 - 1.1 Liquid Balancing in which the resulting organic liquid has a true vapor pressure less than 0.5 psia, or
 - 1.2 An Approved Emission Control System which collects and processes all organic vapors and gases and has an abatement efficiency of at least 90% by weight. The system shall be operated until the concentration of organic compounds in the tank is less than 10,000 ppm expressed as methane.
- 328.2 For all tanks subject to this rule, tank degassing shall not commence after the District predicts an excess of the Federal or State Ambient Air Quality Standard for ozone for the following day, unless emissions resulting from degassing are controlled by one of the methods in subsection 8-5-328.1.1 or 328.1.2.

(Adopted 1/20/93; Amended 11/27/02)

8-5-329 Deleted November 27, 2002

8-5-330 Deleted November 27, 2002

8-5-400 ADMINISTRATIVE REQUIREMENTS

8-5-401 Inspection Requirements for External Floating Roof Tanks: Tanks subject to the requirements of Section 8-5-304 shall be inspected by the operator as follows:

- 401.1 The entire circumference of each primary and secondary seal shall be inspected for compliance with the requirements of Sections 8-5-321 and 8-5-322 twice per calendar year at 4 to 8 month intervals. If a new primary or secondary seal is installed, or if a primary or secondary seal is repaired, both

seals shall be inspected at the time of the seal installation or repair. Flexible wiper seals shall be inspected when the outer edge of the seal is curved upward.

- 401.2 Tank fittings shall be inspected for compliance with the requirements of Section 8-5-320 twice per calendar year at 4 to 8 month intervals.

(Amended 1/20/93; Amended, Renumbered 11/27/02)

8-5-402 Inspection Requirements for Internal Floating Roof Tanks: Tanks subject to the requirements of Section 8-5-305 shall be inspected by the operator as follows:

402.1 The entire circumference of each primary and secondary seal shall be inspected for compliance with the requirements of Sections 8-5-321 and 8-5-322. The time between inspections shall not exceed 10 years. If a new primary or secondary seal is installed, or if a primary or secondary seal is repaired, both seals shall be inspected at the time of the seal installation or repair. Flexible wiper seals shall be inspected when the outer edge of the seal is curved upward.

402.2 The entire circumference of the outermost seal (secondary seal where so equipped, or primary seal where no secondary seal is required) shall be visually inspected for compliance with the requirements of subsections 8-5-305.1, 8-5-305.2, 8-5-305.3, 8-5-321.1 and 8-5-322.1 twice per calendar year at 4 to 8 month intervals. Flexible wiper seals shall be inspected when the outer edge of the seal is curved upward.

402.3 Tank fittings shall be inspected for compliance with the requirements of Section 8-5-320 twice per calendar year at 4 to 8 month intervals. Standards involving gap measurements shall be checked whenever the tank roof is accessible, but need not be checked more frequently than twice per calendar year.

(Amended 1/20/93; Amended, Renumbered 11/27/02)

8-5-403 Inspection Requirements for Pressure Vacuum Valves: Tanks subject to the requirements of Section 8-5-303 shall be inspected for compliance with the requirements of Section 8-5-303 twice per calendar year at 4 to 8 month intervals.

(Adopted November 27, 2002)

8-5-404 Certification: Within 60 days of any inspection or source test required in Section 8-5-401, 402, 403 or 502, a report shall be submitted which certifies compliance with each individual requirement of these Sections.

(Amended, Renumbered 9/4/85; Amended 5/4/88; 1/20/93; 11/27/02)

8-5-405 Information Required: All reports relating to seal condition and gap measurements shall include the following information:

405.1 Date of inspection.

405.2 Actual gap measurements between the tank shell and seals, both the primary seal and the secondary seal, shall be measured around the full circumference of the tank.

405.3 Data, supported by calculations, showing whether or not the requirements of Sections 8-5-320, 321 and 322 are being met.

(Amended, Renumbered 9/4/85; Amended 5/4/88; 1/20/93)

8-5-410 Deleted May 4, 1988

8-5-500 MONITORING AND RECORDS

8-5-501 Records:

501.1 A person whose tanks are subject to this rule shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. Effective January 1, 2003, these records shall be kept for at least 24 months.

501.2 For internal and external floating roof tanks, a person who replaces all or part of a primary or secondary seal shall keep an accurate record of the length of seal replaced and the date(s) on which replacement occurred. Effective January 1, 2003, these records shall be kept for at least 10 years.

(Amended 1/20/93; 11/27/02)

8-5-502 Tank Degassing Annual Source Test Requirement: Any person operating an Approved Emission Control System to comply with the requirements of subsection 8-5-328.1.2 shall test the system as prescribed in subsection 8-5-603.2.

(Adopted 1/20/93; Amended 11/27/02)

8-5-503 Portable Hydrocarbon Detector: Any instrument used for the measurement of organic compounds as specified by Sections 8-5-303.2, 306 and 307 shall be a combustible gas indicator that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21 (40 CFR 60, Appendix A).

(Adopted 1/20/93; Amended 11/27/02)

8-5-600 MANUAL OF PROCEDURES

8-5-601 Analysis of Samples, Reid Vapor Pressure: Samples of organic compounds as specified in this Rule shall be analyzed for Reid Vapor Pressure as prescribed in the Manual of Procedures, Volume III, Lab Method 13.

(Amended 9/4/85; 5/4/88)

8-5-602 Analysis of Samples, True Vapor Pressure: Samples of organic compounds not listed in Table I shall be analyzed for true Vapor Pressure at the tank storage temperature as prescribed in the Manual of Procedures, Volume III, Lab Method 28.

(Adopted 9/4/85; Amended 5/4/88)

8-5-603 Determination of Emissions: Emissions of organic compounds shall be determined as follows:

603.1 Emissions of organic compounds as specified in Section 8-5-306 shall be measured as prescribed in the Manual of Procedures, Volume IV, ST-4.

603.2 Emissions of organic compounds as specified in subsection 8-5-328.1.2 shall be measured as prescribed in the Manual of Procedures, Volume IV, ST-7.

(Renumbered 9/4/85; Amended 1/20/93; 11/27/02)

8-5-604 Determination of Applicability: Table I shall be used to determine if a storage tank is subject to the requirements of this rule. For organic compounds not listed in Table I, refer to Sections 8-5-601 or 602.

(Adopted 9/4/85; Amended 5/4/88; 1/20/93)

8-5-605 Pressure-Vacuum Valve Gas Tight Determination: Determination of organic compound leak concentrations as specified by Sections 8-5-303.2, 306 and 307 shall be conducted by EPA Reference Method 21 (40 CFR 60, Appendix A).

(Adopted 1/20/93; Amended 11/27/02)

TABLE I

STORAGE TEMPERATURE VERSUS TRUE VAPOR PRESSURE (TVP)

	Density (lb/gal)	Reference Gravity API	IBP °F	Max. Temp. °F Not to Exceed	
				0.5 Psia TVP	1.5 Psia TVP
Crude Oils:*					
San Joaquin Valley	-	-	390	249	-
Middle Distillates:					
Kerosene	-	42.5	350	195	250
Diesel	-	36.4	372	230	290
Gas Oil	-	26.2	390	249	310
Stove Oil	-	23	421	275	340
Jet Fuels:					
JP-1	-	43.1	330	165	230
JP-3	-	54.7	110	-	25
JP-4	-	51.5	150	20	68
JP-5	-	39.6	355	205	260
JP-7	-	44-50	360	205	260
Fuel Oil:					
No. 1	-	42.5	350	195	250
No. 2	-	36.4	372	230	290
No. 3	-	26.2	390	249	310
No. 4	-	23	421	275	340
No. 5	-	19.9	560	380	465
No. 6	-	16.2	625	450	-
Asphalts:					
60-100 pen.	-	-	-	490	550
120-150 pen.	-	-	-	450	500
200-300 pen.	-	-	-	360	420
Organic Compounds:					
Acetone	6.6	47	133	-	35
Acrylonitrile	6.8	41.8	173	30	62
Benzene	7.4	27.7	176	34	70
Carbon Disulfide	10.6	22.1	116	-	10
Carbon Tetrachloride	13.4	-	170	20	63
Chloroform	12.5	-	142	-	40
Cyclohexane	6.5	49.7	177	30	65
1,2 Dichloroethane	10.5	-	180	35	75
Ethyl Acetate	7.5	23.6	171	38	70
Ethyl Alcohol	6.6	47.0	173	55	85
Isopropyl Alcohol	6.6	47.0	181	62	95
Methyl Alcohol	6.6	47.0	148	30	62
Methyl Ethyl Ketone	6.7	44.3	175	30	70
Toluene	7.3	30	231	75	120
Vinylacetate	7.8	19.6	163	30	65

* True vapor pressure for crude oils should be determined from the specific crude slate.

**REGULATION 8
ORGANIC COMPOUNDS
RULE 6
ORGANIC LIQUID BULK TERMINALS AND BULK PLANTS**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 6
ORGANIC LIQUID BULK TERMINALS AND BULK PLANTS**

- 8-6-100 GENERAL**
- 8-6-101 Description:** The purpose of this rule is to limit emissions of organic compounds as defined in Section 8-6-207 from transfer operations at non-gasoline organic liquid bulk terminals and bulk plants.
(Amended March 17, 1982; February 2, 1994)
- 8-6-110 Exemption, Low Vapor Pressure Organic Liquids:** Until December 1, 1994, the requirements in this Rule shall not apply to loading or delivery of any organic liquid having a true vapor pressure less than 77.5 mmHg (1.5 psia). After December 1, 1994, the requirements of this Rule shall not apply to loading and delivery of any organic liquid having a true vapor pressure less than 25.8 mmHg (0.5 psia), as determined by the methods specified in Sections 8-6-603 or 604.
(Amended February 2, 1994)
- 8-6-111 Exemption, Low Throughput:** The vapor recovery requirements of subsection 8-6-302.1 do not apply when the total annual throughput of organic liquids with at least 77.5 mmHg (1.5 psia) true vapor pressure transferred into delivery vehicles only is less than 2,271 cubic meters (600,000 gallons) on a facility-wide basis.
(Amended February 2, 1994)
- 8-6-112 Deleted February 2, 1994**
- 8-6-113 Deleted February 2, 1994**
- 8-6-114 Exemption, Maintenance and Repair:** The requirements of Section 8-6-306 shall not apply to spills resulting from maintenance or repair operations provided proper operating practices are employed to minimize evaporation of organic compounds into the atmosphere.
- 8-6-115 Exemption, Bulk Gasoline Distribution Facilities:** Gasoline bulk terminals and bulk plants are not subject to the requirements of this rule. Such facilities are subject to the provisions of Regulation 8, Rules 33 or 39.
(Adopted November 30, 1983; Amended February 2, 1994)
- 8-6-116 Exemption, Small Transportable Containers:** The requirements of subsection 8-6-302.2 shall not apply to loading organic liquids into any transportable container with a capacity less than 0.114 cubic meters (30 gallons).
(Amended February 2, 1994)
- 8-6-117 Exemption, Liquefied Organic Gases:** The requirements of this rule do not apply to transfer operations involving liquefied organic gases such as liquefied petroleum gas (LPG) and halogenated gases.
(Amended February 2, 1994)
- 8-6-200 DEFINITIONS**
- 8-6-201 Bulk Plant:** Until December 1, 1994, any storage and distribution facility that receives organic liquid by pipeline, railcar, and/or delivery vehicle; stores it in stationary tanks; and/or mixes it in blending tanks; and/or loads it into delivery vehicles or transportable containers, for delivery to distributors, marketers or any product end user; and which has an annual throughput of not more than 22,710 cubic meters (6,000,000 gallons). After December 1, 1994, the annual throughput shall include organic liquids of at least 25.8 mmHg (0.5 psia) true vapor pressure.
(Amended July 2, 1980; February 2, 1994)
- 8-6-202 Deleted February 2, 1994**

- 8-6-203 Submerged Fill Pipes:** Any discharge pipe, lance, or nozzle which meets either of the following conditions:
 203.1 Where the vessel is filled from the top, the end of the discharge pipe or nozzle must be submerged when the liquid level is 15 centimeters (6 inches) from the bottom of the vessel. When the vessel is filled from the top with a retractable lance, the lance shall remain below the liquid surface during the transfer operation.
 203.2 Where the vessel is filled from the side, the discharge pipe or nozzle must be totally submerged when the liquid level is 46 centimeters (18 inches) from the bottom of the vessel.

(Renumbered March 17, 1982; Amended February 2, 1994)

- 8-6-204 Bulk Terminal:** Until December 1, 1994, any storage and distribution facility that receives organic liquid; stores it in stationary tanks; and/or mixes it in blending tanks; and/or loads it into delivery vehicles and transportable containers, for delivery to distributors, marketers or any product end user; and which has an annual throughput of more than 22,710 cubic meters (6,000,000 gallons). After December 1, 1994, the annual throughput shall include organic liquids of at least 25.8 mmHg (0.5 psia) true vapor pressure.

(Renumbered March 17, 1982; Amended February 2, 1994)

- 8-6-205 True Vapor Pressure:** The pressure exerted when an organic liquid is in equilibrium with its own vapor at 25°C (77°F). For liquid mixtures, true vapor pressure is the sum of the equilibrium partial pressures exerted by all organic compounds in the liquid and can be estimated using Raoult's Law as follows:

$$P^* = \frac{\sum_{i=1}^n \frac{(W_i)(VP_i)/MW_i}{W_w + \sum_{i=1}^n \frac{W_i}{MW_i}}}{MW_w}$$

Where:

- W_i = Weight of the "i"th organic compound, in grams
 W_w = Weight of water, in grams
 MW_i = Molecular weight of the "i"th organic compound, in grams/gram-mole
 MW_w = Molecular weight of water, in grams/gram-mole
 P^* = True vapor pressure of liquid mixture at 25°C, in mmHg
 VP_i = Vapor pressure of the "i"th organic compound at 25°C, in mmHg

For organic liquids and organic liquid mixtures to which heat is applied, the true vapor pressure shall be determined at 25°C (77°F) or the actual loading temperature, whichever is higher.

(Renumbered March 17, 1982; Amended February 2, 1994)

- 8-6-206 Vapor Tight:** A leak less than 100 percent of the Lower Explosive Limit on a portable hydrocarbon detector measured at a distance of 1 centimeter from the source.

(Renumbered March 17, 1982; Amended February 2, 1994)

- 8-6-207 Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides of carbonates, and ammonium carbonate.

(Adopted February 2, 1994)

- 8-6-208 Loading Equipment:** Any combination of loading arms, pumps, flexible hosing, dispensing nozzles, meters, and other piping and valves necessary to fill delivery vehicles or transportable containers with organic liquids.

(Adopted February 2, 1994)

- 8-6-209 Organic Liquid:** Any organic compound or mixture of organic compounds that exists in the liquid phase at actual loading conditions. For the purposes of this rule, organic liquids shall not include coatings, adhesives and sealants.
(Adopted February 2, 1994)
- 8-6-210 Transportable Containers:** Any portable enclosed vessel such as a tote tank or cylindrical drum, which contains 550 gallons or less and is used to transport and distribute organic liquids.
(Adopted February 2, 1994)
- 8-6-211 Leak Free:** An organic liquid leak not exceeding three drops per minute excluding losses which occur upon disconnecting transfer fittings. Such disconnect losses shall not exceed 10 milliliters (ml) during a bottom loading operation or no more than two milliliters (ml) during a top loading operation, averaged over three disconnects.
(Adopted February 2, 1994)
- 8-6-212 Delivery Vehicle:** Any motor truck or truck trailer equipped with a stationary cargo tank having a capacity more than 550 gallons and designed and built for the transportation of organic liquids.
(Adopted February 2, 1994)
- 8-6-213 Switch Loading:** For the purpose of this rule, switch loading refers to the transfer of organic liquids into a delivery vehicle cargo tank, which results in displacement of organic vapors remaining from a previous load.
(Adopted February 2, 1994)
- 8-6-214 Vapor Loss Control System:** A system for reducing emissions to the atmosphere, consisting of an abatement device and a collection system, which achieves the abatement efficiency or emission limit specified in the applicable standard(s) during the transfer operation and meets the requirements of Regulation 2, Rule 1.
(Adopted February 2, 1994)
- 8-6-215 Liquefied Petroleum Gas:** A compressed gas composed of one or more of the following flammable hydrocarbons (propane, n-butane, isobutane, propylene, and butylenes), which is used especially as a fuel or as raw material for chemical synthesis.
(Adopted February 2, 1994)
- 8-6-216 Vapor Balance System:** A piping system that is designed to collect organic vapors displaced from organic liquid transfer operations, and to route the collected vapors to the vessel from which the liquid being loaded originated.
(Adopted February 2, 1994)
- 8-6-217 Throughput:** The total volume of organic liquid transferred into delivery vehicles and transportable containers. The volume of water in an organic liquid/water mixture shall not be considered part of the facility throughput.
(Adopted February 2, 1994)
- 8-6-300 STANDARDS**
- 8-6-301 Bulk Terminal Limitations:** A person shall not transfer or allow the transfer of organic liquids from bulk terminal loading equipment unless a vapor loss control system is properly connected and used. Such transfer operations shall not emit into the atmosphere more than 21 grams of organic compounds per cubic meter (0.17 pounds per 1,000 gallons) of organic liquid loaded. Switch loading shall be subject to this standard. (Amended March 17, 1982; February 2, 1994)
- 8-6-302 Bulk Plant Limitations:** A person shall not load or allow the loading of any organic liquid from bulk plant loading equipment unless the following requirements are satisfied:
- 302.1 Vapor Recovery Requirement:** Any emissions displaced while transferring an organic liquid with a true vapor pressure of at least 77.5 mmHg (1.5 psia) into a delivery vehicle shall be controlled by a vapor balance system or a vapor loss control system, which is properly connected and used during loading. Emissions to atmosphere shall not exceed 44 grams of

organic compounds per cubic meter (0.35 pounds per 1,000 gallons) of organic liquid loaded.

302.2 Submerged Fill Requirement: Except as provided in Section 8-6-116, either a submerged fill pipe, bottom filling, or a vapor loss control system shall be used when transferring an organic liquid into a delivery vehicle or transportable container. When a vapor loss control system is used, emissions to atmosphere shall not exceed 44 grams of organic compound per cubic meter (0.35 pounds per 1000 gallons) of organic compound loaded. (Amended July 2, 1980; February 2, 1984)

8-6-303 Deleted February 2, 1994

8-6-304 Deliveries to Storage Tanks: A person shall not transfer or allow the transfer of any organic liquid with a true vapor pressure of at least 77.5 mmHg (1.5 psia) into any bulk terminal or bulk plant storage tank having a capacity between 7.6 and 150 cubic meters, (2,008 and 39,630 gallons) inclusive, unless a vapor balance system or vapor loss control system, has been properly installed on the storage tank and is properly connected during delivery. Emissions to atmosphere shall not exceed 21 grams of organic compounds per cubic meter (0.17 pounds per 1,000 gallons) of organic compound loaded.

(Amended February 2, 1994)

8-6-305 Delivery Vehicle Requirements: Any delivery vehicle loaded at a terminal or bulk plant which is subject to the requirements of Sections 8-6-301 or 302.1 shall be equipped to allow proper connection to the vapor balance system or vapor loss control system required by the section and shall be maintained to be vapor tight, leak free, and in good working order. (Amended February 2, 1994)

8-6-306 Equipment Maintenance: All equipment associated with organic liquid delivery and loading operations shall be maintained to be vapor tight, leak free and in good working order. (Amended February 2, 1994)

8-6-307 Operating Practices: Any organic liquid subject to this Rule shall not be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation to the atmosphere. (Amended February 2, 1994)

8-6-400 ADMINISTRATIVE REQUIREMENTS

8-6-401 Deleted February 2, 1994

8-6-402 Deleted February 2, 1994

8-6-403 Compliance Schedule: Any person who must install or modify equipment to comply with the requirements of Sections 301, 302 or 304 shall comply with the following increments of progress:

403.1 By June 1, 1994 submit a completed application to the APCO for an Authority to Construct.

403.2 After December 1, 1994 be in final compliance.

(Adopted February 2, 1994)

8-6-500 MONITORING AND RECORDS

8-6-501 Records: After December 1, 1994, a person whose loading equipment is subject to this rule shall comply with the following requirements:

501.1 A person shall maintain a current record of the true vapor pressure of each organic liquid and organic liquid mixture.

501.2 A person shall maintain monthly records that provide the throughput (gallons) of each organic liquid and organic liquid mixture transferred into delivery vehicles and transportable containers with at least 25.8 mmHg (0.5 psia) true vapor pressure.

- 501.3 Such records shall be retained for the previous 24-month period and be available to the APCO upon request. (Adopted February 2, 1994)
- 8-6-502** **Portable Hydrocarbon Detector:** Any instrument used for the measurement of organic compounds shall meet the specifications and performance criteria, and shall be calibrated in accordance with EPA Reference Method 21 (40CFR60, Appendix A). (Adopted February 2, 1994)
- 8-6-503** **Burden of Proof:** The burden of proof of eligibility for exemption from the requirements of this rule is on the applicant. Persons seeking such an exemption shall maintain adequate records and furnish them to the APCO upon request. (Adopted February 2, 1994)
- 8-6-600** **MANUAL OF PROCEDURES**
- 8-6-601** **Efficiency and Rate Determination:** The means for determining compliance with Sections 8-6-301, 302, and 304 are set forth in the Manual of Procedures, Volume IV, ST-3 or ST-34. (Amended March 17, 1982; February 2, 1994)
- 8-6-602** **Deleted February 2, 1994**
- 8-6-603** **Analysis of Samples, True Vapor Pressure:** Samples of organic compounds as specified in Section 8-6-110 shall be analyzed for true vapor pressure at 25°C (77°F), as prescribed in the Manual of Procedures, Volume III, Method 28. For organic liquids and organic liquid mixtures to which heat is applied, the true vapor pressure shall be determined at 25°C (77°F) or the actual loading temperature, whichever is higher. (Adopted March 17, 1982; Amended February 2, 1994)
- 8-6-604** **Determination of Applicability:** Any of the following methods may be used to determine if an organic liquid is subject to the requirements of this rule based on its true vapor pressure:
- 604.1 EPA-450/3-87-026 (Exhibit A-2 in Appendix A or Appendix D), or
 - 604.2 Standard reference texts, or
 - 604.3 For liquid mixtures, use Raoult's Law of Partial Pressures as defined in Section 8-6-205 or ASTM Method D 2879-83. (Adopted February 2, 1994)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 7
GASOLINE DISPENSING FACILITIES**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 7
GASOLINE DISPENSING FACILITIES**

8-7-100 GENERAL

8-7-101 Description: The purpose of this Rule is to limit emissions of organic compounds from gasoline dispensing facilities.

(Amended 3/17/82; 11/30/83; 10/17/90)

8-7-110 Exemptions

8-7-111 Phase I Exemptions: The following are exempt from Section 8-7-301:

111.1 Storage tanks with an actual capacity of less than 0.95 cubic meters (250 gallons).

111.2 Deleted November 6, 2002

111.3 Storage tanks with a capacity of less than 2.2 cubic meters (550 gallons), used primarily for the fueling of implements of husbandry as defined in Division 16, Chapter 1, of the California Vehicle Code, provided such tanks are equipped with a submerged fill pipe.

111.4 Storage tanks installed before January 1, 1999 where the APCO determines in writing that Phase I vapor recovery is not feasible.

(Amended and Renumbered 11/30/83; 3/4/87; Amended 10/17/90; 6/1/94; 11/17/99; 11/6/02)

8-7-112 Phase II Exemptions: The following are exempt from Sections 8-7-302 and 313. These exemptions shall not apply to tanks equipped with Phase II vapor recovery equipment unless the Phase II equipment has been removed or otherwise decommissioned to the APCO's satisfaction.

112.1 Facilities which are exempt from Phase I.

112.2 Delivery of fuel to a fuel tank of a vehicle belonging to a class of vehicles for which the APCO has determined in writing that fill-neck configuration or location or some other design feature of the class makes application of the requirements of this rule infeasible. This subsection 8-7-112.2 shall not exempt any gasoline dispensing facility from installing and using such vapor recovery systems as required by this Rule.

112.3 Dispensing of gasoline at facilities where the APCO determines in writing that Phase II vapor recovery is not feasible.

112.4 Mobile refueling and any other vehicle to vehicle refueling.

112.5 Tanks installed prior to March 4, 1987 at facilities which exclusively refuel motor vehicle tanks with a capacity of 0.019 cubic meters (5 gallons) or less.

112.6 Facilities which exclusively refuel aircraft or marine vessels.

112.7 Tanks installed prior to March 4, 1987 at facilities with an annual throughput of less than 227 cubic meters (60,000 gallons) where Phase II vapor recovery equipment was not installed prior to July 1, 1983. Should throughput exceed 227 cubic meters (60,000 gallons) in any consecutive 12-month period, this exemption shall no longer apply.

112.8 Deleted March 4, 1987

112.9 Facilities which can demonstrate to the APCO that at least 90% of the vehicles refueled at the facility in any (time period) are owned by a common operator and equipped with onboard refueling vapor recovery (ORVR). This exemption shall not apply to facilities required to have Phase II vapor recovery under state law.

(Amended and Renumbered 11/30/83; 3/4/87; Amended 10/17/90; 6/1/94; 11/17/99; 11/6/02)

8-7-113 Tank Gauging and Inspection Exemption: Any tank may be opened for gauging or inspection when loading operations are not in progress provided that such tank is not pressurized.

(Adopted November 30, 1983)

8-7-114 Stationary Tank Testing Exemption: The requirements of 8-7-301 do not apply to deliveries made to completely fill stationary tanks for the purpose of tank integrity

leak testing, provided that such deliveries do not exceed 3.8 cubic meters (1000 gallons) at each facility.

(Adopted 11/30/83; Amended 11/17/99)

8-7-115 Exemption, Hold Open Latch: The requirements of Section 8-7-314 shall not apply to nozzles which primarily refuel marine vessels or aircraft, or in areas where prohibited by the local fire marshal.

(Adopted November 17, 1999)

8-7-116 Exemption, Periodic Testing Requirements: The Periodic Testing Requirements of subsections 8-7-301.13, 302.14, and 302.15 shall not apply to new or modified equipment subject to start-up test requirements of Section 8-7-406. This exemption applies only to specific tests required to be performed under Section 8-7-406. The equipment remains subject to all other periodic tests required by Sections 8-7-301 and 302. This exemption does not apply to any start-up or periodic testing required otherwise by this regulation, District Permit conditions, applicable CARB Executive Orders, or state law.

(Adopted November 6, 2002)

8-7-117 Limited Testing Frequency Exemption, ISD-Equipped Tanks: Tanks equipped with an in-station diagnostics (ISD) system shall be required to conduct and pass any tests required by subsections 8-7-301.13, 302.14, and 302.15 at least once in the preceding 24-month period rather than at least once in the preceding 12-month period as set forth in those subsections. This limited exemption does not apply to any start-up or periodic testing otherwise required by this regulation, District Permit conditions, applicable CARB Executive Orders, or state law.

(Adopted November 6, 2002)

8-7-200 DEFINITIONS

8-7-201 CARB Certified Vapor Recovery System: A vapor recovery system which has been certified by the California Air Resources Board (CARB) pursuant to Section 41954 of the California Health and Safety Code.

(Adopted 11/30/83; Amended 10/17/90; 11/17/99)

8-7-202 Gasoline: Motor fuel containing any petroleum distillate where the Reid vapor pressure of the fuel is greater than 4.0 pounds.

(Adopted 11/30/83; Amended 10/17/90)

8-7-203 Leak Free: A liquid leak of no greater than three drops per minute.

(Adopted 11/30/83; Amended 10/17/90)

8-7-204 Phase I: Gasoline vapor recovery during transfer of gasoline between any gasoline cargo tank and any stationary tanks at dispensing facilities.

(Adopted 11/30/83; Amended 10/17/90; 11/17/99)

8-7-205 Phase II: Gasoline vapor recovery during motor vehicle refueling operations from stationary tanks at gasoline dispensing facilities.

(Adopted 11/30/83; Amended 11/17/99)

8-7-206 Vapor Tight: one of the following applicable criteria:

- 206.1 A leak of less than 100 percent of the lower explosive limit on a combustible gas detector measured at a distance of 2.5 cm (1 inch) from the source; or
- 206.2 No visible evidence of air entrainment in the sight glasses of liquid delivery hoses or bubbling of applied soap solution; or
- 206.3 Absence of a leak as determined by the Manual of Procedures, Volume IV, ST-30, ST-38 or CARB Method TP-201.3.

(Adopted 11/30/83; Amended 3/4/87; 10/17/90; 6/1/94; 11/17/99; 11/6/02)

8-7-207 Submerged Fill Pipe: Any discharge pipe or nozzle which meets either of the following conditions:

- 207.1 Where the tank is filled from the top, the end of the discharge pipe or nozzle must be totally submerged when the liquid level is 15 cm (6 inches) from the bottom of the tank.
- 207.2 Where the tank is filled from the side, the discharge pipe or nozzle must be totally submerged when the liquid level is 46 centimeters (18 inches) from the bottom of the tank.

(Adopted November 30, 1983)

- 8-7-208 Top Off:** Any attempt to dispense gasoline to a fuel tank after the dispensing nozzle's primary shutoff mechanism has engaged. The filling of a class of vehicle tanks which, because of the configuration of the fill pipe, cause premature activation of the primary shutoff, shall not be considered topping off.
(Renumbered 11/30/83; Amended 11/17/99; 11/6/02)
- 8-7-209 Gasoline Dispensing Facility (GDF):** Any stationary operation which dispenses gasoline directly into the fuel tanks of motor vehicles. This facility shall be treated as a single source which includes all necessary equipment for the exclusive use of the facility, such as nozzles, dispensers, pumps, vapor return lines, plumbing and storage tanks.
(Adopted 3/4/87; Amended 11/17/99)
- 8-7-210 Fuel Tank:** Any container from which gasoline is directly removed for the operation of an engine.
(Adopted November 17, 1999)
- 8-7-211 Gasoline Cargo Tank:** Any mobile container, including associated pipes and fittings, that is used for the transportation of gasoline and would be required to be certified in accordance with Section 41962 of the California Health and Safety Code if used to transport gasoline on a highway.
(Adopted November 17, 1999)
- 8-7-212 Liquid Retain:** Liquid gasoline remaining in or accumulating in the nozzle/hose assembly on the atmospheric side of the vapor check valve after a refueling event.
(Adopted November 17, 1999)
- 8-7-213 Spitting:** Liquid gasoline dispensed from the nozzle spout when the trigger is depressed without the dispenser being activated.
(Adopted 11/17/99; Amended 11/6/02)
- 8-7-214 Hold Open Latch:** A certified device which is an integral part of the nozzle and is manufactured specifically for the purpose of dispensing gasoline without requiring the consumer's continued physical contact with the nozzle during a refueling event.
(Adopted November 17, 1999)
- 8-7-215 Stationary Tank:** Any non-mobile container used for the storage or distribution of gasoline.
(Adopted November 17, 1999)
- 8-7-216 Motor Vehicle:** For the purposes of this rule, all vehicles defined as motor vehicles in Section 415 of the California Motor Vehicle Code plus self propelled mobile equipment, marine vessels, and aircraft.
(Adopted November 17, 1999)
- 8-7-217 Balance System:** A Phase II vapor recovery system operating on the principle of vapor displacement.
(Adopted November 17, 1999)
- 8-7-218 Vacuum-Assist System:** A Phase II vapor recovery system utilizing a vacuum producing device such as, but not limited to, a compressor or turbine to create a vacuum during gasoline dispensing to capture or assist in the capture of gasoline vapors.
(Adopted 11/17/99; Amended 11/6/02)
- 8-7-219 Retail Gasoline Dispensing Facility:** Any gasoline dispensing facility subject to the payment of California sales tax for the sale of gasoline to the public. All other GDFs shall be considered non-retail.
(Adopted November 17, 1999)
- 8-7-220 Mobile Refueler:** A tank truck or trailer transporting gasoline in an onboard storage tank and dispensing it directly into any motor vehicle fuel tank.
(Adopted November 17, 1999)
- 8-7-221 On-Board Refueling Vapor Recovery (ORVR):** A vehicle-based vapor recovery system required by California Code of Regulations, title 13, section 1978, or 40 Code of Federal Regulations Part 86.
(Adopted 11/17/99; Amended 11/6/02)
- 8-7-222 Insertion Interlock:** A CARB-certified mechanism that is an integral part of a bellows-equipped dispensing nozzle that prohibits the dispensing of fuel unless the bellows is compressed.
(Adopted November 17, 1999)

8-7-223 In-Station Diagnostic (ISD) System: Equipment certified by CARB pursuant to Certification Procedure CP-201 to monitor performance of a vapor recovery system at a gasoline dispensing facility.

(Adopted November 6, 2002)

8-7-300 STANDARDS

8-7-301 Phase I Requirements: A person subject to this section shall comply with all of the following requirements:

- 301.1 A person shall not transfer or allow the transfer of gasoline into stationary tanks at a gasoline dispensing facility unless a CARB certified Phase I vapor recovery system is used. Effective June 1, 2000, a person shall not transfer or allow the transfer of gasoline between a cargo tank or a mobile refueler and a stationary tank unless a CARB certified Phase I vapor recovery system is used during each gasoline transfer.
- 301.2 All Phase I vapor recovery systems at gasoline dispensing facilities shall be installed as per the most recent CARB certifications and shall meet the emission limitations of the applicable CARB certification. This standard shall apply to each stationary tank during each bulk gasoline delivery.
- 301.3 All Phase I vapor recovery systems shall be equipped with a submerged fill pipe.
- 301.4 Deleted November 17, 1999
- 301.5 All Phase I vapor recovery equipment shall be maintained to be properly operating as specified by the manufacturer and/or the applicable CARB Executive Order.
- 301.6 All Phase I vapor recovery equipment, except for components with an allowable leak rate, shall be maintained to be leak-free and vapor tight. Components with allowable leak rates, including pressure vacuum relief valves, shall operate within the applicable leakage rate.
- 301.7 All Phase I vapor recovery systems shall have a CARB certified poppetted drybreak or other CARB-certified poppetted fitting on the vapor riser.
- 301.8 Effective June 1, 2000 no coaxial Phase I systems certified by CARB prior to January 1, 1994 may be installed on new or modified tanks.
- 301.9 Effective June 1, 2000, all new Phase I systems must be equipped with a CARB-certified anti-rotational coupler or swivel adapter.
- 301.10 Effective six months after CARB-certification, no person shall install or modify a Phase I vapor recovery system unless the system vapor recovery rate is 98% or the highest vapor recovery rate specified by CARB if the highest rate is less than 98%.
- 301.11 No person shall operate a Phase I system on an underground tank unless the system is equipped with a CARB-certified spill box.
- 301.12 Effective June 1, 2000, or effective as prescribed by California Code of Regulations, title 17, section 94011, whichever is later, no person shall install or operate a spill-box equipped with a drain valve on the vapor pipe of a two-point Phase I system unless the drain valve has been permanently plugged.
- 301.13 Effective June 1, 2003, no person shall operate a gasoline storage tank equipped with a Phase I vapor recovery system without demonstrating compliance with the vapor tightness standards of subsections 8-7-301.6 and 302.5 by conducting and passing a test pursuant to Section 8-7-602 on the tank and any vapor recovery equipment connected to the tank at least once in the preceding 12 month period.

(Adopted 11/30/83; Amended 10/17/90; 11/17/99; 11/6/02)

8-7-302 Phase II Requirements: A person subject to this section shall comply with all of the following requirements:

- 302.1 A person shall not transfer or allow the transfer of gasoline from stationary tanks into motor vehicle fuel tanks at a gasoline dispensing facility unless a CARB certified Phase II vapor recovery system is used during each transfer.

- 302.2 All Phase II vapor recovery systems shall be maintained as per the most recent CARB certifications and the manufacturer's specifications.
- 302.3 All Phase II vapor recovery equipment shall be maintained to be properly operating as specified by the manufacturer and the applicable CARB Executive Order and free of defects as defined in Section 41960.2(c) of the California Health and Safety Code and California Code of Regulations, title 17, section 94006.
- 302.4 Any component identified as defective but that does not substantially impair the effectiveness of the Phase II vapor recovery system pursuant to Section 41960.2 (e) of the California Health and Safety Code and California Code of Regulations, title 17, section 94006 shall be repaired or replaced within seven days.
- 302.5 All Phase II vapor recovery equipment shall be maintained to be both leak-free and vapor tight. This requirement shall not apply to components with an allowable leak rate or at the nozzle/fill-pipe interface.
- 302.6 All bellows-equipped vapor recovery nozzles shall be equipped with an insertion interlock.
- 302.7 Effective June 1, 2000, or effective as prescribed by California Code of Regulations, title 17, section 94011, whichever is later, no person shall install or operate a vapor recovery nozzle on a balance system unless the nozzle is equipped with a built-in vapor check valve. Remote vapor check valves may not be used in conjunction with nozzles with built-in vapor check valves.
- 302.8 All liquid removal devices required by CARB Executive Order shall achieve a minimum liquid removal rate of at least 5 milliliters per gallon dispensed. This standard shall apply at dispensing rates exceeding 5 gallons per minute, or as otherwise specified in the applicable Executive Order.
- 302.9 No person shall install or operate a vapor recovery nozzle unless it is equipped with a coaxial hose.
- 302.10 No person shall install or operate a gasoline dispenser at a gasoline dispensing facility unless the connection between the riser and the dispenser cabinet is constructed from either galvanized piping or flexible tubing that is listed for use with gasoline. The nominal diameter of this connector shall not be less than 1 inch unless otherwise specified by the applicable CARB Executive Order.
- 302.11 No person shall operate a vacuum assist Phase II vapor recovery system installed after June 1, 2000 unless it has been certified by CARB to be compatible with ORVR.
- 302.12 Effective June 1, 2000, liquid retain from any nozzle shall not exceed 100 ml per 1,000 gallons dispensed or the quantity specified in CARB Certification Procedure CP-201, whichever is less. The quantity of liquid retain shall be determined using CARB Test Procedure TP-201.2E or a test procedure that has been determined by CARB to be equivalent to TP-201.2E.
- 302.13 Effective June 1, 2000, spitting from any nozzle shall not exceed 1.0 ml per nozzle per test or the quantity specified in CARB Certification Procedure CP-201, whichever is less. The quantity of spitting shall be determined using CARB Test Procedure TP-201.2D or a test procedure that has been determined by CARB to be equivalent to TP-201.2D.
- 302.14 Effective June 1, 2003, no person shall operate a Balance Phase II vapor recovery system equipped with vapor return piping unless a Backpressure test in accordance with Section 8-7-601 has been conducted and passed in the preceding 12 month period. The vapor return piping shall meet the following standards:
 - 14.1 The dynamic back pressure standard specified in the applicable CARB Executive Order.
 - 14.2 Dynamic back pressures less than or equal to 0.15, 0.45, and 0.95 inches of water when measured at nitrogen flow rates of 20, 60, and 100 CFH respectively for systems subject to a CARB Executive Order that does not specify a backpressure standard.

302.15 Effective June 1, 2003, no person shall operate a Vacuum Assist Phase II vapor recovery system unless the following tests have been conducted and passed in the preceding 12 month period:

15.1 An Air-to-Liquid Volume Ratio (A/L) test conducted in accordance with Section 8-7-604 on all nozzles on a Phase II system for which the applicable CARB Executive Order specifies an A/L standard. The A/L for each nozzle shall be within the range specified in the applicable Executive Order.

15.2 Any other test(s) required to be re-performed on a periodic basis by the CARB Executive Order applicable to the Phase II system. Test results shall be within the limits established in the applicable CARB Executive Order.

(Adopted 11/30/83; Amended 10/17/90; 11/17/99; 11/6/02)

8-7-303 Topping Off: A person shall not top off fuel tanks or other vessels.

(Renumbered 11/30/83; Amended 11/17/99)

8-7-304 Certification Requirements: A person shall not offer for sale, sell or install within the District, any Phase I or Phase II vapor recovery equipment unless such equipment is CARB certified, meets the performance specifications required by the CARB certification procedures and this rule, and is installed in accordance with the most recent applicable CARB Executive Order.

(Amended and Renumbered 11/30/83; Amended 10/17/90; 11/17/99)

8-7-305 Deleted October 17, 1990

8-7-306 Prohibition of Use: Whenever the APCO determines that a Phase II vapor recovery system, or any component thereof, contains a defect specified by CARB pursuant to Section 41960.2(c) of the Health and Safety Code or California Code of Regulations, title 17, section 94006, the APCO shall mark such system or component "Out of Order." No person shall use or permit the use of such marked component or system until it has been repaired, replaced, or adjusted, as necessary, and the APCO has reinspected it or has authorized its use pending reinspection.

(Amended November 6, 2002)

8-7-307 Posting of Operating Instructions: Each gasoline dispensing facility utilizing a Phase II system shall conspicuously post operating instructions specific to the system in use in the gasoline dispensing area. The instructions shall clearly describe how to fuel vehicles correctly with the vapor recovery nozzles utilized at the station. The instructions shall also include a warning that topping off is prohibited, and may result in spillage or recirculation of gasoline. Additionally, the instructions shall include a prominent display of the District's or the CARB's toll free telephone number for complaints.

(Amended 11/30/83; 11/17/99)

8-7-308 Operating Practices: Gasoline shall not be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation to the atmosphere.

(Adopted November 30, 1983)

8-7-309 Contingent Vapor Recovery Requirement: Facilities which are equipped with Phase II vapor recovery must also be equipped with Phase I vapor recovery.

(Adopted 3/4/87; Amended 10/17/90)

8-7-310 Deleted November 17, 1999

8-7-311 Exempt Tank Requirements: Any tank with a capacity greater than 0.95 cubic meter (250 gallons) where Phase I vapor recovery equipment is not required must be equipped with a submerged fill pipe.

(Adopted 10/17/90; Amended 11/17/99)

8-7-312 Deleted November 17, 1999

8-7-313 Requirements for New or Modified Phase II Installations: Effective June 1, 2000 or effective as prescribed by California Code of Regulations, title 17, section 94011, whichever is later, no person shall install or modify a Phase II vapor recovery system unless all new equipment is CARB-certified to meet the following emission limitations without any maintenance being performed on that equipment for 90 days prior to the certification test:

- 313.1 The total emissions of organic compounds from the nozzle/fill pipe interface, storage tank vent pipes, and pressure-related fugitives shall not exceed 0.42 pounds per 1000 gallons gasoline dispensed.
- 313.2 The emissions of organic compounds from spillage shall not exceed 0.42 pounds per 1000 gallons gasoline dispensed.
- 313.3 The emissions of organic compounds from liquid retain and spitting shall not exceed 0.42 pounds per 1000 gallons gasoline dispensed.

(Adopted 11/17/99; Amended 11/6/02)

8-7-314 Hold Open Latch Requirements: A person shall not operate a nozzle that dispenses gasoline at a retail gasoline dispensing facility or a gasoline dispensing facility operated by the state or any county, city and county, or city unless the nozzle is equipped with an operating hold open latch. Any hold open latch determined to be inoperative may be repaired or replaced by the owner or operator within 48 hours of notification by the APCO or fire marshal without any fines or penalty action.

(Adopted November 17, 1999)

8-7-315 Pressure Vacuum Valve Requirements, Underground Storage Tanks: No person shall operate an underground tank dispensing gasoline unless it is equipped with a CARB certified pressure vacuum (P/V) valve on the vent pipe(s). The valve settings shall be three inches of water column plus or minus one-half inch on the pressure side and eight inches of water column plus or minus two inches on the vacuum side or as otherwise specified in the applicable CARB vapor recovery certification.

(Adopted 11/17/99; Amended 11/6/02)

8-7-316 Pressure Vacuum Valve Requirements, Aboveground Storage Tanks and Vaulted Below-Grade Storage Tanks: No person shall operate a stationary aboveground storage tank or vaulted below-grade storage tank dispensing gasoline unless it is equipped with a pressure vacuum (P/V) valve on the vent pipe(s). The valve settings shall be either as specified in the applicable CARB Executive Order or, for uncertified tanks, at least 90% of the tank's maximum allowable working pressure or 25.8 mm Hg (.5 psig).

(Adopted 11/17/99; Amended 11/6/02)

8-7-400 ADMINISTRATIVE REQUIREMENTS

8-7-401 Equipment Installation and Modification: A person shall not install or modify Phase I or Phase II gasoline vapor recovery equipment unless an Authority to Construct has been obtained pursuant to Section 301 of Regulation 2, Rule 1. An Authority to Construct shall not be required for the replacement of existing hoses and/or nozzles, or for other repairs or replacements of like parts, unless the APCO determines that testing is necessary to verify proper installation of the vapor recovery system.

(Adopted 11/30/83; Amended 11/17/99)

8-7-402 Deleted October 17, 1990

8-7-403 Deleted March 4, 1987

8-7-404 Deleted November 17, 1999

8-7-405 Deleted November 17, 1999

8-7-406 Testing Requirements, New and Modified Installations: No person shall operate new or modified gasoline dispensing equipment without complying with the testing and notification requirements of an Authority to Construct. Installations performed without obtaining an Authority to Construct remain subject to performance testing and prompt submission of applicable data. This requirement may be waived in whole or part for equipment installed at sites for the purposes of performance testing by the District or CARB to establish a new or modified executive order.

(Adopted November 17, 1999)

8-7-407 Periodic Testing Requirements: No person shall operate gasoline dispensing equipment equipped with Phase I or Phase II vapor recovery equipment without complying with the applicable periodic testing requirements of Sections 8-7-301 and 302.

(Adopted November 6, 2002)

8-7-408 Periodic Testing Notification and Submission Requirements: District Source Test staff shall be notified by phone, FAX, or email at least 48 hours prior to testing. Test results shall be submitted to the District Source Test Manager no later than 30 days after the test date and include all necessary data and equipment specifications to determine compliance with the applicable standards.

(Adopted November 6, 2002)

8-7-500 MONITORING AND RECORDS

8-7-501 Burden of Proof: The burden of proof of eligibility for exemption from any section of this rule is on the applicant. Persons seeking such an exemption shall maintain adequate records and furnish them to the APCO upon request.

(Adopted 11/30/83; Amended 11/17/99)

8-7-502 Right of Access: Any facility subject to this rule shall maintain on site the means to provide access to any and all components as necessary to determine compliance with the provisions of this rule. Access shall be furnished to the APCO upon request.

(Adopted October 17, 1990)

8-7-503 Record Keeping Requirements:

503.1 All gasoline dispensing facilities shall maintain records of the quantity of gasoline dispensed from the storage tanks during the last 12 month period.

503.2 All gasoline dispensing facilities shall maintain maintenance records detailing the nature and the date of all maintenance activities, including results of all required testing, during the last 12 month period.

503.3 All records required pursuant to subsections 8-7-503.1 and 503.2 shall be retained for 24 months and made available at the gasoline dispensing facility for inspection by the APCO.

(Adopted 11/17/99; Amended 11/6/02)

8-7-600 MANUAL OF PROCEDURES

8-7-601 Determination of Equipment In Compliance with Dynamic Backpressure Requirements: Compliance with the dynamic back pressure standard shall be determined as prescribed in the Manual of Procedures, under the pertinent sections of Volume IV, ST-27 or as prescribed by CARB Test Procedure TP-201.4.

(Amended 11/30/83; 10/17/90; 11/17/99; 11/6/02)

8-7-602 Determination of Equipment in Compliance with Vapor Tightness Requirements: Compliance with the vapor tightness standards shall be determined as prescribed in the Manual of Procedures, Volume IV, ST-30 (underground storage tanks) or ST-38 (vaulted storage tanks) or as prescribed by CARB Test Procedure TP-201.3 (underground tanks) or CARB Test Procedure TP-201.3B (vaulted storage tanks).

(Adopted 11/17/99; Amended 11/6/02)

8-7-603 Determination of Equipment in Compliance with Phase I Vapor Recovery Efficiency: Compliance with subsection 8-7-301.2 shall be determined as prescribed in the Manual of Procedures, Volume IV, ST-36 or as prescribed by CARB Test Procedure TP-201.1.

(Adopted 10/17/90; Renumbered, Amended 11/17/99; Amended 11/6/02)

8-7-604 Determination of Equipment in Compliance with Liquid Removal Requirements: Compliance with subsection 8-7-302.8 shall be determined as prescribed in the Manual of Procedures, Volume IV, ST-37.

(Adopted November 17, 1999)

8-7-605 Determination of Equipment in Compliance with Air to Liquid Volume Ratio (A/L) Requirements: Compliance with the air to liquid volume ratio requirements shall be determined as prescribed in the Manual of Procedures, Volume IV, ST-39 or CARB Test Procedure TP-201.5.

(Adopted 11/17/99; Amended 11/6/02)

8-7-606 Determination of Applicability: To determine the applicability of this Rule, samples of gasoline shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 13.

(Adopted 10/17/90; Renumbered, Amended 11/17/99)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 8
WASTEWATER (OIL-WATER) SEPARATORS**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 8
WASTEWATER (OIL-WATER) SEPARATORS
(Adopted January 17, 1979)**

- 8-8-100 GENERAL**
- 8-8-101 Description:** The purpose of this Rule is to limit the emissions of precursor organic compounds from wastewater (oil-water) separators, forebays, and air flotation units which remove floating oil, floating emulsified oil, or other liquid precursor organic compounds. (Amended November 1, 1989)
- 8-8-110 Exemption, Less Than 760 Liters:** The requirements of Section 8-8-301 shall not apply to any wastewater separator which processes less than 760 liters (200 gals.) per day of wastewater containing organic liquids. This exemption shall not apply to wastewater separators at petroleum refinery complexes after March 1, 1980.
- 8-8-111 Deleted November 1, 1989**
- 8-8-112 Exemption, Wastewater Critical OC Concentration And/Or Temperature:** The requirements of Sections 8-8-301, 302, 306, 307, and 308 shall not apply to any wastewater separator that processes influent wastewater less than 20 degrees C (68 °F) and/or wastewater comprised of less than 1.0 ppm (volume) critical organic compounds, as defined in Section 8-8-210, dissolved in the water samples, provided that the requirements of Section 8-8-502 are met. (Adopted November 1, 1989)
- 8-8-113 Exemption, Secondary Wastewater Treatment Processes And Stormwater Sewer Systems:** The requirements of Sections 8-8-301, 302, 306, and 308 shall not apply to any secondary wastewater treatment processes or stormwater sewer systems, as defined in Sections 8-8-208 and 216, which are used as a wastewater polishing step or collection of stormwater which is segregated from the process wastewater collection system. (Adopted November 1, 1989)
- 8-8-114 Exemption, Bypassed Oil-Water Separator or Air Flotation Influent:** The requirements of Sections 8-8-301, 302, and 307 shall not apply for wastewater which bypasses either the oil-water separator or air flotation unit provided that: (1) the requirements of Section 8-8-501 are met; and (2) on that day the District did not predict an excess of the Federal Ambient Air Quality Standard for ozone. (Adopted November 1, 1989)
- 8-8-115 Exemption, Municipal Wastewater Treatment Facilities:** The requirements of Sections 8-8-301, 302, 303, 304, 305, 306, 307, and 308 shall not apply to any publicly owned municipal wastewater treatment facility. (Adopted November 1, 1989)
- 8-8-200 DEFINITIONS**
- 8-8-201 Organic Compounds:** For the purposes of this Rule, any organic compound as defined in Section 8-8-210. (Amended November 1, 1989)
- 8-8-202 Wastewater (Oil-Water) Separator:** Any device used to separate liquid organic compounds from oil-water waste streams (excluding Wastewater Separator Forebay, Air Flotation (AF) units, Sludge-dewatering Units, Oil-Water Separator and /or AF Unit Slop Oil Vessels, and Junction Boxes). (Amended November 1, 1989)

- 8-8-203 Wastewater Separator Forebay:** That section of a gravity-type separator which (a) receives the untreated, contaminated wastewater from the preseparator flume, and (b) acts as a header which distributes the influent to the separator channels.
(Amended November 1, 1989)
- 8-8-204 Vapor-tight:** The concentration of precursor organic compounds, measured one centimeter from the source, shall not exceed 500 ppm (expressed as methane) above background.
(Adopted November 1, 1989)
- 8-8-205 Oil-Water Separator Slop Oil:** Floating oil, flocculant sludge, and solids which accumulate in an oil-water separator or air flotation unit.
(Adopted November 1, 1989)
- 8-8-206 Oil-Water Separator Effluent Channel/Pond:** An open channel, trench, pond, or basin which handles wastewater downstream of an oil-water separator that has not been treated by an air flotation unit (usually located between the separator and the air flotation unit).
(Adopted November 1, 1989)
- 8-8-207 Full Contact Fixed Cover:** A stationary separator cover which is always in full contact with the liquid surface of the oil-water separator.
(Adopted November 1, 1989)
- 8-8-208 Secondary Treatment Processes:** Any wastewater treatment process which is downstream of the air flotation unit, any other biological treatment process at a refinery, or any treatment process which is regulated by the EPA National Categorical Pretreatment Standards. These treatment processes are considered to be wastewater polishing steps and include: activated sludge tanks/basins, trickling or sand filters, aerated lagoons, oxidation ponds, rotating biological contactors, and other biological wastewater treatment processes.
(Adopted November 1, 1989)
- 8-8-209 Air Flotation Unit:** Any device, equipment, or apparatus in which wastewater is saturated with air or gas under pressure and removes floating oil, floating emulsified oil, or other floating liquid precursor organic compounds by skimming. Also included in this definition are: induced air flotation units and pre-air flotation unit flocculant sumps, tanks, or basins.
(Adopted November 1, 1989)
- 8-8-210 Critical Organic Compound (OC):** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, carbonates and ammonium carbonate, or non-precursor organic compounds (Methylene chloride, 1,1,1 trichloroethane, 1,1,2 trichlorotrifluoroethane (CFC-113), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), dichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC-115), emitted during separation, processing, or storage of wastewater, and having a carbon number of C-14 or less (excluding phenolic compounds).
(Adopted November 1, 1989)
- 8-8-211 Wastewater:** Any process water which contains oil, emulsified oil, or other organic compounds which is not recycled or otherwise used within a facility.
(Adopted November 1, 1989)
- 8-8-212 Pre-Air Flotation Unit Flocculation Sump, Basin, Chamber, or Tank:** Any facility which pretreats the air flotation unit's influent with chemical coagulants, and/or adjusts the influent's pH.
(Adopted November 1, 1989)
- 8-8-213 Oil-Water Separator Slop Oil Vessel:** Any vessel which, as its sole function, treats or dewateres oil-water separator slop oil.
(Adopted November 1, 1989)
- 8-8-214 Oil-Water Separator Effluent:** Any process wastewater downstream of the oil-water separator that has not been treated by an air flotation unit.
(Adopted November 1, 1989)
- 8-8-215 Sludge-dewatering Unit:** Any device which, as its sole function, is used to dewater oil-water separator and air flotation slop oil/sludge.
(Adopted November 1, 1989)

- 8-8-216 Stormwater Sewer System:** A drain and collection system designed and operated for the sole purpose of collecting stormwater and which is segregated from the wastewater collection system. (Adopted November 1, 1989)
- 8-8-217 Junction Box:** A manhole or access point to a wastewater sewer system line. (Adopted November 1, 1989)
- 8-8-218 Sewer Line:** A lateral, trunk line, branch line, ditch, channel, or other conduit used to convey wastewater to downstream oil-water separators. (Adopted November 1, 1989)

8-8-300 STANDARDS

- 8-8-301 Wastewater Separators Greater than 760 Liters per Day and Smaller than 18.9 Liters per Second:** A person shall not operate any wastewater separator and/or forebay with a design rated or maximum allowable capacity greater than 760 liters per day and smaller than 18.9 liters per second (oil-water separators and/or forebays between 200 gals per day to 300 gals per min.) unless such wastewater separator and/or forebay is operated within its design rated or maximum allowable capacity and is equipped with one of the following:
- 301.1 A solid, gasketed, fixed cover totally enclosing the separator tank, chamber, or basin (compartment) liquid contents, with all cover openings closed, except when the opening is being used for inspection, maintenance, or wastewater sampling. Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps greater than 0.32 cm (0.125 inch) occur in the roof or between the roof and wall; and that the access doors and other openings are closed and gasketed properly; or
- 301.2 A floating pontoon or double-deck vapor-tight type cover. All floating roofs must rest entirely on the liquid surface. The floating roof shall consist of two seals, one above the other, the one below shall be referred to as the primary seal, while the other seal shall be referred to as the secondary seal.
- 2.1 Oil-Water Separator Liquid-Mounted Primary Seal Gap Criteria: No gap between the separator wall and the liquid-mounted primary seal shall exceed 3.8 cm (1.5 inch). No continuous gap greater than 0.32 cm (0.125 inch) shall exceed 10 percent of the perimeter of the separator. The cumulative length of all primary seal gaps exceeding 1.3 cm (0.5 inch) shall be not more than 10 percent of the perimeter and the cumulative length of all primary seal gaps exceeding 0.32 cm (0.125 inch) shall be not more than 40 percent of the perimeter.
- 2.2 Oil-Water Separator Secondary And Wiper Seals Gap Criteria: No gap between the separator wall and the secondary and wiper seals shall exceed 1.5 mm (0.06 inch). The cumulative length of all secondary and wiper seals gaps exceeding 0.5 mm (0.02 inch) shall be not more than 5 percent of the perimeter of the separator. The secondary and wiper seals must exert a positive pressure against the separator such that the seal surface in contact with the separator wall does not pull away from the separator wall more than the gaps allowed.
- 2.3 Primary And Secondary Seal Gap Inspection: The primary seal shall be inspected within 60 calendar days after initial installation of the floating roof and once every 5 years thereafter in accordance with the requirements of Subsection 8-8-301.2.2.1. The secondary seal shall be inspected within 60 calendar days after initial installation of the floating roof and once every year thereafter in accordance with the requirements of Subsection 8-8-301.2.2.2. The owner or operator shall make necessary repairs within 30 calendar days of identification of seals not

meeting the requirements listed in Subsections 8-8-301.2.1 and 301.2.2.2.; or

301.3 An OC vapor recovery system with a combined collection and destruction efficiency of at least 95 percent, by weight.

301.4 Deleted October 6, 1993

(Amended November 1, 1989; October 6, 1993)

8-8-302 Wastewater Separators Larger than or Equal to 18.9 Liters per Second: A person shall not operate any wastewater separator and/or forebay with a rated or maximum allowable capacity larger than or equal to 18.9 liters per second (300 gals per min.) unless such wastewater separator and/or forebay is operated within its design rated or maximum allowable capacity and is equipped with one of the following:

302.1 A solid, vapor-tight, full contact fixed cover which totally encloses the separator tank, chamber, or basin (compartment) liquid contents, with all cover openings closed and sealed, except when the opening is being used for inspection, maintenance, or wastewater sampling; or

302.2 A floating pontoon or double-deck vapor-tight type cover. All floating roofs must rest on the liquid surface. The floating roof shall consist of two seals, one above the other, the one below shall be referred to as the primary seal, while the other seal shall be referred to as the secondary seal.

2.1 Oil-Water Separator Liquid-Mounted Primary Seal Gap Criteria: No gap between the separator wall and the liquid-mounted primary seal shall exceed 3.8 cm (1.5 inch). No continuous gap greater than 0.32 cm (0.125 inch) shall exceed 10 percent of the perimeter of the separator. The cumulative length of all primary seal gaps exceeding 1.3 cm (0.5 inch) shall be not more than 10 percent of the perimeter and the cumulative length of all primary seal gaps exceeding 0.32 cm (0.125 inch) shall be not more than 40 percent of the perimeter.

2.2 Oil-Water Separator Secondary And Wiper Seals Gap Criteria: No gap between the separator wall and the secondary and wiper seals shall exceed 1.5 mm (0.06 inch). The cumulative length of all secondary and wiper seals gaps exceeding 0.5 mm (0.02 inch) shall be not more than 5 percent of the perimeter of the separator. The secondary and wiper seals must exert a positive pressure against the separator such that the seal surface in contact with the separator wall does not pull away from the separator wall more than the gaps allowed; or

2.3 Primary And Secondary Seal Gap Inspection: The primary seal shall be inspected within 60 calendar days after initial installation of the floating roof and once every 5 years thereafter in accordance with the requirements of Subsection 8-8-302.2.2.1. The secondary seal shall be inspected within 60 calendar days after initial installation of the floating roof and once every year thereafter in accordance with the requirements of Subsection 8-8-302.2.2.2. The owner or operator shall make necessary repairs within 30 calendar days of identification of seals not meeting the requirements listed in Subsections 8-8-302.2.2.1 and 302.2.2.2.; or

302.3 A vapor-tight fixed cover with an OC vapor recovery system which has a combined collection and destruction efficiency of at least 95 percent, by weight, inspection and access hatches shall be closed except when the opening is being used for inspection, maintenance, or wastewater sampling, or

302.4 A solid, sealed, gasketed, fixed cover which totally encloses the separator tank, chamber, or basin (compartment) liquid contents, with all cover openings closed and sealed, except when the opening is being used for

inspection, maintenance, or wastewater sampling. The cover may include a pressure/vacuum valve. The concentration of precursor organic compounds, measured one centimeter from the roof seals, fixed cover, access doors, pressure/vacuum valve, and other openings shall not exceed 1,000 ppm (expressed as methane) above background. Roof seals, fixed cover, access doors, and other openings shall be inspected initially and semiannually thereafter to ensure that there are no emission leaks greater than 1,000 ppm. Any emission leak greater than 1,000 ppm must be reported to the APCO and repaired within 15 days.

302.5 Deleted October 6, 1993

(Adopted November 1, 1989; Amended October 6, 1993)

8-8-303 Gauging and Sampling Devices: Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.

(Amended, Renumbered November 1, 1989)

8-8-304 Sludge-dewatering Unit: Any sludge-dewatering unit, equipment, machinery, apparatus, or device shall be totally enclosed and vented to a control device which has a minimum combined collection and destruction efficiency of 95 percent by weight; or shall have vapor-tight covers on the unit, conveyer belts, and storage bins or tanks except during inspection, maintenance or when the solids storage bin is in use.

(Adopted November 1, 1989; Amended October 6, 1993)

8-8-305 Oil-Water Separator And/Or Air Flotation Unit Slop Oil Vessels: A person shall not store any oil-water separator and/or air flotation unit sludges in an oil-water separator slop oil vessel unless such oil-water separator slop oil vessel is equipped with one of the following:

305.1 A solid, gasketed, fixed cover totally enclosing the vessel liquid contents, with all cover openings closed, except when the opening is being used for inspection, maintenance, or wastewater sampling. The cover may include an atmospheric vent or a pressure/vacuum valve. Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps greater than 0.32 cm (0.125 inch) occur in the roof or between the roof and wall; and that the access doors and other openings are closed and gasketed properly; or

305.2 An OC vapor recovery system with a combined collection and destruction efficiency of at least 70 percent, by weight.

305.3 Deleted October 6, 1993

(Adopted November 1, 1989; Amended October 6, 1993)

8-8-306 Oil-Water Separator Effluent Channel, Pond, Trench, or Basin: A person shall not operate any oil-water separator effluent channel, pond, trench, or basin a design rated or maximum allowable capacity greater than 25.2 liters per second (any oil-water separator effluent channel, pond, trench, or basin greater than 400 gals per min) unless such oil-water separator effluent channel, pond, trench, or basin is operated within its design rated or maximum allowable capacity and is equipped with one of the following:

306.1 A solid, gasketed, fixed cover totally enclosing the oil-water separator effluent channel, pond, trench, or basin (compartment) liquid contents, with all cover openings closed, except when the opening is being used for inspection, maintenance, or wastewater sampling. Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps greater than 0.32 cm (0.125 inch) occur in the roof or between the roof and wall; and that the access doors and other openings are closed and gasketed properly; or

306.2 An OC vapor recovery system with a combined collection and destruction efficiency of at least 70 percent, by weight.

306.3 Deleted October 6, 1993

(Adopted November 1, 1989; Amended October 6, 1993)

8-8-307 Air Flotation Unit: A person shall not operate any air flotation unit and/or pre-air flotation unit flocculation sump, basin, chamber, or tank with a design rated or maximum allowable capacity greater than 25.2 liters per second (air flotation units and/or pre-air flotation unit flocculation sump, basin, chamber, or tank greater than 400 gals per min.) unless such air flotation unit and/or pre-air flotation unit flocculation sump, basin, chamber, or tank is operated within its design rated or maximum allowable capacity and is equipped with one of the following:

307.1 A solid, gasketed, fixed cover totally enclosing the air flotation and pre-air-flotation-unit flocculation tank, chamber, or basin (compartment) liquid contents, with all cover openings closed, except when the opening is being used for inspection, maintenance, or wastewater sampling. The cover may include an atmospheric vent or pressure/vacuum valve. Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps greater than 0.32 cm (0.125 inch) occur in the roof or between the roof and wall; and that the access doors and other openings are closed and gasketed properly; or

307.2 An OC vapor recovery system with a combined collection and destruction efficiency of at least 70 percent, by weight.

307.3 Deleted October 6, 1993

(Adopted November 1, 1989; Amended October 6, 1993)

8-8-308 Junction Box: Any junction box shall be equipped with either a solid, gasketed, fixed cover totally enclosing the junction box or a solid manhole cover. Junction boxes may include openings in the covers and vent pipes if the total open area of the junction box does not exceed 81.3 cm² (12.6 in²) and all vent pipes are at least 3 feet in length.

(Adopted November 1, 1989; Amended October 6, 1993)

8-8-309 Deleted October 6, 1993

8-8-310 Deleted October 6, 1993

8-8-311 Deleted October 6, 1993

8-8-400 ADMINISTRATIVE REQUIREMENTS

8-8-401 Deleted October 6, 1993

8-8-500 MONITORING AND RECORDS

8-8-501 API Separator or Air Flotation Bypassed Wastewater Records: Any person who bypasses wastewater past their API Separator or Air Flotation unit shall maintain records on the amount of bypassed wastewater, duration, date, causes for bypasses, and dissolved critical OC concentration (volume). These records shall be retained and available for inspection by the APCO for at least 24 months.

(Adopted November 1, 1989)

8-8-502 Wastewater Critical OC Concentration And/Or Temperature Records: Any person who exempts their wastewater separator because of either wastewater critical OC concentration or temperature shall sample and test the wastewater initially and semiannually thereafter and maintain records on the date, time of test, location, and wastewater temperature and/or critical OC concentration (volume). These records shall be retained and available for inspection by the APCO for at least 24 months.

(Adopted November 1, 1989)

- 8-8-503** **Inspection and Repair Records:** Records of inspections and repairs as required by Sections 8-8-301, 302, 305, 306 or 307 shall be retained and made available for inspection by the APCO for at least 24 months. (Adopted October 6, 1993)
- 8-8-504** **Portable Hydrocarbon Detector:** Any instrument used for the measurement of organic compounds shall be a gas detector that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21 (40 CFR 60, Appendix A). Adopted June 15, 1994)
- 8-8-600** **MANUAL OF PROCEDURES**
- 8-8-601** **Wastewater Analysis for Critical OCs:** Samples of wastewater as specified in this rule shall be taken at the influent stream for each unit and analyzed for the concentration of dissolved critical organic compounds as prescribed in the Manual of Procedures, Volume III, Lab Method 33.
(Amended November 1, 1989; October 6, 1993)
- 8-8-602** **Determination of Emissions:** Emissions of precursor organic compounds as specified in Sections 8-8-301.3, 8-8-302.3, 8-8-304, 8-8-305.2, 8-8-306.2, and 8-8-307.2 shall be measured as prescribed by any of the following methods: 1) BAAMQD 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 referenced test methods exceed the standards of this rule.
(Amended November 1, 1989; October 6, 1993, June 15, 1994)
- 8-8-603** **Inspection Procedures:** For the purposes of Sections 8-8-301, 302, 303 and 304, leaks shall be measured using a portable gas detector as prescribed in EPA Reference Method 21 (40 CFR 60, Appendix A). (Adopted June 15, 1994)

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BAY AREA AIR QUALITY MANAGEMENT DISTRICT

REGULATION 8

ORGANIC COMPOUNDS

RULE 9

VACUUM PRODUCING SYSTEMS

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REGULATION 8

ORGANIC COMPOUNDS

RULE 9

VACUUM PRODUCING SYSTEMS

- 8-9-100 GENERAL
- 8-9-101 Description: The purpose of this Rule is to limit emissions of precursor organic compounds as defined in Section 8-9-201, from vacuum producing systems.
- 8-9-110 Exemption, Vacuum Tank Trucks: The requirements of Section 8-9-301 shall not apply to vacuum tank trucks which are governed by the requirements of Rule 2 - Miscellaneous, of this Regulation 8.
- 8-9-111 Exemption, Chemical Plants: The provisions of Section 8-9-301 shall not apply to chemical plants until January 1, 1985.
- 8-9-200 DEFINITIONS
- 8-9-201 Chemical Plants: Any facility engaged in producing organic or inorganic chemicals and/or manufacturing products by chemical processes. Any facility or operation that has 28 as the first two digits in their Standard Industrial Classification Code as determined from the Standard Industrial Classification Manual published in 1972 by the Executive Office of the President, Office of Management and Budget. Chemical plants may include, but are not limited to the manufacture of: industrial inorganic and organic chemicals; plastic and synthetic resins, synthetic rubber, synthetic and other man made fibers; drugs; soap, detergents and cleaning preparations, perfumes, cosmetics and other toilet preparations; paints, varnishes, lacquers, enamels and allied products; agricultural chemicals; safflower and sunflower oil extracts; re-refining.
- 8-9-202 Organic Compound: For the purposes of this Rule, any organic compound as defined in Section 8-1-201.
- 8-9-202 Petroleum Refinery: Any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants or other products through distillation of petroleum or through redistillation, cracking, rearrangement or reforming or unfinished petroleum derivatives.
- 8-9-203 Vacuum Producing Systems: Vacuum producing systems

include, but are not limited to, steam ejectors with contact (barometric) condensers, steam ejectors with surface condensers, and mechanical vacuum pumps.

8-9-300 STANDARDS

8-9-301 Vacuum Producing Systems: Effective March 17, 1980 The control of precursor organic compound emissions from vacuum producing systems at petroleum refineries and chemical plants complexes shall be accomplished by employing the following equipment and/or strategies:

301.1 Non-condensable precursor organic emissions from vacuum producing systems must either be controlled and piped to an appropriate firebox or incinerator for combustion, or be collected, compressed, and added to the refinery fuel gas system, or be contained and treated so as to prevent their emission into the atmosphere.

301.2 Hot wells and/or accumulators associated with vacuum system condensers must be covered and the precursor organic vapors must either be incinerated or contained and treated so as to prevent their emission into the atmosphere.

8-9-400 ADMINISTRATIVE REQUIREMENTS

8-9-401 Increments of Progress: A person at a chemical plant who must modify existing sources or install new control equipment to comply with the requirements of this Rule shall comply with the following compliance schedule:

401.1 ~~May 17, 1979~~ January 1, 1984: Submit to the APCO a final control plan which describes, as a minimum, the steps, including a construction schedule, that will be taken to achieve compliance with such requirements.

401.2 ~~July 17, 1979~~ July 1, 1984: Submit a completed application for any Authority to Construct necessary to achieve compliance with such requirements.

401.3 ~~March 17, 1980~~ January 1, 1985: Be in compliance with all the requirements of this Rule.

8-9-600 MANUAL OF PROCEDURES

8-9-601 Determination of Emissions: Emissions of organic compounds as specified in Section 8-9-301 shall be measured as prescribed in the Manual of Procedures, Volume IV, ST-7.

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BAY AREA AIR QUALITY MANAGEMENT DISTRICT

REGULATION 8

ORGANIC COMPOUNDS

RULE 10

PROCESS VESSEL DEPRESSURIZATION

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REGULATION 8

ORGANIC COMPOUND

RULE 10

PROCESS VESSEL DEPRESSURIZATION

8-10-100 GENERAL

8-10-101 Description: The purpose of this Rule is to limit emissions of precursor organic compounds from process vessel depressurization at petroleum refineries and chemical plants. ~~complexes.~~

8-10-110 Exemption, Storage Vessels: The requirements of Section 8-10-301 shall not apply to stationary containers used solely for the storage of an organic liquid.

8-10-111 Exemption, Chemical Plants: The provisions of Section 8-10-301 shall not apply to chemical plants until January 1, 1985.

8-10-200 DEFINITIONS

8-10-201 Chemical Plant: Any facility engaged in producing organic or inorganic chemicals and/or manufacturing products by chemical processes. Any facility or operation that has 28 as the first two digits in their Standard Industrial Classification Code as determined from the Standard Industrial Classification Manual published in 1972 by the Executive Office of the President, Office of Management and Budget. Chemical plants may include, but are not limited to the manufacture of: industrial inorganic and organic chemicals; plastic and synthetic resins, synthetic rubber, synthetic and other man made fibers; drugs; soap, detergents and cleaning preparations, perfumes, cosmetics and other toilet preparations; paints, varnishes, lacquers, enamels and allied products; agricultural chemicals; safflower and sunflower oil extracts; re-refining.

8-10-202 Organic Compound: For the purposes of this Rule, any organic compound as defined in Section 8-1-201.

8-10-202 Petroleum Refinery: Any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants or other products through distillation of petroleum or through redistillation, cracking, rearrangement or reforming of unfinished petroleum derivatives.

~~8-10-203~~ 8-10-203 Process Unit: A manufacturing process which is independent of other processes and is continuous when supplied with a constant feed of raw materials and sufficient storage facilities for the final product.

8-10-204 Process Vessel: Any vessel in which organic compounds are fractionated on more than one tray or on packing, or chemically reacted, or washed or purified.

8-10-300 STANDARDS

8-10-301 Process Vessel Depressurizing: ~~Effective March 17 1980~~ The control of precursor organic compound emissions from depressurizing any process vessel at a petroleum refinery or a chemical plant ~~example~~ during a process unit turnaround shall be accomplished so that the organic compounds, after passing through a knockout pot to remove the condensable fraction, must either be:

- 301.1 Recovered (added to the ~~refinery~~ fuel gas system) and combusted,
- 301.2 Controlled and piped to an appropriate firebox or incinerator for combustion,
- 301.3 Flared,
- 301.4 Contained and treated so as to prevent their emission to the atmosphere.

Such procedures shall continue until the pressure within the process vessel is as close to atmospheric pressure as practicably possible, in no case shall a process vessel be vented to the atmosphere until the partial pressure of organic compounds in that vessel is less than 1000 mm Hg (4.6 psig).

8-10-400 ADMINISTRATIVE REQUIREMENTS

8-10-401 Turnaround Records: ~~Effective March 17 1979~~ Refinery personnel shall keep records of each process unit turnaround, listing as a minimum:

- 401.1 The date of unit shutdown and/or depressurizing,
- 401.2 The approximate process vessel hydrocarbon concentration when the organic emissions were first discharged into the atmosphere, and
- 401.3 The approximate quantity of total precursor organic compounds emitted into the atmosphere. These records shall be kept for at least two (2) years and be made available to the APCO during any compliance inspection. ~~of the refinery.~~

8-10-402 Increments of Progress: A person who must modify existing sources or install new control equipment at chemical plants to comply with the requirements of this Rule shall comply with the following compliance

schedule:

- 402.1 ~~May 17 1979~~ January 1, 1984: Submit to the APCO final control plan which describes, as a minimum, the steps, including a construction schedule, that will be taken to achieve compliance with such requirements.
- 402.2 ~~July 17 1979~~ July 1, 1984: Submit a completed application for any Authority to Construct necessary to achieve compliance with such requirements.
- 402.3 ~~March 17 1980~~ January 1, 1985: Be in compliance with all the requirements of this Rule.

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REGULATION 8
ORGANIC COMPOUNDS
RULE 11
METAL CONTAINER, CLOSURE AND COIL COATING

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REGULATION 8
ORGANIC COMPOUNDS
RULE 11
METAL CONTAINER, CLOSURE AND COIL COATING

(Adopted January 24, 1979)

8-11-100 GENERAL

8-11-101 Description: The purpose of this Rule is to reduce emissions of volatile organic compounds (VOC) from the coating of metal coils, cans, drums, pails, lids and crowns.

8-11-110 Deleted September 20, 1989

8-11-200 DEFINITIONS

8-11-201 Coating Line: An operation or process for applying, drying, baking and/or curing surface coatings, together with associated equipment including a coating applicator, flashoff area and oven.

8-11-202 Coil Coating: Any coating applied to metal sheets or strips which are then rolled into coils for further industrial or commercial use.

8-11-203 Daily Weighted Average: The amount of volatile organic compounds emitted on a given day, considering actual production, VOC content of coatings used, and the degree of control achieved by any abatement equipment on the coating line or lines included in the submitted plan.

8-11-204 End Sealing Compound: A compound which is coated onto can ends and which functions as a gasket when the end is assembled onto the can.

8-11-205 Exterior Base Coating: A coating applied to the exterior of a can body, end, or flat sheet to provide protection to the metal or to provide background for any lithographic or printing operation. (Amended December 19, 1984)

8-11-206 Exterior Body Spray: A coating sprayed on the exterior of the container body to provide a decorative or protective finish.

8-11-207 Interior Base Coating: A coating applied to the interior of a can body, end, or flat sheet to provide a protective lining between the product and the can. (Amended December 19, 1984)

8-11-208 Interior Body Spray: A coating sprayed on the interior of the can body to provide a protective film between the product and the can.

8-11-209 Metal Container or Closure Coating: Any coating applied to either the interior or exterior of formed metal cans, drums, pails, lids or crowns or flat metal sheets which are intended to be formed into cans, drums, pails, lids or crowns.

8-11-210 Overvarnish: A coating applied directly over a design coating to reduce the coefficient of friction, to provide gloss and to protect the finish against abrasion and corrosion.

8-11-211 Three-piece Can Side-Seam Spray: A coating sprayed on the exterior and/or interior of a welded, cemented or soldered seam to protect the exposed metal.

8-11-212 Two-piece Can Exterior-End Coating: A coating applied to the exterior bottom end of a can to reduce the coefficient of friction and to provide protection to the metal. (Amended November 19, 1997)

8-11-213 Deleted September 20, 1989

8-11-214 Deleted September 20, 1989

8-11-215 Volatile Organic Compound: Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.

215.1 For purposes of calculating VOC content of a coating, any water or the following non-precursor organic compounds shall not be considered to be part of the coating:

methylene chloride
 1,1,1 trichloroethane
 trichlorotrifluoroethane (CFC-113)
 trichlorofluoromethane (CFC-11)
 dichlorodifluoromethane (CFC-12)
 dichlorotetrafluoroethane (CFC-114)
 chloropentafluoroethane (CFC-115)
 acetone
 perchlorobenzotrifluoride (PCBTF)
 cyclic, branched or linear, completely methylated siloxanes (VMS)

(Adopted September 20, 1989; Amended December 20, 1995)

8-11-216 **Reconditioned Drums, Pails, or Lids:** Any metal container which is reused, recycled or remanufactured. (Adopted September 20, 1989)

8-11-217 **Ink:** Any coating used to impart graphical designs, letters, or numerals on the exterior surface of a metal container, closure, or coil.

(Adopted September 20, 1989, amended November 19, 1997)

8-11-218 **Food Cans:** Any metal container used for the storage of food products intended for human or animal consumption. (Adopted November 19, 1997)

8-11-300 **STANDARDS**

8-11-301 **Metal Container or Closure Coating Limitations:** Except as provided in Sections 8-11-302 and 305, a person shall not apply any metal container or closure coating with a VOC content in excess of the following limits, expressed as grams VOC per liter (pounds VOC per gallon) of coating, as-applied, excluding water:

Coating Category		Effective July 1, 1998	Effective Jan 1, 2000
<u>CANS</u>			
301.1	Sheet basecoat (interior and exterior) and overvarnish	225 (1.9)	
301.2	Deleted September 20, 1989		
301.3	Two-piece can exterior basecoat, overvarnish, and end coating	250 (2.1)	
301.4	Interior body spray		
	4.1 Two-piece cans	510 (4.2)	420 (3.5)
	4.2 Three-piece cans	510 (4.2)	360 (3.0)
301.5	Three-piece can side seam spray	660 (5.5)	
301.6	End sealing compound		
	6.1 Food cans	440 (3.7)	
	6.2 Non-Food cans	440 (3.7)	20 (0.1)
	6.3 Beverage cans	440 (3.7)	20 (0.1)
301.7	Exterior body spray	420 (3.5)	
<u>DRUMS, PAILS, AND LIDS</u>			
301.8	Body Spray		
	8.1 Reconditioned Interior	510 (4.2)	
	8.2 Reconditioned Exterior	420 (3.5)	
	8.3 New Interior	510 (4.2)	420 (3.5)
	8.4 New Exterior	420 (3.5)	340 (2.8)
301.9	End Sealing Compound		
	9.1 Food Drums	440 (3.7)	
	9.2 Non-Food Drums	440 (3.7)	60 (0.5)
301.10	Inks, all applications	300 (2.5)	

(Amended 12/19/84; 9/20/89; 10/6/93; 11/19/97)

8-11-302 **Emission Control Device Limitation for Metal Container or Closure Coatings:** The use of coatings with VOC contents in excess of the limits specified in Section 8-11-301 shall be allowed, provided emissions of VOC to the atmosphere are controlled

to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 90 percent that meets the requirements of Regulation 2, Rule 1.

(Amended September 20, 1989; October 6, 1993)

8-11-303 Coil Coating Limitation: Except as provided in Sections 8-11-304, a person shall not apply any coil coating with a VOC content in excess of 200 grams per liter of coating applied (1.7 lb/gal), excluding water. (Amended December 19, 1984)

8-11-304 Emission Control Device Limitation for Coil Coating: The requirements of Section 8-11-303 shall not apply to a coil coating line from which emissions of VOC to the atmosphere are controlled to no more than 120 grams per liter of coating applied (1.0 lb/gal), excluding water, by air pollution abatement equipment with an abatement device efficiency of at least 90 percent that meets the requirements of Regulation 2, Rule 1. (Amended December 19, 1984; September 20, 1989; October 6, 1993)

8-11-305 Alternative Emission Control Plan: The requirements of Sections 8-11-301 shall not apply to any coating line or coating lines which comply with an alternative emission control plan which satisfies all the following requirements:

305.1 Emissions of VOC, on a daily weighted average, shall be no greater than that amount which would result if the affected coating line or lines complied with all applicable requirements of Sections 8-11-301. Air pollution abatement devices used to control VOC emissions must achieve an abatement device efficiency of at least 90 percent and meet the requirements of Regulation 2, Rule 1.

305.2 The plan shall be submitted to the APCO for review and approval on an annual basis.

305.3 The plan shall include methods acceptable to the APCO for demonstrating compliance with the plan on a daily basis. Such demonstration shall include the following:

3.1 List of products which will be coated on each line

3.2 Type of coatings which will be applied on each product

3.3 Amount of those coatings which will be applied on each coating product

3.4 VOC content or equivalent emission level for each coating, per gallon or liter of solids for each coating

3.5 Detailed description of compensation reduction to be achieved for each non-complying product.

305.4 The information required in subsection 305.3 shall be available for inspection by the APCO on each production day and maintained for two years.

305.5 The plan shall contain credit only for reductions achieved on coating lines subject to this Rule and not for emission reductions required by other District rules or regulations.

305.6 Failure to comply with any provision of an approved plan shall constitute a violation of this Rule.

305.7 The person submitting the plans shall retain such records for two years and submit such information on coating usage, coating composition, laboratory analysis, source tests, or other information as required by the APCO to determine compliance with the plan.

305.8 If any District regulation is adopted or amended after approval of the plan, which requires emission reductions which are included in the plan, a new plan shall be submitted which does not include credit for those reductions.

(Amended December 19, 1984; September 20, 1989; October 6, 1993)

8-11-306 Surface Preparation and Cleanup Solvent: The requirements of this Section shall apply to any person using organic solvent for surface preparation or cleanup.

306.1 A person shall use closed containers for storage or disposal of cloth or paper used for solvent surface preparation and cleanup.

306.2 A person shall store fresh or spent solvent in closed containers.

306.3 A person shall not use organic compounds for the cleanup of spray equipment including paint lines unless equipment for collecting the cleaning compounds and minimizing their evaporation to the atmosphere is used.

(Adopted September 20, 1989)

8-11-400 ADMINISTRATIVE REQUIREMENTS

8-11-401 Deleted September 20, 1989

8-11-402 Operation and Maintenance Plan: Every twelve months, at least 60 days prior to permit renewal, any person subject to the provisions of Section 8-11-302, 304 or 305 where applicable shall submit to the APCO for approval an Operation and Maintenance (O/M) plan. Such plan will contain the following elements:

Afterburner Temperatures:

flame unit: minimum operating temperature

catalytic unit: minimum preheat temperature, temperature increase across catalyst bed

Burner maintenance schedule

Catalyst cleaning/recharging schedule, where applicable

Duct inspection schedule

(Adopted December 19, 1984; Amended September 20, 1989)

8-11-403 Compliance Schedule: Any person subject to the provisions of Section 8-11-504 shall comply with the following increment of progress:

403.1 By January 1, 1990, be in full compliance. (Adopted September 20, 1989)

8-11-500 MONITORING AND RECORDS

8-11-501 Coating Records: Any person subject to Section 8-11-301, 302, 303 or 304 shall comply with the following requirements.

501.1 A person shall maintain a current list of coatings in use which provides all of the coating data necessary to evaluate compliance.

501.2 A person shall maintain records on a daily basis showing the type and amount of each coating used.

501.3 A person shall maintain records on a monthly basis showing the types and amounts of solvent used for surface preparation and cleanup.

501.4 A person shall have available monthly records that provide information on a daily basis of the types of inks used. The amounts of ink used shall be maintained on a monthly basis.

501.5 Such records shall be retained and made available for inspection by the APCO for the previous 24-month period.

(Adopted December 19, 1984; Amended September 20, 1989)

8-11-502 Deleted September 20, 1989

8-11-503 Alternate Emission Control Plan Records: Any person subject to Section 8-11-305 shall comply with the provisions of Section 8-11-501, in addition to the elements already required in subsection 305.3.

503.1 Excess Reporting: Any record showing violation of subsection 305.1 shall be reported by sending a copy of such record to the Enforcement Division of the District within 96 hours following the occurrence. Such report will include an explanation of the cause of the violation and the corrective action taken.

(Adopted December 19, 1984; Amended September 20, 1989)

8-11-504 Afterburner Temperature, Monitoring: Any person incinerating gases, vapors or gas entrained effluent pursuant to the provisions of Sections 8-11-302, 8-11-304, and, where applicable, 8-11-305 shall install, calibrate and maintain in good working order a device which continuously records the operating temperature of the incineration unit. (Adopted September 20, 1989)

8-11-600 MANUAL OF PROCEDURES

8-11-601 Analysis of Samples: Samples of volatile organic compounds as specified in Sections 8-11-301 and 303 and subsection 8-11-305.7 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 21 or 22.

(Adopted March 17, 1982; Amended December 19, 1984)

8-11-602 Determination of Emissions: Emissions of volatile organic compounds as specified in Sections 8-11-302 and 304 and subsection 8-11-305.7 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. When either EPA Method 25 or 25A is used, control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule.

(Adopted March 17, 1982; Amended December 19, 1984; June 15, 1994)

8-11-603 Deleted October 6, 1993

**REGULATION 8
ORGANIC COMPOUNDS
RULE 12
PAPER, FABRIC AND FILM COATING**

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REGULATION 8
ORGANIC COMPOUNDS
RULE 12
PAPER, FABRIC AND FILM COATING

(Adopted January 17, 1979)

8-12-100 GENERAL

8-12-101 Description: The purpose of this Rule is to limit emissions of volatile organic compounds (VOC) from the application of coatings and adhesives to paper, fabric or films. Any operation which is determined to be exempt from the provisions of this Rule shall be subject to the provisions of Rule 4, if not already subject to another rule of Regulation 8. (Amended June 18, 1986; June 21, 1989)

8-12-110 Exemptions: This Rule shall not apply to the following:

110.1 Any coating line which emits less than 6.5 kg (14.3 pounds) per day.

110.2 Deleted October 6, 1993

110.3 Operations manufacturing converted flexible packaging materials for packaging of food or health care products for human or animal consumption. Such line is subject to Rule 20 of this Regulation unless exempted by that rule.

110.4 Deleted June 21, 1989

110.5 Any coating line where printing or decorative design is applied on the same line. Such line is subject to Rule 20 of this Regulation unless exempted by that rule.

(Amended July 16, 1980; June 18, 1986; June 21, 1989; October 6, 1993)

8-12-200 DEFINITIONS

8-12-201 Approved Emission Control System: A system for reducing emissions of VOC to the atmosphere, consisting of a control device and a collection system, which meets the requirements of Regulation 2, Rule 1, and which satisfies the following conditions:

201.1 The control device shall operate at the efficiency required to meet the standards set forth in Section 301 at all times during normal operation of the equipment being controlled.

201.2 The collection system shall vent all drying oven exhaust to the control device.

201.3 The collection system shall have one or more inlets for collection of fugitive emissions.

201.4 The collection system shall be designed and operated in accordance with good engineering practice for maximum collection of fugitive emissions.

(Adopted June 18, 1986; Amended October 6, 1993)

8-12-202 Coating Line: All operations involved in the application, curing and/or drying of paper, fabric and film coatings or adhesives, which are applied uniformly across the substrate.

(Renumbered June 18, 1986; Amended June 21, 1989)

8-12-203 Converted Flexible Packaging Materials: Any paper, plastic or foil substrate, or any combination of those materials, which is coated, waxed, laminated, printed or otherwise treated for fabrication into bags, pouches or other preformed flexible packages. (Renumbered June 18, 1986)

8-12-204 Fabric Coating: Any decorative or protective coating or reinforcing material applied on or impregnated into textile fabric or vinyl coated textile fabric or vinyl sheets.

(Renumbered June 18, 1986)

- 8-12-205 Film Coating:** Any coating applied in a web coating process on any film substrate other than paper or fabric, including but not limited to typewriter ribbons, photographic film, magnetic tape and metal foil gift wrap. (Renumbered June 18, 1986)
- 8-12-206 Paper Coating:** Any coating applied on or impregnated into paper, including but not limited to adhesive tapes and labels, book covers, post cards, office copier paper, drafting paper and pressure sensitive tape. (Renumbered June 18, 1986)
- 8-12-207 Liquid Leak:** A leak of or greater than four drops per minute.
(Adopted June 21, 1989)
- 8-12-208 Volatile Organic Compounds:** Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.
- 208.1 For purposes of calculating VOC content of a coating, any water or the following non-precursor organic compounds shall not be considered to be part of the coating:
- methylene chloride
 - 1,1,1 trichloroethane
 - 1,1,2-trichlorotrifluoroethane (CFC-113)
 - trichlorofluoromethane (CFC-11)
 - dichlorodifluoromethane (CFC-12)
 - dichlorotetrafluoroethane (CFC-114)
 - chloropentafluoroethane (CFC-115)
 - chlorodifluoromethane (HCFC-22)
 - trifluoromethane (HFC-23)
 - acetone
 - parachlorobenzotrifluoride (PCBTF)
 - cyclic, branched or linear, completely methylated siloxanes (VMS)
- (Adopted June 21, 1989, Amended December 20, 1995)
- 8-12-209 Adhesive:** Any substance applied for the primary purpose of bonding surfaces together. (Adopted June 21, 1989)
- 8-12-210 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 8-12-301.2. (Adopted June 15, 1994)
- 8-12-300 STANDARDS**
- 8-12-301 Limitations, Coating Lines:** A person subject to the requirements of this Rule shall satisfy one of the following conditions:
- 301.1 Low-Solvent Coating or Adhesive - A person using low-solvent coatings or adhesives to comply with this Rule shall use a coating or adhesive with a VOC content of less than 265 grams per liter of coating applied (2.2 pounds VOC per gallon), excluding water.
- 301.2 Approved Emission Control System - A person using an approved emission control system as defined in this Rule shall collect and reduce VOC emissions to less than 120 grams per liter of coating applied (1.0 pounds VOC per gallon), excluding water.
(Amended June 18, 1986; June 21, 1989)
- 8-12-302 Storage and Mixing Operations:** A person shall not allow any liquid leaks from containers storing organic solvents or from tanks for mixing coatings to be used on any paper, fabric or film coating line. All such containers and tanks shall be covered at all times except when material is being added or removed, when the tank or container is being cleaned, or when the container is empty.
- 8-12-303 Deleted September 20, 1989**
- 8-12-304 Compliance Statement Requirement:** The manufacturer of all coatings and adhesives which are sold for use in paper, fabric and film coating within the District shall include a designation of VOC (as defined in Section 8-12-209) expressed in grams per liter or pounds per gallon on data sheets. (Adopted June 21, 1989)

- 8-12-305 Surface Preparation and Cleanup Solvent:** The requirements of this Section shall apply to any person using cleanup solvent:
- 305.1 A person shall not use open containers for the storage or disposal of cloth or paper impregnated with organic compounds that is used for surface preparation, cleanup or coating removal.
 - 305.2 A person shall not store spent or fresh organic compounds to be used for surface preparation, cleanup or coating removal in open containers.
- (Adopted June 21, 1989)

8-12-500 MONITORING AND RECORDS

- 8-12-501 Coating Records:** Any person subject to Section 8-12-301:
- 501.1 Maintain a current list of coatings or adhesives in use which provides all of the data necessary to evaluate compliance.
 - 501.2 Record on a daily basis the type and amount of each coating or adhesive used.
 - 501.3 Record on a daily basis approved emission control key system operating parameters, as defined in Section 8-12-210, when air pollution abatement equipment is used to comply with the requirements of Section 301.2.
 - 501.4 Records shall be retained and available for inspection by the APCO for the previous 24-month period.
- (Adopted June 18, 1986; Amended June 21, 1989; June 15, 1994)

8-12-502 Deleted September 20, 1989

8-12-600 MANUAL OF PROCEDURES

8-12-601 Analysis of Samples: Samples of volatile organic compounds as specified in subsection 8-12-301.1 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Methods 21 or 22. (Adopted March 17, 1982, Amended June 18, 1986)

8-12-602 Determination of Emissions: Emissions of volatile organic compounds as specified in subsections 8-12-110.1, 301.2 or 303.7 shall be measured as prescribed any of the following methods: 1) BAAQMD Manual of Procedures, Volume IV, ST-7, 2) EPA Method 25 or 25A. When either EPA Method 25 or 25A is used, control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule.

(Adopted March 17, 1982; Amended June 18, 1986; June 15, 1994)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 13
LIGHT AND MEDIUM DUTY MOTOR VEHICLE ASSEMBLY PLANTS**

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REGULATION 8
ORGANIC COMPOUNDS
RULE 13
LIGHT AND MEDIUM DUTY MOTOR VEHICLE ASSEMBLY PLANTS

(Adopted January 24, 1979)

8-13-100 GENERAL

8-13-101 Description: The purpose of this Rule is to limit emissions of volatile organic compounds (VOC) from operations at light- and medium-duty motor vehicle assembly plants.

8-13-110 Deleted September 20, 1989

8-13-111 Deleted September 20, 1989

8-13-200 DEFINITIONS

8-13-201 Coating Line: That portion of a motor vehicle assembly plant where surface coatings are applied, dried and/or cured on such vehicles or vehicle components.

(Amended September 20, 1989)

8-13-202 Electrophoretic Primer: Any primer applied by dipping the component in a coating bath with an electrical potential difference between the component and the bath.

8-13-203 Light- and Medium-Duty Motor Vehicles: All passenger cars, light-duty trucks and medium-duty vehicles as defined in Section 1900, Title 13, California Code of Regulations.

(Amended September 20, 1989)

8-13-204 Primer: All coatings under the topcoat.

8-13-205 Primer Surfacer: Any primer coating applied over an electrophoretic primer for the primary purpose of establishing film build.

(Amended September 20, 1989)

8-13-206 Spray Primer: Any primer, including sealers and adhesives, except primer surfacer.

(Amended September 20, 1989)

8-13-207 Topcoat: The final coating or series of coatings applied for the purpose of establishing the final color and/or protective surface, including ground coat, basecoat/clearcoat systems and paint sealer materials.

(Amended September 20, 1989)

8-13-208 Deleted September 20, 1989

8-13-209 Transfer Efficiency: The ratio of coating solids applied on the object being coated to the total volume of coating solids sprayed in the operation, expressed as a percentage as demonstrated pursuant to Section 8-13-603.

(Adopted November 17, 1982; Amended September 20, 1989)

8-13-210 Volatile Organic Compound: Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.

210.1 For purposes of calculating VOC content of a coating, any water or any of the following non-precursor organic compounds shall not be considered to be part of the coating:

methylene chloride

1,1,1 trichloroethane

trichlorotrifluoroethane (CFC-113)

trichlorofluoromethane (CFC-11)

dichlorodifluoromethane (CFC-12)

dichlorotetrafluoroethane (CFC-114)

chloropentafluoroethane (CFC-115)

acetone

parachlorobenzotrifluoride (PCBTF)

cyclic, branched or linear, completely methylated siloxanes (VMS)

(Adopted September 20, 1989, Amended December 20, 1995)

- 8-13-211 Final Repair Coat:** Any incidental coating applied to a fully assembled vehicle or vehicle part subsequent to the overall vehicle or vehicle part coating for the purpose of repairing minor imperfections or mechanical damage incurred prior to intended use.
(Adopted September 20, 1989; Amended June 15, 1994)
- 8-13-212 Flexible Parts Coatings:** Any coating intended for use on a part or product designed to withstand significant deformation without apparent damage, such as flexible automobile bumpers.
(Adopted September 20, 1989)
- 8-13-213 Flow Control Material:** Solvent added to the electrophoretic primer coating tank for the purpose of stabilizing flow of the tank mixture.
(Adopted September 20, 1989)
- 8-13-214 Off-Line Automotive Coatings:** Incidental coating of automobile components which does not occur on the vehicle body coating line(s).
(Adopted September 20, 1989)
- 8-13-215 Key System Operating Parameter:** An air pollution abatement equipment 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 Sections 8-13-306, 307, and 308.
(Adopted June 15, 1994)

8-13-300 STANDARDS

8-13-301 Deleted September 20, 1989

- 8-13-302 Final Limits, Topcoat, Spray Primer, Primer Surfacer:** For each operation as defined pursuant to Section 8-13-603, a person shall not discharge into the atmosphere VOC emissions in excess of:
- 302.1 1.80 kilograms of VOC per liter (15.0 lbs/gal) of applied coating solids from each spray primer operation.
 - 302.2 1.80 kilograms of VOC per liter (15.0 lbs/gal) of applied coating solids from each primer surfacer operation.
 - 302.3 1.80 kilograms of VOC per liter (15.0 lbs/gal) of applied coating solids from each topcoat operation.
(Amended September 20, 1989)

8-13-303 Final Repair Coat Limitation: A person shall not apply on any light- or medium-duty vehicle coating line any final repair coat with a VOC content in excess of 580 grams per liter of coating applied, excluding water (4.8 lbs/gal), on a daily weighted average basis.
(Amended September 20, 1989; October 6, 1993)

8-13-304 Deleted September 20, 1989

8-13-305 Deleted September 20, 1989

8-13-306 Limits, Electrophoretic Primer: A person shall not apply to any part or product subject to this Rule any electrophoretic primer which has a VOC content in excess of 145 grams per liter (1.2 lbs/gal) of coating applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level by use of an air pollution abatement device with an abatement device efficiency of at least 90% that meets the requirements of Regulation 2, Rule 1.

(Adopted September 20, 1989; Amended October 6, 1993)

8-13-307 Limits, Flexible Parts Coatings: A person shall not apply to any flexible part or product subject to this Rule any coating which has a VOC content in excess of the following limits expressed as grams of VOC per liter (lbs VOC per gal) of coating applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level by use of an air pollution abatement device with an abatement device efficiency of at least 90% that meets the requirements of Regulation 2, Rule 1:

- 307.1 flexible primer 490 grams/liter (4.1 lbs/gal)
- 307.2 color topcoat 450 grams/liter (3.8 lbs/gal)
- 307.3 basecoat/clearcoat 540 grams/liter (4.5 lbs/gal)
(combined system)

(Adopted September 20, 1989; Amended October 6, 1993)

8-13-308 Limits, Off-Line Coatings: A person shall not apply to any part or product subject to this Rule any off-line coating which has a VOC content in excess of 340 grams per liter (2.8 lbs/gal) of coating applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level by use of an air pollution abatement

device with an abatement device efficiency of at least 90% that meets the requirements of Regulation 2, Rule 1.

(Adopted September 20, 1989; Amended October 6, 1993)

8-13-309 Surface Preparation and Cleanup Solvent: The requirements of this Section shall apply to any person using solvent for surface preparation and cleanup.

309.1 A person shall use closed containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.

309.2 A person shall store fresh or spent solvent in closed containers.

309.3 A person shall not use organic compounds for the cleanup of spray equipment, including paint lines, unless equipment for collecting the organic compounds and minimizing their evaporation to the atmosphere is used.

(Adopted September 20, 1989)

8-13-400 ADMINISTRATIVE REQUIREMENTS

8-13-401 Deleted November 17, 1982

8-13-402 Deleted September 20, 1989

8-13-403 Deleted September 20, 1989

8-13-404 Deleted September 20, 1989

8-13-405 Deleted September 20, 1989

8-13-406 Compliance Verification: Any person subject to the provisions of Section 8-13-302 shall submit to the APCO for approval an initial Compliance Verification for topcoat applications on or before April 1, 1990, and a second Compliance Verification for all other coating applications on or before October 1, 1990. Subsequent Compliance Verifications shall be submitted to the APCO for approval on or before April 1 every year thereafter. A new Compliance Verification must be submitted within 180 days of a significant modification to coatings or application equipment. A Compliance Verification shall include the following elements:

406.1 Amount of each coating used.

406.2 VOC content of each coating used in grams per liter or pounds per gallon.

406.3 Percent solids by volume of each coating used.

406.4 Transfer efficiency for the application of each coating used.

406.5 Calculations based on the above elements which verify compliance with the applicable standard.

(Adopted September 20, 1989)

8-13-500 MONITORING AND RECORDS

8-13-501 Usage Records, Electrophoretic Primer: Any person using electrophoretic primer shall maintain records of all materials added to primer coating tank, including amount added, VOC content of material added and date added. These records shall be available for inspection for a period of two years. VOC content of electrophoretic primer shall be calculated as a monthly average, based on all materials added and their respective VOC contents. Flow-control material added during downtime periods of seven or more consecutive days for purposes of stabilizing the tank mixture may be excluded from the VOC content calculation.

(Adopted November 17, 1982; Amended September 20, 1989)

8-13-502 Deleted September 20, 1989

8-13-503 Usage Records, Coatings: Any person subject to Sections 8-13-302, 8-13-303, 8-13-307, 8-13-308, and 8-13-309 shall comply with the following requirements:

503.1 The person shall maintain and have available during an inspection, a current list of coatings in use which provides all of the coating data necessary to evaluate compliance including the following information, as applicable:

a. Coating, catalyst and reducer used

b. Mix ratio of components used

c. VOC content of coating as applied

503.2 A person shall have monthly records that provide the following information on a daily basis, as applicable:

a. Type of coating used

- b. Mix ratio of materials added to coating
- c. Quantity of each coating applied
- d. VOC content of each coating as applied

503.3 The person shall maintain records on a monthly basis showing the type and amount of solvent used for cleanup and surface preparation.

503.4 Such records shall be retained and available for inspection by the APCO for the previous 24-month period. (Adopted September 20, 1989)

8-13-504 Air Pollution Abatement Equipment, Recordkeeping Requirements: Any person operating air pollution abatement equipment to comply with Sections 8-13-306, 307 and 308, in addition to Section 8-13-503 shall record an applicable key system operating parameter(s) on a daily basis. (Adopted June 15, 1994)

8-13-600 MANUAL OF PROCEDURES

8-13-601 Analysis of Samples: Samples of volatile organic compounds as specified in Section 8-13-300 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 21 or 22. (Adopted March 17, 1982)

8-13-602 Determination of Emissions: Emissions of volatile organic compounds as specified in Sections 8-13-306, 8-13-307, and 8-13-308 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. When either EPA Method 25, or 25A is used, control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule.

(Adopted March 17, 1982; Amended September 20, 1989; June 15, 1994)

8-13-603 Determination of Compliance, including Transfer Efficiency: Determination of compliance, including transfer efficiency, to verify compliance with Section 8-13-302 and for reporting under subsection 8-13-406.4 shall be as prescribed in EPA Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations, dated December 1988.

(Adopted September 20, 1989)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 14
SURFACE PREPARATION AND COATING OF LARGE APPLIANCES AND
METAL FURNITURE**

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REGULATION 8
ORGANIC COMPOUNDS
RULE 14
SURFACE PREPARATION AND COATING OF LARGE APPLIANCES AND
METAL FURNITURE

(Adopted March 7, 1979)

8-14-100 GENERAL

8-14-101 Description: The purpose of this Rule is to limit emissions of volatile organic compounds (VOC) from the surface preparation and coating of large appliances and metal furniture. Any operation which is determined to be exempt from the provisions of this Rule shall be subject to the provisions of Rule 4, if not already subject to another rule of Regulation 8.

(Amended 12/19/84; 6/7/89; 10/16/02)

8-14-110 Exemption, Low Usage Coatings: The requirements of Sections 8-14-301 and 302 shall not apply to the use of any coating used in volumes less than 75.7 liters (20 gal) in any one calendar year, provided the requirements in Section 8-14-402 are satisfied. A person shall be limited to 208.1 liters (55 gallons) total coating per year under this exemption.

(Amended 12/19/84; 1/7/87; 6/7/89; 6/1/94)

8-14-111 Exemption Touch-up: The provisions of this Rule shall not apply to touch-up operations.

(Amended 3/3/82; 1/7/87)

8-14-112 Exemption, Adhesives: The provisions of this Rule shall not apply to the application of adhesives.

(Adopted January 7, 1987)

8-14-113 Exemption, Aerosol Cans: The provisions of this Rule shall not apply to coating operations employing hand-held aerosol cans. Such coating is subject to the provisions of Regulation 8, Rule 49 or to the California Air Resources Board aerosol coating product regulation found in Title 17 of the California Code of Regulations, beginning at Section 94520.

(Adopted 1/7/87; Amended 6/20/90; 10/16/02)

8-14-114 Exemption Powder Coatings: The requirements of Sections 8-14-302 and 310 shall not apply to the use of any powder coating provided the emission of VOC to the atmosphere does not exceed that which is equivalent to the use of coatings which comply with those limits.

(Adopted 1/7/87; Amended 4/1/87; 6/7/89)

8-14-115 Deleted April 1, 1987

8-14-116 Deleted April 1, 1987

8-14-117 Deleted April 1, 1987

8-14-118 Deleted April 1, 1987

8-14-119 Deleted April 1, 1987

8-14-120 Limited Exemption, Specific Surface Preparation and Cleaning Operations: The surface preparation standards in Section 8-14-321 shall not apply to (i) surface preparation of electrical and electronic components, (ii) stripping of cured inks, coatings and adhesives or cleaning of resin, coating, ink and adhesive mixing, molding and application equipment, or (iii) surface preparation associated with research and development operations; performance testing to determine coating, adhesive or ink performance; or testing for quality control or quality assurance purposes.

(Adopted October 16, 2002)

8-14-200 DEFINITIONS

8-14-201 Air-Dried Coatings: Any coating which is not heated above 90°C (194°F) for the purpose of curing or drying.

- 8-14-202 Baked Coatings:** Any coating which is cured or dried in an oven where the oven air temperature exceeds 90°C (194°F).
(Amended December 19, 1984)
- 8-14-203 Deleted June 7, 1989**
- 8-14-204 Large Appliances:** Doors, cases, lids, panels and interior support parts of residential or commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners and other similar products.
- 8-14-205 Metal Furniture:** Includes tables, chairs, waste baskets, beds, dishes, lockers, benches, shelving, file cabinets, room dividers, drapery hardware, window blinds and shades or other similar products or parts used to fabricate such products.
(Amended January 7, 1987)
- 8-14-206 Volatile Organic Compound:** Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.
- 206.1 For purposes of calculating VOC content of a coating, any water or any of the following non-precursor organic compounds:
acetone
methyl acetate
parachlorobenzotrifluoride (PCBTF)
cyclic, branched or linear, completely methylated siloxanes (VMS)
shall not be considered to be part of the coating.
- 206.2 For the purposes of calculating the VOC content of a surface preparation or cleaning solvent, any water or the non-precursor organic compounds listed in subsection 8-19-206.1, above, shall be considered part of the volume of solvent but shall not be considered part of the VOC content of the solvent.
(Amended 1/7/87; 6/7/89; 12/20/95; 10/16/02)
- 8-14-207 Touch-up:** That portion of the surface preparation or coating operation which is incidental to the main coating process but necessary to cover minor imperfections or mechanical damage incurred prior to intended use.
(Amended 12/19/84; 1/7/87; 10/16/02)
- 8-14-208 Transfer Efficiency:** The ratio of the amount of coating solids adhering to the object being coated to the total amount of coating solids used in the application process, expressed as a percentage.
(Amended 3/3/82; 1/7/87)
- 8-14-209 Pretreatment Wash Primer:** Any coating which contains a minimum of 0.5% acid by weight, is necessary to provide surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.
(Adopted 1/7/87; Amended 6/7/89)
- 8-14-210 Powder Coating:** Any coating applied as a dry (without solvent or other carrier), finely divided solid which, when melted and fused, adheres to the substrate as a paint film.
(Adopted January 7, 1987)
- 8-14-211 Adhesive:** Any coating which is applied for the purpose of bonding surfaces together.
(Adopted January 7, 1987)
- 8-14-212 Solar Absorbant Coating:** Any coating which has as its primary purpose the absorption of solar radiation.
(Adopted January 7, 1987)
- 8-14-213 Heat-Resistant Coating:** Any coating which during normal use must withstand temperatures of at least 204°C (400°F).
(Adopted January 7, 1987)
- 8-14-215 Metallic Topcoats:** Any coating which contains more than 5 g/l (0.042 lb/gal) of metal particles, as identified on a technical or material safety data sheet, as applied, where such metal particles are visible in the dried film.
(Adopted 1/7/87; Amended 6/1/94)
- 8-14-216 High-Gloss Coating:** Any coating which achieves at least 85% reflectance on a 60° meter when tested by ASTM Method D-523-1989.
(Adopted 1/7/87; Amended 6/7/89; 10/6/93)
- 8-14-217 Deleted June 7, 1989**

- 8-14-218 High-Volume, Low-Pressure (HVLP) Spray:** Equipment used to apply coating by means of a gun which is designed to be operated and which is operated between 0.1 and 10.0 psig air atomizing pressure measured dynamically at the center of the air cap and at the air horns.
(Adopted 6/7/89; Amended 10/6/93; 10/16/02)
- 8-14-219 Electrostatic Application:** The application of charged atomized paint droplets which are deposited by electrostatic attraction.
(Adopted June 7, 1989)
- 8-14-220 Key System Operating Parameter:** An air pollution abatement equipment 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 Sections 8-14-302, and 310.
(Adopted June 1, 1994)
- 8-14-221 Approved Emission Control System:** A system for reducing emissions to the atmosphere, consisting of an abatement device and a collection system, which achieves the abatement efficiency specified in the applicable standards at all times during the operation and meets the requirements of Regulation 2, Rule 1.
(Adopted October 16, 2002)
- 8-14-222 Surface Preparation:** The cleaning of large appliances and metal furniture prior to coating, further treatment, sale, or intended use. Surface preparation of large appliances and metal furniture subject to and in compliance with Regulation 8, Rule 16: Solvent Cleaning Operations, is not subject to the surface preparation standards in this Rule.
(Adopted October 16, 2002)
- 8-14-223 Electrical and Electronic Components:** Components and assemblies of components that generate, convert, transmit, or modify electrical energy. Electrical and electronic components include, but are not limited to, wires, windings, stators, rotors, magnets, contacts, relays, printed circuit boards, printed wire assemblies, wiring boards, integrated circuits, resistors, capacitors and transistors. Cabinets in which electrical and electronic components are housed are not considered electrical and electronic components.
(Adopted October 16, 2002)
- 8-14-300 STANDARDS**
- 8-14-301 Deleted June 7, 1989**
- 8-14-302 Limits:** A person shall not apply to any large appliance or metal furniture part or product any coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter of coating applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 85% that meets the requirements of Regulation 2, Rule 1.
- | | |
|--------------------------|-------------------------------|
| 302.1 Baked Coatings | 275 grams/liter (2.3 lbs/gal) |
| 302.2 Air-Dried Coatings | 340 grams/liter (2.8 lbs/gal) |
- (Amended 3/3/82; 12/19/84; 1/7/87; 6/7/89; 10/6/93)*
- 8-14-303 Deleted June 7, 1989**
- 8-14-304 Transfer Efficiency:** All persons subject to this Rule shall use a method of coating application with a transfer efficiency of 65% or greater. Application by properly operated electrostatic application or HVLP spray, flow coat, roller coat, dip coat including electrodeposition and brush coat will serve to comply with this section.
(Amended 3/3/82; 12/19/84; 6/7/89)
- 8-14-305 Deleted October 6, 1993**
- 8-14-306 Deleted June 7, 1989**
- 8-14-307 Deleted June 7, 1989**
- 8-14-308 Prohibition of Specification:** No person shall require for use or specify the application of a coating or solvent subject to this Rule if such use or application results in a violation of any of the provisions of this Rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating or solvent is to be applied to any large appliance for metal furniture product at any physical location within the District.

(Adopted 1/7/87; Amended 6/7/89; 10/16/02)

8-14-309 Compliance Statement Requirement: The manufacturer of coatings or solvents subject to this Rule shall include a designation of VOC as defined in Section 8-14-206.

(Adopted 6/7/87; Amended 4/1/87; 6/7/89; 10/16/02)

8-14-310 Specialty Coating Limitations: A person shall not apply to any large appliance or metal furniture any specialty coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter (lb VOC per gal) of coating applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 85% that meets the requirements of Regulation 2, Rule 1.

		Baked	Air-Dried
310.1	High-Gloss	360 (3.0)	420 (3.5)
310.2	Heat-Resistant	360 (3.0)	420 (3.5)
310.3	Metallic Topcoat	360 (3.0)	420 (3.5)
310.4	Pretreatment Wash Primer	420 (3.5)	420 (3.5)
310.5	Solar Absorbant	360 (3.0)	420 (3.5)

(Adopted 4/1/87; Amended 6/7/89; 10/16/93)

8-14-320 Solvent Evaporative Loss Minimization: Unless emissions to the atmosphere are controlled by an approved emission control system with an overall abatement efficiency of at least 85%, any person using organic solvent for surface preparation or cleanup:

- 320.1 Shall use closed containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.
- 320.2 Shall close containers of fresh or spent solvent, coating or catalyst when not in use.
- 320.3 Shall not use volatile organic compounds for the cleanup of spray equipment including paint lines with a VOC content in excess of 50 g/l (0.42 lbs/gal) unless the VOC can be pressurized through spray equipment with the atomizing air off and collected and stored in a closed container until recycled or properly disposed of offsite.

(Adopted 6/7/89; Amended 10/16/02)

8-14-321 Surface Preparation Standards: Effective June 1, 2003, no person shall use a surface preparation solvent with a VOC content that exceeds 50 g/l (0.42 lbs/gal) for surface preparation of any metal part or product unless emissions to the atmosphere are controlled to an equivalent level by an approved emission control system with an abatement device efficiency of at least 85 percent that meets the requirements of Regulation 2, Rule 1.

(Adopted October 16, 2002)

8-14-400 ADMINISTRATIVE REQUIREMENTS

8-14-401 Deleted December 19, 1984

8-14-402 Low Usage Coating Petition: Any person seeking to satisfy the conditions of Section 8-14-110 shall comply with the following requirements:

- 402.1 The user or specifier shall petition the APCO in writing that substitute complying coatings are not available.
- 402.2 If the APCO grants written approval, such petition will be repeated on an annual basis.
- 402.3 If the APCO grants written approval, such approval shall contain volume and VOC limit conditions.
- 402.4 Records shall be maintained as in Section 8-14-501.

(Adopted 3/3/82; Amended 12/19/84; 1/7/87; 6/7/89; 10/6/93)

8-14-403 Deleted June 7, 1989

8-14-500 MONITORING AND RECORDS

8-14-501 Coating Records: Any person using coatings or solvents subject to this Rule shall:

- 501.1 Maintain a current list of coatings in use which provides all of the coating data necessary to evaluate compliance, including the following information, as applicable:
 - a. coating, catalyst and reducer used
 - b. quantity of each coating applied
 - c. VOC content of coating as applied
 - d. VOC content of surface preparation and clean up solvent, as applied.
- 501.2 Record on a daily basis the following information, as applicable:
 - a. coating and mix ratio of components in the coating used
 - b. quantity of each coating applied
 - c. identification of specialty coating limit category
 - d. oven temperature
- 501.3 Record on a monthly basis the type and amount of surface preparation and clean up solvent unless more frequently specified in permit conditions imposed per Regulation 2-1-403.
- 501.4 Retain and have the records available for inspection by the APCO for two years.

(Adopted 12/19/84; Amended 1/7/87; 4/1/87; 6/7/89; 6/1/94; 10/16/02)

8-14-502 Deleted October 6, 1993

8-14-503 Air Pollution Abatement Equipment, Recordkeeping Requirements: Any person operating air pollution abatement equipment to comply with Sections 8-14-302, 310, 320 and/or 321, in addition to Section 8-14-501 shall record key system operating parameters on a daily basis.

(Adopted 6/1/94; Amended 10/16/02)

8-14-600 MANUAL OF PROCEDURES

8-14-601 Analysis of Samples: Samples of volatile organic compounds as specified in Sections 8-14-302 and 310 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 21 or 22.

(Adopted 3/17/82; Amended 12/19/84; 1/7/87; 4/1/87; 6/7/89)

8-14-602 Determination of Emissions: Emissions of volatile organic compounds as specified in Sections 8-14-302, 310, 320 and/or 321 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. When either EPA Method 25 or 25A is used, control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered in violation if the VOC emissions measured by any one of the referenced test methods exceed the standards of this rule.

(Adopted 3/17/82; Amended 12/19/84; 1/7/87; 6/7/89; 6/1/94; 10/16/02)

8-14-603 Determination of Acid Content: Measurement of acid content as specified in Section 8-14-209 shall be determined in accordance with ASTM Method D-1613-96.

(Adopted 10/6/93; Amended 10/16/02)

8-14-604 Analysis of Solvent Samples: Samples of volatile organic compounds as specified in Section 8-14-320 or 321 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 31.

(Adopted October 16, 2002)

8-14-605 Analysis of Exempt Compounds: Samples of PCBTF, VMS, and methyl acetate shall be analyzed by the Manual of Procedures, Volume III, Method 41, 43 and by ASTM Method D-6133-00, respectively.

(Adopted October 16, 2002)

REGULATION 8
ORGANIC COMPOUNDS
RULE 15
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REGULATION 8
ORGANIC COMPOUNDS
RULE 15
EMULSIFIED AND LIQUID ASPHALTS
(Adopted March 21, 1979)

8-15-100 GENERAL

- 8-15-101 Description: The purpose of this Rule is to limit the emissions of volatile organic compounds caused by the use of Emulsified and Liquid asphalt in paving materials and paving and maintenance operations. (Amended September 16, 1987)
- 8-15-110 Deleted September 16, 1987
- 8-15-111 Deleted September 16, 1987
- 8-15-112 Exemptions, Cool Weather: The requirements of Section 8-15-302 (medium-cure liquid asphalt) shall not apply when the National Weather Service forecasts that atmospheric temperature for the 24-hour period following application will not exceed 100C (500F). (Amended September 16, 1987)

8-15-200 DEFINITIONS

- 8-15-201 Asphalt: The dark brown to black cementitious material (solid or liquid) of which the main constituents are bitumens which occur naturally or as a residue of petroleum refining.
- 8-15-202 Liquid Asphalt: Any asphalt which has been liquified by blending with petroleum solvents. (Amended September 16, 1987)
- 8-15-203 Emulsified Asphalt: Any asphalt liquified with water containing an emulsifier.
- 8-15-204 Medium-cure Liquid Asphalt: A liquid asphalt which meets the standard specifications of ASTM Designation D2027. (Amended September 16, 1987)
- 8-15-205 Paving Material: A mixture consisting mainly of an asphalt and aggregate.
- 8-15-206 Paving and Maintenance Operations: All activities involved in the new construction and maintenance of roadways and parking areas.
- 8-15-207 Deleted September 16, 1987
- 8-15-208 Rapid-cure Liquid Asphalt: A liquid asphalt which meets the standard specifications of ASTM Designation D2028. (Amended September 16, 1987)
- 8-15-209 Slow-cure Liquid Asphalt (Road Oil): A liquid asphalt which meets the standard specifications of ASTM Designation D2026. For purposes of this Regulation, Road Oil and Slow-cure Liquid Asphalt shall be synonymous. (Amended September 16, 1987)

8-15-300 STANDARDS

- 8-15-301 Rapid-cure Liquid Asphalt: A person shall not use any rapid-cure liquid asphalt in paving material or in paving and maintenance operations. (Amended September 16, 1987)
- 8-15-302 Medium-cure Liquid Asphalt: A person shall not use, except as provided in Section 8-15-112, any medium-cure liquid asphalt in paving material or in paving and maintenance operations. (Amended September 16, 1987)
- 8-15-303 Emulsified Asphalt: A person shall not use any emulsified asphalt containing petroleum solvents in excess of 3% by volume in paving material or in paving and maintenance operations. (Amended September 16, 1987)

9/28/94

8-15-304 Slow-cure Liquid Asphalt (Road Oil): A person shall not use any slow-cure liquid asphalt which contains more than 0.5 percent by volume of petroleum solvents which boil at less than 260oC (500oF) as determined by ASTM Distillation Method D402 in paving material or in paving and maintenance operations.

(Adopted September 16, 1987)

8-15-305 Prohibition of Manufacture and Sale: No person shall manufacture, offer for sale or sell a liquid asphalt or emulsified asphalt product if such product is prohibited by any of the provisions of this rule. The prohibition of this section shall apply to the manufacture and sale of any liquid asphalt or emulsified asphalt product which will be applied at any physical location within the District.

(Adopted September 16, 1987)

8-15-306 Prohibition of Specification: No person shall require for use or specify the application of a liquid asphalt or emulsified asphalt product if such product is prohibited by any of the provisions of this rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any liquid asphalt or emulsified asphalt product is to be applied at any physical location within the District.

(Adopted September 16, 1987)

8-15-500 MONITORING AND RECORDS

8-15-501 Records: Any person who manufactures, sells, or offers for sale liquid asphalts and emulsified asphalts which contain solvents shall comply with the following requirements:

501.1 Maintain records showing the types and amounts of liquid asphalts and emulsified asphalts which contain solvents produced, sold, or applied, and the destination of these products.

501.2 Such records shall be retained and available for inspection by the APCO for the previous 24-month period.

(Adopted September 16, 1987; Amended June 1, 1994)

8-15-600 MANUAL OF PROCEDURES

8-15-601 Analysis of Liquid Asphalt Samples: Samples of volatile organic compounds as specified in Sections 8-15-301, 302 and 304 shall be analyzed in accordance with ASTM Distillation Method D402.

(Adopted September 16, 1987)

8-15-602 Analysis of Emulsified Asphalt Samples: Samples of volatile organic compounds as specified in Section 8-15-303 shall be analyzed in accordance with ASTM Distillation Method D244.

(Adopted September 16, 1987)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 16
SOLVENT CLEANING OPERATIONS**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 16
SOLVENT CLEANING OPERATIONS**

(Adopted March 7, 1979)

8-16-100 GENERAL

8-16-101 Description: The purpose of this Rule is to limit emissions from solvent cleaning operations as defined in Section 8-16-220. Any operation which is determined to be exempt from the provisions of this Rule shall be subject to the provisions of Rule 4, if not already subject to another Rule of Regulation 8.

(Amended 7/3/85; 8/2/89; 9/16/98)

8-16-110 Deleted, September 16, 1998

8-16-111 Exemption, Wipe Cleaning: The requirements of Section 8-16-301 through 304 of this Rule shall not apply to any solvent cleaning operation using only wipe cleaning. In addition to any VOC limitations in other Regulation 8 rules, wipe cleaning is subject to the requirements of Section 8-16-501.3, and may be subject to VOC limitations in other Regulation 8 rules.

(Amended 7/3/85; 9/16/98; 10/16/02)

8-16-112 Exemption, Semiconductor Solvent Cleaners: The requirements of this Rule shall not apply to solvent sinks with less than 10 gallons of capacity, enclosed solvent cleaners or solvent vapor dryers at semiconductor manufacturing operations, which are subject to the requirements of Regulation 8, Rule 30.

(Adopted 7/3/85; Amended 3/16/88; 8/2/89; 9/16/98)

8-16-113 Exemption, Aerospace Stripping Operations: The requirements of this Rule shall not apply to stripping operations in aerospace assembly and component coating operations, which are subject to the requirements of Regulation 8, Rule 29.

(Adopted July 3, 1985)

8-16-114 Exemption, Emulsion or Solution Cleaners: The requirements of this rule shall not apply to solvent cleaning operations which employ only emulsion or solution cleaners, each containing less than one percent of volatile organic compounds by weight.

(Adopted 3/16/88; Amended 8/2/89; 9/16/98; 10/16/02)

8-16-115 Limited Exemption, Small, Unheated Solvent Cleaning Equipment: Except for the requirements in subsections 8-16-303.1, 303.3.1, and 303.3.2, the requirements of this Rule shall not apply to equipment or operations that use unheated solvent and that contain less than 3.785 liters (1 gal) of solvent, including volume in any remote reservoir, or have an evaporative area of less than 929 cm² (144 in² or 1 ft²).

(Adopted 3/16/88; Amended 8/2/89; 9/16/98; 10/16/02)

8-16-116 Exemption, Vapor Phase Solder Reflow Operations: The requirements of this Rule shall not apply to vapor phase solder reflow operations in printed circuit board manufacture and assembly operations, which are subject to the requirements of Regulation 8, Rule 4.

(Adopted March 16, 1988)

8-16-117 Exemption, Dry Cleaning Operations: The requirements of this Rule shall not apply to dry cleaning operations subject to Regulation 8, Rule 17 or Regulation 11, Rule 16.

(Adopted 8/2/89; Amended 9/16/98)

8-16-118 Limited Exemption, Compounds with Low Volatility: Solvent cleaning operations utilizing a compound with low volatility shall not be subject to the following requirements:

118.1 Conveyorized Solvent Cleaners: Subsections 302.3, and 302.5.

118.2 Cold Cleaners: Subsection 303.4.

(Adopted 8/2/89; Amended 10/16/02)

8-16-119 Limited Exemption, Sealed Chamber Solvent Cleaners: The requirements of subsections 302.1.6 and 302.3.2 shall not apply to the sealed chamber portion of conveyorized solvent cleaners.

(Adopted August 2, 1989)

8-16-120 Exemption, Stripping Operations: The requirements of this Rule shall not apply to stripping operations such as dry film stripping operations in printed circuit board manufacturing. These operations are subject to the requirements of Regulation 8, Rule 4. Tank type stripping operations in aerospace assembly and component coating operations are subject to the requirements of Regulation 8, Rule 29.

(Adopted September 16, 1998)

8-16-121 Limited Exemption, Single Cold Cleaner: Until June 1, 2003, the VOC content limitation in Section 8-16-303.5 for cleaning solutions used in cold cleaners does not apply to one cold cleaner per facility, provided that annual solvent loss from that cold cleaner does not exceed 20 gallons per year.

(Adopted 9/16/98; Amended 10/16/02)

8-16-122 Limited Exemption, Permitted Cold Cleaners: Until June 1, 2003, the VOC content limitation in Section 8-16-303.5 for cleaning solutions used in cold cleaners does not apply to any cold cleaner for which a District permit to operate has been obtained pursuant to Regulation 2, Rule 1.

(Adopted 9/16/98; Amended 10/16/02)

8-16-123 Limited Exemption, Specific Cleaning Operations: Effective June 1, 2003, Section 8-16-303.5 shall not apply to (i) the cleaning of aerospace components, electrical and electronic components, precision optics, medical devices, or cleaning of resin, coating, ink and adhesive mixing, molding and application equipment; or (ii) cleaning associated with research and development operations; performance testing to determine coating, adhesive or ink performance; or testing for quality control or quality assurance purposes.

(Adopted October 16, 2002)

8-16-124 Limited Exemption, Low VOC Cleaning Operations: The recordkeeping requirements of Section 8-16-501 shall not apply to any cold cleaners that comply with Section 8-16-303.5.1. However, they are subject to Section 8-16-502.

(Adopted October 16, 2002)

8-16-200 DEFINITIONS

8-16-201 Approved Emission Control Device: A device for reducing emissions of volatile organic compounds (VOC) to the atmosphere, consisting of a control device and a collection system, which meets the requirements of Regulation 2, Rule 1 and which satisfies the following conditions:

201.1 The control device shall achieve the control efficiency specified in the applicable standards section at all times during normal operation of the equipment being controlled.

201.2 The collection system shall have a ventilation rate of 15-20 m³/min per m² (49.2-65.6 ft³/min per ft²) of solvent cleaner opening unless necessary to meet OSHA requirements and have one or more inlets for collection of emissions or meet the requirements of Regulation 2, Rule 1.

201.3 The collection system shall be designed and operated in accordance with good engineering practice for maximum collection of emissions.

(Adopted 8/2/89; Amended 9/16/98)

8-16-202 Airless Solvent Cleaner: Any enclosed solvent cleaner that is automatically operated, seals at a differential pressure of 26 torr or less prior to the introduction of solvent vapor into the cleaning chamber, and maintains differential pressure under vacuum during all cleaning and drying cycles.

(Adopted September 16, 1998)

8-16-203 Airtight Solvent Cleaner: Any enclosed solvent cleaner that is automatically operated and seals at a differential pressure no greater than 0.5 psi during all cleaning and drying cycles.

(Adopted September 16, 1998)

8-16-204 Cold (Non-boiling) Cleaner: Any solvent cleaner excluding conveyorized solvent cleaners and vapor solvent cleaners, including, but not limited to, spray sinks, spray booths, spray gun washers and batch-loaded dip tanks.

(Amended 7/3/85; 8/2/89; 9/16/98)

- 8-16-205 Compounds with Low Volatility:** For the purpose of this rule, solvents with an initial boiling point (IBP) greater than 120°C (248°F) and where the initial boiling point exceeds the maximum operating temperature of a solvent cleaning operation by at least 100°C (180°F), shall be considered a low-volatile solvent.
(Adopted August 2, 1989)
- 8-16-206 Condenser Flow Switch:** A safety switch which shuts off sump heat if condenser water fails to circulate or rises above the designated operating temperature.
(Adopted July 3, 1985)
- 8-16-207 ConveyORIZED Solvent Cleaner:** Any continuously loaded, conveyORIZED cold or vapor solvent cleaner, including but not limited to gyro, vibra, monorail, cross-rod, mesh, belt and strip cleaners. Strip cleaners clean material by drawing the strip itself through the unit for cleaning prior to coating or other fabrication processes.
(Amended 3/16/88; 8/2/89)
- 8-16-208 Enclosed Solvent Cleaner:** A solvent cleaner consisting of sealed tanks and a drained spray chamber including, but not limited to, spray gun cleaners, closed loop processors, and spray processors.
(Adopted September 16, 1998)
- 8-16-209 Evaporative Area:**
- 209.1 Cold Cleaner:
 - 1.1 General: The surface area of the top of the solvent.
 - 1.2 Enclosed Reservoir: The surface area of the solvent sink or work area.
 - 209.2 Vapor Solvent Cleaner: The surface area of the top of the solvent vapor-air interface.
 - 209.3 ConveyORIZED Solvent Cleaner:
 - 3.1 Cold Cleaner: Definition in subsection 209.1.
 - 3.2 Vapor Solvent Cleaner: Definition in subsection 209.2.
- (Adopted August 2, 1989)*
- 8-16-210 Freeboard Chiller:**
- 210.1 Cold Cleaners: A condenser mounted in the freeboard area which provides a chilled air blanket above the solvent to reduce emissions.
 - 210.2 Vapor Solvent Cleaner: A secondary condenser mounted above the primary condenser which provides a chilled air blanket above the solvent vapor air-interface to reduce emissions.
 - 210.3 ConveyORIZED Solvent Cleaner:
 - 3.1 Cold Cleaner: Definition in subsection 210.1.
 - 3.2 Vapor Solvent Cleaner: Definition in subsection 210.2.
- (Adopted August 2, 1989)*
- 8-16-211 Freeboard Height:**
- 211.1 Cold Cleaner: The vertical distance from the top of the evaporative area to the top of the cold cleaner.
 - 211.2 Vapor Solvent Cleaner: The vertical distance from the evaporative area (solvent vapor-air interface) to the top of the solvent cleaner.
 - 211.3 ConveyORIZED Solvent Cleaner: The vertical distance from the top of the evaporative area to the bottom of the lowest opening in the solvent cleaner.
(Amended August 2, 1989)
- 8-16-212 Freeboard Ratio:** The freeboard height divided by the smaller of the length or width of the solvent cleaner evaporative area.
(Amended August 2, 1989)
- 8-16-213 Initial Boiling Point:** Boiling point of a solvent as defined by ASTM D-1078-93.
(Adopted 8/2/89; Amended 9/16/98)
- 8-16-214 Liquid Solvent Leak:** A liquid leak of 3 or more drops per minute.
(Adopted 8/2/89; Amended 10/16/02)
- 8-16-215 Makeup Solvent:** Makeup solvent is solvent added to the solvent cleaning operation less the amount of solvent collected from the solvent cleaning operation.
(Adopted 7/3/85; Amended 8/2/89; 9/16/98)
- 8-16-216 National Emission Standards for Hazardous Air Pollutants (NESHAP): Halogenated Solvent Cleaners:** Any solvent cleaner using any of the following six

halogenated solvents: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride and chloroform.

(Adopted September 16, 1998)

8-16-217 Remote Reservoir: A liquid solvent tank which is completely enclosed except for a solvent return opening no larger than 100 cm² which allows used solvent to drain into it from a separate solvent sink or work area and which is not accessible for soaking parts.

(Adopted 3/16/88; Amended 8/2/89; 9/16/98)

8-16-218 Sealed Chamber Solvent Cleaner: A conveyORIZED solvent cleaner in which all spraying and most vapor generating activity is fully contained inside the machine and completely isolated from the outside environment.

(Adopted August 2, 1989)

8-16-219 Solvent: Organic compounds which are used as diluents, thinners, dissolvers, viscosity reducers, cleaning agents or for other similar uses.

(Adopted August 2, 1989)

8-16-220 Solvent Cleaning Operations: For the purpose of this rule, a solvent cleaning operation is any process, including wipe cleaning, used to clean or dry metal and non-metal surfaces typically using a cold, vapor or conveyORIZED solvent cleaner.

(Adopted September 16, 1998)

8-16-221 Solvent Loss: All solvent emitted to atmosphere including, but not limited to, carry out, drag out, working and idling emissions.

(Adopted September 16, 1998)

8-16-222 Solvent Vapor Dryer: A vapor solvent cleaner in which solvents are volatilized to displace water in precision parts drying.

(Adopted September 16, 1998)

8-16-223 Spray Gun Cleaner: A solvent cleaner used to clean spray application equipment.

(Adopted September 16, 1998)

8-16-224 Spray Safety Switch: A safety switch which cuts off the pump of the spray applicator if the vapor level drops below a specified level.

(Adopted July 3, 1985)

8-16-225 Stripping: The removal of cured coatings, inks, adhesives or maskants. Examples include, but are not limited to wood furniture stripping, metal parts stripping and dry film stripper operations.

(Adopted September 16, 1998)

8-16-226 Vapor Concentration Exhaust Sensor: A sensor in the exhaust duct that causes the controller to shut down the unit based on the vapor concentration level registering in the duct.

(Adopted September 16, 1998)

8-16-227 Vapor Level Control Thermostat: A safety switch which turns off the sump heater if the thermostat senses the temperature rising above the designed operating level at the air-vapor interface.

(Adopted 7/3/85; Amended 3/16/88)

8-16-228 Vapor Solvent Cleaner: Any solvent cleaner that cleans through the condensation of hot solvent vapor on colder parts and boils liquid solvent producing solvent vapor that is used during the cleaning or drying cycle.

(Amended 8/2/89; 9/16/98)

8-16-229 Volatile Organic Compound (VOC): Any organic compound of carbon (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, processing, application, or drying of a solvent, or other material. The test methods specified in Section 8-16-602 shall be used to determine compliance with the VOC content standards in Section 8-16-303.5.1.

(Adopted 8/2/89; Amended 10/16/02)

8-16-230 Waste Solvent Residue: Sludge which may contain dirt, oil, metal parts, and/or other undesirable waste products concentrated after heat distillation of the waste solvent either in the solvent cleaner itself or after distillation in a separate still.

(Adopted 7/3/85; Amended 8/2/89)

8-16-231 Water Flow Loss Sensor: A sensor that indicates loss of incoming water flow to the condenser and stops processing to solvent vapor dryers. It is equivalent to a condenser flow switch.

(Adopted September 16, 1998)

8-16-232 Wipe Cleaning: That method of cleaning which utilizes a material such as a rag wetted with a solvent, coupled with a physical rubbing process to remove contaminants from surfaces.

(Amended July 3, 1985)

8-16-233 Repair and Maintenance Cleaning: Cleaning of a part or object that occurs after its original manufacture or after its intended use and that is intended to repair, maintain, or return the object or part to use. Cleaning of equipment that is used in a manufacturing process is considered repair and maintenance cleaning. Facilities that perform repair and maintenance cleaning include, but are not limited to, automotive repair facilities.

(Adopted October 16, 2002)

8-16-234 Automotive Repair Facility: A facility which repairs or services automobiles or other motor vehicles, including, but not limited to, motorcycle, industrial truck, farm equipment, earth moving equipment, or other mobile equipment. Repair activities include, but are not limited to, exhaust systems repair, tire retreading and/or repair, glass replacement, transmission repair, general maintenance and/or repair, and automotive equipment parts and components repair. For the purposes of this Rule, automotive painting is not considered a repair activity.

(Adopted October 16, 2002)

8-16-235 Aerospace Components: The fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle. For the purposes of this Rule, an aerospace component shall include any aerospace prototype or test model.

(Adopted October 16, 2002)

8-16-236 Electrical and Electronic Components: Components and assemblies of components that generate, convert, transmit, or modify electrical energy. Electrical and electronic components include, but are not limited to, wires, windings, stators, rotors, magnets, contacts, relays, printed circuit boards, printed wire assemblies, wiring boards, integrated circuits, resistors, capacitors and transistors. Cabinets in which electrical and electronic components are housed are not considered electrical and electronic components.

(Adopted October 16, 2002)

8-16-237 Precision Optics: The optical elements used in electro-optical devices that are designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes of light energy levels.

(Adopted October 16, 2002)

8-16-238 Medical Devices: An instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar article, including any component or accessory that is (i) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of diseases, or (ii) is intended to affect the structure or any function of the body, or (iii) is defined in the National Formulary or the United States Pharmacopoeia or any supplement to it.

(Adopted October 16, 2002)

8-16-239 Key System Operating Parameter: An operating parameter of an approved emission control device, such as temperature, flow rate or pressure, that ensures operation of the equipment within manufacturer specifications and compliance with the standards in subsections 8-16-301.4.3, 302.5.3, or 303.4.4.

(Adopted October 16, 2002)

8-16-300 STANDARDS

8-16-301 Vapor Solvent Cleaner Requirements: Any person who operates a vapor solvent cleaning device shall conform to the following requirements:

301.1 General Operating Requirements:

- 1.1 The vapor solvent cleaning equipment and emission control device shall be operated and maintained in proper working order.
- 1.2 Liquid solvent leaks shall be repaired immediately or the equipment shall be shut down.

- 1.3 Solvent, including waste solvent, shall not be stored or disposed of in a manner that will cause or allow evaporation into the atmosphere.
- 1.4 Waste solvent residues shall be disposed of by one of the following methods:
 - a. Where residues are treated prior to further offsite treatment, such residues shall be stored in covered containers to minimize evaporation prior to service pick-up.
 - b. Where residues are treated prior to final disposal at an appropriate waste disposal facility, such residues shall not contain more than 10 percent solvent by volume and shall be stored in covered containers.
- 1.5 Devices designed to cover the solvent shall not be removed except to process work or to perform maintenance.
- 1.6 Solvent carry-out shall be minimized by the following methods:
 - a. Rack parts for best drainage,
 - b. Vertical speed of a powered hoist, if one is used, shall not be more than 3.3 m/min (11 ft/min) when lowering and raising the parts,
 - c. Retain the workload in the vapor zone until condensation ceases,
 - d. For manual loading/unloading tip out any pools of solvent on the cleaned parts before removal, and
 - e. Do not remove parts from the solvent cleaner until visually dry.
- 1.7 If a solvent spray is utilized, all spraying must be done at least 10 cm (4 in) below the top of the vapor level or the spray must be totally enclosed during the washing, rinsing, and drying process. The stream pressure shall be low enough to prevent liquid splashing outside the container.
- 1.8 Ventilation fans shall not be positioned in such a way to disturb the vapor zone.
- 1.9 If a water separator is present, water shall not be visually detectable in the solvent returning from the water separator to the solvent cleaner.
- 1.10 The solvent cleaning of porous or absorbent materials in vapor solvent cleaners is prohibited.
- 1.11 The workload shall not occupy more than half the solvent cleaner's evaporative area.
- 301.2 Vapor Solvent Cleaner General Equipment Requirements shall include all of the following:
 - 2.1 A container for the solvent and the articles being cleaned.
 - 2.2 An apparatus, cover, or enclosed reservoir which reduces solvent evaporation when not processing work in the solvent cleaner. The cover must be designed to easily open and close without disturbing the vapor zone. Where a solvent cleaner is subject to Section 301.4.1 and the evaporative area is greater than 1.0 m² (10.8 ft²), the cover must be powered.
 - 2.3 A method for draining cleaned parts, so that drained solvent is returned to the container
 - 2.4 A permanent, conspicuous label summarizing the applicable operating requirements contained in subsection 301.1.
- 301.3 Excluding enclosed solvent cleaners, Vapor Solvent Cleaner safety switches shall include all of the following:
 - 3.1 Condenser flow switch (except where non-water refrigerant is used) or a water flow loss sensor,
 - 3.2 Deleted September 16, 1998
 - 3.3 Spray safety switch when a spray wand is used.
 - 3.4 Vapor level control thermostat, or a vapor concentration exhaust sensor.

- 301.4 Vapor Solvent Cleaners shall not operate without one of the following control devices:
 - 4.1 A physically verifiable, freeboard ratio greater than or equal to 0.75.
 - 4.2 A freeboard chiller where the chilled air blanket temperature measured in °F at the coldest point on the vertical axis in the center of the solvent cleaner shall be no greater than 30 percent of the initial boiling point of the solvent used or 40°F.
 - 4.3 An approved emission control device with a control efficiency of 90 percent or more on a mass basis.
 - 4.4 An enclosed design in which the cover or door opens only when the dry part is entering or exiting the solvent cleaner unless the cleaner is an airless or airtight solvent cleaner.
- 301.5 Deleted March 16, 1988

(Amended 1/8/86; 3/16/88; 8/2/89; 6/15/94; 9/16/98; 10/16/02)

8-16-302 ConveyORIZED Solvent Cleaner Requirements: Any person who operates a conveyORIZED solvent cleaning device shall conform to the following requirements:

- 302.1 General Operating Requirements:
 - 1.1 The solvent cleaning equipment and emission control shall be operated and maintained in proper working order.
 - 1.2 Liquid solvent leaks shall be repaired immediately or the equipment shall be shut down.
 - 1.3 Solvent, including waste solvent, shall not be stored or disposed of in a manner that will cause or allow evaporation into the atmosphere.
 - 1.4 Waste solvent residues shall be disposed of by one of the following methods:
 - a. Where residues are treated prior to further offsite treatment such residues shall be stored in covered containers to minimize evaporation prior to service pick-up.
 - b. Where residues are treated prior to final disposal at an appropriate waste disposal facility, such residues shall not contain more than 10 percent solvent by volume and shall be stored in covered containers.
 - 1.5 Devices designed to cover the solvent shall not be removed except to process work or to perform maintenance.
 - 1.6 If a solvent spray is utilized in a conveyORIZED vapor solvent cleaner, all spraying must be done within the vapor zone. If a solvent flow is utilized in a conveyORIZED cold solvent cleaner, only a continuous fluid stream shall be used (not a fine, atomized, or shower type spray) unless an approved emission control device is used with a control efficiency of 90 percent or more on a mass basis. The stream pressure used in either type of conveyORIZED degreaser shall be low enough to prevent liquid splashing outside the container.
 - 1.7 Solvent carry out shall be minimized by using one or more of the following methods, where applicable:
 - a. For Strip Cleaners:
 - (1) vertical conveyor speed shall be less than 3.3 m/min (11 ft/min), or
 - b. For Non-strip cleaners:
 - (1) vertical conveyor speed shall be less than 3.3 m/min (11 ft/min), and
 - (2) parts shall be racked for best drainage.
 - 1.8 Other Operating Requirements for ConveyORIZED Solvent Cleaners:
 - a. Ventilation fans shall not be positioned in such a way as to direct air flow over the solvent cleaner openings.
 - b. Water shall not be visually detectable in solvent returning from the water separator to the solvent cleaner.

- 1.9 The solvent cleaning of porous or absorbent materials in conveyORIZED degreasers is prohibited.
- 302.2 ConveyORIZED Solvent Cleaner General Equipment Requirements shall include all of the following:
 - 2.1 A container for the solvent and the articles being cleaned.
 - 2.2 An apparatus, cover, or enclosed reservoir which reduces solvent evaporation when not processing work in the degreaser.
 - 2.3 A method for draining cleaned parts, so that drained solvent is returned to the container.
 - 2.4 A permanent, conspicuous label summarizing the applicable operating requirements contained in subsection 302.1.
- 302.3 ConveyORIZED Solvent Cleaners using a volatile solvent shall include all of the following safety switches:
 - 3.1 Condenser flow switch except where non-water refrigerant is used.
 - 3.2 Spray safety switch.
 - 3.3 Vapor level control thermostat.
- 302.4 ConveyORIZED Solvent Cleaner Control Devices shall include the following:
 - 4.1 A drying tunnel or other means, such as a rotating basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor, and
 - 4.2 Minimized entrances and exits which silhouette the work loads such that the average clearance between parts being conveyed and the edge of the solvent cleaner opening is less than 10 cm (4 in) or less than 10 percent of the opening width.
 - 4.3 Down-time covers for closing off the entrance and exit during shutdown hours, or an equivalent device that covers at least 90 percent of the opening.
- 302.5 ConveyORIZED Solvent Cleaners shall not operate without one of the following control devices:
 - 5.1 A freeboard ratio greater than or equal to 0.75.
 - 5.2 A freeboard chiller where the chilled air blanket temperature measured in °F at the coldest point on the vertical axis in the center of the solvent cleaner shall be no greater than 30 percent of the initial boiling point of the solvent used or 40°F.
 - 5.3 An approved emission control device with a control efficiency of 90 percent or more on a mass basis.
 - 5.4 Deleted August 2, 1989
- 302.6 Deleted March 16, 1988

(Adopted 7/3/85; Amended 1/8/86; 3/16/88; 8/2/89; 6/15/94; 9/16/98; 10/16/02)

8-16-303 Cold Cleaner Requirements: Any person who operates a cold solvent cleaning device shall conform to the following requirements.

- 303.1 General Operating Requirements:
 - 1.1 The solvent cleaning equipment and emission control shall be operated and maintained in proper working order.
 - 1.2 Liquid solvent leaks shall be repaired immediately or the equipment shall be shut down.
 - 1.3 Solvent, including waste solvent, shall not be stored or disposed of in a manner that will cause or allow evaporation into the atmosphere.
 - 1.4 Waste solvent residues shall be disposed of by one of the following methods:
 - a. Where residues are treated prior to further offsite treatment such residues shall be stored in covered containers to minimize evaporation prior to service pick-up.
 - b. Where residues are treated prior to final disposal at an appropriate waste disposal facility, such residues shall not contain more than 10 percent solvent by volume and shall be stored in covered containers.

- 1.5 Devices designed to reduce solvent evaporation shall not be removed except to process work or to perform maintenance. Where a compound with low volatility or a VOC content that does not exceed 50 g/l (0.42 lb/gal) is being used, enclosed (remote) reservoirs are deemed equivalent equipment to closed covers.
 - 1.6 If a solvent flow is utilized, only a continuous fluid stream shall be used (not a fine, atomized, or shower type spray), unless an approved emission control device is used with a control efficiency of 90 percent or more on a mass basis, or unless the solvent spray is totally enclosed during the washing, rinsing and drying process.
- 303.2 Cold Cleaner Operating Requirements:
- 2.1 Cleaned parts shall be drained until dripping ceases.
 - 2.2 Solvent agitation shall be accomplished only by pump recirculation or by means of a mixer. Air agitation shall not be used.
 - 2.3 The solvent cleaning of porous or absorbent materials in cold cleaners is prohibited.
- 303.3 Cold Cleaner General Equipment Requirements shall include all of the following:
- 3.1 A container for the solvent and the articles being cleaned.
 - 3.2 An apparatus, cover, or enclosed (remote) reservoir which reduces solvent evaporation when not processing work in the solvent cleaner. If a compound with low volatility or a VOC content that does not exceed 50 g/l (0.42 lb/gal) is not being used or the solvent is agitated or heated, the cover must be designed so that it can be operated with one hand.
 - 3.3 A method for draining cleaned parts, so that drained solvent is returned to the container. If a compound with low volatility or a VOC content that does not exceed 50 g/l (0.42 lb/gal) is not being used, then the drainage facility must be internal so that the parts are enclosed while draining. The drainage facility may be external where the internal type cannot fit into the cleaning system.
 - 3.4 A permanent, conspicuous label summarizing the applicable operating requirements contained in subsection 303.1.
- 303.4 Except as provided in Section 8-16-303.5, cold cleaners shall not operate without one of the following control devices:
- 4.1 A freeboard ratio greater than or equal to 0.75 where the maximum solvent reservoir capacity is clearly marked by a suitable mechanical or physical means.
 - 4.2 A water cover, provided the solvent is insoluble in and heavier than water.
 - 4.3 A freeboard chiller where the chilled air blanket temperature measured in °F at the coldest point on the vertical axis in the center of the solvent cleaner shall be no greater than 30 percent of the initial boiling point of the solvent used or 40°F.
 - 4.4 An approved emission control device which has a control efficiency of 90 percent or more on a mass basis.
 - 4.5 An enclosed design in which the cover or door opens only when the dry part is entering or exiting the cold cleaner unless the cleaner is an airtight solvent cleaner.
- 303.5 Any person using a cold cleaner for repair and maintenance cleaning shall comply with one of the following requirements:
- 5.1 The VOC content of the cleaning solution shall not exceed 50 g/l (0.42 lb/gal); or
 - 5.2 The cleaning solution shall be branched, cyclic, or linear completely methylated siloxane (VMS); or
 - 5.3 The portion of the cleaning solution that is not VMS shall not exceed a VOC content of 50 g/l (0.42 lb/gal); or

5.4 The source complies with subsection 8-16-303.4.4.

(Adopted 7/3/85; Amended 1/8/86; 3/16/88; 8/2/89; 9/16/98; 10/16/02)

8-16-304 National Emission Standards for Hazardous Air Pollutants (NESHAP): Halogenated Solvent Cleaner Requirements: In addition to the requirements of this Rule, solvent cleaning equipment that contains any one or a combination of the halogenated solvents specified in Section 8-16-216 at a total concentration of 5 percent or more by weight is also subject to the federal requirements contained in 40 Code of Federal Regulations, Part 63, Subpart T. Buckets, pails, or beakers with capacities of 2 gallons or less are not subject to the federal requirements.

(Amended, Renumbered 7/3/85; Amended 3/16/88; 9/16/98)

8-16-305 Compliance Statement Requirement: The manufacturer of any solution used to comply with subsection 8-16-303.5 shall provide, on the container or as an accompanying data sheet, a designation of VOC content of the solvent (as defined in Section 8-16-229), including any dilution ratio necessary to achieve compliance with the standards in subsection 8-16-303.5.

(Adopted October 16, 2002)

8-16-400 ADMINISTRATIVE REQUIREMENTS

8-16-401 Deleted March 16, 1988

8-16-402 Deleted March 16, 1988

8-16-403 Deleted September 16, 1998

8-16-404 Deleted August 2, 1989

8-16-500 MONITORING AND RECORDS

8-16-501 Solvent Records: Any person subject to the requirements of this Rule shall keep the following records:

501.1 Deleted September 16, 1998

501.2 On a facility-wide, monthly basis, records showing the type and total amount of make-up solvent used in all solvent cleaning operations subject to this rule regardless of the number of cleaning operations involved.

501.3 On a monthly basis, records showing the type and amount of solvent subject to Section 8-16-111.

501.4 For solvent vapor dryers and enclosed solvent cleaners, monthly records of the type and total amount of makeup solvent on a per source basis.

501.5 Records shall be retained and available for inspection by the APCO for the previous 24-month period.

501.6 Information, such as purchase orders or hazardous waste manifests, that will allow the APCO to verify compliance with the solvent loss limitation in Section 8-16-121.

(Adopted 7/3/85; Amended 3/16/88; 8/2/89; 9/16/98; 10/16/02)

8-16-502 Burden of Proof: Any person claiming exemption pursuant to Section 8-16-114, 115, or 118 or a recordkeeping exemption pursuant to Section 8-16-124 shall have information available such as product data or material safety data sheets that would allow the APCO to verify the eligibility for the exemption.

(Adopted October 16, 2002)

8-16-503 Approved Emission Control Device, Recordkeeping Requirements: Any person operating air pollution abatement equipment to comply with subsections 8-16-301.4.3, 302.5.3 or 303.4.4 shall record applicable key system operating parameters on a daily basis.

(Adopted October 16, 2002)

8-16-600 MANUAL OF PROCEDURES

8-16-601 Determination of Emissions: Emissions of organic compounds as specified in subsections 301.4.3, 302.5.3, or 303.4.4 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 referenced test methods exceed the standards of this rule.

(Amended 7/3/85; 3/16/88; 6/15/94; 9/16/98)

8-16-602 Analysis of Samples: Samples of organic compounds shall be analyzed using EPA Method 24, by the following applicable methods:

- 602.1 Manual of Procedures, Volume III, Method 31 for the determination of percent VOC by weight and VOC content as specified in Sections 8-16-114, and 303.5.
- 602.2 Manual of Procedures Volume III, Method 21 or 22 for the determination of percent solvent by volume as specified in subsections 8-16-301.1.4, 302.1.4 and 303.1.4.
- 602.3 ASTM D-1078-93 for the determination of initial boiling point as specified in Section 8-16-205.
- 602.4 Manual of Procedures, Volume III, Method 43 for the determination of volatile methylsiloxanes (VMS) as specified in subsections 8-16-303.5.2 and 303.5.3.

(Adopted 7/3/85; Amended 3/16/88; 8/2/89; 9/16/98; 10/16/02)

REGULATION 8
ORGANIC COMPOUNDS
RULE 17
PETROLEUM DRY CLEANING OPERATIONS

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REGULATION 8
ORGANIC COMPOUNDS
RULE 17
PETROLEUM DRY CLEANING OPERATIONS
(Adopted May 21, 1980)

8-17-100 GENERAL

- 8-17-101 **Description:** The purpose of this Rule is to limit the emissions of petroleum solvents used in dry cleaning facilities. (Amended March 20, 1985)
- 8-17-110 **Exemption, Other Solvent:** This Rule shall not apply to dry cleaning facilities that do not use petroleum solvent. (Amended March 20, 1985)
- 8-17-111 **Exemption, Small Users:** The provisions of Section 8-17-302 shall not apply to petroleum dry cleaning facilities installed prior to (date of adoption) consuming less than 10,000 liters (2,642 gallons) of petroleum solvent per year, provided the requirements of Section 8-17-501 are met.
(Amended March 20, 1985, September 5, 1990)

8-17-200 DEFINITIONS

- 8-17-201 **Petroleum Solvent:** A clear petroleum distillate having a minimum flash point of 38°C (100°F) and the following distillation ranges: not less than 50% over at 177°C (350°F), 90% over at 190°C (375°F), and the end point not higher than 210°C (410°F). The distillation is performed at standard conditions.
- 8-17-202 **Dry Cleaning Facility:** Any facility engaged in the cleaning of fabrics or leather. The facility includes, but is not limited to washers, dryers, filters, purification systems, holding tanks, pumps, attendant piping and valves.
(Adopted March 20, 1985)
- 8-17-203 **Solvent Recovery Dryer:** A class of dry cleaning dryers that employ a condenser to condense and recover solvent vapors evaporated in a closed loop stream of heated air, together with the piping and ductwork used in the installation of this device.
(Adopted March 20, 1985)
- 8-17-204 **Cartridge Filter:** A discrete filter unit containing filter paper and activated carbon that traps and removes contaminants from petroleum solvent, together with the piping and ductwork used in the installation of this device.
- 8-17-205 **Dry Weight of Articles Cleaned:** The weight of articles prior to being cleaned in a petroleum solvent washer.
(Adopted September 5, 1990)
- 8-17-206 **Solvent Liquid Leak:** A liquid leak of more than 3 drops per minute.
(Adopted September 5, 1990)
- 8-17-207 **Solvent Vapor Leak:** A vapor leak which is a visible mist.
(Adopted September 5, 1990)
- 8-17-208 **Transfer Cart:** A cart or container used for the transfer of wet articles from the washer to the dryer that has walls and a lid which is impervious to the solvent.
(Adopted September 5, 1990)

8-17-300 STANDARDS

- 8-17-301 **Operating Requirements:** A person shall not operate any petroleum dry cleaning facility unless all of the following requirements are satisfied:

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- 301.1 There is no solvent liquid or solvent vapor leaking from any portion of the equipment or the leaking equipment shall not be operated.
- 301.2 Solvents and spent solvents are stored in closed containers, which may be equipped with vents approved by the Air Pollution Control Officer.
- 301.3 All washer and dryer traps, access doors, and other parts of these pieces of equipment, where solvent may be exposed to the atmosphere, are kept closed at all times except when required for proper operation or maintenance.
- 301.4 Cartridge filters are drained in the filter housing for at least 12 hours or placed in an enclosed device including a solvent recovery dryer until dry before being discarded.
- 301.5 All wastes from dry cleaning facilities must be maintained and transported in sealed containers and disposed of in accordance with Department of Health Services regulations.
- 301.6 Articles which have been cleaned must be transferred to the dryer within five minutes after they are removed from the washer, or shall be stored in closed transfer carts. (Amended March 20, 1985, September 5, 1990)

8-17-302 Emission Control Requirements: A person shall not operate any petroleum dry cleaning facility unless one of the following requirements is satisfied:

- 302.1 Add-On-Control Device: All exhaust gases from drying tumblers, washers, and cabinets are vented through an approved and properly functioning control device, which reduces the total emissions of precursor organic compounds by at least 85 percent by weight.
- 302.2 Solvent Recovery Dryer: A solvent recovery dryer that recovers at least 85% of petroleum solvent by weight shall be installed. For the purpose of determining compliance with the 85% recovery efficiency of this subsection, 3 kilograms of petroleum solvent emitted per 100 kilograms dry weight of articles cleaned shall be deemed to be in compliance. In addition, the petroleum solvent flow rate from the water separator of such recovery dryer shall not exceed 15 milliliters per minute at the termination of the recovery cycle.
- 302.3 Deleted September 5, 1990

(Amended March 20, 1985, September 5, 1990)

8-17-303 Solvent Filtration Requirement: A person shall not operate any solvent filtration system unless one of the following requirements is satisfied:

- 303.1 Reduce the total volatile organic compound content in all filtration wastes to
 - 1.1 1 kilogram or less per 100 kilograms dry weight of articles cleaned, before disposal, and exposure to the atmosphere, or
 - 1.2 No more than 0.25 kilograms of solvent per kilogram of solvent still or filter waste.
- 303.2 Install and operate a cartridge filter system.

(Adopted March 20, 1985, September 5, 1990)

8-17-400 ADMINISTRATIVE REQUIREMENTS

8-17-401 Deleted September 5, 1990

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8-17-402 Deleted September 5, 1990

8-17-500 MONITORING AND RECORDS

8-17-501 **Small User Records:** Any person seeking to satisfy the condition of Section 8-17-111 shall maintain purchase records showing amounts of solvent purchased and solvent remaining in inventory. Such records shall be retained and available for inspection by the APCO for the previous 24-month period.

(Adopted September 5, 1990)

8-17-502 **Solvent Filtration Records:** Any person electing to be regulated by Subsection 8-17-303.1.1 shall maintain records of pre-washed weight of articles cleaned per load. Such records shall be retained and available for inspection by the APCO for the previous 24-month period.

(Adopted September 5, 1990)

8-17-600 MANUAL OF PROCEDURES

8-17-601 **Determination of Emissions:** Emissions of organic compounds as specified in Section 8-17-302 shall be measured as prescribed in the Manual of Procedures, Volume IV, ST-7, dated November 1, 1989.

(Amended September 5, 1990)

8-17-602 **Analysis of Solvent Filtration Wastes:** Samples of solvent filtration wastes as specified in subsection 8-17-303.1 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 38.

(Adopted September 5, 1990)

**REGULATION 8
ORGANIC COMPOUNDS
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**REGULATION 8
ORGANIC COMPOUNDS
RULE 18
EQUIPMENT LEAKS**

(Adopted October 1, 1980)

8-18-100 GENERAL

8-18-101 Description: The purpose of this Rule is to limit emissions of organic compounds, including methane, from leaking equipment at petroleum refineries, chemical plants, bulk plants and bulk terminals including, but not limited to: valves, connectors, pumps, compressors, pressure relief devices, diaphragms, hatches, sight-glasses, fittings, sampling ports, meters, pipes, and vessels.

(Amended 3/17/82; 3/4/92; 1/7/98)

8-18-110 Exemption, Controlled Seal Systems and Pressure Relief Devices: Except for Section 8-18-603, the provisions of this Rule shall not apply to seal systems and pressure relief devices vented to a vapor recovery or disposal system which reduces the emissions of organic compounds from the equipment by 95% or greater.

(Amended, Renumbered January 7, 1998)

8-18-111 Exemption, Small Facilities: The provisions of this rule shall not apply to facilities which have less than 100 valves or less than 10 pumps and compressors. Such facilities are subject to the requirements of Regulation 8, Rule 22.

(Adopted 3/4/92; Amended, Renumbered 1/7/98)

8-18-112 Exemption, Bulk Plant and Terminal Loading Racks: The provisions of this rule shall not apply to those connections at the interface between the loading rack and the vehicle being loaded.

(Adopted 3/4/92; Amended, Renumbered 1/7/98)

8-18-113 Limited Exemption, Initial Boiling Point: The provisions of Sections 8-18-400 shall not apply to equipment which handle organic liquids having an initial boiling point greater than 302° F.

(Adopted 3/4/92; Amended, Renumbered 1/7/98)

8-18-114 Limited Exemption, Research and Development: The provisions of Section 8-18-401, 402 and 502 shall not apply to research and development plants which produce only non-commercial products solely for research and development purposes.

(Adopted 3/4/92; Amended, Renumbered 1/7/98)

8-18-115 Limited Exemption, Storage Tanks: The provisions of this rule shall not apply to appurtenances on storage tanks including pressure relief devices, which are subject to requirements contained in Regulation 8, Rule 5: Storage of Organic Liquids.

(Adopted January 7, 1998)

8-18-116 Limited Exemption, Vacuum Service: The provisions of Section 8-18-400 and 502 shall not apply to equipment in vacuum service.

(Amended January 7, 1998)

8-18-117 Limited Exemption, Visual Inspection: The provisions of Section 8-18-403 shall not apply to days when a facility is not staffed.

(Amended, Renumbered January 7, 1998)

8-18-118 Deleted January 7, 1998

8-18-200 DEFINITIONS

8-18-201 Background: The ambient concentration of total organic compounds determined at least 3 meters (10 feet) upwind from the equipment to be inspected and not influenced by any specific emission point as indicated by a hydrocarbon analyzer specified by Section 8-18-501.

(Amended March 4, 1992)

8-18-202 Bulk Plants and Terminals: A distribution facility which is subject to Regulation 8, Rule 6, 33 or 39.

(Amended, Renumbered January 7, 1998)

8-18-203 Chemical Plant: Any facility engaged in producing organic or inorganic chemicals and/or manufacturing chemical products by chemical processes. Any facility or

operation that has 28 as the first two digits in their Standard Industrial Classification Code as determined from the Standard Industrial Classification Manual. Chemical plants include facilities that manufacture chemical products by chemical processes such as: industrial inorganic and organic chemicals; plastic and synthetic resins, synthetic rubber, synthetic and other man made fibers; drugs; soap, detergents and cleaning preparations, perfumes, cosmetic and other toilet preparations; paints, varnishes, lacquers, enamels and allied products; agricultural chemicals; safflower and sunflower oil extracts; re-refining. (Renumbered and Amended January 7, 1998)

- 8-18-204 Connection:** Flanged, screwed, or other joined fittings used to connect equipment.
(Amended, Renumbered January 7, 1998)
- 8-18-205 Equipment:** All components including, but not limited to: valves, pumps, compressors, pressure relief devices, diaphragms, hatches, fittings, sampling ports, pipes, plugs, open-ended lines, gages or sight-glasses.
(Amended, Renumbered January 7, 1998)
- 8-18-206 Inaccessible Equipment:** Any equipment located over 13 feet above the ground when access is required from the ground; or any equipment located over 6.5 feet away from a platform when access is required from a platform.
(Amended, Renumbered January 7, 1998)
- 8-18-207 Inspection:** The determination of the concentration of total organic compounds leaking from equipment using EPA Reference Method 21 as required by Section 8-18-501.
(Amended, Renumbered January 7, 1998)
- 8-18-208 Leak:** The concentration of total organic compounds measured above background, measured 1 centimeter or less from the leak, expressed as methane and measured using EPA Reference Method 21.
(Amended, Renumbered January 7, 1998)
- 8-18-209 Leak Minimization:** Reducing the leak to the lowest achievable level using best modern practices and without shutting down the process the equipment serves.
(Renumbered 3/17/82; Amended 3/4/92; 1/7/98)
- 8-18-210 Leak Repair:** The tightening, adjustment, or addition of packing material, or the replacement of the equipment, which reduces the leakage to the atmosphere below the applicable standard in Section 8-18-300.
(Renumbered 3/17/82; Amended 3/4/92; 1/7/98)
- 8-18-211 Liquid Leak:** Dripping of liquid at a rate of greater than 3 drops per minute and a concentration of total organic compounds greater than the applicable leak standard in Section 8-18-300.
(Amended, Renumbered January 7, 1998)
- 8-18-212 Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.
(Amended, Renumbered January 7, 1998)
- 8-18-213 Petroleum Refinery:** Any facility that processes petroleum products as defined in Standard Industrial Classification Manual as Industry No. 2911, Petroleum Refining.
(Amended, Renumbered January 7, 1998)
- 8-18-214 Pressure Relief Device:** The automatic pressure-relieving device actuated by the static pressure upstream of the device including, but not limited to pressure relief valves and rupture disks.
(Amended, Renumbered January 7, 1998)
- 8-18-215 Process Unit:** A manufacturing process which is independent of other processes and is continuous when supplied with a constant feed or raw materials and has sufficient storage facilities for product.
(Amended, Renumbered January 7, 1998)
- 8-18-216 Quarter:** One of the four consecutive 3-month divisions of the calendar year beginning on January 1.
(Amended, Renumbered January 7, 1998)
- 8-18-217 Reinspection:** Any inspection following the minimization or repair of leaking equipment.
(Amended, Renumbered January 7, 1998)
- 8-18-218 Rupture Disc:** The thin metal diaphragm held between flanges.
(Amended, Renumbered January 7, 1998)
- 8-18-219 Total Organic Compounds:** The concentration of organic compounds as indicated by a hydrocarbon analyzer as specified by Section 8-18-501, including methane.

- (Amended, Renumbered January 7, 1998)*
- 8-18-220 Turnaround:** The scheduled shutdown of a process unit for maintenance and repair work.
- (Amended, Renumbered January 7, 1998)*
- 8-18-221 Valve:** Any device that regulates the flow of process material by means of an external actuator acting to permit or block passage of liquids or gases.
- (Amended, Renumbered January 7, 1998)*
- 8-18-222 Weephole:** A drain hole in the discharge horn of a pressure relief device.
- (Adopted January 7, 1998)*
- 8-18-223 Deleted January 7, 1998**
- 8-18-224 Deleted January 7, 1998**
- 8-18-300 STANDARDS**
- 8-18-301 General:** Except for valves, pumps and compressors, connections and pressure relief devices subject to the requirements of Sections 8-18-302, 303, 304, 305 and 306, a person shall not use any equipment that leaks total organic compounds in excess of 100 ppm unless the leak has been discovered by the operator, minimized within 24 hours and repaired within 7 days.
- (Amended 7/15/81; 3/17/82; 9/6/89; 3/4/92; 1/7/98)*
- 8-18-302 Valves:** A person shall not use any valve that leaks total organic compounds in excess of 100 ppm unless the leak has been discovered by the operator, minimized within 24 hours and repaired within 7 days; or if the leak has been discovered by the APCO, repaired within 24 hours.
- (Adopted 3/4/92; Amended 1/7/98)*
- 8-18-303 Pumps and Compressors:** A person shall not use any pump or compressor that leaks total organic compounds in excess of 500 ppm unless the leak has been discovered by the operator, minimized within 24 hours and repaired within 7 days; or if the leak has been discovered by the APCO, repaired within 24 hours.
- (Adopted 3/4/92; Amended 1/7/98)*
- 8-18-304 Connections:** A person shall not use any connection that leaks total organic compounds in excess of 100 ppm unless one of the following conditions are met:
- 304.1 The leak has been discovered by the operator, minimized within 24 hours and repaired within 7 days; or
- 304.2 The connection is inspected as required by Section 8-18-401.6 and:
- 2.1 If the leak is discovered by the operator, minimized within 24 hours and repaired within 7 days; or
- 2.2 If the leak has been discovered by the APCO, repaired within 24 hours.
- (Adopted 3/4/92; Amended 1/7/98)*
- 8-18-305 Pressure Relief Devices:** A person shall not use any pressure relief device that leaks total organic compounds in excess of 500 ppm unless the leak has been discovered by the operator, minimized within 24 hours and repaired within 15 days; or if the leak has been discovered by the APCO, repaired within 7 days.
- (Amended January 7, 1998)*
- 8-18-306 Non-repairable Equipment:** Any valve, pressure relief device, pump or compressor which cannot be repaired as required by Section 8-18-302, 303 or 305, must comply with the following conditions:
- 306.1 The valve, pressure relief device, pump or compressor must be repaired or replaced within 5 years or at the next scheduled turnaround, whichever date comes first.
- 306.2 The number awaiting repair shall not exceed the percentage expressed in the table below or 1 piece of equipment.

Equipment	Total Number of Non-repairable Equipment Allowed (%)
Valves	0.5%
Pressure Relief Devices	1%
Pumps and Compressors	1%

306.3 In lieu of compliance solely with Sections 8-18-306.2 and not with any other requirements of this rule, the valve, pressure relief device, pump or compressor must meet the following conditions:

- 3.1 The valve, pressure relief device, pump or compressor must be measured for mass emissions within 7 days after the leak is discovered;
- 3.2 The equipment's mass emission measurement must be less than the applicable standard in the table below and the corresponding total number of non-repairable equipment, including non-repairable equipment from Section 8-18-306.2, are less than the standards in the table below.

Equipment	Mass Emission Standard	Total Number of Non-repairable Equipment Allowed (%)
Valves	0.1 lb/day	1.0%
Pressure Relief Devices	0.2 lb/day	5%
Pumps and Compressors	0.2 lb/day	5%

3.3 If the valve, pressure relief device, pump or compressor's mass emission measurement is greater than 15 lb/day total organic compounds, the valve, pressure relief device, pump or compressor must be repaired within 7 days after the mass emission measurement is determined.

(Adopted 3/4/92, Amended 1/7/98)

8-18-307 Liquid Leak: A person shall not use any equipment that leaks liquid as defined in Section 8-18-211, unless the leak has been discovered by the operator, minimized within 24 hours and repaired within 7 days.

(Adopted 3/4/92; Amended 1/7/98)

8-18-308 Alternate Compliance: The requirements of Sections 8-18-301, 302, 303, 304, 305, 306 and 307 shall not apply to any facility which complies with an alternative emission reduction plan that satisfies all the requirements in Sections 8-18-405 and 406.

(Adopted January 7, 1998)

8-18-400 ADMINISTRATIVE REQUIREMENTS

8-18-401 Inspection: Any person subject to this Rule shall comply with the following inspection requirements:

- 401.1 All connections that have been opened during a turnaround shall be inspected for leaks within 90 days after start-up is completed following a turnaround.
- 401.2 Except as provided under Subsection 8-18-401.3, 404, 405, and 406 all valves, pressure relief devices, pumps or compressors subject to this Rule shall be inspected quarterly.
- 401.3 Inaccessible valves and pressure relief devices subject to this Rule shall be inspected at least once a year.
- 401.4 Any equipment subject to this Rule may be inspected at any time by the APCO.
- 401.5 Any equipment found to have a leak in excess of the standard in Section 8-18-300 shall be reinspected within 24 hours after leak repair or minimization.
- 401.6 Any connection that is inspected annually or that is part of an APCO and EPA approved connection inspection program is subject to the provisions of Subsection 8-18-304.2.
- 401.7 Any pressure relief device equipped with a weep hole shall be inspected quarterly at the outlet of the weep hole if the horn outlet is inaccessible.
- 401.8 Any pressure relief device that releases to the atmosphere shall be inspected within 5 working days after the release event.

(Amended 3/17/82; 9/3/86; 9/6/89; 3/4/92; 1/7/98)

8-18-402 Identification: Any person subject to this Rule shall comply with the following identification requirements:

402.1 All valves, pressure relief devices, pumps and compressors shall be identified with a unique permanent identification code approved by the APCO. This identification code shall be used to refer to the valve, pressure relief device, pump or compressor location. Records for each valve, pressure relief device, pump or compressor shall refer to this identification code.

402.2 All equipment with a leak in excess of the applicable leak limitation in Section 8-18-300 shall be tagged with a brightly colored weatherproof tag indicating the date the leak was detected.

(Amended 3/4/92; 1/7/98)

8-18-403 Visual Inspection Schedule: All pumps and compressors subject to this rule shall be visually inspected daily for leaks. If a leak is observed, the concentration of organic compounds shall be determined.

(Renumbered January 7, 1998)

8-18-404 Alternative Inspection Schedule: The inspection frequency for valves may change from quarterly to annually provided all of the conditions in Subsection 404.1 and 404.2 are satisfied.

404.1 The valve has been operated leak free for five consecutive quarters; and

404.2 Records are submitted and approval from the APCO is obtained.

404.3 The valve remains leak free. If a leak is discovered, the inspection frequency will revert back to quarterly.

(Adopted January 7, 1998)

8-18-405 Alternate Emission Reduction Plan: Any person may comply with Section 8-18-308 by developing and submitting an alternate emission reduction plan to the APCO that satisfies all of the following conditions:

405.1 The plan shall contain all information necessary to establish, document, measure progress and verify compliance with an emission reduction level set forth in this rule.

405.2 All emission reductions must be achieved solely from equipment and connections subject to this rule.

405.3 Public notice and a 60-day public comment period shall be provided.

405.4 Following the public comment period, the plan shall be submitted to and approved in writing by the EPA, Region IX prior to the APCO approval of the plan.

405.5 An alternate emission reduction plan must provide for emission reductions equal to or greater than required by the specific limits in this rule.

(Adopted 1/7/98; Amended 11/27/02)

8-18-406 Interim Compliance: A facility is subject to the limits contained in Sections 8-18-301, 302, 303, 304, 305, 306 and 307 until receipt of the written approvals of both the APCO and the EPA of an Alternate Emission Reduction Plan that complies with Section 8-18-405.

(Adopted 1/7/98; Amended 11/27/02)

8-18-500 MONITORING AND RECORDS

8-18-501 Portable Hydrocarbon Detector: Any instrument used for the measurement of organic compounds shall be a combustible gas indicator that has been approved by the APCO and meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21 (40 CFR 60, Appendix A).

(Amended 3/17/82; 9/6/89; 3/4/92)

8-18-502 Records: Any person subject to the requirements of this rule shall maintain records that provide the following information:

502.1 For equipment subject to Section 8-18-402.1, the equipment identification code, equipment type and the location of the equipment.

502.2 The date of all inspections and reinspections and the corresponding leak concentrations measured as specified by Section 8-18-401.

- 502.3 Records shall be maintained for at least 5 years and shall be made available to the APCO for inspection at any time.
- 502.4 Records of all non-repairable equipment subject to the provisions of Section 8-18-306 shall be maintained, submitted to the District quarterly and contain the equipment identification code, equipment type, equipment location, leak concentration measurement and date, last process unit turnaround date, and total number of non-repairable equipment awaiting repair.

(Adopted 3/4/92; Amended 1/7/98)

8-18-600 MANUAL OF PROCEDURES

8-18-601 Analysis of Samples: Samples of organic compounds as defined in Section 8-18-113 shall be analyzed for Initial Boiling Point as prescribed in ASTM D-1078- 98 or ASTM D-86. (Adopted March 17, 1982; Amended March 4, 1992; January 7, 1998)

8-18-602 Inspection Procedure: Inspections of equipment shall be conducted as prescribed by EPA Reference Method 21 (40 CFR 60, Appendix A).

(Adopted 9/6/89; Amended 3/4/92; 1/7/98)

8-18-603 Determination of Control Efficiency: The control efficiency as specified by Section 8-18-110 shall be determined 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 referenced test methods exceed the standards of this rule.

(Renumbered and Amended January 7, 1998)

8-18-604 Determination of Mass Emissions: The mass emission determination as specified by Section 8-18-306 shall be determined using by any of the following methods: 1) EPA Protocol for Equipment Leak Emission Estimates, Chapter 4, Mass Emission Sampling, (EPA-453/R-95-017) November, 1995 or 2) a method determined to be equivalent by the EPA and approved by the APCO.

(Adopted January 7, 1998)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 19
SURFACE PREPARATION AND COATING OF MISCELLANEOUS METAL
PARTS AND PRODUCTS**

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REGULATION 8
ORGANIC COMPOUNDS
RULE 19
SURFACE PREPARATION AND COATING OF MISCELLANEOUS METAL
PARTS AND PRODUCTS

(Adopted January 9, 1980)

8-19-100 GENERAL

8-19-101 Description: The purpose of this Rule is to limit the emission of volatile organic compounds from the surface preparation and coating of miscellaneous metal parts and products as defined in Section 8-19-204. Any operation which is determined to be exempt from the provisions of this Rule shall be subject to the provisions of Rule 4, if not already subject to another rule of Regulation 8.

(Amended 12/19/84; 10/16/02)

8-19-110 Exemption, Low Usage Coatings: The requirements of Sections 8-19-302 and 312 shall not apply to the use of any coating used in volumes less than 75.7 liters (20 gal) in any one calendar year, provided the requirements in Section 8-19-405 are satisfied. A person shall be limited to 378.5 liters (100 gal) total coating per year under this exemption.

(Amended 12/19/84; 12/18/85; 6/7/89; 2/3/93)

8-19-111 Exemption, Adhesives: The provisions of this Rule shall not apply to the application of adhesives. The application of adhesives is subject to the requirements of Regulation 8, Rule 51.

(Amended 12/19/84; 12/18/85; 2/3/93)

8-19-112 Exemption, Touch-up: The provisions of this Rule shall not apply to touch-up operations.

(Amended December 18, 1985)

8-19-113 Exemption, Specific Operations: The provisions of this Rule shall not apply to the coating of the following types of products, which may be subject to other rules of Regulation 8.

113.1 Light-duty and medium-duty motor vehicles (original equipment manufacturing) (Rule 13)

113.2 Metal containers and closures (cans, drums, lids, etc.) and metal coil (Rule 11)

113.3 Magnet wire for use in electrical machinery (Rule 26)

113.4 Metal furniture or large appliances (Rule 14)

113.5 Aircraft or aerospace vehicles (Rule 29)

113.6 Motor vehicle and mobile equipment coating operations (Rule 45)

113.7 Marine vessels and component parts (Rule 43).

113.8 Stationary structures and their appurtenances which require architectural coatings, except where baked coatings are applied (Rule 3)

113.9 Magnetic data storage disks (Rule 38)

113.10 Test panels for evaluation of coating performance (Rule 4)

(Amended 12/2/81; 12/19/84; 12/18/85; 1/7/87; 4/1/87; 6/7/89; 2/3/93; 10/16/02)

8-19-114 Exemption, Aerosol Cans: The provisions of this Rule shall not apply to coating operations employing hand-held aerosol cans. Such coating is subject to the provisions of Regulation 8, Rule 49 or to the California Air Resources Board aerosol coating product regulation found in Title 17 of the California Code of Regulations, beginning at Section 94520.

(Amended 12/2/81; 12/19/84; 12/18/85; 6/20/90; 10/16/02)

8-19-115 Deleted April 1, 1987

8-19-116 Deleted January 7, 1987

8-19-117 Exemption, Stencil Coatings: The requirements of this Rule shall not apply to coatings that are applied by template in order to add designs, letters and/or numbers to the products.

(Adopted December 2, 1985)

8-19-118 Deleted April 1, 1987

- 8-19-119 Deleted April 1, 1987**
- 8-19-120 Exemption, Powder Coatings:** The requirements of Sections 8-19-302 and 312 shall not apply to the use of any powder coating provided the emission of VOC to the atmosphere does not exceed that which is equivalent to the use of coatings which comply with those limits.
(Adopted 12/19/84; Amended 4/1/87; 6/7/89)
- 8-19-121 Deleted April 1, 1987**
- 8-19-122 Deleted December 18, 1985**
- 8-19-123 Exemption, Solid Film Lubricant:** The provisions of this Rule shall not apply to any solid film lubricant.
(Adopted December 19, 1984)
- 8-19-124 Deleted January 7, 1987**
- 8-19-125 Deleted April 1, 1987**
- 8-19-126 Deleted April 1, 1987**
- 8-19-127 Deleted April 1, 1987**
- 8-19-128 Deleted April 1, 1987**
- 8-19-129 Deleted April 1, 1987**
- 8-19-130 Exemption, Cathode Coatings:** The provisions of this Rule shall not apply to any electrical cathode coating.
(Adopted December 18, 1985)
- 8-19-131 Exemption, Chemical Milling Maskant Coatings:** The provisions of this Rule shall not apply to any chemical milling maskant coating.
(Adopted December 18, 1985)
- 8-19-132 Deleted April 1, 1987**
- 8-19-133 Exemption, Spray Application Equipment:** The requirements of Section 8-19-313 shall not apply to the following operations:
- 133.1 The application of coatings to achieve a two-tone finish.
 - 133.2 The application of cutback asphalt coatings.
 - 133.3 The application of solvent-borne coatings with a solids content of at least 60 percent by volume to achieve a smooth finish on flat, front panels specified by original equipment manufacturers of computer, electronics and medical instrumentation equipment. This exemption only applies to coatings subject to the limits of Section 8-19-302.
 - 133.4 The application of coatings to the inner surface area of pipes which require a spray gun nozzle extension.
 - 133.5 The application of pretreatment wash primers.
 - 133.6 The application of a textured finish coat.
- (Adopted February 3, 1993)*
- 8-19-134 Limited Exemption, Coating Records:** The requirements of subsection 8-19-501.2 shall not apply to individual source operations using less than 75.7 liters (20 gal) of coating in any calendar year, unless otherwise specified in permit conditions pursuant to Regulation 2-1-403. A person shall maintain monthly records of coating usage under this exemption.
(Adopted February 3, 1993)
- 8-19-135 Exemption, Printed Circuit Boards:** The requirements of this Rule shall not apply to coatings applied to assembled printed circuit boards. This coating operation is subject to Regulation 8, Rule 4.
(Adopted February 3, 1993)
- 8-19-136 Limited Exemption, Specialty Coatings:** The requirements of Section 8-19-312 shall not apply to the following specialty coatings, provided that the VOC of those coatings does not exceed the following VOC limits and provided that the requirements of Section 8-19-407 are met.
- | | |
|--------------------------------------|-----------|
| 136.1 High Performance Architectural | 750 (6.2) |
| 136.2 Pretreatment Wash Primer | 780 (6.5) |
| 136.3 Silicone Release | 700 (5.8) |
| 136.4 Extreme Performance | 750 (6.2) |
| 136.5 High Temperature | 550 (4.6) |
- Any person seeking to use a coating subject to subsection 8-19-136.4 shall be limited to 3785 liter (1000 gal) of coating in any calendar year.
(Adopted June 15, 1994)

8-19-137 Limited Exemption, Specific Surface Preparation and Cleaning Operations: The surface preparation standards in Section 8-19-321 shall not apply to (i) the surface preparation of electrical and electronic components or medical devices, (ii) surfaces prepared for adhesive bonding of dissimilar substrates, (iii) stripping of cured inks, coatings and adhesives or cleaning of resin, coating, ink and adhesive mixing, molding and application equipment, or (iv) surface preparation associated with research and development operations; performance testing to determine coating, adhesive or ink performance; or testing for quality control or quality assurance purposes.

(Adopted October 16, 2002)

8-19-138 Limited Exemption, Military Components: The requirements of Section 8-19-321 shall not apply to the surface preparation of any military component for which a contract exists that specifies the use of an organic solvent that does not comply with the standards in Section 8-19-321, provided that contract has been entered into prior to December 1, 2005.

(Adopted October 16, 2002)

8-19-200 DEFINITIONS

8-19-201 Air-Dried Coatings: Any coating which is not heated above 90°C (194°F) for the purpose of curing or drying.

8-19-202 Baked Coatings: Any coating which is cured or dried in an oven where the oven air temperature exceeds 90°C (194°F).

8-19-203 Deleted June 7, 1989

8-19-204 Miscellaneous Metal Part or Product: Any metal part or product, except for those specified in Section 8-19-113.

8-19-205 Deleted December 18, 1985

8-19-206 Deleted June 7, 1989

8-19-207 Touch-up: That portion of the surface preparation and coating operation which is incidental to the main coating process but necessary to cover minor imperfections or mechanical damage incurred prior to intended use.

(Amended 12/19/84; 12/18/85; 10/16/02)

8-19-208 Transfer Efficiency: The ratio of the amount of coating solids adhering to the object being coated to the total amount of coating solids used in the application process, expressed as a percentage.

8-19-209 Camouflage Coating: A coating applied on military equipment to conceal such equipment from detection.

(Amended December 2, 1981)

8-19-210 Pretreatment Wash Primer: Any coating which contains a minimum of 0.5% acid by weight, is necessary to provide surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.

(Adopted 12/19/84; Amended 6/7/89)

8-19-211 Powder Coating: Any coating applied as a dry (without solvent or other carrier), finely divided solid which, when melted and fused, adheres to the substrate as a paint film.

(Adopted December 19, 1984)

8-19-212 Volatile Organic Compound: Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.

212.1 For purposes of calculating VOC content of a coating, any water or any of the following non-precursor organic compounds:

acetone

methyl acetate

parachlorobenzotrifluoride (PCBTF)

cyclic, branched or linear, completely methylated siloxanes (VMS)

shall not be considered to be part of the coating.

212.2 For the purposes of calculating the VOC content of a surface preparation or cleaning solvent, any water or the non-precursor organic compounds listed in

subsection 8-19-212.1, above, shall be considered part of the volume of solvent but shall not be considered part of the VOC content of the solvent.

(Adopted 12/19/84; Amended 6/7/89; 2/3/93; 12/20/95; 10/16/02)

8-19-213 Solid Film Lubricant: A very thin coating consisting of an organic binder system containing as its chief pigment material one or more of molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE) or other solids that act as a dry lubricant between meeting surfaces.

(Adopted 12/19/84; Amended 2/3/93)

8-19-214 Adhesive: Any coating which is applied for the purpose of bonding surfaces together.

(Adopted December 18, 1985)

8-19-215 Motor Vehicle: A vehicle which is self-propelled and is a device by which any person or property may be propelled, moved or drawn upon a highway, excepting a device moved by human power or used exclusively upon stationary rails or tracks.

(Adopted January 7, 1987)

8-19-216 Solar Absorbant Coating: Any coating which has as its primary purpose the absorption of solar radiation.

(Adopted December 18, 1985)

8-19-217 Heat-Resistant Coating: Any coating which during normal use must withstand temperatures of at least 204°C (400°F).

(Adopted December 18, 1985)

8-19-218 High-Gloss Coating: Any coating which achieves at least 85 percent reflectance on a 60° meter when tested by ASTM Method D-523-1989.

(Adopted 12/18/85; Amended 6/7/89; 2/3/93)

8-19-219 Extreme Performance Coating: Any coating which during intended use is exposed to one or more of the following conditions:

219.1 Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, detergents, cleaners or abrasive scouring agents

219.2 Repeated exposure to temperatures in excess of 121°C (250°F), or below 0°C (32°F) or high vacuum conditions

219.3 Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solution.

(Adopted December 18, 1985)

8-19-220 Cathode Coating: Any coating which has as its primary purpose the coating of electrical cathodes.

(Adopted December 18, 1985)

8-19-221 Chemical Milling Maskant Coating: Any coating which is applied to a component to protect areas when performing chemical milling, anodizing, aging, bonding, plating, etching, and/or other chemical surface operations on the component.

(Adopted December 18, 1985)

8-19-222 Non-Skid Coating: Any coating which has as its primary purpose the creation of traction to prevent slippage.

(Adopted December 18, 1985)

8-19-223 Silicone Release Coating: Any coating which contains silicone resin and has as its primary function the release of food products from metal surfaces such as baking pans.

(Adopted December 18, 1985)

8-19-224 Metallic Topcoat: Any coating which contains more than 5 g/l (.042 lb/gal) of metal particles as identified on a technical or material safety data sheet, as applied, where such metal particles are visible in the dried film.

(Adopted 12/18/85; Amended 1/7/87; 2/3/93)

8-19-225 High Performance Architectural Coating: Any coating applied to architectural subsections and which is required to meet the specifications of Architectural Aluminum Manufacturer's Association's publication number AAMA 605.2-1980.

(Adopted April 1, 1987)

8-19-226 Deleted February 3, 1993

8-19-227 Deleted February 3, 1993

8-19-228 High-Temperature Coating: Any coating applied to a substrate which during normal use must withstand temperatures of at least 538°C (1000°F).

(Adopted 6/7/89; Amended 2/3/93)

- 8-19-229 Electrostatic Spray:** Equipment used to apply coating by charging atomized particles that are deposited by electrostatic attraction.
(Adopted February 3, 1993)
- 8-19-230 High-Volume, Low-Pressure (HVLP) Spray:** Equipment used to apply coating by means of a gun which is designed to be operated and which is operated between 0.1 and 10.0 psig air atomizing pressure measured dynamically at the center of the air cap and at the air horns.
(Adopted 2/3/93; Amended 10/16/02)
- 8-19-231 Detailing Gun:** Small air-spray equipment, including air brushes, that operate at no greater than 5 cfm air flow and no greater than 50 psig air pressure.
(Adopted February 3, 1993)
- 8-19-232 Cutback Asphalt Coating:** A protective coating consisting of a liquified asphalt blend of asphaltic cement (semi-solid residue from the distillation of crude oil) and volatile petroleum distillates which is applied to large metal pipes to prevent corrosion.
(Adopted February 3, 1993)
- 8-19-233 Smooth Finish:** An industrial class 'A' surface coating finish that is characterized by a homogeneous, uninterrupted surface film without any imperfections such as orange peel. This type of finish is not intended to have a subsequent textured finish coat applied.
(Adopted February 3, 1993)
- 8-19-234 Two-Tone Finish:** A surface coating finish where one color coating is applied adjacent to a previously coated substrate of a different color, without the use of a maskant. The interface between the two coatings is a clear division of colors without any overlap.
(Adopted February 3, 1993)
- 8-19-235 Approved Emission Control System:** A system for reducing emissions to the atmosphere, consisting of an abatement device and a collection system, which achieves the abatement efficiency specified in the applicable standards at all times during the operation and meets the requirements of Regulation 2, Rule 1.
(Adopted February 3, 1993)
- 8-19-236 Textured Finish Coat:** Any non-smooth, patterned surface that is intentionally produced and applied as a final coat by spraying drops of coating over a previously applied base coating.
(Adopted February 3, 1993)
- 8-19-237 Mold Release Coating:** A temporary protective coating with a solids content of less than 120 grams solids per liter (1 pound solids per gallon) that reduces or prevents adhesion between the mold surface and the surface being molded.
(Adopted February 3, 1993)
- 8-19-238 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 Sections 8-19-302, 312, 313, 320 and/or 321.
(Adopted 6/15/94; Amended 10/16/02)
- 8-19-239 Surface Preparation:** The cleaning of metal parts and products prior to coating, further treatment, sale, or intended use. Surface preparation of metal parts subject to and in compliance with Regulation 8, Rule 16: Solvent Cleaning Operations, is not subject to the surface preparation standards in this Rule.
(Adopted October 16, 2002)
- 8-19-240 Electrical and Electronic Components:** Components and assemblies of components that generate, convert, transmit, or modify electrical energy. Electrical and electronic components include, but are not limited to, wires, windings, stators, rotors, magnets, contacts, relays, printed circuit boards, printed wire assemblies, wiring boards, integrated circuits, resistors, capacitors and transistors. Cabinets in which electrical and electronic components are housed are not considered electrical and electronic components.
(Adopted October 16, 2002)
- 8-19-241 Medical Device:** An instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar article, including any component or accessory that is (i) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of diseases, or (ii) is intended to

affect the structure or any function of the body, or (iii) is defined in the National Formulary or the United States Pharmacopoeia or any supplement to it.

(Adopted October 16, 2002)

8-19-300 STANDARDS

8-19-301 Deleted June 7, 1989

8-19-302 Limits: Except as otherwise provided by this Rule, a person shall not apply to any miscellaneous metal part or product any coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter of coating applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 85 percent that meets the requirements of Regulation 2, Rule 1.

302.1 Baked Coatings 275 grams/liter (2.3 pounds/gallon)

302.2 Air-Dried Coating 340 grams/liter (2.8 pounds/gallon)

302.3 Deleted January 7, 1987

(Amended 12/2/81; 12/19/84; 12/18/85; 1/7/87; 4/1/87; 6/7/89; 2/3/93)

8-19-303 Deleted February 3, 1993

8-19-304 Deleted June 7, 1989

8-19-305 Deleted June 7, 1989

8-19-306 Deleted January 7, 1987

8-19-307 Prohibition of Specification: No person shall require for use or specify the application of a coating or solvent subject to this Rule if such use or application results in a violation of any of the provisions of this Rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating or solvent is to be applied to any miscellaneous metal part or product at any physical location within the District.

(Adopted 12/19/84; Amended 12/18/85; 6/7/89; 10/16/02)

8-19-308 Compliance Statement Requirement: The manufacturer of coatings and solvents subject to this Rule shall provide on the coating container or as an accompanying data sheet, a designation of VOC (as defined in Section 8-19-212), expressed in grams per liter or pounds per gallon of coating. The designation shall include the VOC content of the coating as supplied and at the maximum recommended thinning ratio to maintain compliance with the VOC limits of this Rule.

(Adopted 12/19/84; Amended 12/18/85; 6/7/89; 2/3/93; 10/16/02)

8-19-309 Deleted April 1, 1987

8-19-310 Deleted April 1, 1987

8-19-311 Deleted June 7, 1989

8-19-312 Specialty Coating Limitations: Except as provided in Section 8-19-136, a person shall not apply to any miscellaneous metal part or product any specialty coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter (lbs VOC per gal) of coating applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level by an air pollution abatement equipment with an abatement device efficiency of at least 85 percent that meets the requirements of Regulation 2, Rule 1.

	<u>Baked</u>	<u>Air dried</u>
312.1 Camouflage	360 (3.0)	420 (3.5)
312.2 High Gloss	360 (3.0)	420 (3.5)
312.3 Heat Resistant	360 (3.0)	420 (3.5)
312.4 High Performance Architectural	420 (3.5)	420 (3.5)
312.5 Metallic Topcoat	360 (3.0)	420 (3.5)
312.6 Deleted June 7, 1989		
312.7 Pretreatment Wash Primer	420 (3.5)	420 (3.5)
312.8 Silicone Release	420 (3.5)	420 (3.5)
312.9 Solar Absorbant	360 (3.0)	420 (3.5)
312.10 Deleted February 3, 1993		
312.11 Deleted February 3, 1993		
312.12 Extreme Performance	420 (3.5)	420 (3.5)
312.13 High Temperature	420 (3.5)	420 (3.5)

(Adopted 4/1/87; Amended 6/7/89; 2/3/93; 6/15/94)

- 8-19-313 Spray Application Equipment Limitations:** Effective July 1, 1994, any person who uses spray application equipment to apply coatings to miscellaneous metal parts or products within the District shall use one or more of the following high transfer efficiency application methods, unless emissions to the atmosphere are controlled by an approved emission control system with an overall abatement efficiency of at least 85 percent:
- 313.1 High-Volume, Low-Pressure (HVLP) Spray, operated in accordance with the manufacturer's recommendations; or
 - 313.2 Electrostatic spray, operated in accordance with the manufacturer's recommendations; or
 - 313.3 Detailing gun; or
 - 313.4 Any other coating spray application that achieves an equivalent transfer efficiency compared to the spray application methods listed in subsections 313.1 through 313.3. Prior written approval from the APCO shall be obtained for each alternative method used.

(Adopted 6/7/89; Amended 2/3/93; 10/6/93)

- 8-19-320 Solvent Evaporative Loss Minimization:** Unless emissions to the atmosphere are controlled by an approved emission control system with an overall abatement efficiency of at least 85%, any person using organic solvent for surface preparation and cleanup or any person mixing, using or disposing of coatings containing organic solvent:

- 320.1 Shall use closed containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.
- 320.2 Shall not use organic solvent for the cleanup of spray equipment including paint lines with a VOC content in excess of 50 g/l (0.42 lbs/gal) unless either (i) the solvent is pressurized through spray equipment with the atomizing air off or dispensed from a small non-atomizing container, and collected and stored in a closed container until recycled or properly disposed of offsite, or (ii) a spray gun washer subject to and in compliance with the requirements of Regulation 8, Rule 16 is used.
- 320.3 Shall close containers of coating, catalyst or solvent when not in use.

(Adopted 6/7/89; Amended 2/3/93; 10/16/02)

- 8-19-321 Surface Preparation Standards:** Effective June 1, 2003, no person shall use a surface preparation solvent with a VOC content that exceeds 50 g/l (0.42 lbs/gal), as applied, for surface preparation of any metal part or product unless emissions to the atmosphere are controlled to an equivalent level by an approved emission control system with an overall abatement efficiency of at least 85 percent.

(Adopted October 16, 2002)

8-19-400 ADMINISTRATIVE REQUIREMENTS

8-19-401 Deleted December 19, 1984

8-19-402 Deleted January 7, 1987

8-19-403 Deleted March 5, 1986

8-19-404 Deleted April 1, 1987

8-19-405 Low Usage Coating Petition: Any person seeking to satisfy the conditions of Section 8-19-110 shall comply with the following requirements:

- 405.1 The user or specifier shall petition the APCO in writing that substitute complying coatings are not available.
- 405.2 If the APCO grants written approval, such petition will be repeated on an annual basis.
- 405.3 If the APCO grants written approval, such approval shall contain volume and VOC limit conditions.
- 405.4 Records must be maintained as in Section 8-19-501.

(Adopted 12/19/84; Amended 12/18/85; 6/7/89)

8-19-406 Deleted June 7, 1989

8-19-407 Specialty Coating Petition: A person seeking a limited exemption pursuant to Section 8-19-136, shall comply with the following requirements:

- 407.1 A petition shall be submitted to the APCO containing the following information, as applicable: performance requirements, job order description, volume of coating, and maximum VOC level necessary.
- 407.2 If the APCO grants written approval, such petition will be repeated on an annual basis.
- 407.3 If the APCO grants written approval, such approval shall contain volume and VOC limit conditions.
- 407.4 Records must be maintained as in Section 8-19-501.

(Adopted 12/18/85; Amended 4/1/87; 6/7/89; 2/3/93; 6/15/94)

8-19-408 Emission Reduction Credits: Emission reduction credits established pursuant to Regulation 2, Rule 4 shall not take credit for any emissions reduced from coatings in excess of the standards of Section 8-19-302 or 312.

(Adopted June 15, 1994)

8-19-500 MONITORING AND RECORDS

8-19-501 Records: Any person using coatings or solvents subject to this Rule shall:

- 501.1 Maintain current data necessary to evaluate compliance, including the following information, as applicable:
 - a. coating catalyst and reducer used
 - b. VOC content of coating as applied
 - c. VOC content of surface preparation and cleanup solvents, as applied
- 501.2 Record the following information on a weekly basis, as applicable, unless otherwise specified in permit conditions imposed per Regulation 2-1-403:
 - a. coating and mix ratio of components in the coating used as applied
 - b. quantity of each coating applied
 - c. identification of specialty coating limit category
 - d. oven temperature
- 501.3 Record on a daily basis coating usage and key system operating parameters when an approved emission control system is used to comply with the requirements of Section 302, 312, 313, 320 or 321.
- 501.4 Record on a monthly basis the type and amount of solvent used for cleanup and surface preparation, unless more frequently specified in permit conditions imposed per Regulation 2-1-403.
- 501.5 Records shall be retained and available for inspection by the APCO for the previous 24-month period.

(Adopted 12/19/84; Amended 12/18/85; 1/7/87; 4/1/87; 6/7/89; 2/3/93; 10/6/93; 6/15/94; 10/16/02)

8-19-502 Deleted February 3, 1993

8-19-600 MANUAL OF PROCEDURES

8-19-601 Analysis of Coating Samples: Samples of volatile organic compounds as specified in Sections 8-19-302 and 312 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 21 or 22.

(Adopted 3/17/82; Amended 12/19/84; 1/7/87; 4/1/87; 6/7/89; 2/3/93)

8-19-602 Determination of Emissions: Emissions of volatile organic compounds as specified in Sections 8-19-302, 312, 313, 320 and/or 321 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. When either EPA Method 25 or 25 A is used, control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered in violation if the VOC emissions measured by any of the test methods exceed the standards of this rule.

(Adopted 3/17/82; Amended 1/7/87; 4/1/87; 6/7/89; 2/3/93; 6/15/94; 10/16/02)

8-19-603 Determination of Acid Content: Measurement of acid content as specified in Section 8-19-210 shall be determined in accordance with ASTM Method D-1613-96.

(Adopted 2/3/93; Amended 10/16/02)

8-19-604 Analysis of Mold Release Coating Samples: Samples of mold release coatings containing volatile organic compounds as specified in Section 8-19-302 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 31.

(Adopted February 3, 1993)

8-19-605 Analysis of Solvent Samples: Samples of volatile organic compounds as specified in Section 8-19-320 or 321 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 31.

(Adopted October 16, 2002)

8-19-606 Analysis of Exempt Compounds: Samples of PCBTF, VMS, and methyl acetate shall be analyzed by the Manual of Procedures, Volume III, Method 41, 43 and by ASTM Method D-6133-00, respectively.

(Adopted October 16, 2002)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 20
GRAPHIC ARTS PRINTING AND COATING OPERATIONS**

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- 8-20-112 Deleted April 19, 1989
- 8-20-113 Deleted April 19, 1989
- 8-20-114 Deleted April 19, 1989
- 8-20-115 Deleted April 19, 1989
- 8-20-116 Exemption, Circuitry Printing
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8-20-200 DEFINITIONS

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- 8-20-202 Flexographic Printing
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- 8-20-205 Gravure Printing
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- 8-20-209 Porous Substrate
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8-20-300 STANDARDS

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- 8-20-303 Deleted April 19, 1989
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- 8-20-306 Compliance Statement Requirement
- 8-20-307 Screen Printing Requirements
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- 8-20-309 Cleaning Product Requirements
- 8-20-320 Solvent Evaporative Loss Minimization

8-20-400 ADMINISTRATIVE REQUIREMENTS

- 8-20-401 Deleted April 19, 1989
- 8-20-402 Deleted April 19, 1989
- 8-20-403 Deleted April 19, 1989
- 8-20-404 Deleted April 19, 1989
- 8-20-405 Deleted April 19, 1989
- 8-20-406 Compliance Schedule, Loss of Exemption
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8-20-500 MONITORING AND RECORDS

- 8-20-501 Deleted April 19, 1989
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- 8-20-503 Records
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- 8-20-505 Emission Control System Monitoring
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8-20-600 MANUAL OF PROCEDURES

- 8-20-601 Analysis of Samples
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REGULATION 8
ORGANIC COMPOUNDS
RULE 20
GRAPHIC ARTS PRINTING AND COATING OPERATIONS

(Adopted April 12, 1980)

8-20-100 GENERAL

8-20-101 Description: The purpose of this Rule is to limit the emission of volatile organic compounds from graphic arts operations and graphic arts lines. Any operation which is determined to be exempt from the provisions of this Rule shall be subject to the provisions of Rule 4, if not already subject to another rule of Regulation 8.

(Amended December 4, 1985; October 6, 1993)

8-20-110 Exemption, Small User: Until September 1, 1999, the requirements of this Rule shall not apply to any facility which emits less than 182 kilograms (400 pounds) of VOC in any month from graphic arts operations, including surface preparation and cleanup solvent, provided the requirements of Section 8-20-507 are met. Effective September 1, 1999, the requirements of this Rule shall not apply to any facility which emits less than 79.4 kilograms (175 pounds) of VOC in any month from graphic arts operations, including surface preparation and cleanup solvent, provided the requirements of Section 8-20-507 are met. For the purpose of calculating exemption applicability, emissions of volatile organic compounds from the use of non-heatset lithographic ink as determined by Section 8-20-601 shall be reduced by 95 percent.

110.1 Exemption, Small User, Extreme Performance Screen Printing: Until January 1, 2003, the Extreme Performance Ink/Coating requirement of Section 8-20-307 shall not apply to any extreme performance screen printing facility which emits less than 182 kilograms (400 pounds) of VOC in any month from graphic arts operations, including surface preparation and cleanup solvent, provided the requirements of Section 8-20-406 are met.

(Amended April 19, 1989; October 6, 1993; March 3, 1999)

8-20-111 Exemption, Laboratory and Experimental Operations: Until September 1, 1999, the requirements of this Rule, except as provided in Section 8-20-503, shall not apply to equipment used exclusively for research, laboratory analysis or determination of product quality and commercial acceptance, provided emissions of VOC from such equipment do not exceed 136 kilograms (300 pounds) per month per facility. Effective September 1, 1999, the requirements of this Rule, except as provided in Section 8-20-503, shall not apply to equipment used exclusively for research, laboratory analysis or determination of product quality and commercial acceptance, provided emissions of VOC from such equipment do not exceed 79.4 kilograms (175 pounds) per month per facility.

(Amended April 19, 1989; October 6, 1993; March 3, 1999)

8-20-112 Deleted April 19, 1989

8-20-113 Deleted April 19, 1989

8-20-114 Deleted April 19, 1989

8-20-115 Deleted April 19, 1989

8-20-116 Exemption, Circuitry Printing: The requirements of this Rule shall not apply to circuitry printing.

(Adopted April 19, 1989; Amended March 3, 1999)

8-20-117 Exemption, Heat Shrinkable Tubing and Wire Insulation: The requirements of this Rule shall not apply to the printing of heat shrinkable tubing and wire insulation.

(Adopted October 6, 1993; Amended March 3, 1999)

8-20-118 Limited Exemption, Water Slide Decals: The requirements of this Rule, except as provided in Section 8-20-503, shall not apply to the screen printing of water slide decals.

(Adopted October 6, 1993)

8-20-119 Exemption, Solvent Cleaners: The requirements of this Rule shall not apply to the use of any vapor degreaser or cold cleaner that use or contain solvent for cleaning. Such vapor degreasers or cold cleaners are subject to Regulation 8, Rule 16: Solvent Cleaning Operations.

(Adopted March 3, 1999)

8-20-200 **DEFINITIONS**

- 8-20-201 **Approved Emission Control System:** A system for reducing emissions of VOC to the atmosphere, consisting of a control device and a collection system, which achieves the overall abatement efficiency specified in the applicable standards section at all times during operation of the equipment being controlled.
(Amended April 19, 1989; October 6, 1993)
- 8-20-202 **Flexographic Printing:** The application of words, designs or pictures by roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric material.
- 8-20-203 **Fugitive Emissions:** Emissions of VOC from any portion of the printing, coating or laminating operation other than the drying oven.
- 8-20-204 **Graphic Arts Operation:** Any gravure, publication gravure, flexographic printing, screen printing, letterpress, or lithographic printing operation, or any coating or laminating operation manufacturing converted flexible packaging materials for packaging of food or health care products for human or animal consumption.
(Amended December 4, 1985; April 19, 1989; October 6, 1993)
- 8-20-205 **Gravure Printing:** An intaglio printing operation in which the ink is transferred from minute etched wells on a plate to the substrate, which is supported by an impression roller, with excess ink removed by a doctor blade.
- 8-20-206 **Deleted October 6, 1993**
- 8-20-207 **Non-Porous Substrate:** Any substrate whose surface prevents penetration by water, including but not limited to foil, polyethylene, polypropylene, cellophane, paper or paperboard coated with a non-porous surface, metalized polyester, nylon and polyethylene terephthalate (mylar). Clay-coated printing paper as defined by the American Paper Institute Classification System and paperboard coated with clay to prevent water penetration shall be considered a non-porous substrate.
- 8-20-208 **Deleted October 6, 1993**
- 8-20-209 **Porous Substrate:** A substrate whose surface does not prevent penetration by water, including but not limited to paper, paperboard, and any paper product which is coated with a porous material.
- 8-20-210 **Publication Gravure:** Gravure printing on paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements or other types of printed material.
- 8-20-211 **Fountain Solution:** The solution applied to the image plate to maintain the hydrophilic properties of the non-image areas and to keep the non-image area free from ink. It is primarily water and contains at least one of the following materials: etchants such as mineral salts; hydrophilic gums; or VOC additives to reduce the surface tension of the solution.
(Adopted December 4, 1985; Amended March 3, 1999)
- 8-20-212 **Letterpress Printing:** A method where the image area is raised relative to the non-image area and the ink is transferred to the paper directly from the image surface.
(Adopted December 4, 1985)
- 8-20-213 **Lithographic Printing:** A plane-o-graphic method in which the image and non-image areas are on the same plane.
(Adopted December 4, 1985; Amended October 6, 1993)
- 8-20-214 **Screen Printing:** A process where the printing ink passes through a web or a fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.
(Adopted December 4, 1985)
- 8-20-215 **Makeup Solvent:** That solvent which is added to printing inks to reduce viscosity.
(Adopted April 19, 1989)
- 8-20-216 **Volatile Organic Compounds:** Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.

216.2 Effective January 1, 1995, for the purpose of calculating the VOC content of an ink, coating, or adhesive, any water or the following non-precursor organic compounds shall not be considered to be part of the product:

acetone
parachlorobenzotrifluoride (PCBTF)
cyclic, branched or linear, completely methylated siloxanes (VMS)

216.3 For the purpose of calculating the VOC content of fountain solution and cleanup solvent, any water or the following non-precursor organic compounds shall not be considered to be part of the VOC content of the product:

acetone
parachlorobenzotrifluoride (PCBTF)
cyclic, branched or linear, completely methylated siloxanes (VMS)

(Adopted 4/19/89; Amended 10/6/93; 6/15/94; 12/20/95; 3/3/99)

- 8-20-217 Graphic Arts Line:** Printing application equipment, coating equipment, laminating equipment, flash-off areas, ovens, conveyors or other equipment operating in an uninterrupted series in a graphic arts operation. (Adopted April 19, 1989)
- 8-20-218 Non-Heat Set Ink:** An ink which dries by oxidation and absorption into the substrate without the use of heat from dryers or ovens. (Adopted April 19, 1989)
- 8-20-219 Extreme Performance Ink/Coating:** For the purposes of this Rule, an ink or coating used in screen printing on a non-porous substrate that is designed to resist or withstand any of the following: more than two years of outdoor exposure; exposure to industrial-grade chemicals, solvents, acids, or detergents, oil products, cosmetics, temperatures exceeding 76°C (170°F), vacuum forming, embossing or molding. (Adopted October 6, 1993)
- 8-20-220 Heat Shrinkable Tubing and Wire Insulation:** Thermoplastic tubing, including but not limited to polyethylene, Kynar and mylar tubing that, after printing, is exposed to temperatures exceeding 100°C (212°F) or other environmental extremes, including but not limited to, repetitive rubbing or contact with hot fluids. (Adopted October 6, 1993; Amended March 3, 1999)
- 8-20-221 Metallic Ink:** An ink that contains greater than 50 grams of metal per liter (0.4 lb/gal) of ink. (Adopted October 6, 1993)
- 8-20-222 Sign Ink/Coating:** An ink or coating used in screen printing indoor and outdoor signs (excluding structural components) and murals, including lettering enamels, poster colors, copy blockers, and bulletin enamels. (Adopted October 6, 1993)
- 8-20-223 Solvent:** Organic compounds which are used as diluents, thinners, dissolvers, viscosity reducers, cleaning agents or for other similar uses. (Adopted October 6, 1993)
- 8-20-224 Water Slide Decal:** A decal which is screen printed onto treated paper stock and is removable from the stock by the dissolution of an underlying, water-soluble adhesive or a similar carrier. (Adopted October 6, 1993)
- 8-20-225 Web Splicing Adhesive:** An adhesive used to join two continuous rolls of substrate. (Adopted October 6, 1993)
- 8-20-226 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 8-20-301.2, and 308. (Adopted June 15, 1994)
- 8-20-227 Circuitry Printing:** Printing on circuit boards and other electronic circuitry, including membrane switches. (Adopted March 3, 1999)
- 8-20-228 Lithographic, Blanket and Roller Washes:** Cleaning products which are used to wash the blankets, the rollers, and the exterior surfaces of the printing press to remove excess printing inks, oils, and paper pieces. (Adopted March 3, 1999)
- 8-20-229 Lithographic, Other Cleaners:** Cleaning products which are used to clean the other components of the lithographic presses other than blankets, rollers, and exterior surfaces, such as metering rollers and printing plates. (Adopted March 3, 1999)

- 8-20-230 **Ink Removal Products:** Cleaning products used for the final cleaning of application equipment prior to color change or storage of the application equipment.
(Adopted March 3, 1999)
- 8-20-231 **VOC Composite Partial Pressure:** Sum of the partial pressures of the compounds defined as VOCs.
(Adopted March 3, 1999)
- 8-20-232 **Specialty Flexographic Printing:** Flexographic printing on polyethylene, polypropylene, polyester and foil substrates for food packaging and health care products and specialty products on nylon substrates.
(Adopted March 3, 1999)

8-20-300 **STANDARDS**

- 8-20-301 **Publication Gravure Requirements:** A person shall not operate a publication gravure process unless one or more of the following conditions is satisfied:
- 301.1 The process uses ink and coating that contains less than 300 grams VOC per liter of product, less water, or
- 301.2 Emissions of VOC from the printing and drying operation are controlled by an emission control system that meets the requirements of Regulation 2, Rule 1, and which has an overall collection and control efficiency of at least 85 percent on a mass basis. (Amended April 19, 1989; October 6, 1993)
- 8-20-302 **Flexographic, Gravure, Letterpress, and Lithographic Requirements:** Except as provided in Section 8-20-308, a person shall not operate a flexographic, gravure, letterpress, lithographic, related printing or coating operation unless the following product limits, expressed in grams VOC per liter of product as applied (pounds per gallon), less water, or percent VOC by volume are met:

Product Limits

grams VOC per liter of product as applied, less water (lbs/gal)

Ink	300 (2.5)
Coating	300 (2.5)
Adhesive	150 (1.25)
Web Splicing Adhesive	300 (2.5)

Product Limit

percent VOC by volume

Fountain Solution 8

(Amended October 6, 1993; June 15, 1994; March 3, 1999)

- 8-20-303 **Deleted April 19, 1989**
- 8-20-304 **Alternate Emission Control Plan:** The requirements of Sections 8-20-301 and 8-20-302 shall not apply to any graphic arts operation or group of such operations which comply with an alternative emission control plan that satisfies all the following requirements:
- 304.1 For plans submitted prior to May 26, 1988, emissions of VOC, on a daily weighted average, shall be no greater than that amount which would result if the affected graphic arts line or lines complied with all applicable requirements of Sections 8-20-301, and 302. Averaging shall be performed using pounds of VOC emitted per gallon of solids applied. The VOC content of the ink, coating, adhesive or fountain solution is as applied including any solvent added before or during application.
- 304.2 The plan shall include methods acceptable for demonstrating compliance with the plan on a daily basis. The information shall be available for inspection by the APCO for each production day at the time of inspection. Such demonstration shall include the following information:
- 2.1 List of products included in the plan
- 2.2 Type of inks, coatings or adhesives which will be applied on each product
- 2.3 Amount of ink, coatings or adhesives applied on each product
- 2.4 Solids content for each ink, coating or adhesive

- 2.5 VOC content per gallon or liter of solids, as applied, for each ink, coating or adhesive
- 2.6 Detailed description of how compliance with Section 8-20-304.1 or Section 8-20-304.7.2, where applicable, shall be achieved
- 304.3 The person submitting the plan shall maintain such records and submit such information on usage and composition, laboratory analysis, source tests or other information as required by the APCO to determine compliance with the plan.
- 304.4 The plan shall contain credit only for reductions achieved on sources subject to the applicable sections of this Rule. Credit shall not be granted for periods of non-operation, for reductions in surface preparation or cleanup solvent, for coatings exempt from the standards in Section 8-20-301 and 302, nor for emission reductions required by other regulations of this District.
- 304.5 If any District regulation is adopted or amended after approval of the plan which requires emissions reductions that are included in the plan, a new plan shall be submitted which does not include credit for those reductions.
- 304.6 The plan shall be submitted to the APCO for review and approval on an annual basis. Submission of the plan shall be within 60 days prior to annual permit renewal. Approval of the plan shall include a 30-day public comment period.
- 304.7 For alternate emission control plans submitted on or after May 26, 1988, the following additional requirements shall be satisfied:
- 7.1 Emissions of VOC on a daily basis shall not exceed the maximum daily emission limit as specified in subsection 8-20-304.7.2.
- 7.2 For the purpose of determining the maximum daily emission limit, the plan shall include a 20 percent net reduction beyond a baseline as calculated in subsection 8-20-304.7.3.
- 7.3 Baseline emissions shall be calculated as follows:
 Baseline emissions = $E \times P \times U$, where
 E = the lower of the actual or allowable pounds of VOC at the time of submission of the plan per pound of solids applied.
 P = the arithmetic average of the lower of the actual or allowable hours of operation per day for the prior two years or two other years if it can be shown to the satisfaction of the APCO that the prior two years are not representative.
 U = the lower of the actual or allowable pounds of solids per unit of production times units of production per day.
 Allowable emissions shall be those which would meet the limits specified in Section 8-20-301 and 302, expressed as a solids applied basis.
- 7.4 The plan submitted pursuant to subsection 8-20-304.2 shall additionally include units of production per hour or per production run and hours of operation or production runs per day to demonstrate compliance with the plan on a daily basis.
- 7.5 Emissions reductions achieved as a result of compliance with subsection 304.7.2 shall not be deposited into an emissions trading bank. The plan may not take credit for emissions banked as the result of a shutdown.
- (Amended October 6, 1993)
- 7.6 Emissions reductions from an air pollution abatement device may not be used to generate credit toward an alternate emissions control plan where the installation of the device was necessary to comply with Sections 8-20-301 or 302.
- 7.7 Each renewal of a plan shall maintain the maximum daily emission limit established at the time of initial approval of the plan as specified in subsection 8-20-304.7.1. A recalculation of baseline emissions and a 20 percent net reduction as specified in subsections 8-20-304.7.2

and 304.7.3 shall not be required for each plan renewal. Any modification of the provisions of the plan shall constitute a new plan.

7.8 The requirements of subsections 8-20-304.7.1, 304.7.2 and 304.7.3 shall not apply to any plan submitted where the provisions of the plan are limited to coatings applied at a single source subject to the same emission limitation during a single production run. Allowable emissions shall be those specified in subsection 8-20-304.1.

7.9 The provisions of subsection 8-20-304.7 shall be submitted to the Environmental Protection Agency (EPA) as a source-specific revision to the State Implementation Plan (SIP). Sources which obtain an approved alternate emission control plan pursuant to the provisions of subsection 8-20-304.7 remain subject to federal enforcement of existing SIP limits pending federal approval of the plan as a source-specific SIP revision.

304.8 Failure to comply with any provision of an approved plan shall constitute a violation of this Rule. (Amended September 20, 1989; October 6, 1993)

8-20-305 Deleted April 19, 1989

8-20-306 **Compliance Statement Requirement:** The manufacturer of all inks, coatings, adhesives, and fountain solutions which are sold for use in graphic arts operation within the District shall include a designation of VOC of product, less water, as supplied (as defined in Section 8-20-216) expressed in grams per liter or pounds per gallon, either by calculation or analysis, on data sheets.

(Adopted April 19, 1989; Amended October 6, 1993)

8-20-307 **Screen Printing Requirements:** Except as provided in Section 8-20-308, a person shall not operate a screen printing operation unless the following product limits, expressed in grams VOC per liter (pounds per gallon) as applied, less water, are met:

Product Limit
grams per liter VOC as applied, less water (lbs/gal)

Ink	400 (3.3)
Coating	400 (3.3)
Adhesive	150 (1.25)
Extreme Performance Ink/Coating	400 (3.3)
Metallic Ink	400 (3.3)
Sign Ink/Coating	400 (3.3)

(Adopted October 6, 1993; Amended March 3, 1999)

8-20-308 **Approved Emission Control System Requirements:** The limits of Section 8-20-302, 307, or 309 shall not apply when emissions of VOC to the atmosphere from the printing, coating or laminating, drying and cleanup operations are controlled by an emission control system that meets the requirements of Regulation 2, Rule 1, and has a collection and control efficiency of at least 75 percent overall on a mass basis.

(Adopted October 6, 1993; Amended March 3, 1999)

8-20-309 Cleaning Product Requirements: Effective January 1, 2000, except as provided in Section 8-20-308, a person shall not use cleaning products containing VOC's for the cleanup of equipment used in graphic arts printing and coating operations, unless the following product limits are met:

	<u>Product Limit</u>		
	VOC g/l (lb/gal), including water		VOC Composite Partial Pressure Hg @ 20°C (68°F)
Lithographic, Blanket and Roller Washes	300 (2.5)	OR	10
Lithographic, Other Cleaners	300 (2.5)	OR	25
Screen Printing, Ink Removal Products	300 (2.5)	OR	10
Gravure Printing	800 (6.7)	OR	25
Ultraviolet Inks, Ink Removal Products	800 (6.7)	AND	33
Flexographic Printing	810 (6.8)	AND	21
Specialty Flexographic Printing	880 (7.4)	AND	25

(Adopted March 3, 1999)

8-20-320 Solvent Evaporative Loss Minimization: The requirements of this Section shall apply to any person using solvent for surface preparation and cleanup and to any person using, mixing, storing, or disposing of ink, coating or adhesive :

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 surface preparation, cleanup or ink, coating or adhesive removal.

320.2 A person shall not store spent or fresh organic compounds to be used for surface preparation, cleanup or ink, coating, or adhesive removal in open containers.

320.3 A person shall not leave containers or ink, coating, adhesive or fountain solution open when not in use.

(Adopted April 19, 1989; Amended and Renumbered October 6, 1993)

8-20-400 ADMINISTRATIVE REQUIREMENTS

8-20-401 Deleted April 19, 1989

8-20-402 Deleted April 19, 1989

8-20-403 Deleted April 19, 1989

8-20-404 Deleted April 19, 1989

8-20-405 Deleted April 19, 1989

8-20-406 **Compliance Schedule, Loss of Exemption:** Any person who becomes subject to the requirements of Sections 301, 302, or 307 through loss of exemption in Section 110 shall comply with the following increment of progress:

406.1 By January 1, 1995, be in full compliance with the requirements of this Rule.

8-20-407 **Small User, Extreme Performance Screen Printing Petition:** Any person seeking to use an Extreme Performance Ink/Coating which does not comply with the requirements of Section 8-20-307 shall satisfy the conditions of Section 8-20-110.1 and shall comply with the following requirements:

406.1 The user or specifier shall petition the APCO (attn: Enforcement Division) in writing that substitute complying coatings are not available.

406.2 The petition to the APCO shall include the performance requirements, volume of coating, and VOC level, which is attainable. A facility may submit more than one petition, as long as the conditions of Section 8-20-110.1 are satisfied.

406.3 If the APCO grants written approval, such petition will be repeated on an annual basis.

406.4 If the APCO grants written approval, such approval shall contain conditions consistent with the information provided in the petition to monitor usage and insure compliance with Section 8-20-110.1.

406.5 Records shall be maintained as in Section 8-20-503.

(Adopted March 3, 1999)

8-20-500 MONITORING AND RECORDS

8-20-501 Deleted April 19, 1989

8-20-502 Deleted April 19, 1989

8-20-503 Records: Any person complying with the requirements of Sections 8-20-111, 118, 301.1, 302, 307 or 309 shall:

503.1 Maintain a current list of inks, coatings, adhesives, fountain solutions and makeup and cleaning solvents in use which states the VOC content of each.

503.2 Record on a monthly basis the type and amount of all ink, using one of the following methods:

2.1 Group the quantity of all inks used and identify the maximum VOC content and use the minimum density of 1.01 kg/l (8.44lb/gal).

2.2 Report process inks and pantone colors separately and use the specific VOC content and density value for each process ink and the highest volatile organic compound and 1.01 kg/l (8.44 lbs/gal) for pantone inks; or

2.3 Report process inks and pantone colors separately using the maximum VOC content and minimum density for both process and pantone inks or use the density of 1.01 kg/l (8.44 lbs/gal) for pantone inks.

2.4 Itemize each ink and pantone color and use the specific VOC content and density value for each.

503.3 Record on a monthly basis the type and amount of each coating, adhesive, fountain solution and makeup, surface preparation, and cleanup solvent used.

503.4 Retain and have such records available for inspection by the APCO for the previous 24-month period.

(Adopted 4/19/89; Amended 10/6/93; 6/15/94; 3/3/99)

8-20-504 Deleted October 6, 1993

8-20-505 Emission Control System Monitoring: Effective September 1, 1989, any person who uses an emission control system which is subject to the provisions of Sections 8-20-301.2, 301.3, 304, and 308 shall install a readily visible temperature gauge which monitors the operating temperature of the emission control system at all times during operation.

(Adopted April 19, 1989; Amended September 20, 1989; October 6, 1993)

8-20-506 Emission Control System, Recordkeeping Requirements: Any person subject to Sections 8-20-301.2 and 308 shall:

506.1 Maintain a current list of inks, coatings, adhesives, fountain solutions and makeup solvent in use which states the VOC content of each.

506.2 Record on a daily basis the type and amount of all ink, coating, adhesive, fountain solution and makeup, surface preparation and cleanup solvent used.

506.3 Record key system operating parameters, as defined in Section 8-20-226, on a daily basis.

506.4 Retain and have such records available for inspection by the APCO for the previous 24-month period.

(Adopted October 6, 1993; Amended June 15, 1994)

8-20-507 Burden of Proof: Any person claiming the small user exemption per Section 8-20-110 must have information available, such as purchase orders or hazardous waste manifests, that would allow the APCO to verify facility usage.

(Adopted October 6, 1993)

8-20-600 MANUAL OF PROCEDURES

8-20-601 Analysis of Samples: Samples of products specified in Sections 8-20-301, 302, and 307 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Methods 21 or 22, or EPA Methods 24 and 24A to determine VOC content. Samples of fountain solutions and cleaning materials as specified in Section 8-20-302 and 309, shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 31.

(Amended October 6, 1993; Amended March 3, 1999)

8-20-602 Determination of Emissions: Emissions of volatile organic compounds as specified in Sections 8-20-110, 111, 301, 308, and subsection 8-20-304.3 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. When either EPA Method 25 or 25A is used, control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule. When determining emissions of VOC for lithographic printing facilities, the following substrate retention factors of VOC for inks will be applied: 20 percent retention of the VOC content for heatset inks and 95 percent retention of the VOC content for non-heatset inks, based on the VOC content as determined by Section 8-20-601. For the purpose of determining abatement device efficiency, any acetone, PCBTF or VMS shall be included as volatile organic compounds. A source shall be considered in violation if the VOC emissions measured by any of the reference test method exceed the standards of this rule.

(Amended April 19, 1989; Sept. 20, 1989; Oct. 6, 1993; June 15, 1994)

8-20-603 Deleted October 6, 1993

8-20-604 Determination of VOC Composite Partial Pressure: Emissions of VOC Composite Partial Pressure shall be measured as prescribed by BAAQMD Manual of Procedures, Volume III, Method 46. (Adopted March 3, 1999)

05/13/80

REGULATION 8 - RULE 21

RUBBER TIRE MANUFACTURING OPERATIONS

- 8-21-100 GENERAL
- 8-21-101 Description: The purpose of this Rule is to limit emissions of volatile organic compounds (VOC) from pneumatic rubber tire manufacturing operations.
- 8-21-110 Exemption, Retread Operations: The requirements of this Rule shall not apply to operations applying new tread to used tires.
- 8-21-200 DEFINITIONS
- 8-21-201 Approved Emission Collection System: A system, approved by the APCO, for collecting VOC emissions and transporting them to a control device and which satisfies at least one of the following conditions:
- 201.1 The system collects at least 85 percent of the VOC emissions generated by the operation being controlled, or
- 201.2 The system achieves maximum reasonable collection consistent with good engineering practice and guidelines published by the American Federation of Industrial Hygienists and the National Institute of Occupational Safety and Health.
- 8-21-202 Bead Dipping: Dipping of an assembled tire bead into a solvent based cement.
- 8-21-203 Green Tire Coating: Coating of green tires with release compounds to help remove air during tire molding and prevent the tire from sticking to the mold after curing.
- 8-21-204 Green Tires: Assembled tires before molding and curing have occurred.
- 8-21-205 Pneumatic Rubber Tire Manufacturing: Production of pneumatic rubber tires for passenger cars, light trucks or medium trucks, or other pneumatic rubber tires manufactured on an assembly line using automated equipment.
- 8-21-206 Tread End Cementing: Application of a solvent based cement to the tire tread ends.
- 8-21-207 Undertread Cementing: Application of a solvent based cement to the underside of a tire tread.
- 8-21-208 Water Based Coating: Release compounds which contain less than 3 percent volatile organic compounds.

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8-21-300 STANDARDS

8-21-301 Cementing and Bead Dipping: Effective April 1, 1982, a person shall not operate any undertread cementing, tread end cementing or bead dipping operation unless the following requirements have been satisfied:

301.1 Install and operate an approved emission collection system, as defined in this Rule.

301.2 Install and operate a control device which reduces emissions from the collection system by at least 95 percent on a mass basis.

8-21-302 Green Tire Coating: Effective April 1, 1982, a person shall use only water base coatings in green tire coating operations unless the following requirements are satisfied:

302.1 Install and operate an emission collection system which collects and transports to the control device at least 90 percent (on a mass basis) of the VOC emitted by the green tire coating.

302.2 Install and operate a control device which reduces emissions from the collection system by at least 95 percent on a mass basis.

8-21-303 Compensating Reductions: The requirements of Sections 8-21-301 through 302 shall not apply to any pneumatic rubber tire manufacturing operations which comply with an alternative emission control plan which has been approved by the APCO and which satisfies all the following requirements:

303.1 Emissions of VOC, on a daily weighted average be no greater than that amount which would result if the affected operations complied with all applicable requirements of Sections 8-21-301 through 302.

303.2 The plan shall be submitted to the APCO for review and approval on an annual basis.

303.3 The plan shall include methods acceptable to APCO for demonstrating compliance with the plan a daily basis. Such demonstration shall include the following:

303.3.1 List of materials which will be used on each production line.

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- 303.3.2 Type of coatings or cements which will be applied.
 - 303.3.3 Amount of those coatings or cements which will be applied.
 - 303.3.4 VOC content or equivalent emission for each coating or cement.
 - 303.3.5 Detailed description of compensating reductions to be achieved for each non-complying operation.
 - 303.4 The information required in Section 303.3 shall be available for inspection by the APCO on each production day.
 - 303.5 The plan shall contain credit only for reductions achieved on coating or cementing operations subject to this Rule.
 - 303.6 Failure to comply with any provision of an approved plan shall constitute a violation of this Rule.
 - 303.7 The person submitting the plan shall maintain such records and submit such information on usage and composition, laboratory analysis, source tests or other information as required by the APCO to determine compliance with the plan.
 - 303.8 The plan shall not include credit for emission reductions required by other sections of this regulation or other regulations of this District.
 - 303.9 If any District regulation is adopted or amended after approval of the plan, which requires emission reductions which are included in the plan, a new plan shall be submitted which does not include credit for those reductions.
- 8-21-304 Container Requirements: Containers for organic solvents or for cements containing organic solvents shall be covered at all times except when cleaning or adding or removing material, and any leaks in such containers shall be repaired immediately.
- 8-21-400 ADMINISTRATIVE REQUIREMENTS
- 8-21-401 Compliance Schedule: Any person who is subject to the requirements of this Rule shall comply with the following increments of progress:
- 401.1 By April 1, 1981: Submit to the APCO a plan describing the methods to be used to comply with the applicable requirements.
 - 401.2 By November 1, 1981: Submit a completed application for any Authority to Construct necessary to comply with the applicable requirements.
 - 401.3 By April 1, 1982: Be in full compliance with all applicable requirements.

**REGULATION 8
ORGANIC COMPOUNDS
RULE 22
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**REGULATION 8
ORGANIC COMPOUNDS
RULE 22
VALVES AND FLANGES AT CHEMICAL PLANTS
(Adopted March 5, 1980)**

8-22-100 GENERAL

8-22-101 Description: The purpose of this Rule is to limit emissions of precursor organic compounds from valves and flanges at chemical plants.
(Amended March 17, 1982; July 20, 1983)

8-22-110 Deleted September 6, 1989

8-22-111 Deleted September 6, 1989

8-22-112 Exemption, Low Vapor Pressure: The provisions of this Rule shall not apply to valves or flanges which handle only organic liquids with a vapor pressure less than 2.6 mmHg (0.05 psia) at 20°C (68°F) or exhibit a 10 percent evaporation point greater than 150°C (302°F) when using ASTM D-86.
(Amended September 6, 1989)

8-22-113 Exemption, Natural Gas: The provisions of this Rule shall not apply to valves or flanges which handle only commercial natural gas. (Amended September 6, 1989)

8-22-114 Exemption, Research and Development Facilities: The provisions of this Rule shall not apply to research or development facilities which produce only non-commercial products for research and development purposes.
(Amended June 1, 1994)

8-22-115 Exemption, Chemical Plants With 100 or More Valves: Effective January 1, 1993, the provisions of this Rule shall not apply to valves or flanges in chemical plants having 100 or more valves, which are subject to the provisions of Regulation 8, Rule 18: Valves and Connectors at Petroleum Refineries, Chemical Plants, Bulk Plants and Bulk Terminals.
(Adopted March 4, 1992)

8-22-200 DEFINITIONS

8-22-201 Background: The ambient concentration of organic compounds determined at least 3 meters (10 feet) upwind from the valve or flange to be inspected and not influenced by any specific emission point.
(Amended March 17, 1982; September 6, 1989)

8-22-202 Essential Valve or Flange: A valve or flange which cannot be taken out of service without shutting down the process unit which it serves.

8-22-203 Flange: A projecting rim on a pipe or piping component used to attach it to another piping detail.

8-22-204 Flange Leak Minimization: Tightening, adjusting or addition of gasket material to a flange, using best modern practices, for the purpose of stopping or reducing leakage to the atmosphere.

8-22-205 Flange Leak Repair: Tightening, adjusting or replacing, adding gasket material to a flange which reduces leakage to the atmosphere below the limit of Section 8-22-301.

8-22-206 Process Unit: A manufacturing process which is independent of other processes and is continuous when supplied with a constant feed of raw materials and sufficient storage facilities for the final project.
(Renumbered March 17, 1982)

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8-22-207

Chemical Plants: Any facility engaged in producing organic or inorganic and/or manufacturing products by chemical processes. Any facility or operation that has 28 as the first two digits in their Standard Industrial Classification Code as determined from the Standard Industrial Classification Manual published in 1972 by the Executive Office of the President, Office of Management and Budget. Chemical plants may include, but are not limited to the manufacture of: industrial inorganic and organic chemicals; plastic and synthetic resins, synthetic rubber, synthetic and other man made fibers; drugs; soap, detergents and cleaning preparations, perfumes, cosmetics and other toilet preparations; paints, varnishes, lacquers, enamels and allied products; agricultural chemicals; safflower and sunflower oil extracts; re-refining.

(Renumbered March 17, 1982; Amended July 20, 1983; March 4, 1992)

8-22-208

Valve: Any device that regulates the flow of fluids in a piping system by means of an external actuator acting to permit or block passage of liquids or gases.

(Renumbered March 17, 1982)

8-22-209

Valve Leak Minimization: The tightening, adjustment, or addition of packing material which surrounds the valve stem, or the replacement of the valve for the purpose of stopping or reducing leakage to the atmosphere, using best modern practices.

(Renumbered March 17, 1982)

8-22-210

Valve Leak Repair: The tightening, adjustment, or addition of packing material which surrounds the valve stem, or the replacement of the valve, which reduces the leakage to the atmosphere below the limit of Section 8-22-301.

(Renumbered March 17, 1982)

8-22-211

Inaccessible Valves and Flanges: Valves or flanges that are not in an accessible location as defined by Title 8, Section 3207, General Industrial Safety Orders of CAL OSHA 1986.

(Adopted September 6, 1989)

8-22-212

Small Chemical Plant: Effective January 1, 1993, any chemical plant that has 100 or less valves.

(Adopted March 4, 1992)

8-22-300

STANDARDS

8-22-301

Valves and Flanges: A person shall not use any valve or flange handling precursor organic compounds in a chemical plant if the concentration of organic compounds, measured 1 cm or less from any leak in such valve or flange, exceed 10,000 ppm (expressed as methane) above background, unless the following requirements are satisfied:

- 301.1 If the valve or flange is not essential, the leak shall be repaired within 15 days.
- 301.2 If the valve or flange is essential, the leak shall be minimized within 15 days.
- 301.3 If a valve or flange leak which has been minimized as required by subsection 301.2 still exceeds the limitations of Section 8-22-301, that valve or flange shall be repaired at the next scheduled turnaround of the process unit. Effective July 1, 1980 any such valve or flange shall not be operated longer than six months before repairs are conducted.
- 301.4 Any valve or flange subject to Section 8-22-301, where the organic compound concentration exceeds 75,000 ppm (expressed as methane) above background, measured 1 cm or less from a leak in any such valve or flange, shall be repaired within 15 days.

(Amended March 17, 1982; July 20, 1983; September 6, 1989)

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8-22-400

ADMINISTRATIVE REQUIREMENTS

8-22-401

Identification: Any valve or flange with a leak in excess of the limitations of Section 8-22-301, which has been detected by the operator and is awaiting repair shall be identified in a manner which is readily observable by a District inspector. (Amended September 6, 1989)

8-22-402

Inspection Plan: Any person subject to this Rule shall comply with the following inspection requirements:

402.1 All annually inspected valves shall be inspected at least once prior to January 1, 1991. All quarterly inspected valves shall be inspected at least once prior to April 1, 1990.

402.2 Any valve which exceeds the limitations of Section 8-22-301 shall be marked with a tag and shall be reinspected within 3 months after being repaired.

402.3 Any inaccessible valve subject to this Rule shall be inspected at least once a year by the person subject to this Rule.

402.4 Any accessible valve subject to this Rule shall be inspected at least quarterly by the person subject to this Rule.

402.5 Any valve subject to this Rule may be inspected at any time by the APCO.

(Amended March 17, 1982; July 20, 1983; September 6, 1989)

8-22-403 Deleted June 1, 1994

8-22-500 MONITORING AND RECORDS

8-22-501 **Portable Hydrocarbon Detector:** Any instrument used for the measurement of precursor organic compounds shall be a combustible gas indicator approved by the APCO or other type of instrument approved by the APCO in accordance with EPA Reference Method 21. (Amended March 17, 1982; September 6, 1989)

8-22-502 **Records:** Any person subject to the requirements of this Rule shall maintain records that provide the following information:

502.1 The valve identification code, valve type and the location of the valve.

502.2 The date of all inspection and reinspection and the corresponding leak concentration measured as specified by Section 8-22-401.

502.3 Records shall be maintained for at least 5 years and shall be made available to the APCO for inspection at any time.

502.4 Monthly records of all non-repairable valves subject to the provisions of Section 8-22-301.3 shall be maintained and contain the valve identification code, valve type, valve location, leak concentration monthly measurement and date, last unit turnaround date, and total number of non-repairable valves awaiting repair. (Adopted June 1, 1994)

8-22-600 MANUAL OF PROCEDURES

8-22-601 **Analysis of Samples:** Samples of organic compounds as defined in this Rule shall be analyzed for Reid vapor pressure as prescribed in the Manual of Procedures, Volume 111, Method 13. (Adopted March 17, 1982)

8-22-602 **Inspection Procedure:** Inspection of valves and flanges shall be conducted as prescribed by EPA Reference Method 21. (Adopted September 6, 1989)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 23
COATING OF FLAT WOOD PANELING
AND WOOD FLAT STOCK**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 23
COATING OF FLAT WOOD PANELING
AND WOOD FLAT STOCK**

(Adopted April 2, 1980)

8-23-100 GENERAL

8-23-101 Description: The purpose of this Rule is to limit the emission of volatile organic compounds (VOC) from the application of coatings and adhesives to flatwood panels and wood flat stock including but not limited to the following:

- 101.1 Printed interior panels made of hardwood plywood and thin particleboard
- 101.2 Natural finish hardwood plywood
- 101.3 Hardwood paneling
- 101.4 Baseboard
- 101.5 Wood flat stock
- 101.6 Veneers, doors, door skins, and wood flat product skins
- 101.7 Tileboard and wallboard
- 101.8 Exterior siding

Any coating which is determined to be exempt from the provisions of this Rule shall be subject to the provisions of Rule 4, if not already subject to another Rule of Regulation 8. (Amended March 20, 1985; June 21, 1989)

8-23-102 Deleted October 6, 1993

8-23-110 Exemption, Furniture and Cabinet Components This Rule shall not apply to the surface coating of flat wood stock intended to be used as a furniture or cabinet component. Such coating is subject to Regulation 8, Rule 32.

(Amended June 21, 1989)

8-23-111 Exemption, Architectural Coatings The provisions of this Rule shall not apply to the application of coatings to stationary structures and their appurtenances. Such coating is subject to Regulation 8, Rule 3, Architectural Coatings.

(Adopted June 21, 1989)

8-23-200 DEFINITIONS

8-23-201 Deleted June 21, 1989

8-23-202 Deleted June 21, 1989

8-23-203 Hardboard: A panel manufactured primarily from inter-felted ligno-cellulosic fibers which are consolidated under heat and pressure in a hot press.

8-23-204 Hardwood Plywood: Plywood whose surface layer is a veneer of hardwood.

8-23-205 Natural Finish Hardwood Plywood Panels: Panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

8-23-206 Printed Interior Panels: Panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

8-23-207 Thin Particleboard: A manufactured board 1/4 inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.

8-23-208 Tileboard: Paneling that has a colored waterproof surface coating.

8-23-209 Adhesive: Any substance that is applied for the primary purpose of bonding surfaces together. (Adopted March 20, 1985; Amended June 21, 1989)

8-23-210 Deleted June 21, 1989

8-23-211 Coating: Any coating applied on any wood flat stock including but not limited to water repellent preservative, semitransparent stains, opaque stains, filler, or clear top coat.

(Adopted March 20, 1985)

- 8-23-212 Deleted June 21, 1989**
- 8-23-213 Ink:** Any fluid or viscous composition used in printing, impressing or transferring an image onto a panel. (Adopted March 20, 1985)
- 8-23-214 Deleted June 21, 1989**
- 8-23-215 Deleted June 21, 1989**
- 8-23-216 Deleted June 21, 1989**
- 8-23-217 Deleted June 21, 1989**
- 8-23-218 Panel:** A flat piece of wood or wood product, usually rectangular and used inside homes and mobile homes for wall decorations. (Adopted March 20, 1985)
- 8-23-219 Deleted June 21, 1989**
- 8-23-220 Deleted June 21, 1989**
- 8-23-221 Wood Flat Stock:** Panels containing wood including but not limited to redwood stocks, plywood panels, particle boards, composition hardboards, and any other panels containing solid wood or wood product. (Adopted March 20, 1985)
- 8-23-222 Volatile Organic Compound:** Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.
- 222.1 For purposes of calculating VOC content of a coating, any water or the following non-precursor organic compounds:
- methylene chloride
 - 1,1,1 trichloroethane
 - 1,1,2 trichlorotrifluoroethane (CFC-113)
 - trichlorofluoromethane (CFC-11)
 - dichlorodifluoromethane (CFC-12)
 - dichlorotetrafluoroethane (CFC-114)
 - chloropentafluoroethane (CFC-115)
 - chlorodifluoromethane (HCFC-22)
 - trifluoromethane (HFC-23)
 - acetone
 - parachlorobenzotrifluoride (PCBTF)
 - cyclic, branched or linear, completely methylated siloxanes (VMS)
- shall not be considered to be part of the coating.
(Adopted June 21, 1989; Amended December 20, 1995)
- 8-23-223 Non-Heat-Set Ink:** An ink which dries by oxidation and absorption into the substrate without the use of heat from dryers or ovens. (Adopted June 21, 1989)
- 8-23-224 Key System Operating Parameter:** An air pollution abatement equipment 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 8-23-301. (Adopted June 15, 1994)

8-230-300 STANDARDS

- 8-23-301 Emission Limits:** A person shall not apply to any wood flat stock or wood panel any coating in excess of the following limits, (expressed as grams of VOC per liter of coating used, excluding water) unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 90% and meets the requirements of Regulation 2, Rule 1:
- | | | |
|-------------------------|-----|---------------|
| Wood Flat Stock Coating | 250 | (2.1 lbs/gal) |
| Adhesive | 250 | (2.1 lbs/gal) |
| Inks | 250 | (2.1 lbs/gal) |
- (Amended March 20, 1985; June 21, 1989; October 6, 1993)
- 8-23-302 Deleted June 21, 1989**
- 8-23-303 Deleted June 21, 1989**
- 8-23-304 Deleted June 21, 1989**
- 8-23-305 Deleted October 6, 1993**

8-23-400 ADMINISTRATIVE REQUIREMENTS

8-23-401 Coating List: Any person subject to Section 8-23-301 shall maintain a current list of coatings and adhesives in use which provides all of the data necessary to evaluate compliance. (Amended March 20, 1985; June 21, 1989)

8-23-402 Deleted October 6, 1993

8-23-500 MONITORING AND RECORDS

8-23-501 Records: Any person subject to this Rule shall maintain records on a daily basis that provide the following information, as applicable:

- a. coating and mix ratio of components in the coating or adhesive used
- b. quantity of each coating or adhesive applied
- c. description of substrate coated
- d. oven or cure temperature
- e. type and amount of solvent used for cleanup and surface preparation

(Adopted June 21, 1989)

8-23-502 Air Pollution Abatement Equipment, Recordkeeping Requirements: Any person operating air pollution abatement equipment to comply with Section 8-23-301, in addition to Section 8-23-501, shall record key system operating parameters on a daily basis. (Adopted June 15, 1994)

8-23-600 MANUAL OF PROCEDURES

8-23-601 Analysis of Samples: Samples of volatile organic compounds as defined in this Rule shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 21 or 22.. (Amended June 21, 1989; June 15, 1994)

8-23-602 Determination of Emissions: Emissions of precursor organic compounds as specified in Sections 8-23-301 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. When either EPA Method 25 or 25A is used, control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule.

(Adopted March 20, 1985; Amended June 21, 1989; June 15, 1994)

REGULATION 8
ORGANIC COMPOUNDS
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- 8-24-306 Bulk Loading
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- 8-24-308 Operating Requirements
- 8-24-309 Surface Preparation and Cleanup Solvent

8-24-400 ADMINISTRATIVE REQUIREMENTS

- 8-24-401 Deleted July 11, 1990
- 8-24-402 Compliance Schedule, Loss of Exemption

8-24-500 MONITORING AND RECORDS

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- 8-24-502 Organic Compound Processing Records

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REGULATION 8
ORGANIC COMPOUNDS
RULE 24
PHARMACEUTICAL AND COSMETIC MANUFACTURING OPERATIONS

8-24-100 GENERAL

8-24-101 **Description:** The purpose of this Rule is to limit emissions of organic compounds from the manufacture of pharmaceutical and cosmetic products or devices.

8-24-110 **Exemption, Small User:** The requirements of Sections 8-24-301, 302, 303, 305, 306, 307 and 502 shall not apply to facilities that emit, 6.8 kg (15 lbs) per day or less of unabated organic compounds provided the requirements of Section 8-24-501 are met. (Calculations shall not include surface preparation and cleanup solvent.)

(Amended July 11, 1990)

8-24-111 **Exemption, Ethylene Oxide Sterilizers:** Ethylene oxide sterilizers which are subject to the provisions of Regulation 11, Rule 9, are exempt from the provisions of Section 8-24-303.

(Adopted July 11, 1990)

8-24-200 DEFINITIONS

8-24-201 **Cosmetics Manufacturing Plant:** Any plant producing or blending chemicals for use in cosmetic products and/or manufacturing cosmetic products.

8-24-202 **In-Process Tank:** Containers used for mixing, blending, heating, reacting, holding, crystallizing, evaporating, or cleaning operations in the manufacture of pharmaceuticals or cosmetics.

8-24-203 **Organic Compound:** Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, or carbonates, ammonium carbonates, methane, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (CFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), 1,1,1-trichloroethane and methylene chloride.

8-24-204 **Pharmaceutical Manufacturing Plant:** Any plant producing or blending chemicals for use in pharmaceutical products and/or employing chemical processes in the manufacture of pharmaceutical products or medical devices.

8-24-205 **Approved Emission Control System:** A system for reducing emissions to the atmosphere, consisting of an abatement device and a collection system, which achieves the abatement efficiency specified in the applicable standards at all times during the operation of the equipment being controlled. (Adopted June 15, 1994)

8-24-206 **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 8-24-301.2, 302, 303, and 305. (Adopted June 15, 1994)

8-24-300 STANDARDS

8-24-301 **Reactors, Distillation Columns, Crystallizers & Centrifuges:** A person shall not emit more than 6.8 kg (15 lbs) or organic compounds per day from any reactor, distillation column, crystallizer or centrifuge unless such emissions are reduced by one of the following:

301.1 Surface condensers for the control of organic compounds having the outlet gas temperature controlled as follows:

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Vapor Pressure of Organic Compounds at 20°C (68°F)		Maximum Condenser Outlet Gas Temp.	
mm Hg	Psia	°C	(°F)
26-52	(0.5-1.0)	25	(77)
52-78	(1.0-1.5)	10	(50)
78-150	(1.5-2.9)	0	(32)
150-300	(2.9-5.8)	-15	(5)
over 300	(over 5.8)	-25	(-13)

301.2 Any other approved emission control system that meets the requirements of Regulation 2, Rule 1 that reduces emissions by at least as much as would have occurred using a surface condenser specified in subsection 8-24-301.1

(Amended July 11, 1990; June 15, 1994)

8-24-302 Separation Operations: A person shall not emit more than 15 kg (33 lbs) or organic compounds per day from any rotary vacuum filter or any other filter or separation device having an exposed liquid surface where the liquid contains organic compounds with a combined vapor pressure of 26 mm Hg (0.5 psia) or more at 20°C (68°F) unless such emissions are reduced by 90 percent on a mass basis.

(Amended July 11, 1990)

8-24-303 Sterilizers: A person shall not operate any chemical sterilizer using gaseous organic compounds unless the following condition is met:

303.1 Deleted July 11, 1990

303.2 Emissions of organic compounds shall not exceed 15 kg (33 lbs) per day from any such sterilizer unless such emissions are reduced by at least 75% on a mass basis.

(Amended July 11, 1990)

8-24-304 In-Process Tanks: A person shall not use in-process tanks for material containing organic liquids unless a cover is provided. These covers must remain closed, unless production, sampling, maintenance, loading or unloading procedures require operator access.

8-24-305 Air Dryers: A person shall not emit more than 15 kg (33 lbs) of organic compounds per day from any air dryer unless such emissions are reduced by at least 90 percent by weight.

8-24-306 Bulk Loading: A person shall not transfer organic liquids having vapor pressure greater than 212 mm Hg (4.1 psia) at 20°C (68°F) from any rail car or tank truck into any storage tank with a capacity greater than 7,500 liters (2,000 gal.) unless organic compound emissions during transfer are reduced by 90 percent by weight.

8-24-307 Storage Tanks: All storage tanks that store organic liquids with a vapor pressure greater than 78 mm Hg (1.5 psia) at 20°C (68°F) shall be equipped with pressure/vacuum vents set at a minimum ± 2 mm Hg (± 0.03 psia).

8-24-308 Operating Requirements: An operator shall repair all leaks from which organic liquids can be observed to be running or dripping. The repair shall be completed the first time the equipment is off-line for a period long enough to complete the repair.

8-24-309 Surface Preparation and Cleanup Solvent: The requirements of this Section shall apply to any person using organic solvent for surface preparation and cleanup.

309.1 A person shall use closed containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.

309.2 A person shall store fresh or spent solvent in closed containers.

(Adopted July 11, 1990)

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8-24-400 ADMINISTRATIVE REQUIREMENTS

8-24-401 Deleted July 11, 1990

8-24-402 **Compliance Schedule, Loss of Exemption:** Any person who becomes subject to the requirements of this Rule through loss of exemption in Section 110 shall comply with the following increments of progress.

402.1 By January 1, 1991, submit an application to the APCO for Authority to Construct.

402.2 By June 1, 1991, be in final compliance. (Adopted July 11, 1990)

8-24-500 MONITORING AND RECORDS

8-24-501 **Smaller-User Records:** Any person seeking to satisfy the conditions of Section 8-24-110 shall comply with the following requirements:

501.1 The user shall keep records on a daily basis which show the types and amounts of organic compounds used.

501.2 Such records shall be retained and available for inspection by the APCO for the previous 24-month period. (Adopted July 11, 1990)

8-24-502 **Organic Compound Processing Records:** Any person subject to Sections 8-24-301, 302, 303, or 305 shall:

502.1 Maintain a current list of organic compounds in use including the vapor pressure of each compound at 20°C.

502.2 Record on a daily basis the types and amounts of organic compounds used.

502.3 Record on a daily basis approved emission control system key system operating parameters.

502.4 Retain and have such records available for inspection by the APCO for the previous 24-month period. (Adopted July 11, 1990; Amended June 15, 1994)

8-24-600 MANUAL OF PROCEDURES

8-24-601 **Analysis of Samples:** Samples of organic compounds as specified in Section 8-24-300 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 13. (Adopted March 17, 1982; Amended July 11, 1990)

8-24-602 **Determination of Emissions:** Emissions of organic compounds as specified in Sections 8-24-110, 301, 302, 303 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. When either EPA Method 25 or 25A is used control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule.

(Adopted March 17, 1982; Amended June 15, 1994)

7-23-96

**REGULATION 8
ORGANIC COMPOUNDS
RULE 26
MAGNET WIRE COATING OPERATIONS**

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REGULATION 8
ORGANIC COMPOUNDS
RULE 26
MAGNET WIRE COATING OPERATIONS
(Adopted May 7, 1980)

8-26-100 GENERAL

8-26-101 Description: The purpose of this Rule is to limit the emission of volatile organic compounds (VOC) from magnet wire coating operations.

8-26-110 Exemption, Small User: The requirements of this Rule shall not apply to sources that emit, at their design production rating, 6.8 kg. (15 lbs.) per day or less of VOC.

8-26-111 Exemption, Electrical Machinery: The requirements of this Rule shall not apply to the coating of electrical machinery and equipment subassemblies such as motor housings, rotors, stators or armatures.

8-26-200 DEFINITIONS

8-26-201 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 by the APCO and which satisfies the following conditions:

201.1 The control device shall achieve the control efficiency specified in Section 8-26-301 at all times during normal operation of the equipment being controlled.

201.2 The collection system shall vent all coating, drying, and curing exhausts to the control device.

201.3 The collection system shall be designed and operated in accordance with good engineering practice for maximum collection emissions.

8-26-202 Magnet Wire: Wire used in electromagnetic field application in electrical machinery and equipment such as transformers, motors, generators, and magnetic tape recorders.

8-26-203 Magnet Wire Coating Operation: The process of applying insulation coatings such as varnish or enamel on magnet wire where wire is continuously drawn through a coating applicator.

8-26-204 Volatile Organic Compound: Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.

204.1 For purposes of calculating VOC content of a coating, any water or any of the following non-precursor organic compounds shall not be considered to be part of the coating:

acetone

parachlorobenzotrifluoride (PCBTF)

cyclic, branched or linear completely methylated siloxanes (VMS)

(Adopted December 20, 1995)

8-26-300 STANDARDS

8-26-301 Magnet Wire Coating Requirements: Effective January 1, 1989, a person shall not apply any magnet wire coating unless one or more of the following conditions is satisfied:

301.1 The coating operation uses a magnet wire coating which contains less than 200 g/liter (1.67 lb./gal.), excluding water, of VOC, or

301.2 Emissions of VOC are controlled by an approved emission control system, as defined in this rule, with a control device efficiency of at least 90% on a mass basis.

8-26-600 MANUAL OF PROCEDURES

8-26-601 Analysis of Samples: Samples of volatile organic compounds as defined in Section 8-26-301 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 21 or 22. (Adopted March 17, 1982)

8-26-602 Determination of Emissions: Emissions of volatile organic compounds as specified in Section 8-26-110 and 301 shall be measured as prescribed in the Manual of Procedures, Volume IV, ST-7. (Adopted March 17, 1982)

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REGULATION 8 - RULE 27
PERCHLOROETHYLENE DRY CLEANING

8-27-100 GENERAL

- 8-27-101 Description: The purpose of this Rule is to limit emissions of perchloroethylene from dry cleaning operations.
- 8-27-110 Exemption, Other Solvents: This Rule does not apply to dry cleaning plants which do not use perchloroethylene.
- 8-27-111 Exemption, Small Users: The provisions of Section 8-27-302 shall not apply to dry cleaning plants which consume less than 1200 liters (320 gallons) of perchloroethylene per year.
- 8-27-112 Exemption, Space and Steam Limitations: The provisions of Section 8-27-302 shall not apply to dry cleaners which satisfy one of the following conditions:
- 112.1 An adsorber cannot be accommodated because of inadequate space.
 - 112.2 Excess steam capacity in the plant is insufficient to regenerate a carbon adsorption system.
 - 112.3 The plant operator has demonstrated to the satisfaction of the APCO that other hardships justify such an exclusion.

8-27-300 STANDARDS

- 8-27-301 Operating Requirements: Effective May 15, 1980, a person shall not operate any dry cleaning equipment which uses perchloroethylene unless all of the following requirements are satisfied:
- 301.1 Any solvent liquid or solvent vapor leaks shall be repaired immediately.
 - 301.2 The residue from a solvent still shall not contain more than 0.6 kg of solvent per kg of wet waste.
 - 301.3 The used filtration cartridges shall be put in the filter housing and drained there for at least 24 hours before being discarded or for at least 12 hours provided that they are dried in a closed container which is vented to a control device approved by the APCO.

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- 301.4 The used absorbent earth filters shall be cooked or treated so that the residue contains no more than 0.25 kg of solvent per kg of wet waste.
- 301.5 Any other filtration or distillation system can be used if it can be demonstrated to the satisfaction of the APCO that it reduces waste losses below 0.01 kg per kg of clothes.
- 301.6 The still residue stored in sealed containers or underground tanks is disposed of at a Class I dump or by other procedures approved by the APCO.

8-27-302 Emission Control Requirements: A person shall not operate any dry cleaning equipment which uses perchloroethylene unless one of the following requirements is satisfied:

- 302.1 All exhaust gases from drying tumblers and cabinets are vented through a carbon adsorber or other control device which reduces the total emissions of organic compounds to the atmosphere during the entire cycle by at least 90 percent by weight, or
- 302.2 All of the exhaust gases from drying tumblers and cabinets are vented through a carbon adsorber or other control device which reduces the total emissions of organic compounds to the atmosphere during the entire drying cycle to 100 ppm before dilution.

The effective date for this Section 8-27-302 shall be as follows:

December 31, 1981 - for any plant which consumes more than 4000 liters (1060 gallons) of perchloroethylene per year.

December 31, 1982 - for any plant which consumes more than 2000 liters (530 gallons) of perchloroethylene per year.

December 31, 1983 - for any plant which consumes more than 1200 liters (320 gallons) of perchloroethylene per year.

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8-27-400 ADMINISTRATIVE REQUIREMENTS

8-27-401 Compliance Schedule for Section 8-27-302: A person subject to the requirements of Section 8-27-302 shall comply with the following increments of progress:

401.1 Submit a control plan on or before September 1, 1980.

401.2 Submit a complete application for any required authority to construct at least 6 months before the effective date for that plant.

401.3 Complete construction or installation of the required emission control equipment on or before the effective date for that plant.

**REGULATION 8
ORGANIC COMPOUNDS
RULE 28
EPISODIC RELEASES FROM PRESSURE RELIEF DEVICES AT
PETROLEUM REFINERIES AND CHEMICAL PLANTS**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 28
EPISODIC RELEASES FROM PRESSURE RELIEF DEVICES AT
PETROLEUM REFINERIES AND CHEMICAL PLANTS**

(Adopted July 16, 1980)

8-28-100 GENERAL

8-28-101 Description: The purpose of this Rule is to prevent the episodic emissions of organic compounds from pressure relief devices on any equipment handling gaseous organic compounds at petroleum refineries, and to collect information on episodic organic and inorganic compound emissions from petroleum refineries and chemical plants.

(Amended March 17, 1982, July 20, 1983, December 17, 1997)

8-28-110 Deleted September 6, 1989

8-28-111 Exemption, Evaporation Point: The provisions of this rule shall not apply to pressure relief valves which exclusively handle organic compounds exhibiting a 10% evaporation point greater than 150 degrees Celsius (302 degrees Fahrenheit) when using ASTM D-86 and/or inorganic compounds not listed in Section 8-28-401.5. The provisions of this rule shall also not apply to thermal relief valves that are vented to process drains or back to the pipeline.

(Amended September 6, 1989, December 17, 1997, March 18, 1998)

8-28-112 Exemption, Storage Tanks: The requirements of this rule shall not apply to any pressure relief device on storage tanks. (Amended December 17, 1997)

8-28-113 Exemptions, Research and Development Facilities: The provisions of this Rule shall not apply to research or development facilities which produce only non-commercial products for research and development purposes.

(Adopted June 1, 1994)

8-28-114 Limited Exemption, Small Refineries: Section 8-28-304.2 shall not apply to petroleum refineries processing less than 20,000 barrels per stream day of crude, unless the District's evaluation of the Process Hazards Analysis in Section 8-28-303.1 determines that it is cost-effective and technologically feasible for the refinery to control the pressure relief devices. (Adopted December 17, 1997)

8-28-200 DEFINITIONS

8-28-201 Chemical Plant: Any facility engaged in producing organic or inorganic chemicals and/or manufacturing products by chemical processes. Any facility or operation that has 28 as the first two digits in their Standard Industrial Classification Code as determined from the Standard Industrial Classification Manual published in 1972 by the Executive Office of the President, Office of Management and Budget. Chemical plants may include, but are not limited to the manufacture of: industrial inorganic and organic chemicals; plastic and synthetic resins, synthetic rubber, synthetic and other man-made fibers; drugs; soap, detergents and cleaning preparations, perfumes, cosmetics and other toilet preparations; paints, varnishes, lacquers, enamels and allied products; agricultural chemicals; safflower and sunflower oil extracts; re-refining, not including petroleum refineries.

(Adopted July 20, 1983, amended December 17, 1997)

8-28-202 Pressure Relief Valve: The automatic pressure-relieving device actuated by the static pressure upstream of the valve. (Renumbered July 20, 1983)

8-28-203 Rupture Disk: The thin metal diaphragm held between flanges.

(Renumbered July 20, 1983)

8-28-204 Deleted December 17, 1997

8-28-205 Deleted December 17, 1997

8-28-206 Deleted December 17, 1997

- 8-28-207 Modified Source:** The same definition contained in District Regulation 2-2-223.
(Adopted December 17, 1997)
- 8-28-208 Parallel Service:** Additional pressure relief devices which protect a common piece or pieces of equipment. These additional pressure relief devices may be installed as spares to facilitate maintenance or because the design relieving capacity cannot be obtained with a single pressure relieving device. The pressure relieving devices do not need to have the same pressure setting to be considered parallel.
(Adopted December 17, 1997)
- 8-28-209 Petroleum Refinery:** Any facility that processes products as defined in Standard Industrial Classification Manual as Industry No. 2911, Petroleum Refining.
(Adopted December 17, 1997)
- 8-28-210 Pressure Relief Device:** The automatic pressure-relieving device for discharges of organic compounds which prevents safety hazards, prevents pressures from exceeding the maximum allowable working pressure of the operating process equipment or prevents equipment damage. Such devices include, but are not limited to, pressure relief valves, emergency de-pressuring vents or rupture disks.
(Adopted December 17, 1997)
- 8-28-211 Prevention Measure:** A reliable component, system, or program that will prevent a Release Event. Examples of prevention measures include, but are not limited to: (1) flow, temperature, level and pressure indicators with interlocks, deadman switches, monitors, or automatic actuators, (2) documented and verified routine inspection and maintenance programs, (3) inherent safer designs, (4) deluge systems. Operator training and documented and verified routine inspection and maintenance programs may count as only one of the 3 Prevention Measures required by Section 8-28-302.2, 8-28-303.2, and 8-28-304.1. A component, system or program with a high probability for failure shall not be considered a Prevention Measure.
(Adopted December 17, 1997)
- 8-28-212 Process Hazards Analysis (PHA):** A PHA is an organized effort to identify and analyze the significance of hazardous scenarios associated with a process or activity. For the purposes of this rule, PHA's are used to pinpoint weaknesses in the design and operation of facilities that could lead to a Release Event and to provide the facility with information to aid in making decisions for preventing such events.
(Adopted December 17, 1997)
- 8-28-213 Qualified Person:** An APCO approved person who is qualified to attest to the validity of the Prevention Measures Procedures and who is a registered professional engineer in the State of California with expertise in chemical, mechanical or safety engineering.
(Adopted December 17, 1997)
- 8-28-214 Release Event:** Any release of organic or inorganic pollutant greater than 10 pounds resulting from a pressure relieving device, subject to this Rule, opening to the atmosphere. These events do not include releases that are vented to a vapor recovery or disposal system with at least 95% by weight organic compound control efficiency.
(Adopted December 17, 1997)
- 8-28-215 Responsible Manager:** A person who is an employee of the facility or corporation, who possesses sufficient corporate authority and who is responsible for the management of the facility.
(Adopted December 17, 1997)
- 8-28-300 STANDARDS**
- 8-28-301 Deleted December 17, 1997**
- 8-28-302 Pressure Relief Devices at New or Modified Sources at Petroleum Refineries:** Any person installing a new refinery source or modifying an existing refinery source, that is equipped with at least one pressure relief device in organic compound service, shall meet all of the following conditions:
- 302.1 Meet the applicable requirement of Regulation 2, Rule 2, including Best Available Control Technology, and
- 302.2 Meet the Prevention Measures Procedures specified in Section 8-28-405.
(Adopted December 17, 1997)

8-28-303 Pressure Relief Devices at Existing Sources at Petroleum Refineries: After the next scheduled turnaround following July 1, 1998, use of a pressure relief device in organic compound service on any equipment at a Petroleum Refinery is prohibited, except when the device meets at least one of the following conditions prior to the equipment startup:

303.1 Vent all pressure relief devices from the source to a vapor recovery or disposal system with at least a 95 percent by weight organic compounds control efficiency, and the control system shall be properly sized per manufacturer's recommendations to handle the material from all devices it is intended to serve, or

303.2 Meet the Prevention Measures Procedures specified in Section 8-28-405.

(Adopted December 17, 1997; Amended March 18, 1998)

8-28-304 Repeat Release – Pressure Relief Devices at Petroleum Refineries: After the next scheduled turnaround following July 1, 1998, any petroleum refinery source that has at least one reportable Release Event from a pressure relief device in organic compound service, including those in parallel service, in any consecutive five calendar year period shall meet the following conditions:

304.1 Within 90 days of the first Release Event from a pressure relief device, the facility shall conduct an additional, separate Process Hazard Analysis and meet the Prevention Measures Procedures specified in Section 8-28-405; and conduct a failure analysis of the incident, to prevent recurrence of similar incidents. Within 120 days of the first Release Event, the facility shall equip each pressure relief device of that source with a tamperproof tell-tale indicator that will show that a release has occurred since the last inspection. The Process Hazard Analysis shall include an evaluation of the cost-effectiveness and technical feasibility of control devices to remedy the incident. This evaluation of control devices shall include, but shall not be limited to, the following: (1) installing additional flare gas compressor recovery capacity and (2) venting the pressure relief device that caused the Release Event to existing vapor recovery or disposal systems, and

304.2 Within one year of the second Release Event from a pressure relief device in organic compound service on the same source, including those in parallel service, the facility shall vent all the pressure relief devices that vent the second Release Event, including those in parallel service, to a vapor recovery or disposal system with at least 95 percent by weight organic compounds control efficiency, and the control system shall be properly sized per manufacturer's recommendations to handle the material from all devices it is intended to serve.

The five calendar year period of this section shall begin at the time that the District receives a Prevention Measure Plan as specified in Section 8-28-304.1.

(Adopted December 17, 1997; Amended March 18, 1998)

8-28-400 ADMINISTRATIVE REQUIREMENTS

8-28-401 Reporting at Petroleum Refineries and Chemical Plants: A Release Event from a pressure relief device at petroleum refineries and chemical plants shall be reported to the APCO on the next working day following the venting. In addition, the following information shall be submitted in writing to the APCO within 30 days following the Release Event:

401.1 Date, time, and duration of the Release Event in minutes.

401.2 Identification of the device by its unique number as required in Section 8-28-404 as well as its name and service commonly referred to by the facility.

401.3 Identification of the incident number assigned by the APCO when the event is reported within one working day.

401.4 Type and size of device.

401.5 Type and amount of material released in pounds, accurate to two significant digits. Reportable materials are: total organic compounds, ammonia, hydrogen sulfide, chlorine, sulfur dioxide, sulfur trioxide, hydrofluoric acid, and difluoroethane.

- 401.6 Necessary information and assumptions used to report the duration and amount released during the event.
- 401.7 Cause of the event.
- 401.8 A schedule for action to prevent re-occurrence of the event.
- 401.9 Results of fugitive emission inspection of the device done in accordance with the requirements of section 8-28-402.

(Amended February 18, 1981, December 17, 1997, March 18, 1998)

8-28-402 Inspection: Any pressure relief device which has a Release Event and is subject to this Rule shall be inspected within 5 working days after actuation to confirm compliance with Regulation 8, Rule 18 and the results reported in accordance with Regulation 8-28-401.9.

(Amended September 6, 1989, June 1, 1994, December 17, 1997)

8-28-403 Records: Any person subject to this Rule shall comply with the following recordkeeping requirements:

403.1 Prevention measure records to demonstrate compliance with the standards in sections 8-28-302, 8-28-303, 8-28-304, and 8-28-405.

(Adopted September 6, 1989, amended June 1, 1994, December 17, 1997)

8-28-404 Identification: Any person subject to this rule shall comply with the following identification requirements:

404.1 All pressure relief valves subject to this rule shall be identified with a unique permanent identification code approved by the APCO. This identification code shall be used to refer to the pressure relief valve location. Records for each pressure relief valve shall refer to this identification code.

(Adopted June 1, 1994; Amended December 17, 1997)

8-28-405 Prevention Measures Procedures: All facilities using pressure relief devices in organic compound service which are subject to the standards in Section 8-28-300 and which have a potential for a Release Event shall comply with the following process safety requirements:

405.1 Explicitly establish training, equipment, inspection, maintenance and monitoring levels such that the pressure relief device releases are minimized and

405.2 Using a Process Hazards Analysis, predict, plan and implement either:

2.1 At least 3 consecutive Prevention Measures for the Release Event before a pressure relief device will release or

2.2 At least one Prevention Measure for the Release Event before a pressure relief device will release. For single Prevention Measure pressure relief devices that vent a Release Event, within one year of the Release Event, the facility shall vent these pressure relief devices, including those in parallel service, to a vapor recovery or disposal system with at least 95% by weight organic compound efficiency.

405.3 Must be approved and signed by a Qualified Person and a Responsible Manager.

405.4 Must be submitted for review to the APCO to determine if the plan meets the requirements of subsections 8-28-405.1 through 405.3. The APCO shall provide a 30-day public comment period and will consider all comments received during this period prior to approval or disapproval of the procedures.

(Adopted December 17, 1997; Amended March 18, 1998)

8-28-500 MONITORING AND RECORDS

8-28-501 Deleted December 17, 1997

8-28-600 MANUAL OF PROCEDURES

8-28-601 Deleted December 17, 1997

8-28-602 Determination of Control Efficiency: The control efficiency as specified Section 8-28-302.1, 8-28-303.1, 8-28-304.2, and 8-28-405.2.2 (with the exception of non-enclosed flares) shall be determined as prescribed by any of the following methods: 1) BAAQMD Manual of Procedures, Volume IV, ST-7, 2) EPA Method 25 or 25A. 3)

Flare control efficiency calculations approved by the APCO and EPA in writing, or 4) other methods to demonstrate control efficiency approved by the APCO and EPA in writing. A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule.

(Adopted June 1, 1994; Amended December 17, 1997)

8-28-603 Deleted December 17, 1997

**REGULATION 8
ORGANIC COMPOUNDS
RULE 29
AEROSPACE ASSEMBLY AND COMPONENT COATING OPERATIONS**

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REGULATION 8
ORGANIC COMPOUNDS
RULE 29
AEROSPACE ASSEMBLY AND COMPONENT COATING OPERATIONS

(Adopted August 4, 1982)

8-29-100 GENERAL

- 8-29-101 Description:** The purpose of this Rule is to limit the emission of volatile organic compounds from the surface preparation and coating of aerospace components and cleanup of aerospace coating equipment. (Amended November 1, 1989)
- 8-29-110 Exemption, Electronic Industries:** The requirements of 8-29-305 and 306 shall not apply to fabrication of electronic components, including but not limited to microprocessors, control systems and instrumentation. (Amended February 3, 1993)
- 8-29-111 Exemption, Printed Circuit Boards:** The requirements of this Rule shall not apply to coatings applied to assembled printed circuit boards. This coating operation is subject to Regulation 8, Rule 4. (Amended February 3, 1993)
- 8-29-112 Exemption, Low Usage Coatings:** The requirements of Section 302 shall not apply to coatings with separate formulations that are used in volumes of less than 20 gallons per calendar year, provided the requirements of Section 8-29-402 are satisfied. No more than 200 gallons of low usage coating may be used per facility per calendar year. Records of coating usage shall be maintained as per Section 8-29-501. (Amended November 1, 1989; February 3, 1993; June 1, 1994)
- 8-29-113 Deleted February 3, 1993**
- 8-29-114 Exemption, Paper-Fabric-Film Coating:** The requirements of this Rule shall not apply to any source which is subject to and complies with the provisions of Regulation 8, Rule 12.
- 8-29-115 Exemption, Tank-type Stripper:** The requirements of Section 8-29-305 shall not apply to a tank-type stripper employing a sealing fluid at least four inches in depth which floats on the stripper surface and which consists of:
- 115.1 Water, or
 - 115.2 A fluid with a true vapor pressure of less than 10 mmHg (0.19 psia) at actual usage temperature. (Adopted December 7, 1983)
- 8-29-116 Exemption, Adhesives:** The requirements of this Rule shall not apply to the application of adhesives. Application of adhesive is subject to the requirements of Regulation 8, Rule 4. (Adopted November 1, 1989)
- 8-29-117 Exemption, Aerosol Cans:** The requirements of this Rule shall not apply to non-refillable handheld aerosol cans. Application of coating from aerosol cans is subject to the requirements of Regulation 8, Rule 49. (Adopted November 1, 1989, Amended June 20, 1990)
- 8-29-118 Exemption, Stencil Coatings:** The requirements of this Rule shall not apply to the application of coatings by template or hand in order to add designs, letters and/or numbers to the products. Stencil Coating is subject to the requirement of Regulation 8, Rule 4. (Adopted November 1, 1989)
- 8-29-119 Exemption, Solid Film Lubricant:** The provisions of this Rule shall not apply to any solid film lubricant (anti-chafe coating). The application of solid film lubricant is subject to the requirements of Regulation 8, Rule 4. (Adopted November 1, 1989)
- 8-29-120 Exemption, Test Panels:** The provisions of this Rule shall not apply to coating test panels used to evaluate coating performance. Such coating is subject to the requirements of Regulation 8, Rule 4. (Adopted November 1, 1989)
- 8-29-121 Exemption, Satellite Coatings:** The provisions of Section 8-29-302 shall not apply to the coating of satellites or satellite components, provided records are maintained as per Section 8-29-501. Application of satellite coating is subject to the requirements of Regulation 8, Rule 4. (Adopted November 1, 1989)
- 8-29-122 Exemption, High-Temperature-Curing Adhesive Bonding Primer:** The provisions of Section 8-29-302 and 310 shall not apply to the use of adhesive

bonding primer that has a cure temperature in excess of 325°F, provided records are maintained as per Section 8-29-501. Application of high-temperature-curing adhesive bonding primer is subject to the requirements of Regulation 8, Rule 4.

(Adopted November 1, 1989; Amended February 3, 1993)

8-29-123 Exemption, Spray Application Equipment: The requirements of Section 8-29-310 shall not apply to the following provisions:

123.1 The application of coatings to surface areas with limited access due to visual impairment which require a 360° spray-gun nozzle extension.

123.2 The application of waterborne extreme performance interior topcoat coatings.

123.3 The application of adhesive bonding primers and pretreatment wash primers.

123.4 The application of a textured finish coat. (Adopted February 3, 1993)

8-29-124 Limited Exemption, Coating Records: The requirements of Subsection 501.2 shall not apply to individual source operations using less than 75.7 liters (20 gal) of coating in any calendar year, unless otherwise specified in permit conditions pursuant to Regulation 2-1-403. A person shall maintain monthly records of coating usage under this exemption. (Adopted February 3, 1993)

8-29-200 DEFINITIONS

8-29-201 Aerospace Component: The fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle. For the purposes of this Rule, an aerospace component shall include any aerospace prototype or test model.

(Amended November 1, 1989)

8-29-202 Adhesive Bonding Primer: A coating applied in a very thin film to aerospace metal for the primary purpose of providing a primer for a subsequent coat of structural adhesive.

(Amended November 1, 1989)

8-29-203 Deleted November 1, 1989

8-29-204 Electric or Radiation Effect Coatings: Electrical conductive or insulative coatings and coatings used on radar and antennae enclosures. (Amended November 1, 1989)

8-29-205 Flight Test Coating: The coating applied to test aircraft to protect the test aircraft from corrosion and to provide required marking during flight test evaluation.

8-29-206 Fuel Tank Coating: A coating applied to the interior of a fuel tank or fuel-wetted areas of aircraft to protect it from corrosion. (Amended November 1, 1989)

8-29-207 Maskant for Chemical Processing: A coating applied directly to an aerospace component to protect surface areas when chemical milling, anodizing, aging, bonding, plating, etching and/or performing other chemical operations on the surface of the component.

8-29-208 Pretreatment Wash Primer: A coating which contains a minimum of 0.5% acid by weight for surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion. (Amended November 1, 1989)

8-29-209 Primer: A coating applied directly to the aerospace component for purposes of corrosion prevention, protection from the environment, functional fluid resistance and adhesion of subsequent coatings. (Amended November 1, 1989)

8-29-210 Deleted November 1, 1989

8-29-211 Stripper: An organic compound mixture applied to remove temporary protective coating, maskant for chemical processing, surface coating or coating residue.

(Amended February 3, 1993)

8-29-212 Temporary Protective Coating: A coating applied to an aerospace component to protect it from any mechanical or environmental damage during manufacturing.

(Amended February 3, 1993)

8-29-213 Topcoat: Coatings applied over a primer or intermediate coating for purposes such as appearance, identification or protection. (Amended November 1, 1989)

8-29-214 Tank-type Stripper: A tank employing a stripping solution where parts are immersed for removal of temporary protective coating, maskant for chemical processing, surface coating or coating residue.

(Adopted December 7, 1983; Amended February 3, 1993)

- 8-29-215 Interior Topcoat:** A topcoat used in interior habitable spaces of aircraft.
(Adopted November 1, 1989; Amended February 3, 1993)
- 8-29-216 Electrostatic Spray:** Equipment used to apply coating by charging atomized particles that are deposited by electrostatic attraction.
(Adopted November 1, 1989; Amended February 3, 1993)
- 8-29-217 Extreme Performance Interior Topcoat:** A topcoat used in interior spaces of aircraft areas requiring fluid, stain or nicotine barrier. (Adopted November 1, 1989)
- 8-29-218 Fire Insulation Coating:** A coating used to provide a layer of insulation in the event of an aircraft or engine fire. (Adopted November 1, 1989)
- 8-29-219 High-Temperature Coating:** A coating that, during normal use, must withstand temperatures in excess of 350oF. (Adopted November 1, 1989)
- 8-29-220 High-Volume, Low-Pressure (HVLP) Spray:** Equipment used to apply coating by means of a gun that operates between 0.1 and 10 psig air atomizing pressure.
(Adopted November 1, 1989; Amended February 3, 1993)
- 8-29-221 Sealant:** A coating applied for the purpose of filling voids and providing a barrier against penetration of water, fuel or other fluids or vapors.
(Adopted November 1, 1989)
- 8-29-222 Self-priming Topcoat:** A coating applied directly to the aerospace component that is not subsequently overcoated. (Adopted November 1, 1989)
- 8-29-223 Transfer Efficiency:** The ratio of the amount of coating solids adhering to an object being coated to the total amount of coating solids used in the application process, expressed as a percentage. (Adopted November 1, 1989)
- 8-29-224 Volatile Organic Compound:** Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent, surface coating, or stripper.
- 224.1 For purposes of calculating VOC content of a coating, any water or any of the following non-precursor organic compounds shall not be considered to be part of the coating:
methylene chloride
1,1,1 trichloroethane
trichlorotrifluoroethane (CFC-113)
trichlorofluoromethane (CFC-11)
dichlorodifluoromethane (CFC-12)
dichlorotetrafluoroethane (CFC-114)
chloropentafluoroethane (CFC-115)
acetone
parachlorobenzotrifluoride (PCBTF)
cyclic, branched or linear completely methylated siloxanes (VMS)
- 224.2 For purposes of calculating the VOC content of a stripper, methylene chloride and water shall not be considered a part of the VOC content of the stripper.
(Adopted November 1, 1989; Amended February 3, 1993, December 20, 1995)
- 8-29-225 Solid Film Lubricant:** A very thin coating consisting of an organic binder system containing as its chief pigment material one or more of molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE) or other solids that act as a dry lubricant between faying surfaces. (Adopted November 1, 1989; February 3, 1993)
- 8-29-226 Sealant Bonding Primer:** A coating applied in a very thin film to an aerospace component for the purpose of providing a primer for a subsequent coat of silicone sealant. (Adopted November 1, 1989)
- 8-29-227 Structural Adhesive:** A coating which is applied for the purpose of bonding structural components together. (Adopted November 1, 1989)
- 8-29-228 Satellite:** A device intended to orbit the earth above the earth's atmosphere.
(Adopted November 1, 1989)
- 8-29-229 Detailing Gun:** Small air-spray equipment, including air brushes, that operate at no greater than 5 cfm air flow and no greater than 50 psig air pressure.
(Adopted February 3, 1993)

8-29-230 Approved Emission Control System: A system for reducing emissions to the atmosphere, consisting of an abatement and a collection system, which achieves the abatement efficiency specified in the applicable standards at all times during the operation and meets the requirements of Regulation 2, Rule 1.

(Adopted February 3, 1993)

8-29-231 Textured Finish Coat: Any non-smooth, patterned surface that is intentionally produced and applied as a final coat by spraying drops of coating over a previously applied base coating.

(Adopted February 3, 1993)

8-29-232 Mold Release Coating: A temporary protective coating with a solids content of less than 120 grams solids per liter (1 pound solids per gallon) that reduces or prevents adhesion between the mold surface and the surface being molded.

(Adopted February 3, 1993)

8-29-233 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 Sections 8-29-302, 306.1, and 310.

(Adopted June 1, 1994)

8-29-300 STANDARDS

8-29-301 Deleted November 1, 1989

8-29-302 Coating Limitations: A person shall not apply to aerospace components any coating with a VOC content in excess of the following limits, expressed as grams VOC per liter (lbs/gal) of coating as applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 85 percent that meets the requirements of Regulation 2, Rule 1.

302.1	Primer	350 (2.9)
302.2	Adhesive bonding primer	850 (7.1)
302.3	Interior Topcoat	340 (2.8)
302.4	Electric or Radiation Effect Coating	800 (6.7)
302.5	Extreme Performance Interior Topcoat	420 (3.5)
302.6	Fire Insulation Coating	600 (5.0)
302.7	Fuel Tank Coating	720 (6.0)
302.8	High-Temperature Coating	720 (6.0)
302.9	Sealant	600 (5.0)
302.10	Self-priming Topcoat	420 (3.5)
302.11	Topcoat	420 (3.5)
302.12	Pretreatment Wash Primer	420 (3.5)
302.13	Sealant Bonding Primer	720 (6.0)
302.14	Temporary Protective Coating	250 (2.1)

(Amended November 1, 1989; February 3, 1993)

8-29-303 Deleted November 1, 1989

8-29-304 Solvent Evaporative Loss Minimization: Any person using organic solvent for surface preparation and cleanup or mixing, using or disposing of coating or stripper containing organic solvent:

- 304.1 Shall use closed containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.
- 304.2 Shall not use organic compounds for the cleanup of spray equipment including paint lines unless equipment for collecting the cleaning compounds and minimizing their evaporation to the atmosphere is used.
- 304.3 Shall close containers of stripper subject to this Rule, coating, catalyst, thinner, or solvent when not in use.

(Amended November 1, 1989; February 3, 1993)

8-29-305 Stripper Limitations: A person shall not use a stripper unless it complies with one or both of the following:

- 305.1 The stripper contains less than 400 grams/liter (3.3 lbs/gal) of precursor organic compounds.

305.2 The stripper has a true vapor pressure of less than 10 mmHg (0.19 psia) at actual usage temperature. (Amended December 7, 1983)

8-29-306 Maskant for Chemical Processing Limitations: A person shall not apply any maskant for chemical processing to aerospace components unless:

306.1 The VOC emissions from coating operations are reduced by 85 percent, or

306.2 The coating contains less than 600 grams of VOC per liter of coating excluding water, as applied. (Amended December 4, 1985, November 1, 1989)

8-29-307 Deleted November 1, 1989

8-29-308 Prohibition of Specification: No person shall require for use or specify the application of a coating subject to this Rule if such use or application results in a violation of any of the provisions of this Rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating is to be applied to any aerospace component at any physical location within the District.

(Adopted November 1, 1989)

8-29-309 Compliance Statement Requirement: The manufacturer of coatings subject to this Rule shall provide on the coating container or as an accompanying data sheet a designation of VOC (as defined in Section 8-29-224), expressed in grams per liter or pounds per gallon of coating. Effective September 1, 1993, the designation shall include the VOC content of the coating as supplied and at the maximum recommended thinning ratio to maintain compliance with the VOC limits of this Rule.

(Adopted November 1, 1989; Amended February 3, 1993)

8-29-310 Spray Application Equipment Limitations: Effective July 1, 1994, a person who uses spray application equipment to apply coatings to aerospace components within the District shall use one or more of the following high transfer efficiency application methods, unless emissions to the atmosphere are controlled by an approved emission control system with an overall abatement efficiency of at least 85%.

310.1 High-Volume, Low-Pressure (HVLP) Spray, operated in accordance with manufacturer's recommendations, or

310.2 Electrostatic Spray, operated in accordance with manufacturer's recommendations, or

310.3 Detailing Gun, or

310.4 Any other coating spray application which has been demonstrated to the satisfaction of the APCO to achieve an equivalent transfer efficiency compared to the spray application methods listed in Subsections 310.1 through 310.3. Prior written approval from the APCO shall be obtained for each alternative method used. (Adopted February 3, 1993)

8-29-400 ADMINISTRATIVE REQUIREMENTS

8-29-401 Deleted November 1, 1989

8-29-402 Low Usage Coating Petition: Any person seeking to satisfy the requirements of Section 8-29-112 shall comply with the following requirements:

402.1 The user or specifier shall notify the APCO in writing of coatings to be qualified pursuant to this exemption.

402.2 Such notification shall be repeated on an annual basis.

402.3 The notification shall contain volumes and maximum VOC levels of coatings to be used.

402.4 Records must be maintained as in Section 8-19-501.

(Adopted November 1, 1989; Amended June 1, 1994)

8-29-403 Methylene Chloride Reduction Plan: By January 1, 1995, any person using stripper subject to this Rule shall submit a methylene chloride reduction plan. The plan shall include the following:

403.1 Methylene chloride emissions inventory by source

403.2 Description of reduction measures to be implemented

403.3 Implementation schedule for the reduction measures

403.4 Anticipated emission reductions and projected costs for each reduction measure (Adopted February 3, 1993)

8-29-500 MONITORING AND RECORDS

8-29-501 Records: Any person subject to Sections 8-29-302, 305 and/or 306 shall:

- 501.1 Maintain current data necessary to evaluate compliance, including the following information as applicable:
 - a. coating stripper, catalyst, and reducer used
 - b. VOC content of coating and stripper as applied
- 501.2 Record coating usage on a weekly basis including the following information, as applicable, unless otherwise specified in permit conditions imposed per Regulation 2-1-403:
 - a. coating and mix ratio of components in the coating used as applied
 - b. quantity of each coating applied
- 501.3 Record on a daily basis coating usage and key system operating parameters when air pollution abatement equipment is used to comply with the requirements of Sections 302, 306, or 310.
- 501.4 Record cleanup solvent usage on a monthly basis the type and amount of solvent used for cleanup and surface preparation, unless otherwise specified in permit conditions imposed per Regulation 2-1-403.
- 501.5 Records on a monthly basis the amount of stripper used, unless otherwise specified in permit conditions imposed per Regulation 2-1-403. A person using a tank-type stripper shall maintain records on a monthly basis showing the amount of stripper added to each tank.
- 501.6 Records shall be retained and available for inspection by the APCO for the previous 24-month period
- 501.7 The requirements of Section 8-29-501.2, 501.4 and 501.5 shall not apply to any person who complies with an alternate recordkeeping plan that provides for an enforceable daily record which meets the following requirements:
 - a. The APCO must be petitioned in writing that complying with Sections 8-29-501.2, 501.4 and 501.5 would constitute an undue burden.
 - b. A list of coatings and solvents subject to the plan.
 - c. A description of the calculation methodology, and estimated annual usage for coatings and solvent.
 - d. Effective August 1, 1994 and annually thereafter, any facility operating under this provision must submit an update to the plan that identifies any changes in coating and solvent usage, and the annual usage for the preceding year.
 - e. A violation of Sections 8-29-302, 305 or 306 within the reporting period, as established by the plan, shall be considered a violation for each day of the reporting period.

(Adopted 11/1/89; Amended February 3, 1993; October 6, 1993; June 1, 1994)

8-29-600 MANUAL OF PROCEDURES

8-29-601 Analysis of Coating Samples: Samples of volatile organic compounds as specified in Sections 8-29-302 and 306 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 21 or 22.

(Amended November 1, 1989; February 3, 1993)

8-29-602 Determination of Emissions: Emissions of volatile organic compounds as specified in Section 8-29-302, 306, and 310 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. When either EPA Method 25 or 25A is used control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standard of the rule.

(Amended November 1, 1989; February 3, 1993; June 1, 1994)

8-29-603 Analysis of Stripper Samples: Samples of volatile organic compounds of stripper as specified in Section 8-29-305 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 31. (Adopted November 1, 1989)

- 8-29-604 Determination of Acid Content:** Measurement of acid content as specified in Section 8-29-208 shall be determined in accordance with ASTM Method D-1613-85.
(Adopted February 3, 1993)
- 8-29-605 Analysis of Mold Release Coating Samples:** Samples of mold release coatings containing volatile organic compounds as specified in Section 8-29-302 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 31.
(Adopted February 3, 1993)

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 30
SEMICONDUCTOR MANUFACTURING OPERATIONS**

8-30-100 GENERAL

8-30-101 Description: The purpose of this Rule is to limit the emissions of precursor organic compounds from semiconductor manufacturing operations. For the purpose of this Rule, semiconductor manufacturing operations are limited to the manufacture of semiconductor and other related integrated circuits.

8-30-110 Exemption, Small Semiconductor Operation: The provisions of Sections 8-30-302, 303, and 501 shall not apply to any facility whose total combined negative photoresist maskant and negative photo resist developer consumption is less than 24 gallons per month on a facility wide basis and provided the requirements of Section 8-30-402 and Section 8-30-502 are met. (Amended November 23, 1988)

8-30-111 Exemption, Solvent Cleaners: The provisions of Sections 8-30-301 and 8-30-304 shall not apply to any vapor degreaser or cold cleaner utilizing solvent flow or with a capacity greater than 10 gallons. Such vapor degreasers or cold cleaners are subject to Regulation 8, Rule 16, Solvent Cleaning Operations.

(Amended November 23, 1988)

8-30-112 Exemption, Compounds with Low Volatility: All compounds with an initial boiling point greater than 150°C (302°F) and where the initial boiling point exceeds the actual operating temperature by at least 100°C (180°F) are exempt from the requirements of Section 8-30-304.3

(Amended November 23, 1988)

8-30-200 DEFINITIONS

8-30-201 Freeboard Height: The distance from the top of the solvent or solvent drain to the top of the sink.

8-30-202 Freeboard Ratio: The freeboard height divided by the smaller of the length or width of the sink or reservoir.

8-30-203 Masking: Application of a maskant material to a wafer to increase or decrease the masked area's resistance to chemical milling.

8-30-204 Organic Compound: Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.

8-30-205 Organic Compound, Non-precursor: Methylene chloride, 1,1,1 trichloroethane, 1,1,2 trichlorotrifluoroethane (CFC-113), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), chlorodifluoromethane (CFC-22), and trifluoromethane (FC-23).

8-30-206 Organic Compound, Precursor: Any organic compound as defined in 8-30-204 excepting the non-precursors as designated in 8-30-205.

8-30-207 Photoresist Line : Equipment used to apply and develop photoresist masking solution on a wafer. Process includes preparation (except primary cleaning), soft bake, develop and hard bake.

8-30-208 Photoresist, Negative: Maskant hardens when exposed to light. Unhardened maskant is stripped, exposing wafer surface to etching. Typically uses xylene formulated resin and developer solutions.

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- 8-30-209 **Photoresist, Positive:** Maskant softens when exposed to light. Softened maskant is stripped, exposing wafer surface for etching. Typically uses cellosolves for primer and resin carrier with caustic type developer.
- 8-30-210 **Semiconductor Manufacture:** Any operation performed in order to manufacture semiconductor or related solid state devices, such as semiconductor diodes and stacks, and including rectifiers, integrated microcircuits, transistors, solar cells, and light sensing and emitting devices. Semiconductor manufacture includes all processing from crystal growth through circuit separation and encapsulation. Examples of semiconductor operations are: crystal growth, diffusion operations, photoresist operations, wafer processing, etching, etc. (Amended March 6, 1985)
- 8-30-211 **Solvent Cleaning Station:** Any operation whose primary purpose is to remove surface contaminants or to remove photoresist using a liquid or vapor containing organic compounds. (Amended November 23, 1988)
- 8-30-212 **Liquid Solvent Leak:** A liquid leak of four drops or more per minute. (Amended November 23, 1988)
- 8-30-213 **Container:** For the purposes of Section 8-30-301 and Section 8-30-304, a container is defined as having a total volume of 1 liter (0.264 gal) or less. Any container with a volume greater than 1 liter is considered a reservoir. (Amended November 23, 1988)
- 8-30-300 **STANDARDS**
- 8-30-301 Deleted June 15, 1994)
- 8-30-302 **Negative Photoresist Operations:** All exhaust gases containing precursor organic vapors from negative photoresist operations shall be vented to control devices that reduce the total emission of precursor organic compounds to the atmosphere by at least 90 percent by weight. (Amended November 23, 1988)
- 8-30-303 Deleted June 15, 1994
- 8-30-304 **Solvent Cleaning Station Limits:** A person shall not operate a solvent cleaning station at a semiconductor manufacturing facility unless the following requirements are met:
- 304.1 All unheated containers, reservoirs, and sinks containing precursor organic compounds shall be provided with a cover. These covers must remain closed unless production, sampling, maintenance, loading or unloading procedures require operator access.
 - 304.2 All unheated reservoirs and sinks containing acetone, isopropyl alcohol, methyl alcohol, methyl ethyl ketone, or trichloroethylene shall have a freeboard ratio greater than or equal to 0.75.
 - 304.3 All heated reservoirs, sinks, or containers containing precursor organic compounds shall be provided with a cover as described in Section 304.1. In addition, heated reservoirs and sinks must also have a freeboard ratio greater than or equal to 0.75.
 - 304.4 The capacity of all vapor degreasers and cold cleaners shall be clearly marked by a suitable physical or mechanical means.
 - 304.5 Precursor organic compounds, including waste solvents, shall not be stored or disposed of in a manner that will allow evaporation into the atmosphere. Storage of organic compounds in tanks which comply with Regulation 8, Rule 5, constitutes compliance with Section 8-30-304.5.
 - 304.6 All equipment at a solvent cleaning station shall be operated and maintained in proper working order.
 - 304.7 Liquid solvent leaks shall be repaired immediately or the equipment shall be shut down. (Adopted November 23, 1988; Amended June 15, 1994)

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8-30-400 ADMINISTRATIVE REQUIREMENTS

- 8-30-401 Reservoir and Sink Compliance Schedule:** Any existing facility subject to Section 8-30-304 of this Rule shall comply with the following increments of progress:
- 401.1 Submit to the APCO a complete application for an Authority to Construct necessary equipment modifications on or before March 1, 1989.
 - 401.2 Complete onsite construction of equipment modifications on or before March 1, 1990.
 - 401.3 Demonstrate final compliance on or before July 1, 1990.
(Amended November 23, 1988)
- 8-30-402 Small Semiconductor Operation Petition:** Any person seeking to satisfy the conditions of Section 8-30-110 shall comply with the following requirements:
- 402.1 A written petition for exemption shall be submitted to the APCO showing the total combined net usage of negative photoresist maskant and negative photoresist developer is less than 24 gallons per month for the facility.
 - 402.2 If the APCO grants written approval, such petition will be repeated on an annual basis.
(Adopted November 23, 1988)
- 8-30-403 Deleted June 15, 1994**

8-30-500 MONITORING AND RECORDS

- 8-30-501 Annual Reporting:** Any person subject to Sections 8-30-302, 303, or 304 of this Rule shall report the following on an annual basis, prior to renewal of Permits to Operate:
- 501.1 Quantity of each of the following liquid organic compounds purchased during the previous 12 months for use in semiconductor manufacturing.
 - Xylene
 - n-Butyl Acetate
 - Acetone
 - Isopropyl Alcohol
 - Methyl Ethyl Ketone
 - Trichloroethylene
 - All other precursor organic compounds (total)
 - Methylene Chloride
 - 1,1,1 Trichloroethane
 - All other non-precursor organic compounds (total)
 - 501.2 Separate totals of precursor and non-precursor organic compounds disposed of or reclaimed in liquid form from semiconductor manufacturing operations during the previous 12 months.
- 8-30-502 Records:** Any person seeking to satisfy the conditions of Section 8-30-110 shall comply with the following requirements:
- 502.1 A weekly record shall be kept showing the facility wide combined net usage of negative photoresist maskant and negative photoresist developer.
 - 502.2 Such records shall be maintained and be available for inspection by the APCO for the previous 24 month period. (Adopted November 23, 1988)
- 8-30-503 Negative Photoresist Source Tests:** Any person subject to Section 8-30-302 shall conduct a source test of the abatement device to demonstrate compliance. Results of the tests shall be submitted within 90 days of (Date of adoption by the Board of Directors), or 90 days after start up of affected equipment, whichever is later. The APCO shall be contacted in writing no less than 15 days prior to testing. Equipment that has previously undergone a District approved source test and successfully demonstrated compliance under Regulation 8, Rule 30 Requirements need not be retested.
(Adopted November 23, 1988)

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8-30-600 MANUAL OF PROCEDURES

8-30-601 Determination of Abatement Efficiency: Abatement efficiency of precursor organic compounds as specified in Section 8-30-302, 8-30-303, and subsection 8-30-304.3.2 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 test methods exceed the standards of this rule.

(Adopted November 23, 1988; Amended June 15, 1994)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 31
SURFACE PREPARATION AND COATING OF PLASTIC PARTS AND
PRODUCTS**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 31
SURFACE PREPARATION AND COATING OF PLASTIC PARTS AND
PRODUCTS**

(Adopted September 7, 1983)

8-31-100 GENERAL

8-31-101 Description: The purpose of this Rule is to limit the emission of volatile organic compounds from the surface preparation and coating of plastic parts and products, including polyester resin (fiberglass) products.

(Amended 6/7/89; 10/16/02)

8-31-110 Exemption, Adhesives: The requirements of this Rule shall not apply to the application of adhesives. Application of adhesives is subject to Regulation 8, Rule 51.

(Amended 6/7/89; 2/3/93)

8-31-111 Exemption, Low Usage Coatings: The requirements of Sections 8-31-302, 306 and 309 shall not apply to any coating used in volumes less than 75.7 liters (20 gallons) in any one year, and provided the requirements in Section 8-31-403 are satisfied. A person shall be limited to 208.1 liters (55 gallons) total coating per year under this exemption.

(Amended 1/7/87; 4/1/87; 6/7/89; 6/1/94)

8-31-112 Deleted April 1, 1987

8-31-113 Exemption, Aerosol Cans: The provisions of this Rule shall not apply to coating operations employing hand-held aerosol cans. Such coating is subject to the provisions of Regulation 8, Rule 49 or to the California Air Resources Board aerosol coating product regulation found in Title 17 of the California Code of Regulations, beginning at Section 94520.

(Amended 1/7/87; 6/7/89; 6/20/90; 10/16/02)

8-31-114 Exemption, Touch-up: The provisions of this Rule shall not apply to touch-up operations.

(Amended 1/7/87; 6/7/89)

8-31-115 Deleted April 1, 1987

8-31-116 Deleted April 1, 1987

8-31-117 Deleted April 1, 1987

8-31-118 Exemption, Automobile Assembly Coatings: The requirements of this Rule shall not apply to coatings applied to parts in an automobile assembly plant, provided the following conditions are satisfied:

118.1 The parts are coated in a coating line subject to the requirements of Regulation 8, Rule 13.

118.2 The coating of these parts complies with the requirements which apply to other parts or products coated in the same coating line.

(Amended June 7, 1989)

8-31-119 Exemption, Aerospace Assembly Coatings: The requirements of this Rule shall not apply to coatings applied to plastic aerospace components subject to Regulation 8, Rule 29.

(Adopted June 7, 1989)

8-31-120 Exemption, Test Panels: The requirements of this Rule shall not apply to test panels used to evaluate coating performance. Such test panels are subject to Regulation 8, Rule 4.

(Adopted June 7, 1989)

8-31-121 Exemption, Stencil Coatings: The requirements of this Rule shall not apply to coatings that are applied by template in order to add designs, letters and/or numbers to the products.

(Adopted June 7, 1989)

8-31-122 Exemption, Spray Application Equipment: The requirements of Section 8-31-310 shall not apply to the following operations:

- 122.1 The application of high solids, solvent-borne coatings with a solids content of at least 60% by volume to pre-textured or hair-cell surfaces of plastic parts and products. This exemption only applies to coatings subject to the limits of Section 8-31-302.
- 122.2 The application of coatings to the inner surface area of pipes which require a spray gun nozzle extension.
- 122.3 The application of a textured finish coat.
- 122.4 The application of conductive coatings.

(Adopted February 3, 1993)

- 8-31-123 Exemption, Small User:** The spray application equipment limitations of Section 8-21-310 shall not apply to any facility where the total amount of all coatings used to coat plastic parts and products does not exceed 50 gallons/year.

(Adopted February 3, 1993)

- 8-31-124 Limited Exemption, Coating Records:** The requirements of subsection 8-31-501.2 shall not apply to individual source operations using less than 75.7 liters (20 gal) of coating in any calendar year, unless otherwise specified in permit conditions pursuant to Regulation 2-1-403. A person shall maintain monthly records of coating usage under this exemption.

(Adopted February 3, 1993)

- 8-31-125 Exemption, Printed Circuit Boards:** The requirements of this Rule shall not apply to coatings applied to assembled printed circuit boards. This coating operation is subject to Regulation 8, Rule 4.

(Adopted February 3, 1993)

- 8-31-126 Exemption, Translucent Coatings:** The requirements of Section 8-31-302 shall not apply to translucent coatings applied to translucent plastic provided records are maintained as per Section 8-29-501. The application of translucent coating is subject to the requirements of Regulation 8, Rule 4.

(Adopted February 3, 1993)

- 8-31-127 Limited Exemption, Specific Surface Preparation and Cleaning Operations:** The surface preparation standards in Section 8-31-321 shall not apply to, (i) the surface preparation of medical devices or precision optics, (ii) surfaces prepared for adhesive bonding of dissimilar substrates, (iii) stripping of cured inks, coatings and adhesives or cleaning of resin, coating, ink and adhesive mixing, molding and application equipment, or (iv) surface preparation associated with research and development operations; performance testing to determine coating, adhesive or ink performance; or testing for quality control or quality assurance purposes.

(Adopted October 16, 2002)

- 8-31-128 Limited Exemption, Military Components:** The requirements of Section 8-31-321 shall not apply to the surface preparation of any military component for which a contract exists that specifies the use of an organic solvent that does not comply with the standards in Section 8-19-321, provided that contract has been entered into prior to December 1, 2005.

(Adopted October 16, 2002)

8-31-200 DEFINITIONS

- 8-31-201 Camouflage Coating:** A coating used on military equipment to conceal such equipment from detection.

- 8-31-202 Conductive Coating:** A coating used on electrical or electronic equipment to provide shielding against electromagnetic interference, radio frequency interference or static discharge.

- 8-31-203 Flexible Part or Product:** A part or product designed to withstand significant deformation without apparent damage, such as flexible automobile bumpers.

- 8-31-204 Metallic Topcoat:** A topcoat containing more than 5 g/l (0.42 lb/gal) of metal particles, as identified on a technical or material safety data sheet, where such metal particles are visible in the dried film.

(Amended 1/7/87; 6/1/94)

- 8-31-205 Volatile Organic Compound:** Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and

ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.

205.1 For purposes of calculating VOC content of a coating, any water or the following non-precursor organic compounds:

acetone

methyl acetate

parachlorobenzotrifluoride (PCBTF)

cyclic, branched or linear, completely methylated siloxanes (VMS)

shall not be considered to be part of the coating.

206.2 For the purposes of calculating the VOC content of a surface preparation or cleaning solvent, any water or the non-precursor organic compounds listed in subsection 8-31-206.1, above, shall be considered part of the volume of solvent but shall not be considered part of the VOC content of the solvent.

(Amended 1/7/87; 6/7/89, 12/20/95; 10/16/02)

8-31-206 Extreme Performance Coating: Any coating which during intended use is exposed to one or more of the following conditions:

206.1 Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleaners or abrasive scouring agents.

206.2 Repeated exposure to temperatures in excess of 121°C (250°F).

206.3 Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solution.

(Amended 1/7/87; 6/1/94)

8-31-207 Deleted June 7, 1989

8-31-208 Touch-up: That portion of the surface preparation or coating operation which is incidental to the main coating process but necessary to cover minor imperfections or mechanical damage incurred prior to intended use.

(Amended 1/7/87; 10/16/02)

8-31-209 Transfer Efficiency: The ratio of the amount of coating solids adhering to the object being coated to the total amount of coating solids used in the application process, expressed as a percentage.

8-31-210 Deleted January 7, 1987

8-31-211 High Gloss Coating: Any coating which achieves at least 85% reflectance on a 60o meter when tested by ASTM Method D-523-1989.

(Adopted June 7, 1989)

8-31-212 Adhesive: Any coating applied for the purpose of bonding surfaces together.

(Adopted June 7, 1989)

8-31-213 Electrostatic Spray: Equipment used to apply coating by charging atomized particles that are deposited by electrostatic attraction.

(Adopted February 3, 1993)

8-31-214 High Volume, Low Pressure (HVLP) Spray: Equipment used to apply coating by means of a gun which is designed to be operated and which is operated between 0.1 and 10.0 psig air atomizing pressure measured dynamically at the center of the air cap and at the air horns.

(Adopted 2/3/93; 10/16/02)

8-31-215 Pre-Textured or Hair-Cell Surface: The rough or uneven surface impressed upon a manufactured plastic part during molding processes that exists before applying a semi-transparent or colored surface coating.

(Adopted February 3, 1993)

8-31-216 Detailing Gun: Small air spray equipment, including air brushes, that operate at no greater than 5 cfm air flow and no greater than 50 psig air pressure.

(Adopted February 3, 1993)

8-31-217 Approved Emission Control System: A system for reducing emissions to the atmosphere, consisting of an abatement device and a collection system, which achieves the abatement efficiency specified in the applicable standards at all times during the operation and meets the requirements of Regulation 2, Rule 1.

(Adopted February 3, 1993)

8-31-218 Translucent Coating: A clear or colored coating which is formulated to allow light transmission.

(Adopted February 3, 1993)

- 8-31-219 Textured Finish Coat:** Any non-smooth, patterned surface that is intentionally produced and applied as a final coat by spraying drops of coating over a previously applied base coating.
(Adopted February 3, 1993)
- 8-31-220 Optical Coating:** Any coating applied to ophthalmic lenses to provide a scratch resistant, protective film.
(Adopted February 3, 1993)
- 8-31-221 Mold Release Coating:** A temporary protective coating with a solids content of less than 120 grams solids per liter (1 pound solids per gallon) that reduces or prevents adhesion between the mold surface and the surface being molded.
(Adopted February 3, 1993)
- 8-31-222 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 Sections 8-31-302, 306, 309, and 310.
(Adopted June 1, 1994)
- 8-31-223 Medical Device:** An instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar article, including any component or accessory that is (i) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of diseases, or (ii) is intended to affect the structure or any function of the body, or (iii) is defined in the National Formulary or the United States Pharmacopoeia or any supplement to it.
(Adopted October 16, 2002)
- 8-31-224 Precision Optics:** The optical elements used in electro-optical devices that are designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes of light energy levels.
(Adopted October 16, 2002)
- 8-31-225 Surface Preparation:** The cleaning of plastic parts and products prior to coating, further treatment, sale, or intended use. Surface preparation of plastic parts subject to and in compliance with Regulation 8, Rule 16: Solvent Cleaning Operations, is not subject to the surface preparation standards in this Rule.
(Adopted October 16, 2002)
- 8-31-300 STANDARDS**
- 8-31-301 Deleted June 7, 1989**
- 8-31-302 Limit:** A person shall not apply to any plastic part or product any coating with a VOC content in excess of 340 grams of VOC per liter of coating applied (2.8 lb/gal), excluding water, unless emissions to the atmosphere are controlled to an equivalent level by use of an air pollution abatement device with an abatement device efficiency of at least 85% that meets the requirements of Regulation 2, Rule 1.
(Amended 1/7/87; 4/1/87; 6/7/89; 2/3/93)
- 8-31-303 Deleted February 3, 1993**
- 8-31-304 Deleted June 7, 1989**
- 8-31-305 Deleted June 7, 1989**
- 8-31-306 Flexible Coatings:** A person shall not apply to any flexible part or product any coating which has a VOC content in excess of the following limits expressed as grams of VOC per liter (lb VOC per gal) of coating applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level by use of an air pollution abatement device with an abatement device efficiency of at least 85% that meets the requirements of Regulation 2, Rule 1.
- | | | |
|-------|--|------------------------------|
| 306.1 | Flexible primer | 490 grams/liter (4.1 lb/gal) |
| 306.2 | Color topcoat | 450 grams/liter (3.8 lb/gal) |
| 306.3 | Base coat/clear coat (combined system) | 540 grams/liter (4.5 lb/gal) |
- (Amended 1/7/87; 4/1/87; 6/7/89; 2/3/93)*
- 8-31-307 Prohibition of Specification:** No person shall require for use or specify the application of a coating or solvent subject to this Rule if such use or application results in a violation of any of the provisions of this Rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any

coating or solvent is to be applied to any plastic part or product at any physical location within the District.

(Adopted 1/7/87, Amended 6/7/89; 10/16/02)

- 8-31-308 Compliance Statement Requirement:** The manufacturer of coatings and solvents subject to this Rule shall provide on the coating container or as an accompanying data sheet a designation of VOC (as defined in Section 8-31-205), expressed in grams per liter or pounds per gallon of coating. Effective September 1, 1993, the designation shall include the VOC content of the coating as supplied and at the maximum recommended thinning ratio to maintain compliance with the VOC limits of this Rule.

(Adopted 1/7/87; Amended 7/7/89; 2/3/93; 10/16/02)

- 8-31-309 Specialty Coating Limitations:** A person shall not apply to any plastic part or product any specialty coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter (lb VOC per gal) of coating applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level by use of an air pollution abatement device with an abatement device efficiency of at least 85% that meets the requirements of Regulation 2, Rule 1.

Effective January 1, 1994

309.1	Camouflage	420 (3.5)	
309.2	Conductive	700 (5.8)	325 (2.7)
309.3	Metallic Topcoat	420 (3.5)	
309.4	Extreme Performance	750 (6.2)	
309.5	High Gloss	420 (3.5)	
309.6	Optical	800 (6.7)	

Any person seeking to use a coating subject to subsection 8-31-309.4 shall also comply with the following provisions:

- a. Usage is limited to 3785 liters (1000 gal) in any calendar year.
- b. Requirements of Section 8-31-401 must be satisfied.

(Adopted 4/1/87; Amended 6/7/89; 2/3/93)

- 8-31-310 Spray Application Equipment Limitations:** Effective July 1, 1994, a person who uses spray application equipment to apply coatings to plastic parts and products within the District shall use one or more of the following application methods, unless emissions are controlled by an approved emission control system with an overall abatement efficiency of at least 85%:

- 310.1 High Volume, Low Pressure (HVLP) spray, operated in accordance with the manufacturer's recommendations, or
- 310.2 Electrostatic Spray, operated in accordance with the manufacturer's recommendations, or
- 310.3 Detailing Gun, or
- 310.4 Any other coating spray application, which has been demonstrated to the satisfaction of the APCO to achieve an equivalent transfer efficiency compared to the spray application methods listed in subsections 310.1 through 310.3. Prior written approval from the APCO shall be obtained for each alternative method used.

(Adopted February 3, 1993)

- 8-31-320 Solvent Evaporative Loss Minimization:** Unless emissions to the atmosphere are controlled by an approved emission control system with an overall abatement efficiency of at least 85%, any person using organic solvent for surface preparation and cleanup or mixing, using or disposing of coating, catalyst or thinner containing organic solvent:

- 320.1 Shall use closed containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.
- 320.2 Shall not use organic solvent for the cleanup of spray equipment including paint lines with a VOC content in excess of 50 g/l (0.42 lbs/gal) unless either (i) the VOC can be pressurized through spray equipment with the atomizing air off or dispensed from a small non-atomizing container, and collected and stored in a closed container until recycled or properly disposed of offsite, or (ii) a spray gun washer subject to and in compliance with the requirements of Regulation 8, Rule 16 is used.
- 320.3 Shall close containers of coating, catalyst or solvent when not in use.

(Adopted 6/7/89; Amended 2/3/93; 10/16/02)

8-31-321 Surface Preparation Standards: Effective June 1, 2003, no person shall use a surface preparation solvent with a VOC content that exceeds 50 g/l (0.42 lbs/gal) for surface preparation of any plastic part or product unless emissions to the atmosphere are controlled to an equivalent level by an approved emission control system with an abatement device efficiency of at least 85 percent that meets the requirements of Regulation 2, Rule 1.

(Adopted October 16, 2002)

8-31-400 ADMINISTRATIVE REQUIREMENTS

8-31-401 Extreme Performance Coating Petition: A person seeking to come within the provisions of subsection 8-31-309.4, shall comply with the following requirements:

- 401.1 A petition shall be submitted to the APCO stating the performance requirements, volume of coating, and VOC level which is attainable.
- 401.2 If the APCO grants written approval, such petition will be repeated on an annual basis.
- 401.3 If the APCO grants written approval, such approval shall contain volume and VOC limit conditions.
- 401.4 Records shall be maintained as in Section 8-31-501.

(Amended 1/7/87; 4/1/87; 6/7/89; 2/3/93)

8-31-402 Deleted June 7, 1989

8-31-403 Low Usage Coating Petition: A person seeking to satisfy the conditions of Section 8-31-111 shall comply with the following requirements:

- 403.1 The user or specifier shall petition the APCO in writing that substitute complying coatings are not available.
- 403.2 If the APCO grants written approval, such petition will be repeated on an annual basis.
- 403.3 If the APCO grants written approval, such approval shall contain volume and VOC limit conditions.
- 403.4 Records shall be maintained as in Section 501.

(Adopted June 7, 1989)

8-31-500 MONITORING AND RECORDS

8-31-501 Records: Any person using coatings or solvents subject to this Rule shall:

- 501.1 Maintain current data necessary to evaluate compliance, including the following information as applicable:
 - a. coating catalyst and reducer used
 - b. VOC content of coating as applied
 - c. VOC content of surface preparation and cleanup solvents, as applied.
- 501.2 Record coating usage on a weekly basis, including the following information as applicable:
 - a. coating and mix ratio of components in the coating used as applied
 - b. quantity of each coating applied
 - c. identification of specialty coating limit category
 - d. oven temperature
- 501.3 Record coating usage and key system operating parameters on a daily basis when air pollution abatement equipment is used to comply with the requirements of Sections 8-31-302, 306, 309, 310, 320 and/or 321.
- 501.4 Record cleanup solvent usage on a monthly basis showing the type and amount used for cleanup and surface preparation, unless more frequently specified in permit conditions imposed per Regulation 2-1-403.
- 501.5 Records shall be retained and available for inspection by the APCO for the previous 24-month period.

(Adopted 1/7/87; Amended 4/1/87; 6/7/89; 2/3/93; 6/1/94; 10/02/16)

8-31-502 Deleted February 3, 1993

8-31-600 MANUAL OF PROCEDURES

- 8-31-601 Analysis of Coating Samples:** Samples of volatile organic compounds as specified in Sections 8-31-302, 306 and 309 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 21 or 22.
(Adopted 1/7/87; Amended 4/1/87; 2/3/93)
- 8-31-602 Determination of Emissions:** Emissions of volatile organic compounds as specified in Sections 8-31-302, 306, 309, 310, 320 and/or 321 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. When either EPA Method 25 or 25A is used, control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered to be in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule.
(Adopted 1/7/87; Amended 4/1/87; 2/3/93; 6/1/94; 10/16/02)
- 8-31-603 Analysis of Mold Release Coating Samples:** Samples of mold release coatings containing volatile organic compounds as specified in Section 8-31-302 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 31.
(Adopted February 3, 1993)
- 8-31-604 Analysis of Solvent Samples:** Samples of volatile organic compounds as specified in Section 8-31-320 or 321 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 31.
(Adopted October 16, 2002)
- 8-31-605 Analysis of Exempt Compounds:** Samples of PCBTF, VMS, and methyl acetate shall be analyzed by the Manual of Procedures, Volume III, Method 41, 43 and by ASTM Method D-6133-00, respectively.
(Adopted October 16, 2002)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 32
WOOD PRODUCTS COATINGS**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 32
WOOD PRODUCTS COATINGS
(Adopted September 21, 1983)**

- 8-32-100 GENERAL**
- 8-32-101 Description:** The purpose of this Rule is to limit emissions of volatile organic compounds from the application of coatings to, and surface preparation of, any wood products, including furniture, cabinets and custom architectural millwork. This Rule shall not apply to residential noncommercial operations. (Amended April 17, 1991)
- 8-32-110 Deleted October 6, 1993**
- 8-32-111 Exemption, Small Coating Operations:** The provisions of this Rule shall not apply to facilities that use a total of less than 20 gallons of coating per year.
(Adopted April 17, 1991)
- 8-32-112 Exemption, Specific Operations:** The provisions of this Rule shall not apply to the following specific coating operations:
- 112.1 Coatings and adhesives applied to Flatwood Paneling and Wood Flat Stock subject to the provisions of Regulation 8, Rule 23
 - 112.2 Coating applied to stationary structures and their appurtenances subject to the provisions of Regulation 8, Rule 3 or Rule 48
 - 112.3 Coating applied from aerosol cans subject to the provisions of Regulation 8, Rule 49
(Adopted April 17, 1991)
 - 112.4 Adhesive coating subject to the provisions of Regulation 8, Rule 51.
(Adopted November 18, 1992)
- 8-32-113 Exemption, Refinishing, Replacement and Custom Replica Furniture Operations:** The provisions of Sections 8-32-303, 304, 305 and 501 shall not apply to any refinishing operation necessary for preservation, to return the wood product or furniture to original condition, to replace missing furniture to produce a matching set, or to produce custom replica furniture.
(Adopted April 17, 1991)
- 8-32-114 Exemption, Stencil Coatings:** The provisions of this Rule shall not apply to the application of coatings by template in order to add designs, letters or numbers to products. The application of stencil coatings is subject to the provisions of Regulation 8, Rule 4.
(Adopted April 17, 1991)
- 8-32-115 Exemption, Specific Finishes:** The provisions of Sections 8-32-301, 303, and 304 shall not apply to coatings used to produce the following finishes, provided records are maintained as specified in Section 8-32-501:
- 115.1 Crackle lacquers
 - 115.2 Leaf finishes
 - 115.3 Faux finishes
 - 115.4 Imitation wood grain
- The application of coatings used to produce these specific finishes is subject to the provisions of Regulation 8, Rule 4.
(Adopted April 17, 1991)
- 8-32-116 Exemption, Musical Instruments:** The provisions of this Rule shall not apply to the application of coatings to musical instruments.
(Adopted April 17, 1991)
- 8-32-117 Exemption, Polyester Resin Application:** The application of polyester resin with a VOC content of less than 120 grams VOC per liter (1.0 pound VOC per gallon) shall be exempt from the spray application equipment limitations of Section 8-32-301.
(Adopted April 17, 1991)

8-32-200 DEFINITIONS

8-32-201 Deleted April 17, 1991

8-32-202 Binders: Non-volatile polymeric organic materials (resins) which form surface film in coating applications.

8-32-203 Clear Topcoat: The final coating which contains binders, but not opaque pigments, and is specifically formulated to form a transparent or translucent solid protective film.

8-32-204 Deleted April 17, 1991

8-32-205 Opaque Stains: Stains containing pigments not classified as semitransparent stains, including wiping stains, glazes and other opaque material to give character to wood.

8-32-206 Pigmented Coatings: Opaque coatings which contain binders and colored pigments which are formulated to hide the wood surface, either as an undercoat or topcoat.

8-32-207 Sanding Sealer: A coating containing binders, which seals the wood prior to application of and provides a sandable surface for the subsequent coatings.

(Amended April 17, 1991)

8-32-208 Semi-transparent Stains: Stains containing dyes and/or semi-transparent pigments which are formulated to enhance wood grain and change surface color, but not to conceal surface grain, and include sap stain, toner and non-grain raising stains. For the purpose of this Rule, semi-transparent stains shall be considered low-solids coatings and shall contain less than 120 grams solids per liter (1 pound solids per gallon) of coating. Semi-transparent stains with greater than 120 grams solids per liter (1 pound solids per gallon) of coating shall be considered opaque stains.

(Amended April 17, 1991)

8-32-209 Transfer Efficiency: The ratio of the weight of coating solids deposited on an object to the total weight of coating solids used in a coating application step, expressed as a percentage.

(Amended April 17, 1991)

8-32-210 Wash Coat: A coating, containing binders, which penetrates into and seals wood, prevents undesired staining and seals in wood pitch. For the purpose of this Rule, washcoats shall be considered low-solids coatings and shall contain less than 120 grams solids per liter (1 pound solids per gallon) of coating. Wash coats with greater than 120 grams solids per liter (1 pound solids per gallon) of coating shall be considered sanding sealers.

(Amended April 17, 1991)

8-32-211 Wood Furniture: Those surface coated room furnishings which are subject to Standard Industrial Classification Major Group 25 including tables, chairs, beds, sofas, dressers and standing screens made of solid wood, wood composition or wood material.

(Amended April 17, 1991)

8-32-212 General Wood Products: For the purpose of this Rule, general wood products are those surface coated objects which are subject to Standard Industrial Classification Major Group 24 including cabinets, vanities, shutters, containers, frames, tools and ladders made of solid wood, wood composition or wood material.

(Adopted April 17, 1991)

8-32-213 Custom Architectural Millwork: Those in shop finished wood products intended for use as architectural components including panels, doors and trim. Custom architectural millwork is individually produced items designed for a specific space and client.

(Adopted April 17, 1991)

8-32-214 Volatile Organic Compound: Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.

214.1 For purposes of calculating the VOC content of a high solids coating subject to Sections 8-32-303.1 and 304.1, any water or the following compounds:
acetone

parachlorobenzotrifluoride (PCBTF)
cyclic, branched or linear, completely methylated siloxanes (VMS)
shall not be considered a part of the coating.

214.2 For purposes of calculating the VOC content of a low solids coating subject to Sections 8-32-303.2 and 304.2, any water shall be considered a part of the coating. The following compounds:

acetone
parachlorobenzotrifluoride (PCBTF)
cyclic, branched or linear, completely methylated siloxanes (VMS)
shall not be considered part of the VOC content of the coating.

(Adopted April 17, 1991; Amended December 20, 1995)

8-32-215 Airless Spray: Equipment used to apply coatings by use of fluid pressure without atomizing air, including heated airless spray. (Adopted April 17, 1991)

8-32-216 Air Assisted Airless Spray: Equipment used to apply coatings that uses fluid pressure to atomized coating and air pressure between 0.1 and 50 psig to adjust the spray pattern. (Adopted April 17, 1991; Amended July 6, 1994)

8-32-217 High-Volume, Low-Pressure (HVLP) Spray: Equipment used to apply coatings by means of a gun which operates between 0.1 and 10 atomizing psig air pressure. (Adopted April 17, 1991; Amended October 6, 1993)

8-32-218 Electrostatic Air Spray: Equipment used to apply coating by charging atomized particles that are deposited by electrostatic attraction. (Adopted April 17, 1991)

8-32-219 Detailing or Touch-up Guns: Small air spray equipment, including air brushes, that operate at no greater than 5 cfm air flow and no greater than 50 pig air pressure and are used to coat small products or portions of furniture. (Adopted April 17, 1991)

8-32-220 Crackle Lacquer: A clear or pigmented topcoat intended to dry to produce a cracked or crazed appearance. (Adopted April 17, 1991)

8-32-221 Filler: A material whose primary function is to fill voids. (Adopted April 17, 1991)

8-32-222 Leaf Finish: A finish used in conjunction with metal leaf or foil. (Adopted April 17, 1991)

8-32-223 Faux Finish: A finish intended to simulate a surface other than wood, including stone, sand, slate, marble, metal, metal flake or leather. (Adopted April 17, 1991)

8-32-224 Imitation Wood Grain: A hand applied finish that simulates the appearance of a specific natural wood grain. (Adopted April 17, 1991)

8-32-225 Custom Replica Furniture: Furniture individually produced for a specific client using methods of construction including materials, joinery and finishes authentic to the period and in keeping with the style of furniture. (Adopted April 17, 1991)

8-32-226 Key System Operating Parameter: An air pollution abatement equipment 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 Sections 8-32-303, and 304.

(Adopted June 15, 1994)

8-32-300 STANDARDS

8-32-301 Spray Application Equipment Limitations: Any person who utilizes spray application equipment to apply coatings to wood products, furniture and cabinets shall use one or more of the following application methods:

Airless spray
Air assisted airless spray
High Volume Low Pressure (HVLP) spray
Electrostatic air spray
Detailing or Touch-up Guns

(Amended April 17, 1991)

8-32-302 Deleted April 17, 1991

8-32-303 General Wood Product Limits: A person shall not apply to any wood product, any coating with a VOC content in excess of the following limits expressed as grams VOC per liter (pounds VOC per gallon) of coating applied, unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 85 percent that meets the requirements of Regulation 2, Rule 1.

303.1 High Solids Coatings:

	Effective August 1, 1991	Effective July 1, 1992	Effective July 1, 1995	Effective July 1, 1997
Clear Topcoat	700 (5.8)	550 (4.6)	275 (2.3)	275 (2.3)
Sanding Sealer	700 (5.8)	550 (4.6)	550 (4.6)	275 (2.3)
Pigmented Coating	600 (5.0)	600 (5.0)	275 (2.3)	275 (2.3)
Opaque Stain	700 (5.8)	700 (5.8)	700 (5.8)	240 (2.0)
Filler	500 (4.2)	500 (4.2)	500 (4.2)	275 (2.3)

303.2 Low Solids Coatings:

	Effective August 1, 1991	Effective July 1, 1992	Effective July 1, 1995	Effective July 1, 1997
Semi-transparent				
Stain	800 (6.7)	480 (4.0)	480 (4.0)	120 (1.0)
Wash-coat	800 (6.7)	480 (4.0)	480 (4.0)	120 (1.0)

(Adopted April 17, 1991; Amended October 6, 1993; July 6, 1994)

8-32-304 Furniture and Custom Architectural Millwork Limits: A person shall not apply to any furniture or custom architectural millwork any coating with a VOC content in excess of the following limits, expressed as grams VOC per liter (pounds VOC per gallon) of coating applied, unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 85 percent that meets the requirements of Regulation 2, Rule 1.

304.1 High Solids Coatings:

	Effective August 1, 1991	Effective July 1, 1992	Effective July 1, 1995	Effective July 1, 1997
Clear Topcoat	700 (5.8)	700 (5.8)	420 (3.5)	420 (3.5)
Sanding Sealer	700 (5.8)	700 (5.8)	550 (4.6)	420 (3.5)
Pigmented Coating	600 (5.0)	600 (5.0)	420 (3.5)	420 (3.5)
Opaque Stain	700 (5.8)	700 (5.8)	700 (5.8)	420 (3.5)
Filler	500 (4.2)	500 (4.2)	500 (4.2)	275 (2.3)

304.2 Low Solids Coatings:

	Effective August 1, 1991	Effective July 1, 1992	Effective July 1, 1995	Effective July 1, 1997
Semi-transparent				
Stain	800 (6.7)	800 (6.7)	480 (4.0)	120 (1.0)
Wash-coat	800 (6.7)	800 (6.7)	480 (4.0)	120 (1.0)

(Adopted April 17, 1991; Amended October 6, 1993; July 6, 1994)

8-32-305 Prohibition of Specification: No person shall require for use or specify the application of a coating subject to this Rule if such use or application results in a violation of any of the provisions of this Rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating is to be applied to any wood product, furniture or cabinet at any physical location within the District.

- 8-32-306 Compliance Statement Requirement:** Effective August 1, 1991, the manufacturer of coatings subject to this Rule shall provide on the coating container or as an accompanying specification a designation of VOC content (as defined in Section 8-32-214) expressed in grams per liter or pounds per gallon of coating.
(Adopted April 17, 1991)
- 8-32-320 Solvent Evaporative Loss Minimization:** The requirements of this Section shall apply to any person using organic solvent for surface preparation and cleanup or to any person mixing, using or disposing of coating, adhesive or stripper containing organic solvent.
- 320.1** A person shall use closed containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.
- 320.2** A person shall store fresh or spent solvent in closed containers.
- 320.3** A person shall not use organic compounds for the cleanup of mixing, storage or spray equipment unless equipment for collecting the cleaning compounds and minimizing their evaporation to the atmosphere is used.
- 320.4** A person shall not leave containers of stripper, coating, adhesive, catalyst or thinner open to the atmosphere when not in use. (Adopted April 17, 1991)
- 8-32-400 ADMINISTRATIVE REQUIREMENTS**
- 8-32-401 Deleted April 17, 1991**
- 8-32-402 Progress Report:** Any facility, where compliance with Section 8-32-303 or 304 is required, where the total organic compound emissions from wood coating operations is greater than 5 tons per year shall submit a report showing the results of product trials of products compliant with the VOC standards effective July 1, 1995. At a minimum the report shall show names of coating manufacturers' products tested and the results of those tests. The report shall be submitted to the APCO no later than March 1, 1995.
(Adopted July 6, 1994)
- 8-32-500 MONITORING AND RECORDS**
- 8-32-501 Recordkeeping Requirements:** Any person subject to Sections 8-32-303 or 304 shall:
- 501.1** Maintain a current list of coatings in use which provides all of the data necessary to evaluate compliance, including the following information, as applicable:
- a. coating, catalyst or reducer used
 - b. manufacturer's recommended mix ratio of components
 - c. VOC content of coating as applied
- 501.2** Record the following information on a daily basis, as applicable:
- a. coating and mix ratio of components in the coating used
 - b. quantity of each coating applied
 - c. identification of coating category
 - d. type and amount of solvent used for cleanup and surface preparation
- 501.3** Record air pollution abatement equipment key operating parameters on a daily basis where such equipment is installed to meet the requirements of Sections 8-32-303 and 304.
- 501.4** Records shall be retained and available for inspection by the APCO for the previous 24-month period. (Adopted April 17, 1991; Amended June 15, 1994)
- 8-32-502 Refinishing, Replacement and Custom Replica Furniture Operations Recordkeeping Requirements:** Any person refinishing wood products or furniture, replacing missing furniture or producing custom replica furniture shall:
- 502.1** Maintain a current list of coatings in use which provides the following information, as applicable:

- a. coating, catalyst or reducer used
 - b. manufacturer's recommended mix ratio of components
 - c. VOC content of coating or reducer
- 502.2 Record on a monthly basis the following information, as applicable:
- a. amount of coating, catalyst and reducer used
 - b. type and amount of solvent used for cleanup and surface preparation
 - c. type and amount of stripper used
- 502.3 Records shall be retained and available for inspection by the APCO for the previous 24-month period. (Adopted April 17,1991; Amended June15,1994)
- 8-32-503 Custom Architectural Millwork Recordkeeping Requirements:** In addition to the requirements of Section 8-32-501, any person producing custom architectural millwork shall maintain and make available for inspection by the APCO job orders, shop drawings or blueprints, or designer or architectural drawings as necessary to establish the custom nature of the work. (Adopted April 17,1991)
- 8-32-600 MANUAL OF PROCEDURES**
- 8-32-601 Analysis of Samples:** Samples of VOC as specified in Sections 8-32-303.1 or 304.1 shall be analyzed as prescribed in the Manual of Procedures, Volume 111, Method 21 or 22. Samples of VOC as specified in Sections 8-32-303.2 or 304.2 shall be analyzed as prescribed in the Manual of Procedures, Volume 111, Method 31. (Amended April 17, 1991)
- 8-32-602 Determination of Emissions:** Emissions of volatile organic compounds as specified in Sections 8-32-303 or 304 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. When either EPA Method 25 or 25A is used, control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule. (Adopted April 17,1991; Amended June 15, 1994)

REGULATION 8
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**REGULATION 8
ORGANIC COMPOUNDS
RULE 33
GASOLINE BULK TERMINALS AND GASOLINE DELIVERY VEHICLES
(Adopted November 30, 1983)**

8-33-100 GENERAL

8-33-101 Description: The purpose of this Rule is to limit emissions of organic compounds from gasoline transfer operations at gasoline bulk terminals and delivery vehicles.
(Amended October 7, 1987; June 1, 1994)

8-33-110 Exemptions

8-33-111 Delivery Vehicle Exemptions: The requirements of subsections 8-33-304.1 and 304.2 do not apply to gasoline delivery vehicles which deliver exclusively to;

111.1 Storage tanks with a capacity of less than 1.0 cubic meter (260 gallons).

111.2 Storage tanks installed prior to February 18, 1987, with an annual throughput of less than 227 cubic meters (60,000 gallons).

111.3 Storage tanks with a capacity of less than 2.2 cubic meters (550 gallons), used primarily for the fueling of implements of husbandry as defined in Division 16, Chapter 1, of the California Vehicle Code.

111.4 Storage tanks where the APCO determines that Phase I vapor recovery is not feasible. (Amended January 9, 1985; October 7, 1987; June 1, 1994)

8-33-112 Tank Gauging and Inspection: Any tank may be opened for gauging or inspection when loading operations are not in progress provided that such tank is not pressurized. (Amended and Renumbered October 7, 1987)

8-33-113 Maintenance and Repair Exemption: The requirements of Section 8-33-306 shall not apply to spills and vapor leaks resulting from maintenance or repair operations provided proper operating practices are employed to minimize evaporation of gasoline into the atmosphere. (Renumbered October 7, 1987)

8-33-200 DEFINITIONS

8-33-201 CARB Certified Vapor Recovery System: A vapor recovery system which has been certified by the California Air Resources Board (CARB) pursuant to Section 41954 of the Health and Safety Code. (Amended October 7, 1987)

8-33-202 Gasoline Bulk Terminal: A distributing facility which receives gasoline by other than tank truck, or rail car, stores it in stationary tanks, and loads it into tank trucks for delivery to gasoline bulk plants, service stations or other distribution points. (Amended October 7, 1987; June 1, 1994)

8-33-203 Gasoline: Petroleum distillates used as motor fuel with a Reid vapor pressure greater than 4.0 pounds.

8-33-204 Leak Free: A liquid leak of less than four drops per minute excluding losses which occur upon disconnecting transfer fittings, provided such disconnect losses do not exceed 10 milliliters (0.34 fluid ounces) per disconnect, averaged over three disconnects.

8-33-205 Submerged Fill Pipe: Any discharge pipe or nozzle which meets either of the following conditions:

205.1 Where the tank is filled from the top, the end of the discharge pipe or nozzle must be totally submerged when the liquid level is 15 cm (6 in.) from the bottom of the tank.

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- 205.2 Where the tank is filled from the side, the discharge pipe or nozzle must be totally submerged when the liquid level is 46 cm (18 in.) from the bottom of the tank.
- 8-33-206 **Switch Loading:** For the purpose of this Rule, switch loading is the loading of organic liquids with a Reid vapor pressure of less than 4.0 pounds into a delivery vehicle where the previous load was gasoline.
- 8-33-207 **Vapor Tight:** A leak of less than 100 percent of the lower explosive limit on a combustible gas detector measured at a distance of 2.5 cm (1 in.) from the source or no visible evidence of air entrainment in the sight glasses of liquid delivery hoses.
- 8-33-208 **Vapor Tight - Gasoline Cargo Tank:** A leak that does not exceed the standards specified in the CARB "Certification and Test Procedures for Vapor Recovery Systems on Gasoline Delivery Tanks. (Adopted January 9, 1985)
- 8-33-209 Deleted June 1, 1994
- 8-33-210 **Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate. (Adopted June 1, 1994)
- 8-33-300 STANDARDS
- 8-33-301 **Final Gasoline Bulk Terminal Limitations:** Effective April 1, 1989, a person shall not load or permit the loading of gasoline into or out of a gasoline bulk terminal unless a CARB certified vapor recovery system is properly connected and used. Such systems shall not emit into the atmosphere more than 9.6 grams of organic compounds per cubic meter (0.08 lbs per 1000 gallons) of organic liquid loaded. Switch loading shall be subject to this standard. Where multiple processors are used, each processor shall be subject to this standard. (Amended October 7, 1987; July 20, 1988; June 1, 1994)
- 8-33-302 **Vapor Recovery System Requirement:** A person shall not install a vapor recovery system unless it is CARB certified. (Amended October 7, 1987)
- 8-33-303 **Bottom Fill Requirement:** Delivery vehicle loading operations at gasoline bulk terminals shall be accomplished by bottom fill. (Amended October 7, 1987)
- 8-33-304 **Delivery Vehicle Requirements:** Gasoline delivery vehicles are subject to the following requirements:
- 304.1 **Vapor Integrity Requirement:** A person shall not operate, or allow the operation of, a gasoline delivery vehicle unless valid State of California decals, as required by Section 41962 of the Health and Safety Code which attest to the vapor integrity of the tank, are displayed.
- 304.2 **Vapor Recovery Requirement:** Any gasoline delivery vehicle loading at a facility subject to the requirements of Section 8-33-301 shall be equipped with and use a vapor recovery system.
- 304.3 Deleted October 7, 1987.
- 304.4 **Purging Requirement:** A person shall not purge gasoline vapor from the tank of a delivery vehicle to the atmosphere. (Renumbered, Amended January 9, 1985, October 7, 1987)
- 8-33-305 **Equipment Maintenance:** All equipment associated with delivery and loading operations shall be maintained to be leak free, vapor tight and in good working order.
- 8-33-306 **Operating Practices:** Gasoline shall not be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation to the atmosphere.
- 8-33-307 **Loading Practices:** Loading operations which use vapor processing equipment shall be operated in such a manner that the vapor processing capacity is not exceeded.

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- 8-33-308 Vapor Diaphragm Requirements:** Diaphragms used in vapor storage tanks shall be maintained such that organic compound emissions from the airspace above the diaphragm do not exceed a concentration of 3,000 parts per million expressed as methane and 6.8 kilograms (15 pounds) per day. (Amended October 7, 1987)
- 8-33-309 Vapor Recovery System Requirements - Loading Rack:** The system shall be maintained and operated in a manner that prevents gauge pressure in the delivery tank from exceeding 46cm (18 in.) of water column during product loading.
(Adopted January 9, 1985)
- 8-33-310 Interim Gasoline Bulk Terminal Limitations:** Until April 1, 1989, a person shall not load or permit the loading of gasoline into or out of a gasoline bulk terminal unless a CARB certified vapor recovery system is properly connected and used. Such systems shall not emit into the atmosphere more than 66 grams of organic compounds per cubic meter (0.55 lbs per 1000 gallons) of organic liquid loaded. Switch loading shall be subject to this standard. Where multiple processors are used, each processor shall be subject to this standard.
(Adopted July 20, 1988; Amended June 1, 1994)
- 8-33-400 ADMINISTRATIVE REQUIREMENTS**
- 8-33-401 Equipment Installation and Modification:** A person shall not install or modify stationary gasoline storage tanks greater than 1 cubic meter (260 gallons) or vapor recovery equipment, exclusive of repair, unless an authority to construct has been obtained pursuant to Section 301 of Regulation 2, Rule I.
- 8-33-402 Implementation:** Any person who must install or modify vapor recovery equipment as required by Section 8-33-301 of this rule as amended on October 7, 1987, shall meet the following increments of progress:
(a) By April 1, 1988, submit an application to the APCO for Authority to Construct.
(b) By April 1, 1989, be in final compliance.
(Amended October 7, 1987; December 2, 1987)
- 8-33-500 MONITORING AND RECORDS**
- 8-33-501 Burden of Proof:** The burden of proof of eligibility for exemption from this rule is on the applicant. Persons seeking such an exemption shall maintain adequate records and furnish them to the APCO upon request.
- 8-33-600 MANUAL OF PROCEDURES**
- 8-33-601 Emission Rate Determination (Vapor Processing Systems):** The means by which mass emission rates of vapor processing systems are set forth in the Manual of Procedures, Volume IV, ST-34 (Amended October 7, 1987; June 1, 1994)
- 8-33-602 Emission Rate Determination (Vapor Balance System):** The means for determining mass emission rates from vapor balance systems are set forth in the Manual of Procedures, Volume IV, ST-3.
- 8-33-603 Vapor Recovery System Loading Pressure:** The means of determining gauge pressure in the delivery truck are set forth in the Manual of Procedures, Volume IV, ST-34. (Adopted January 9, 1985; Amended June 1, 1994)
- 8-33-604 Vapor Tight - Delivery Vehicles:** The means for determining vapor integrity for delivery vehicles are set forth in the Manual of Procedures, Volume IV, ST-33.
(Adopted October 7, 1987)

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8-33-605 Analysis of Samples: Samples of gasoline as specified in Section 8-33-203 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 13.
(Renumbered January 9, 1985; October 7, 1987)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 34
SOLID WASTE DISPOSAL SITES**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 34
SOLID WASTE DISPOSAL SITES**

(Adopted May 2, 1984)

8-34-100 GENERAL

8-34-101 Description: The purpose of this Rule is to limit the emission of non-methane organic compounds and methane from the waste decomposition process at solid waste disposal sites. The use of materials that contain volatile organic compounds, such as contaminated soil or sludge, in land treatment or refuse cover operations is considered to be an aeration operation and is subject to Regulation 8, Rule 40.

(Amended Sept. 17, 1986; Nov. 17, 1993; Oct. 6, 1999)

8-34-110 Limited Exemption, Old Landfills: The requirements of this Rule shall not apply to any landfill meeting the requirements of Sections 8-34-110.1, 110.2, and 110.3, provided the requirements of Section 8-34-405 are satisfied.

110.1 The landfill is a closed landfill or an inactive landfill with no design capacity available for future waste deposition,

110.2 The landfill last received solid waste at least thirty years ago, and

110.3 The owner has demonstrated that the site does not pose a health risk to human beings or a threat to the environment pursuant to California Health and Safety Code, Section 41805.5.

(Adopted October 6, 1999)

8-34-111 Limited Exemptions, Small Solid Waste Disposal Sites: The requirements of this Rule shall not apply to any solid waste disposal site meeting the requirements of Sections 8-34-111.1 and 111.2, provided the requirements of Sections 8-34-402 and 405 are satisfied.

111.1 The solid waste disposal site has an in-place tonnage of less than 907,194 megagrams (1,000,000 tons) of decomposable solid waste, and

111.2 The solid waste disposal site has a maximum design capacity of less than 2,500,000 megagrams (2,755,000 tons) or less than 2,500,000 cubic meters (3,269,000 cubic yards).

111.3 Deleted October 6, 1999

(Amended Sept. 17, 1986; Nov. 17, 1993; Jul. 17, 1996; Oct. 6, 1999)

8-34-112 Deleted November 17, 1993

8-34-113 Limited Exemption, Inspection and Maintenance: The requirements of Sections 8-34-301, 303 and 305 shall not apply to solid waste disposal sites during inspection and maintenance of the landfill gas collection or emission control system provided that the following conditions are met:

113.1 Emission of raw landfill gas to the atmosphere is minimized during shutdown.

113.2 The gas collection and emission control systems are not shutdown for more than 240 hours in any calendar year. The duration of a gas collection system shutdown shall not exceed 5 consecutive days. For the purposes of determining consecutive days of shutdown, collection system startups lasting less than 12 hours shall be considered to be shutdown days.

113.3 The applicable requirements of Section 8-34-501 are fulfilled.

(Adopted Nov. 17, 1993; Amended Jul. 17, 1996; Oct. 6, 1999)

8-34-114 Limited Exemption, Energy Recovery Device and Emission Control System: Until July 1, 2002, for any energy recovery device or emission control system installed and operating before January 1, 1995, the provision of Section 8-34-301.4 shall not apply provided the equipment reduces the amount of organic compounds and methane in the collected gases by at least 90 percent by weight. Effective July 1, 2002, this exemption shall not apply to any energy recovery device or emission control system.

(Adopted November 17, 1993; Amended October 6, 1999)

8-34-115 Deleted October 6, 1999

- 8-34-116 Limited Exemption, Well Raising:** The requirements of Sections 8-34-301.1, 301.2 and 305 shall not apply to individual wells involved in well raising provided all of the following conditions are met:
- 116.1 New fill is being added,
 - 116.2 No more than five gas collection wells or ten percent of the gas collection wells of the landfill gas collection system, whichever number is less, are shut down at any time for well raising purposes. For the purposes of this section, a well shall be deemed shutdown if it has been disconnected from a vacuum source and is not meeting the requirements of Section 8-34-305,
 - 116.3 A gas collection well is not disconnected from a vacuum source for longer than 24 consecutive hours unless fill is actively being placed or compacted in the immediate vicinity around the well,
 - 116.4 Once installed, a gas collection well extension is sealed or capped until the raised well is reconnected to a vacuum source, and
 - 116.5 Well disconnection times are recorded pursuant to Section 8-34-501.

(Adopted July 17, 1996; Amended October 6, 1999)

- 8-34-117 Limited Exemption, Gas Collection System Components:** The requirements of Sections 8-34-301.1, 301.2, and 305 shall not apply to individual landfill gas collection system components that must be temporarily shut down in order to repair the components, to connect new landfill gas collection system components to the existing system, to prevent or extinguish fires, or to perform construction activities meeting the requirements of Sections 8-34-118.1 through 118.9, provided the following requirements are met:

- 117.1 Existing gas collection system components are being repaired to maintain compliance with this Rule or are being shut down to prevent or extinguish fires,
- 117.2 New gas collection system components are required to maintain compliance with this Rule and are included in the most recent Collection and Control System Design Plan as specified in Section 8-34-408,
- 117.3 For other construction activities, the requirements of Sections 8-34-118.1 through 118.9 must be met,
- 117.4 No more than five gas collection wells or ten percent of the gas collection wells of the landfill gas collection system, whichever number is less, are shut down at any time, except in cases where wells are being shut down to prevent or extinguish fires. For the purposes of this section, a well shall be deemed shutdown if it has been disconnected from a vacuum source and is not meeting the requirements of Section 8-34-305,
- 117.5 No gas collection well may be disconnected from a vacuum source for longer than 24 consecutive hours, unless the operator receives prior written approval from the APCO for a longer well shutdown time. Under no circumstances shall a gas collection well be disconnected from a vacuum source for longer than 5 consecutive days.
- 117.6 Well disconnection times are recorded pursuant to Section 8-34-501.

(Adopted October 6, 1999)

- 8-34-118 Limited Exemption, Construction Activities:** The requirements of Sections 8-34-303 shall not apply to the working face of the landfill or to areas of the landfill surface where the landfill cover material has been removed and refuse has been exposed for the express purpose of installing, expanding, replacing, or repairing components of the landfill gas, leachate, or gas condensate collection and removal systems, provided the following requirements are met:

- 118.1 The operator shall submit a construction plan in writing to the APCO at least seven calendar days prior to beginning any construction activities, unless the construction activity is urgently required. Appropriate reasons for urgent construction activities include, but are not limited to, preventing or extinguishing fires, minimizing emissions of raw landfill gas to the atmosphere or meeting the requirements of Sections 8-34-414 or 415. For urgent construction activities, the operator shall notify the APCO of the need for an urgent construction activity within 24 hours of discovery of the problem and shall submit an urgent construction activity report to the APCO within 30

calendar days of discovery of the problem. The construction plan or urgent construction activity report shall contain the following:

- 1.1 A description of the action(s) being taken,
 - 1.2 A description of the areas of the landfill that will be affected by these actions,
 - 1.3 A description of any landfill gas collection system components that will be affected by these actions,
 - 1.4 A map of the landfill showing the affected areas and any affected collection system components,
 - 1.5 The reason the action is required including a copy of the statute, regulation, standard, provision and/or permit clause that obligates the landfill to take the action(s) or written approval for the action(s) from the appropriate enforcement agencies,
 - 1.6 A construction schedule including projected construction start and finish dates, projected equipment installation dates, and projected shutdown times for individual gas collection system components, and
 - 1.7 A description of the mitigation measures planned to minimize potential air quality impacts.
- 118.2 For construction activities related to the installation, expansion, replacement, or repair of landfill gas collection system components, the action must be required to maintain compliance with this Rule, and any new collection system components must be included in the most recent Collection and Control System Design Plan.
- 118.3 For construction activities related to leachate or gas condensate collection and removal systems, the action must be required by or approved by the appropriate enforcement agency.
- 118.4 Emission of raw landfill gas to the atmosphere is minimized during construction,
- 118.5 Any excavated refuse is covered immediately and then properly disposed of within 24 hours of excavation,
- 118.6 No drilled wells or excavated trenches shall be left uncovered for more than 8 hours,
- 118.7 The installation time for each component is minimized,
- 118.8 Landfill gas collection wells are sealed or capped until the well is connected to a vacuum source,
- 118.9 The construction dates and times for each well are recorded pursuant to Section 8-34-501.

(Adopted October 6, 1999)

8-34-119 Limited Exemption, Inactive or Closed Landfills: The requirements of Sections 8-34-305, 406, 407, 412, 413, 414, 505, and 506 shall not apply to inactive or closed landfills that last received waste before November 8, 1987 and that have no design capacity available for future waste deposition. (Adopted October 6, 1999)

8-34-120 Limited Exemption, Small Design Capacity Landfills: The requirements of Sections 8-34-305, 406, 407, 412, 413, 414, 505, and 506 shall not apply to solid waste disposal sites with a design capacity of less than 2,500,000 megagrams (2,755,000 tons) or less than 2,500,000 cubic meters (3,269,000 cubic yards). (Adopted October 6, 1999)

8-34-121 Limited Exemption, Low Emission Landfills: The requirements of Sections 8-34-301, 303, 304, and 305 shall not apply to solid waste disposal sites which meet all of the following requirements:

- 121.1 The solid waste disposal site has an in-place tonnage of less than 907,194 megagrams (1,000,000 tons) of decomposable solid waste, and
- 121.2 The solid waste disposal site has an NMOC emission rate of less than 50 megagrams per year (55 tons per year) as determined using the procedures in 40 CFR 60.754(a).

(Adopted October 6, 1999)

8-34-122 Limited Exemption, Permanent Collection and Control System Shutdown: The requirements of Sections 8-34-301, 303, 304, and 305 shall not apply to closed landfills which meet all of the following requirements:

- 122.1 The landfill last accepted waste at least 30 years ago,
- 122.2 The gas collection system and emission control system have been in operation for a minimum of fifteen years,
- 122.3 The landfill has an NMOC emission rate of less than 50 megagrams per year (55 tons per year) as determined using the procedures in 40 CFR 60.752(b)(2)(v)(C) and 60.754(b),
- 122.4 The operator can demonstrate to the satisfaction of the APCO that the landfill, without a gas collection system, would pass a risk screening analysis, as defined in Regulation 2-1-225, performed according to the current Air Toxic Risk Screening Procedure, and
- 122.5 The APCO has approved the Equipment Removal Report required pursuant to Section 8-34-410.

(Adopted October 6, 1999)

8-34-200 DEFINITIONS

Except as noted below, all terms in this Rule shall be defined as in 40 CFR 60.751.

- 8-34-201 **Solid Waste Disposal Site:** A Waste Management Facility, as defined by California Code of Regulations Title 27 §20164, or a Municipal Solid Waste Landfill as defined in 40 CFR 60.31(c) or 60.751.
(Amended Sept. 17, 1986; Nov. 17, 1993; Oct. 6, 1999)
- 8-34-202 **Solid Waste:** All decomposable and non-decomposable solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes. Solid waste also includes any material meeting the definition of Solid Waste in 40 CFR 60.751.
(Adopted Sept. 17, 1986; Amended Jul. 17, 1996; Oct. 6, 1999)
- 8-34-203 **Non-decomposable Solid Waste:** Materials which do not degrade biologically to form landfill gas. Examples include, but are not limited to, earth, rock, concrete, asphalt paving fragments, clay products, inert tailings, inert plastics, plasterboard, vehicle tires, glass, inert slag, asbestos, and demolition materials containing minor amounts (less than 10 percent by volume) of wood and metals. Materials that do not meet this definition shall be considered decomposable solid waste.
(Adopted Sept. 17, 1986; Amended Nov. 17, 1993; Jul. 17, 1996; Oct. 6, 1999)
- 8-34-204 **Landfill Gas:** Any untreated, raw gas derived through a natural process from the decomposition of organic waste deposited in a solid waste disposal site or from the evolution of volatile species in the waste. (Adopted September 17, 1986)
- 8-34-205 **Active Landfill:** A landfill that is accepting solid waste for disposal.
(Adopted November 17, 1993; Amended October 6, 1999)
- 8-34-206 **Background:** The ambient concentration of total organic compounds, including all methane and non-methane organic compounds, determined at least 3 meters (10 feet) upwind from the valve or connector to be inspected and not influenced by any specific emission point as indicated by a hydrocarbon analyzer specified by Section 8-34-504.
(Adopted November 17, 1993; Amended October 6, 1999)
- 8-34-207 **Energy Recovery Device:** Any combustion device which uses landfill gas to recover energy in the form of steam or electricity, including, but not limited to, gas turbines, internal combustion engines, boilers and boiler-to-steam turbine systems.
(Adopted November 17, 1993)
- 8-34-208 **Emission Control System:** Any system which disposes of collected landfill gas employing one or more of the following means: combustion, adsorption, gas treatment for subsequent sale, or sale for processing offsite, or an equivalent method that achieves the destruction/treatment efficiency specified in the applicable standards section. (Adopted November 17, 1993; Amended July 17, 1996)
- 8-34-209 **Destruction Efficiency:** A measure of the ability of the control device to combust, transform, or otherwise prevent emissions of non-methane organic compounds in landfill gas to the atmosphere, expressed as a percentage.
(Adopted November 17, 1993; Amended October 6, 1999)

- 8-34-210 Gas Collection System:** Any system which employs various gas collection wells and connected piping, and mechanical blowers, fans, pumps, or compressors to create a pressure gradient and extract landfill gas.
(Adopted November 17, 1993; Amended July 17, 1996)
- 8-34-211 Inactive Landfill:** A landfill that is no longer accepting solid waste for disposal.
(Adopted November 17, 1993; Amended October 6, 1999)
- 8-34-212 Landfill:** Any location within a solid waste disposal site used for the permanent disposal of waste where the organic portion of the waste is subject to natural processes of aerobic and anaerobic decomposition. (Adopted November 17, 1993)
- 8-34-213 Component Leak:** The concentration of total organic compounds (non-methane organic compounds and methane) measured above background, expressed as methane and measured 1 centimeter or less from the component leak source.
(Adopted November 17, 1993; Amended October 6, 1999)
- 8-34-214 Minimization:** The shutting of valves, insertion of sewer plugs, or any other similar method that reduces emissions of raw landfill gas to the atmosphere.
(Adopted November 17, 1993)
- 8-34-215 Non-repeatable, Momentary Readings:** Indications of the presence of non-methane organic compounds and methane which persist for less than five seconds and do not recur when the sampling probe of a portable gas detector is placed in the same location.
(Adopted November 17, 1993; Amended October 6, 1999)
- 8-34-216 Operator:** The landowner of a solid waste disposal site and any other person who through a lease, franchise agreement or other arrangement with the landowner becomes responsible to the District for compliance with the provisions of this Rule.
(Adopted November 17, 1993)
- 8-34-217 Non-Methane Organic Compound (NMOC):** Any compound which contains at least one atom of carbon except: methane, carbon monoxide, carbon dioxide, metallic carbides, carbonates, and carbonic acid.
(Adopted November 17, 1993; Amended October 6, 1999)
- 8-34-218 Enforcement Agency:** The California Regional Water Quality Control Board (RWQCB), California Integrated Waste Management Board (CIWMB), or a designated local enforcement agency that has CIWMB delegated regulatory enforcement authority over solid waste disposal sites. (Adopted July 17, 1996)
- 8-34-219 Continuous Operation:** A landfill gas collection system and emission control system shall be considered to be operated continuously when all existing gas collection wells are operating under vacuum while maintaining landfill gas flow with the collected landfill gas being processed by an emission control system or energy recovery device 24 hours per day.
(Adopted July 17, 1996)
- 8-34-220 Leak Repair:** Tightening, adjustment, the addition of sealing material or replacement of components that reduce leakage to the atmosphere below the limit specified in Section 8-34-301.2. (Adopted July 17, 1996; Amended October 6, 1999)
- 8-34-221 Well Raising:** A landfill activity where an existing gas collection well is temporarily disconnected from a vacuum source, and the non-perforated pipe attached to the well is extended vertically to allow the addition of a new layer of solid waste or the final cover; or is extended horizontally to allow the horizontal extension of an existing layer of solid waste or cover material. The extended pipe (well extension) is then re-connected in order to continue collecting gas from that well.
(Adopted July 17, 1996; Amended October 6, 1999)
- 8-34-222 Fill:** Solid waste and surface cover material that is placed in a landfill.
(Adopted July 17, 1996)
- 8-34-223 Closed Landfill:** A landfill which is no longer accepting solid waste for disposal and has documentation that closure was conducted in accordance with the applicable statutes, regulations, and local ordinances in effect at the time.
(Adopted July 17, 1996)
- 8-34-224 Working Face:** The open area where daily waste is deposited and compacted with landfill equipment.
(Adopted July 17, 1996)
- 8-34-225 Landfill Surface:** The area of the landfill under which decomposable solid waste has been placed, excluding the working face. Vaults containing equipment that is not part of the gas collection system and that are located at or near the surface of the landfill shall be considered part of the landfill surface. Such vaults may contain gas

condensate or leachate management systems, ground water monitoring equipment, perimeter probes used exclusively for detecting subsurface landfill gas migration, electrical, water, sewer, or related equipment. Vaults containing gas collection system equipment, where the operator has demonstrated to the satisfaction of the APCO that the collection system equipment contained within the vault is properly operating and not leaking in excess of the 8-34-301.2 limit, shall be considered part of the landfill surface. (Adopted October 6, 1999)

8-34-226 Controlled Solid Waste Disposal Site: Any solid waste disposal site that is equipped with a landfill gas collection system. (Adopted October 6, 1999)

8-34-227 Surface Leak: The concentration of total organic compounds (non-methane organic compounds and methane) measured above background, expressed as methane. Until July 1, 2002, surface leak concentrations shall be measured at 7.5 centimeters (3 inches) above the landfill surface. Effective July 1, 2002, surface leak concentrations shall be measured at 5 centimeters (2 inches) above the landfill surface. (Adopted October 6, 1999)

8-34-228 Component: Any equipment that is part of the gas collection system or emission control system and that contains landfill gas including, but not limited to, wells, pipes, flanges, fittings, valves, flame arrestors, knock-outs, sampling ports, blowers, compressors, or connectors, but excluding landfill gas analyzers. Vaults containing gas collection system equipment, where the top of the vault is located at or near the surface of the landfill, are considered to be components, unless the operator can demonstrate to the satisfaction of the APCO that the collection system equipment contained within the vault is properly operating and not leaking in excess of the 8-34-301.2 limit. (Adopted October 6, 1999)

8-34-229 Administrator: For the purposes of this Rule, "Administrator" (as referred to in 40 CFR 60.750 et. seq.) means the Air Pollution Control Officer (APCO) of the Bay Area Air Quality Management District, except that the APCO shall not be empowered to approve alternatives to the test methods, standards, or work practices allowed by this Rule, except where such authority has been granted in 40 CFR 60.750 et. seq., such as in 40 CFR 60.752(b)(2)(i), 60.753(c) and (d). (Adopted October 6, 1999)

8-34-300 STANDARDS

8-34-301 Landfill Gas Collection and Emission Control System Requirements: Except as provided in Sections 8-34-110, 111, 113, 114, 116, 117, 121 and 122, an operator shall collect and process landfill gases through a gas collection system and emission control system installed in such a manner that the requirements of Sections 8-34-301.1 and 301.2 and either 301.3 or 301.4 are met:

301.1 The gas collection and emission control systems are operated continuously as defined in Section 8-34-219, unless the requirements of Section 8-34-404 are met; and

301.2 There are no component leaks that exceed 1000 ppm by volume measured as methane at any component that contains landfill gas, unless the leak has been discovered by the operator, recorded pursuant to Section 8-34-501, and repaired within 7 days; and

301.3 Until July 1, 2002, the collected gases are processed in a flare, of the enclosed ground type, which achieves an organic compound and methane destruction efficiency of at least 98 percent by weight. Effective July 1, 2002, the collected gases are processed in an enclosed ground type flare, which reduces the amount of NMOC in the collected gases by at least 98 percent by weight or emits less than 30 ppm by volume of NMOC at the outlet, dry basis, expressed as methane, corrected to 3% oxygen; or

301.4 Until July 1, 2002, the collected gases are processed in an energy recovery device or emission control system that reduces the amount of organic compounds in the collected gases by at least 97 percent by weight and reduces the amount of methane in the collected gases by at least 97 percent by weight. Effective July 1, 2002, the collected gases are processed in an emission control system device, or series of devices, other than a flare, which reduces the amount of NMOC in the collected gases by at least 98 percent by

weight or emits less than 120 ppm by volume of NMOC at the outlet, dry basis, expressed as methane, corrected to 3% oxygen.

(Amended Sept. 17, 1986; Nov. 17, 1993; Jul. 17, 1996; Oct. 6, 1999)

8-34-302 Deleted November 17, 1993

8-34-303 Landfill Surface Requirements: Until July 1, 2002 and except as provided in Sections 8-34-110, 111, 113, 118, 121 and 122, at no point on the surface of the landfill shall there be a concentration of organic compounds and methane, measured 7.5 cm (3 in) above the surface of the landfill that exceeds 1000 ppm by volume, expressed as methane above background, other than non-repeatable, momentary readings. Effective July 1, 2002 and except as provided in Sections 8-34-110, 111, 113, 118, 121 and 122, at no point on the landfill surface shall there be a surface leak that exceeds 500 ppm by volume, expressed as methane above background, other than non-repeatable, momentary readings, unless the landfill surface leak has been discovered by the operator and all of the requirements of Section 8-34-415 are satisfied.

(Adopted Nov. 17, 1993; Amended Jul. 17, 1996; Oct. 6, 1999)

8-34-304 Gas Collection System Installation Requirements: Gas collection wells or other approved gas collection system components shall be installed and operational in each area, cell, or group of cells in the landfill within 60 days of the sooner of the following dates:

- 304.1 The date in which the initial solid waste has been in place for a period of 2 years or more, for inactive or closed areas or cells or areas at final grade; or
- 304.2 The date in which the initial solid waste has been in place for a period of 5 years or more, for active areas or cells; or
- 304.3 The date in which a cumulative total of 1,000,000 tons of decomposable solid waste has been placed in an area or cell.
- 304.4 If Sections 304.1 through 304.3 do not apply, and an NMOC Emission Rate Report indicates that the NMOC emission rate calculated in accordance with 40 CFR 60.754(a) will exceed 50 megagrams per year (55 tons per year), then the initial gas collection and emission control system shall be installed and operational by July 1, 2002 or within 30 months of the date that NMOC emissions are first reported to exceed 50 megagrams per year, whichever is later. The operator may elect to recalculate the NMOC emission rate in accordance with 40 CFR 60.754(a)(3) or (4), provided that the operator complies with all provisions of 40 CFR 60.757(b), (c)(1), and (c)(2).

(Adopted October 6, 1999)

8-34-305 Wellhead Requirements: Effective July 1, 2002 and except as provided in Sections 8-34-119 or 120, each wellhead in the gas collection system shall meet the requirements of Sections 8-34-305.1 and 305.2 and either 305.3 or 305.4, unless the operator has discovered the excess and has satisfied all of the requirements of Section 8-34-414; or the operator has received permit conditions containing alternative operating levels:

- 305.1 Each wellhead shall operate under a vacuum (negative pressure); and
- 305.2 The landfill gas temperature in each wellhead shall be less than 55 °C (131 °F); and either
- 305.3 The nitrogen concentration in each wellhead shall be less than 20% by volume; or
- 305.4 The oxygen concentration in each wellhead shall be less than 5% by volume.

(Adopted October 6, 1999)

8-34-400 ADMINISTRATIVE REQUIREMENTS

8-34-401 Deleted November 17, 1993

8-34-402 Small Solid Waste Disposal Site Exemption Petition: Any operator seeking to satisfy the conditions of Section 8-34-111 shall comply with the following requirements:

- 402.1 A written petition for exemption shall be submitted to the APCO, and

402.2 The petitioner shall submit copies of all permits, waste discharge requirements, site disposal records, and any other data necessary to determine whether an exemption should be granted.

402.3 If the landfill is an active landfill or an inactive landfill with design capacity available for future waste deposition, the exemption granted under Section 8-34-111 shall be for a period of 12 months. A renewal request shall be submitted annually to the APCO until the operator completes all closure requirements in accordance with California Code of Regulation Title 27, Sections 20950 through 21200.

(Adopted Sept. 17, 1986; Amended Nov. 17, 1993; Jul. 17, 1996; Oct. 6, 1999)

8-34-403 Deleted November 17, 1993

8-34-404 Less than Continuous Operation Petition: Any operator seeking to operate less than continuously shall submit a written petition to the APCO that contains the following:

404.1 The landfill gas flow rate and methane concentrations as measured for the entire system or as measured for individual gas collection wells or components for which less than continuous operation is being sought;

404.2 A map showing the locations of individual components; and

404.3 An operating, maintenance, and inspection schedule.

404.4 If the APCO grants written approval, such approval shall contain landfill gas flow rate, methane concentration, and operating conditions.

404.5 A less than continuous operation petition must be renewed every three years or whenever the information submitted pursuant to Section 8-34-404.1 changes.

A petition to operate the entire gas collection and emission control systems less than continuously will only be considered when a landfill is not generating enough landfill gas to operate the emission control system continuously.

(Adopted Nov. 17, 1993; Amended Jul. 17, 1996; Oct. 6, 1999)

8-34-405 Design Capacity Reports: Any operator of a solid waste disposal site shall submit an Initial Design Capacity Report and, if applicable, an Amended Design Capacity Report to the APCO in accordance with the provisions of 40 CFR 60.757(a). The Initial Design Capacity Report is due no later than December 31, 1999, unless the site meets the requirements of 40 CFR 60.750. Sites meeting the requirements of 40 CFR 60.750 must meet the federal compliance times for landfills subject to New Source Performance Standards (NSPS).

(Adopted October 6, 1999)

8-34-406 Initial NMOC Emission Rate Report: Except as provided in Sections 8-34-119 or 120, any operator of a solid waste disposal site, which has a maximum design capacity of at least 2,500,000 megagrams (2,755,000 tons) and at least 2,500,000 cubic meters (3,269,000 cubic yards), shall submit an Initial NMOC Emission Rate Report to the APCO in accordance with the provisions of 40 CFR 60.757(b). The Initial NMOC Emission Rate Report is due no later than December 31, 1999, unless the site meets the requirements of 40 CFR 60.750. Sites meeting the requirements of 40 CFR 60.750 must meet the federal compliance times for landfills subject to New Source Performance Standards (NSPS).

(Adopted October 6, 1999)

8-34-407 Periodic NMOC Emission Rate Reports: Except as provided in Sections 8-34-119 or 120, any operator of a solid waste disposal site, which has a maximum design capacity of at least 2,500,000 megagrams (2,755,000 tons) and at least 2,500,000 cubic meters (3,269,000 cubic yards), shall submit annual NMOC Emission Rate Reports to the APCO in accordance with the provisions of 40 CFR 60.757(b), unless one of the following criteria apply:

407.1 The solid waste disposal site is closed as defined in 8-34-223, or

407.2 The solid waste disposal site is equipped with a gas collection and emission control system operating in compliance with the provisions of this rule and with the provisions of 40 CFR 60.752(b)(2), 60.753, and 60.755, or

407.3 The NMOC emission rate is calculated to be less than 50 megagrams per year (55 tons per year) in each of the next five years and the operator submits a 5-year report in lieu of an annual report.

(Adopted October 6, 1999)

- 8-34-408 Collection and Control System Design Plan:** Any operator of a solid waste disposal site, which meets one of the criteria listed in Sections 8-34-408.1 through 408.4 below, is required to submit to the APCO a Collection and Control System Design Plan, prepared by a professional engineer and meeting the requirements of this Rule and 40 CFR 60.752(b)(2)(i) and 60.759. The Collection and Control System Design Plan shall be submitted to the APCO as a permit application. The APCO shall review and either approve or deny the Collection and Control System Design Plan in accordance with the permit application procedures identified in Regulation 2, Rule 1. An amended Collection and Control System Design Plan shall be submitted within 90 days of any event that requires a change to this plan.
- 408.1 An Initial or Periodic NMOC Emission Rate Report indicates that the NMOC emission rate will exceed 50 megagrams per year (55 tons per year). In this case, the Collection and Control System Design Plan shall be submitted within 1 year of the date of this Initial or Periodic NMOC Emission Rate Report, or
- 408.2 The solid waste disposal site is equipped with a collection and control system as of October 6, 1999. In this case, the initial Collection and Control System Design Plan is due no later than December 31, 2000, or
- 408.3 The operator is required to install and operate a gas collection system in the future, pursuant to Section 8-34-304.3. In this case, the Collection and Control System Design Plan is due at least 90 days before the date the gas collection system is required to be in operation, pursuant to Section 8-34-304. If the collection system is required to be in operation prior to March 31, 2001, the Collection and Control System Design Plan is due December 31, 2000, or
- 408.4 Sections 8-34-408.1 through 408.3 do not apply, but the operator elects to install a gas collection system. In this case, the Collection and Control System Design Plan is due at least 90 days before the operator's projected gas collection system installation date. If the operator plans to install the collection system prior to March 31, 2001, the Collection and Control System Design Plan is due December 31, 2000.
- (Adopted October 6, 1999)
- 8-34-409 Closure Report:** In accordance with the provisions of 40 CFR 60.757(d), any operator of a controlled solid waste disposal site, which has ceased accepting waste, shall submit a Closure Report to the APCO within 30 days of waste acceptance cessation. Landfills that are closed as of October 6, 1999 are not subject to this requirement.
- (Adopted October 6, 1999)
- 8-34-410 Equipment Removal Report:** In accordance with the provisions of 40 CFR 60.757(e), any operator of a controlled solid waste disposal site seeking to satisfy the requirements of Section 8-34-122 shall submit an Equipment Removal Report to the APCO at least 30 days prior to capping any wells or shutting down any control equipment. The Equipment Removal Report shall be submitted to the APCO as a permit application. The Equipment Removal Report shall contain sufficient information to determine compliance with all provisions of Section 8-34-122. The APCO shall review and either approve or deny the Equipment Removal Report in accordance with the permit application procedures identified in Regulation 2, Rule 1.
- (Adopted October 6, 1999)
- 8-34-411 Annual Report:** In accordance with the provisions of 40 CFR 60.757(f), any operator of a controlled solid waste disposal site shall submit to the APCO Annual Reports containing the information required by Sections 8-34-501, 503, 505, 506, 507, 508, and 509. The initial Annual Report shall include the initial Performance Test Report required by Section 8-34-413 and is due no later than 180 days from the initial start-up of the gas collection system, but not earlier than January 1, 2003.
- (Adopted October 6, 1999)
- 8-34-412 Compliance Demonstration Test:** Except as provided in Sections 8-34-119 or 120, any operator of equipment that is subject to Sections 8-34-301.3 or 301.4, shall conduct a Compliance Demonstration Test in accordance with the requirements of 40 CFR 60.8 and 60.752(b)(2)(iii)(B) using the test methods identified in 40 CFR 60.754(d). The initial Compliance Demonstration Test shall be conducted within 120 days of initial start up of the gas collection system or by October 1, 2002, whichever is

later. Any operator that is subject to this requirement and that is required to have a Major Facility Review Permit, shall conduct annual Compliance Demonstration Tests.

(Adopted October 6, 1999)

8-34-413 Performance Test Report: Any operator required to meet Section 8-34-412 shall submit a Performance Test Report to the APCO in accordance with the provisions of 40 CFR 60.8. The initial Performance Test Report shall contain the information specified in 40 CFR 60.757(g) and shall be included in the initial Annual Report required by Section 8-34-411. Any operator required to perform annual Compliance Demonstration Tests shall submit the annual Performance Test Report along with the Annual Report required by Section 8-34-411.

(Adopted October 6, 1999)

8-34-414 Repair Schedule for Wellhead Excesses: In accordance with the provisions of 40 CFR 60.755(a)(3 and 5), any operator subject to the requirements of Section 8-34-305 shall meet the following requirements, if any excess of a limit specified in Sections 8-34-305.1, 305.2, 305.3, or 305.4 is detected.

414.1 The operator shall record the date, the excess value and the well identification number.

414.2 The operator shall initiate action to correct the excess within 5 calendar days of discovering the problem.

414.3 If the excess cannot be corrected within 15 days of the date that the problem was first discovered, the gas collection system shall be expanded to correct the excess.

414.4 If a gas collection system expansion is required pursuant to Section 8-34-414.3, the expansion shall be completed and all new wells shall be operating within 120 days of the date that the problem was first discovered.

(Adopted October 6, 1999)

8-34-415 Repair Schedule for Landfill Surface Leak Excesses: In accordance with the provisions of 40 CFR 60.755(c)(4), any operator subject to the requirements of Section 8-34-303 shall meet the following requirements, if any excess of the limit specified in Section 8-34-303 is detected:

415.1 The operator shall mark the location and record the date, location and value of each monitored excess.

415.2 The operator shall initiate action, such as cover maintenance or well vacuum adjustments, to correct the excess within 5 calendar days of discovering the excess.

415.3 The location of the excess shall be re-monitored within 10 calendar days of the date that the excess was first discovered.

415.4 If the re-monitoring pursuant to Section 8-34-415.3 indicates no excess of the Section 8-34-303 limit, the location shall be re-monitored within 1 month of the date that the excess was first discovered.

415.5 If the re-monitoring pursuant to Section 8-34-415.4 indicates no excess of the Section 8-34-303 limit, no further monitoring is required until the next regularly scheduled quarterly monitoring date.

415.6 If monitoring pursuant to Sections 8-34-415.3 or 415.4 indicates a second excess of the Section 8-34-303 limit, additional corrective action shall be initiated within 5 calendar days of detecting the second excess.

415.7 Any location exhibiting a second excess within a quarterly period shall be re-monitored within 10 calendar days of detecting the second excess.

415.8 If the re-monitoring pursuant to Section 8-34-415.7 indicates no excess of the Section 8-34-303 limit, the location shall be re-monitored within 1 month of the date that the second excess was discovered.

415.9 If the re-monitoring pursuant to Section 8-34-415.8 indicates no excess of the Section 8-34-303 limit, no further monitoring is required until the next regularly scheduled quarterly monitoring date.

415.10 If monitoring pursuant to Section 8-34-415.7 or 415.8 indicates a third excess of the Section 8-34-303 limit within a quarterly period, a gas collection system expansion shall be required.

415.11 If a gas collection system expansion is required pursuant to Section 8-34-415.10, the expansion shall be completed and all new wells shall be operating within 120 days of the date that the excess was first discovered.

8-34-416 **Cover Repairs:** Any operator subject to Section 8-34-510 shall repair the landfill surface cover as necessary to maintain compliance with the provisions of Section 8-34-303. (Adopted October 6, 1999)
(Adopted October 6, 1999)

8-34-500 **MONITORING AND RECORDS**

8-34-501 **Operating Records:** Any operator subject to this Rule shall record the following:

- 501.1 All collection system downtime, including individual well shutdown times and the reason for the shutdown;
- 501.2 All emission control system downtime and the reason for the shutdown;
- 501.3 Continuous temperature for all operating flares and any enclosed combustors subject to Section 8-34-507;
- 501.4 Testing performed to satisfy any of the requirements of this Rule;
- 501.5 Monthly landfill gas flow rates and well concentration readings for facilities subject to Section 8-34-404.
- 501.6 For operations subject to Sections 8-34-503 and 506, records of all monitoring dates, leaks in excess of the limits in Section 8-34-301.2 or Section 8-34-303 that are discovered by the operator, including the location of the leak, leak concentration in ppm by volume, date of discovery, the action taken to repair the leak, date of repair, date of any required re-monitoring, and the re-monitored concentration in ppm by volume.
- 501.7 Annual waste acceptance rate and the current amount of waste in-place.
- 501.8 Records of the nature, location, amount, and date of deposition of non-degradable wastes, for any landfill areas excluded from the collection system requirement as documented in the Collection and Control System Design Plan.
- 501.9 For operations subject to Section 8-34-505, records of all monitoring dates and any excesses of the limits stated in Section 8-34-305 that are discovered by the operator, including well identification number, the measured excess, the action taken to repair the excess, and the date of repair.
- 501.10 Continuous gas flow rate records for any site subject to Section 8-34-508.
- 501.11 For operations subject to Section 8-34-509, records of key emission control system operating parameters.
- 501.12 The records required above shall be made available and retained for a period of five years.

(Adopted Nov. 17, 1993; Amended Jul. 17, 1996; Oct. 6, 1999)

8-34-502 **Deleted October 6, 1999**

8-34-503 **Landfill Gas Collection and Emission Control System Leak Testing:** For facilities subject to Section 8-34-301.2, testing shall be performed quarterly in accordance with Section 8-34-602.

(Adopted Nov. 17, 1993; Amended Jul. 17, 1996; Oct. 6, 1999)

8-34-504 **Portable Hydrocarbon Detector:** Any instrument used for the measurement of total organic compounds, including all methane and non-methane organic compounds, shall be a gas detector that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21 (40 CFR 60, Appendix A).
(Adopted Nov. 17, 1993; Amended Oct. 6, 1999)

8-34-505 **Well Head Monitoring:** In accordance with the provisions of 40 CFR 60.756(a), any operator of a controlled landfill that is subject to the requirements of Section 8-34-305, shall monitor each individual wellhead on a monthly basis for the parameters listed in Sections 8-34-505.1 and 505.2 and either 505.3 or 505.4. Well head monitoring shall begin no later than August 1, 2002.

- 505.1 Gauge pressure, and
- 505.2 Landfill gas temperature, and
- 505.3 Landfill gas nitrogen concentration, or
- 505.4 Landfill gas oxygen concentration.

(Adopted October 6, 1999)

8-34-506 **Landfill Surface Monitoring:** In accordance with the provisions of 40 CFR 60.755(c)(1-3) and 60.756(f), any operator subject to the requirements of Section 8-

34-303, shall monitor the landfill surface for total NMOC and methane concentration on a quarterly basis using the equipment and procedures specified by Section 8-34-607, unless the operator meets the requirements of Sections 8-34-119 or 120 or 506.1 through 506.3. Landfill surface monitoring shall begin no later than October 1, 2002.

506.1 The landfill is closed as defined in Section 8-34-223, and

506.2 The operator has detected no excesses of the Section 8-34-303 limit in three consecutive quarters of landfill surface monitoring, and

506.3 The operator shall monitor the landfill surface for total NMOC and methane concentration on an annual basis. The operator shall return to a quarterly monitoring schedule if any excess of the Section 8-34-303 limit is detected.

(Adopted October 6, 1999)

8-34-507 Continuous Temperature Monitor and Recorder: Any operator using a flare or other enclosed combustor to meet the requirements of Section 8-34-301, shall measure the temperature in the combustion zone of the device, using a continuous temperature monitor and recorder meeting the requirements of 40 CFR 60.756(b)(1).

(Adopted October 6, 1999)

8-34-508 Gas Flow Meter: In accordance with the provisions of 40 CFR 60.756(b)(2), any operator subject to the requirements of Section 8-34-301 shall install, calibrate, and maintain a gas flow measuring device that records the flow rate of landfill gas to the emission control system at least every 15 minutes. The gas flow meter shall be installed and operating no later than July 1, 2002.

(Adopted October 6, 1999)

8-34-509 Key Emission Control System Operating Parameter(s): Any operator using an emission control system other than a flare or other enclosed combustor shall determine the key emission control system operating parameter(s) for the device using District approved methods and shall monitor the parameter(s) on a schedule approved by the APCO.

(Adopted October 6, 1999)

8-34-510 Cover Integrity Monitoring: In accordance with the provisions of 40 CFR 60.755(c)(5), any operator of a controlled solid waste disposal site shall monitor the landfill surface for cover integrity on a monthly basis using procedures specified in the Collection and Control System Design Plan for the site. Cover integrity monitoring shall begin no later than August 1, 2002.

(Adopted October 6, 1999)

8-34-600 MANUAL OF PROCEDURES

8-34-601 Determination of Emissions: Emissions of non-methane organic compounds as specified in Section 8-34-301 shall be measured as prescribed by any of the following methods: BAAQMD Manual of Procedures, Volume IV, ST-7 and ST-14 or EPA Reference Methods 18, 25, 25A, or 25C (40 CFR 60, Appendix A). If Method 18 is used, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollution Emission Factors (AP-42). A source shall be considered in violation if the NMOC emissions measured by any of the referenced test methods exceed the standards of this rule. For the purposes of determining compliance using ST-7, NMOC is the same as organic compounds.

(Amended Nov. 17, 1993; Jun. 15, 1994; Oct. 6, 1999)

8-34-602 Collection and Control System Leak Inspection Procedures: For the purposes of Section 8-34-301.2, leaks shall be measured using a portable gas detector as prescribed in EPA Reference Method 21 (40 CFR 60, Appendix A).

(Adopted Nov. 17, 1993; Amended Jul. 17, 1996; Oct. 6, 1999)

8-34-603 Landfill Gas Sampling Procedure: For the purposes of Sections 8-34-121.2, 406, 407 or 408, landfill gas samples, which are necessary for determining landfill gas production rate or a site-specific k value, shall be taken either from existing wells or from temporary wells that meet the requirements specified in EPA Reference Method 2E (40 CFR 60, Appendix A). Landfill gas sampling for other purposes shall be performed according to BAAQMD Manual of Procedures, Volume IV, Part 1 or ST-7, or EPA Reference Methods 18, 25, 25A, or 25C (40 CFR 60, Appendix A). If Method 18 is used, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollution Emission Factors (AP-42).

(Adopted Nov. 17, 1993; Amended Jul. 17, 1996; Oct. 6, 1999)

- 8-34-604 Determination of Concentration:** For the purposes of Sections 8-34-121.2, 305, 404, 406, 407, or 408, the percentage concentration of carbon dioxide, methane, nitrogen, or oxygen in the landfill gas shall be determined as prescribed in EPA Reference Method 3C (40 CFR 60, Appendix A).
(Adopted Nov. 17, 1993; Amended Jul. 17, 1996; Oct. 6, 1999)
- 8-34-605 Determination of NMOC Emission Rate:** For the purposes of Sections 8-34-121.2, 406, or 407, the non-methane organic compound (NMOC) emission rate shall be determined as prescribed in 40 CFR 60.754(a). For the purposes of Section 8-34-122, the NMOC emission rate shall be determined as prescribed in 40 CFR 60.754(b). For the purposes of Section 8-34-408, the NMOC emission rate for non-productive areas shall be determined as prescribed in 40 CFR 60.759(a)(3)(ii).
(Adopted October 6, 1999)
- 8-34-606 Determination of Maximum Expected Gas Generation Rate:** For the purposes of Section 8-34-408, the maximum expected gas generation rate shall be determined as prescribed in 40 CFR 60.755(a)(1).
(Adopted October 6, 1999)
- 8-34-607 Landfill Surface Inspection Procedures:** For the purposes of Section 8-34-303, the surface concentration of non-methane organic compounds and methane shall be measured using a portable hydrocarbon detector meeting the requirements of 40 CFR 60.755(d) and the applicable requirements of EPA Reference Method 21 (40 CFR 60, Appendix A). The probe shall be placed 5 centimeters (2 inches) above the ground. Monitoring shall be performed under the meteorological conditions specified in BAAQMD Manual of Procedures. The background concentration shall be determined as specified in BAAQMD Manual of Procedures. In accordance with the provisions of 40 CFR 60.753(d) and 60.755(c)(1-3), the entire perimeter of the landfill surface shall be inspected. The interior landfill shall be inspected along a pattern that traverses the landfill in 30 meter intervals or other APCO approved site-specific spacing. Landfill surface areas with distressed vegetation, cracks or seeps shall also be inspected. Steep slopes and other dangerous areas may be excluded from landfill surface inspection.
(Adopted October 6, 1999)
- 8-34-608 Determination of Gauge Pressure:** For the purposes of Section 8-34-305.1 and 505.1, gauge pressure shall be determined using a hand-held manometer, magnahelic gauge, or other APCO approved pressure measuring device. The device shall be calibrated and operated in accordance with manufacturer's specifications.
(Adopted October 6, 1999)

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

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 35
COATING, INK AND ADHESIVE MANUFACTURING
(Adopted May 2, 1984)**

- 8-35-100 General**
- 8-35-101 Description:** The purpose of this rule is to limit emissions of Organic Compounds from the manufacture of coatings, inks, and adhesives. (Amended March 18, 1992)
- 8-35-110 Exemptions, Small Manufacturers:** Until January 1, 1993, the requirements of 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)
- 114.1 Flexible and Rigid Disc Manufacturing (Rule 38).
- 114.2 Paper, Fabric and Film Coating (Rule 12). (Adopted March 18, 1992)
- 8-35-115 Exemption, Adhesive Manufacturers:** Until January 1, 1993, the provisions of 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)

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- 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.
- 8-35-206 **High Speed Dispersion Mill:** A mixer with one or more blades that rotate at high 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:

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- 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)

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- 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)

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- 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)

REGULATION 8

ORGANIC COMPOUNDS

RULE 36

RESIN MANUFACTURING

10/19/84

8-36-100 GENERAL

8-36-101 Description: The purpose of this rule is to limit the emissions of precursor organic compounds from the resin manufacturing operations.

8-36-200 DEFINITIONS

8-36-201 Blending Tank: A vessel in which resin, solvent, or other materials are added, normally to produce a final product blend.

8-36-202 Completed Resin: Resin solids, solvents and additives as delivered for sale or use.

8-36-203 Organic Compound: Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.

8-36-204 Organic Compound, Non-precursor: Methylene chloride, 1,1,1 trichloroethane, 1,1,2 trichlorotrifluoroethane (CFC-113), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), chlorodifluoromethane (CFC-22), and trifluoromethane (FC-23).

8-36-205 Organic Compound, Precursor: Any organic compound as defined in Section 8-36-203 excepting the non-precursor compounds defined in Section 8-36-204.

8-36-206 Resin: A solid or semi-solid, water insoluble, organic material with little or no tendency to crystallize. Resins may be used as the basic components of plastics and as components of surface coating formulations.

8-36-207 Resin Reactor: Equipment used to produce an organic resin by reacting organic or other materials. This may include a reaction vessel, a stripping column, condensers, and a decant vessel.

8-36-208 Thinning Tank: A vessel which receives resin and/or other reaction products from a resin reactor and to which solvents may be added.

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8-36-300 STANDARDS

8-36-301 Resin Reactors, Thinning Tanks, and Blending Tanks: A person shall not operate a resin reactor unless one of the following standards is met:

301.1 Total emissions of precursor organic compounds to the atmosphere from the resin reactor, thinning tank and blending tank are abated by 95 percent or more.

301.2 Total emissions of precursor organic compounds to the atmosphere from all resin reactors, thinning tanks and blending tanks at the facility do not exceed 4.5 kg (10 lbs) per day.

8-36-400 ADMINISTRATIVE REQUIREMENTS

8-36-401 Compliance Schedule: Any person who is subject to the requirements of this rule shall comply with the following increments of progress:

401.1 By November 1, 1984: Submit to the APCO a plan describing the method(s) to be used to comply with the applicable requirements.

401.2 By January 1, 1985: Submit a completed application for any Authority to Construct necessary to comply with the applicable requirements.

401.3 By January 1, 1986: Be in full compliance with all applicable requirements.

8-36-600 MANUAL OF PROCEDURES

8-36-601 Determination of Emissions: Emissions of organic compounds ~~as specified in Section 8-36-301~~ shall be measured as prescribed in the Manual of Procedures, Volume IV, ST-7.

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REGULATION 8
ORGANIC COMPOUNDS
RULE 37

NATURAL GAS AND CRUDE OIL PRODUCTION FACILITIES

(Adopted March 20, 1985)

8-37-100 GENERAL

8-37-101 **Description:** The purpose of this Rule is to limit the emissions of organic compounds from natural gas and crude oil production facilities.

(Amended October 17, 1990)

8-37-110 Deleted October 17, 1990

8-37-111 **Exemption, Distribution, Storage and Transportation Facilities:** The provisions of this Rule shall not apply to natural gas distribution, transportation and storage facilities, including underground storage and associated processing facilities, provided the provisions of Section 8-37-403 are met. (Amended October 17, 1990)

8-37-112 **Exemption, Methane:** The provisions of this Rule shall not apply to natural gas streams which contain more than or equal to 90 percent methane by volume, provided the provisions of Section 8-37-404 are met. (Amended October 17, 1990)

8-37-113 **Exemption, Water Streams:** The provisions of this Rule shall not apply to liquid streams with a water content in excess of 90 percent by volume, provided the provisions of Section 8-37-405 are met. (Amended October 17, 1990)

8-37-200 DEFINITIONS

8-37-201 **Background:** The ambient concentration of organic compounds determined at least 3 meters (10 feet) upwind from the valve, flange, pump, compressor or component to be inspected and not influenced by any specific emission point.

(Amended October 17, 1990)

8-37-202 **Essential Valve or Flange:** A valve or flange which cannot be taken out of service without shutting down the process unit which it serves.

8-37-203 **Flange:** A projecting rim on a pipe or piping component used to attach it to another segment.

8-37-204 Deleted October 17, 1990

8-37-205 Deleted October 17, 1990

8-37-206 **Valve:** Any device that regulates the flow of fluids in a piping system by means of an external actuator acting to permit or block passage of liquids or gases.

8-37-207 **Leak Minimization:** The tightening, adjustment, or addition of packing or gasket material or the replacement of the valve, flange, pump, compressor or other component for the purpose of stopping or reducing leakage to the atmosphere, using best modern practices. (Amended October 17, 1990)

8-37-208 **Leak Repair:** The tightening, adjustment, or addition of packing or gasket material to a valve, flange, pump, compressor or other component or the replacement of the valve, flange, pump, compressor or other component, which reduces the leakage to the atmosphere below the limit of Section 8-37-301. (Amended October 17, 1990)

8-37-209 **Choke:** The regulating valve that controls the production rate of oil or gas.

8-37-210 **Stuffing Box:** The area or packing gland through which the pump polish rod passes and which is surrounded with packing material or "stuffing," to prevent leaks.

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- 8-37-211 **Essential Pump or Compressor:** A pump or compressor which cannot be taken out of service without stopping production of production well.
- 8-37-212 **Lease Area:** The area where the well and associated production equipment is located.
- 8-37-213 **Natural Gas Production Facility:** Any facility engaged in the production of natural gas. For the purpose of this Rule, this includes all valves, flanges, chokes, pumps, compressors and other components, from the well head to the storage tank, including the oil and gas separator. Transport loading arms are included.
(Amended October 17, 1990)
- 8-37-214 **Crude Oil Production Facility:** Any facility engaged in the production of crude oil. For the purpose of this Rule, this includes all valves, flanges, chokes, stuffing boxes, pumps and other components from the well head to the storage tank, including the oil and gas separator. Transport loading arms are included where used for custody transfer.
(Amended October 17, 1990)
- 8-37-215 **Liquid Pool:** Any organic liquid that results in a pool of crude oil or condensate on the ground with a volume of at least 250 ml or covering an area of three inches in diameter and over one inch deep.
(Amended October 17, 1990)
- 8-37-216 **Custody Transfer:** The transfer of produced petroleum and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.
- 8-37-217 **Relief Valve:** A valve set to open when a predesignated pressure is reached.
- 8-37-218 **Component:** Pressure relief valves, threaded connections, hatches, sight glasses and fittings.
- 8-37-219 **Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.
(Amended October 17, 1990)

8-37-300 STANDARDS

- 8-37-301 **Valves, Flanges, Chokes and Components:** A person shall not use any valve, flange, choke or component handling organic compounds in a natural gas or crude oil production facility if the concentration of organic compounds, measured 1 cm from any leak in such equipment exceeds 10,000 ppm (expressed as methane) above background, unless the following requirements are satisfied:
- 301.1 If the equipment is not essential, the leak shall be repaired within 24 hours.
- 301.2 If the equipment is essential, the leak shall be minimized within 24 hours.
- 301.3 If the equipment leak which has been minimized as required by subsection 301.2 still exceeds the limitations of Section 8-37-301, that equipment shall be repaired at the next scheduled maintenance of the well head. Any such equipment shall not be operated longer than three months before repairs are conducted.
(Amended October 17, 1990)
- 301.4 Deleted October 17, 1990
- 8-37-302 **Liquid Pools:** There shall be no open liquid pools of crude oil or condensate in the lease area.
(Amended October 17, 1990)
- 8-37-303 **Open Vessels:** No open or uncovered vessels of crude material larger than 250 ml shall be kept in the lease area. The well cellar shall be kept covered.
(Amended October 17, 1990)
- 8-37-304 **Spills:** All spills of crude oil and condensate which causes a liquid pool shall be cleaned up by removal of the liquid within 24 hours of the spill detection.
- 8-37-305 **Pumps and Compressors:** A person shall not use any pump or compressor handling organic compounds in natural gas or crude oil production operation if the concentration of organic compounds exceeds 10,000 ppm (as methane), measured at a distance of 1 cm from the detected source, unless the following requirements are satisfied:

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- 305.1 If the pump or compressor is not essential, that pump or compressor shall be removed from service for leak repairs within 24 hours of the discovery of the leak.
- 305.2 If the spare for the pump or compressor also exceeds the limitation of this section, leak repairs to either pump or compressor shall be completed within 30 days of discovery of its leak and the other pump or compressor may be operated until repairs are completed.
- 305.3 Deleted October 17, 1990
- 305.4 Deleted October 17, 1990
- 305.5 If the pump or compressor has a packed seal and is essential, the leak shall be minimized within 24 hours of its discovery.
- 305.6 If the pump or compressor is essential, and has been leak minimized as required by subsection 8-37-305.5 and still exceeds the limitation of this section, that pump or compressor shall be repaired at the next scheduled maintenance of the well head or within three months.
(Amended October 17, 1990)
- 305.7 All pumps and compressors shall be visually inspected at least weekly.
(Adopted October 17, 1990)
- 8-37-306 Liquid Leaks:** No person shall use any valve, flange, pump, compressor, liquid line or component that has a liquid leak of more than three drops per minute. Such a leak shall be repaired within 24 hours of detection. If repair is not successful, the leaking component shall be replaced within 15 days. (Amended October 17, 1990)
- 8-37-307 Stuffing Box Leaks:** A person shall not use any stuffing box where the concentration of organic compounds exceeds 10,000 ppm (as methane) above background, measured 1 cm from the polish rod box interface or where there is a liquid leak exceeding three drops per minute. (Amended October 17, 1990)
- 8-37-308 Closed Hatches:** All access hatches shall remain closed except during active maintenance or repairs. (Adopted October 17, 1990)
- 8-37-309 Reinspection of Repaired Components:** All components subject to Section 8-37-301, 305, 306, and 307 shall be reinspected within one week of repairs.
(Adopted October 17, 1990)
- 8-37-400 ADMINISTRATIVE REQUIREMENTS**
- 8-37-401 Identification:** Any valve, flange, choke, stuffing box, pump or compressor with a leak in excess of the limitations of Sections 8-37-301, 305 or 306 which has been detected by the operator and is awaiting repair shall be identified in a manner which is readily observable by a District inspector. Any leak in such equipment exceeding the limitations of Section 8-37-301, 305 or 306 which is detected by the APCO and which has not been so identified by the operator shall constitute a violation of this Section.
(Amended October 17, 1990)
- 8-37-402 Deleted October 17, 1990**
- 8-37-403 Natural Gas Distribution, Storage and Transportation Facilities Petition:** Any person seeking to satisfy the conditions of Section 8-37-111 shall submit a written petition for exemption to the APCO. This petition shall include complete information on any associated processing facilities. (Adopted October 17, 1990)
- 8-37-404 Methane Petition:** Any person seeking to satisfy the conditions of Section 8-37-112 shall comply with the following requirements:
- 404.1 A written petition for exemption shall be submitted to the APCO showing the percentage of methane in the natural gas stream is more than or equal to 90% by volume.
- 404.2 If the APCO grants written approval, such petition will be repeated on an annual basis and accompanied by a current gas stream analysis.
(Adopted October 17, 1990)

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8-37-405 Water Streams Petition: Any person seeking to satisfy the conditions of Section 8-37-113 shall comply with the following requirements:

405.1 A written petition for exemption shall be submitted to the APCO showing the percentage of water in the liquid stream is greater than or equal to 90% by volume.

405.2 If the APCO grants written approval, such petition will be repeated on an annual basis and accompanied by a current liquid stream analysis.

(Adopted October 17, 1990)

8-37-500 MONITORING AND RECORDS

8-37-501 Portable Hydrocarbon Detector: Any instrument used for the measurement of organic compounds shall be a combustible gas detector or any other type of instrument approved by the APCO that meets the specifications and performance criteria of, and is calibrated in accordance with, EPA Reference Method 21.

(Amended October 17, 1990)

8-37-502 Records: Any person subject to this Rule shall comply with the following recordkeeping requirements:

502.1 Records of equipment repairs as required by Sections 8-27-301, 305 or 306 shall be maintained. These records shall include the dates on which the leaking equipment was discovered, minimized and/or repaired.

502.2 Inspection records shall be maintained for at least two years and shall be made available to the APCO upon request. (Adopted October 17, 1990)

8-37-600 MANUAL OF PROCEDURES

8-37-601 Inspection Procedure: Inspection of valves, pumps, flanges, compressors and components shall be conducted as prescribed by EPA Reference Method 21.

8-37-602 Methane and Water Analysis: Analyses for the purpose of meeting the exemption requirements of Sections 8-37-112 and 8-37-113 shall be done according to the general guidelines of ASTM Methods E-168, E-169 and E-260, or other methods approved by the APCO. (Adopted October 17, 1990)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 38
FLEXIBLE AND RIGID DISC MANUFACTURING**

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REGULATION 8
ORGANIC COMPOUNDS
RULE 38
FLEXIBLE AND RIGID DISC MANUFACTURING

(Adopted October 2, 1985)

8-38-100 GENERAL

- 8-38-101 Description:** The purpose of this Rule is to limit the emissions of volatile organic compounds from the manufacture of flexible and rigid magnetic data storage discs.
- 8-38-110 Exemption, Non-Precut Substrates:** The requirements of this Rule shall not apply to coating, washing, or mixing operations used in the production of disc substrate materials that are in sheets or rolls not cut into final disc form. Such coating operations are subject to Rule 12 of this Regulation unless exempted by that Rule.
- 8-38-111 Exemption, Low VOC Coatings:** The requirements of Sections 8-38-301 and 303 shall not apply to the application, mixing, or milling of any coating with a VOC content of less than 340 grams per liter of coating applied, excluding water (2.8 pounds per gallon).
- 8-38-112 Exemption, Low VOC Solvents:** The requirements of Section 8-38-302 shall not apply to the use of any solvent containing less than 15 percent VOC, by weight.
- 8-38-113 Exemption, Small Coating Lines:** The requirements of Section 8-38-301 shall not apply to any disc coating line which does not emit more than 6.8 kilograms of VOC per operating day (15 lb/day).
- 8-38-114 Exemption, Small Polishing Lines:** The requirements of Section 8-38-302 shall not apply to any disc polishing line which does not emit more than 10 kilograms of VOC per operating day (22 lb/day).
- 8-38-115 Exemption, Small Mixing Operation:** The requirements of Section 8-38-303 shall not apply to any mixing vat with a volume of 0.045 cubic meters (12 gallons) or less.
- 8-38-116 Exemption, Equipment Cleaning:** The requirements of this Rule shall not apply to the emissions of VOC resulting from the cleaning of disc coating or polishing equipment.

8-38-200 DEFINITIONS

- 8-38-201 Flexible Magnetic Data Storage Disc:** A flat, circular plastic film, contained in a non-rigid envelope, with a magnetic coating on which digital information can be stored by selective magnetization of portions of the flat surface.
- 8-38-202 Rigid Magnetic Data Storage Disc:** A flat, circular, non-flexible plate with a magnetic coating on which digital information can be stored by selective magnetization of portions of the flat surface.
- 8-38-203 Disc Coater:** Any device used for applying a magnetizable film to the substrate of flexible or rigid magnetic data storage discs.
- 8-38-204 Disc Polisher:** Any device or technique using a physical rubbing process with an organic solvent on the surface of flexible or rigid magnetic data storage discs for the purpose of removing contaminants or oxidation or for increasing surface smoothness, resolution or gloss. Solvent cleaning devices using immersion or agitation in solvent or solvent vapors are subject to Rule 16 of this Regulation unless exempted by that Rule.
- 8-38-205 Coating Mixing Operation:** Any vat used for blending, milling or dispersing oxide, resin, solvent, or any other compounds in the preparation of a magnetizable coating in the manufacture of flexible or rigid magnetic data storage discs.
- 8-38-206 Disc Coating Line:** All disc coaters at a facility dedicated to the manufacture of a specific magnetic data storage disc product.
- 8-38-207 Disc Polishing Line:** All disc polishers at a facility dedicated to the manufacture of a specific magnetic data storage disc product.

8-38-208 Volatile Organic Compound (VOC): Any organic compound [excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, which would be emitted during the use, application, curing or drying of a solvent or surface coating.

208.1 For the purposes of calculating VOC content of a coating, any water or the following non-precursor organic compounds,
methylene chloride
1,1,1 trichloroethane
1,1,2-trichloro 1,2,2-trifluoroethane (CFC-113)
trichlorofluoromethane (CFC-11)
dichlorodifluoromethane (CFC-12)
dichlorotetrafluoroethane (CFC-114)
chloropentafluoroethane (CFC-115)
acetone
parachlorobenzotrifluoride (PCBTF)
cyclic, branched or linear, completely methylated siloxanes (VMS)
shall not be considered to be part of the coating.

(Amended December 20, 1995)

8-38-209 Approved Emission Control System: A system for reducing emissions to the atmosphere, consisting of an abatement device and a collection system, which achieves the abatement efficiency specified in the applicable standards at all times during the operation and meets the requirements of Regulation 2, Rule 1.

(Adopted June 15, 1994)

8-38-210 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 Sections 8-38-301, and 302.

(Adopted June 15, 1994)

8-38-300 STANDARDS

8-38-301 Disc Coating Line Requirements: Effective January 1, 1987, a person shall not operate a disc coating line unless the emissions of VOC from the disc coaters are controlled by an approved emission control system which has an overall collection and control efficiency of at least 85 percent on a mass basis and meets the requirements of Regulation 2, Rule 1. (Amended October 6, 1993; June 15, 1994)

8-38-302 Disc Polishing Line Requirements: Effective January 1, 1987, a person shall not operate a disc polishing line unless the emissions of VOC from the disc polishers are controlled by an approved emission control system which has an overall collection and control efficiency of at least 85 percent on a mass basis and meets the requirements of Regulation 2, Rule 1. (Amended October 6, 1993; June 15, 1994)

8-38-303 Coating Mixing Operation Requirements: Effective January 1, 1987, a person shall not operate a coating mixing operation unless vats are covered, except to add ingredients or take samples, with covers that satisfy the following requirements:

303.1 Covers extend at least 1/2 inch beyond the outer rim of the vat or are attached to the rim of the vat; and

303.2 Covers 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; and

303.3 Covers may have a slit to allow clearance for insertion of a mixer shaft. The slit shall be covered after insertion of the mixer shaft, except to allow safe clearance for the shaft.

303.4 Polyethylene or other non-permanent covers may be used provided that the requirements of subsections 8-38-303.1 through 303.3 are met.

3-38-304 Deleted October 6, 1993

8-38-400 ADMINISTRATIVE REQUIREMENTS

8-38-401 Deleted October 6, 1993

8-38-402 Qualification for Exemption: By March 1, 1986, persons seeking to claim exemption from the requirements of Section 8-38-301 and/or 302 pursuant to Sections 8-38-111 through 114 shall submit for APCO approval a description of the methods and/or limitations that will ensure qualification for exemption. Such description shall include a list of coatings or solvents and the VOC contents of each to qualify for the exemptions pursuant to Sections 8-38-111 or 112 and daily production records sufficient to qualify for the exemptions pursuant to Sections 8-38-113 or 114.

(Amended October 6, 1993)

8-38-500 MONITORING AND RECORDS

8-38-501 Approved Emission Control System, Recordkeeping Requirements: Any person subject to Sections 301 and 302 shall:

501.1 Maintain a current list of coatings and solvent in use which states the VOC content of each.

501.2 Record on a daily basis the type and amount of coating and solvent used.

501.3 Record on a daily basis key system operating parameters. Key system operating parameters are those necessary to ensure compliance with VOC content of coating requirements, such as temperature, flow rate, and pressure, when applicable.

501.4 Retain and have such records available for inspection by the APCO for the previous 24-month period.

(Adopted June 15, 1994)

8-38-502 Burden of Proof: Any person claiming an exemption pursuant to Sections 8-38-113, 114, or 115, must have information available, such as purchase orders or hazardous waste manifests, that would allow the APCO to verify facility usage.

(Adopted June 15, 1994)

8-38-600 MANUAL OF PROCEDURES

8-38-601 Analysis of Samples: Samples of VOC as specified in Sections 8-38-111 and 112 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 21 or 22.

8-38-602 Determination of Emissions: Emissions of volatile organic compounds as specified in Sections 8-38-113, 114, 301, 302 and subsection 304.7 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 referenced test methods exceed the standards of this rule. (Adopted October 2, 1985; Amended June 15, 1994)

9-28-94

REGULATION 8
ORGANIC COMPOUNDS
RULE 39
GASOLINE BULK PLANTS
AND GASOLINE DELIVERY VEHICLES

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REGULATION 8
ORGANIC COMPOUNDS
RULE 39
GASOLINE BULK PLANTS
AND GASOLINE DELIVERY VEHICLES
(Adopted October 7, 1987)

- 8-39-100 GENERAL
- 8-39-101 **Description:** The purpose of this Rule is to limit emissions of organic compounds from gasoline transfer operations at gasoline bulk plants and delivery vehicles.
(Amended June 1, 1994)
- 8-39-110 **Exemptions**
- 8-39-111 **Delivery Vehicle Exemptions:** The requirements of Subsections 8-39-304.1 and 304.2 and 304.3 do not apply to gasoline delivery vehicles which deliver exclusively to :
- 111.1 Storage tanks installed prior to February 18, 1987, with an annual throughput of less than 227 cubic meters (60,000 gallons) which were not equipped with Phase I vapor recovery as of July 1, 1983.
- 111.2 Storage tanks with a storage capacity of less than 2.2 cubic meters (550 gallons) used primarily for the fueling of implements of husbandry as defined in Division 16, Chapter 1, of the California Vehicle Code.
- 111.3 Storage tanks where the APCO determines that Phase I vapor recovery is not feasible.
(Amended June 1, 1994)
- 8-39-112 **Delivery to Exempt Facilities:** The requirements of Section 8-39-302 do not apply to bulk gasoline distribution facilities which load exclusively to gasoline delivery vehicles servicing stationary tanks which are exempt from Phase I as defined in Section 8-39-209 provided that submerged fill is used.
- 8-39-113 **Tank Gauging and Inspection Exemption:** Any tank may be opened for gauging or inspection when loading operations are not in progress provided that such tank is not pressurized.
- 8-39-114 **Maintenance and Repair Exemption:** The requirements of Section 8-39-306 shall not apply to spills and vapor leaks resulting from maintenance or repair operations provided proper operating practices are employed to minimize evaporation of gasoline into the atmosphere.
- 8-39-200 DEFINITIONS
- 8-39-201 **CARB Certified Vapor Recovery System:** A vapor recovery system which has been certified by the California Air Resources Board (CARB) pursuant to Section 41954 of the Health and Safety Code.
- 8-39-202 **Gasoline Bulk Plant:** A distributing facility which receives gasoline by tank truck, stores it in stationary tanks, and loads it into tank trucks for delivery to service stations or other distribution points.
- 8-39-203 **Gasoline:** Petroleum distillates used as motor fuel with a Reid vapor pressure greater than 4.0 pounds.
- 8-39-204 **Leak Free:** A liquid leak of less than four drops per minute excluding losses which occur upon disconnecting transfer fittings, provided such disconnect losses do not exceed 10 milliliters (0.34 fluid ounces) per disconnect, averaged over three disconnects.
- 8-39-205 **Submerged Fill Pipe:** Any discharge pipe or nozzle which meets either of the following conditions:

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- 205.1 Where the tank is filled from the top, the end of the discharge pipe or nozzle must be totally submerged when the liquid level is 15 cm (6 in.) from the bottom of the tank.
- 205.2 Where the tank is filled from the side, the discharge pipe or nozzle must be totally submerged when the liquid level is 46 cm (18 in.) from the bottom of the tank.
- 8-39-206 **Switch Loading:** For the purpose of this Rule, switch loading is the loading of organic liquids with a Reid vapor pressure of less than 4.0 pounds into a delivery vehicle where the previous load was gasoline.
- 8-39-207 **Vapor Tight:** A leak of less than 100 percent of the lower explosive limit on a combustible gas detector measured at a distance of 2.5 cm (1 in.) from the source or no visible evidence of air entrainment in the sight glasses of liquid delivery hoses.
- 8-39-208 **Vapor Tight - Gasoline Cargo Tank:** A leak that does not exceed the standards specified in the CARB "Certification and Test Procedures for Vapor Recovery Systems on Gasoline Delivery Tanks."
- 8-39-209 Deleted June 1, 1994
- 8-39-210 **Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.
(Adopted June 1, 1994)
- 8-39-300 **STANDARDS**
- 8-39-301 **Phase I Requirements:** A person shall not transfer or allow the transfer of gasoline from gasoline delivery vehicles into stationary tanks at gasoline bulk plants unless a CARB certified Phase I vapor recovery system is used.
- 8-39-302 **Gasoline Bulk Plant Limitations:** A person shall not load or permit the loading of gasoline into or out of a gasoline bulk plant unless a CARB certified vapor recovery system is properly connected and used. Such systems shall not emit into the atmosphere more than 60 grams of organic compounds per cubic meter (0.50 pounds per 1,000 gallons) of organic liquid loaded. Switch loading shall be subject to this standard. Where multiple processors are used, each processor shall be subject to this standard. (Amended June 1, 1994)
- 8-39-303 **Vapor Recovery System Requirements:** Vapor recovery systems installed at gasoline bulk plants shall be subject to CARB certification.
- 8-39-304 **Delivery Vehicle Requirements:** Gasoline delivery vehicles are subject to the following requirements:
- 304.1 **Vapor Integrity Requirement:** A person shall not operate, or allow the operation of, a gasoline delivery vehicle unless valid State of California decals, as required by Section 41962 of the Health and Safety Code which attest to the vapor integrity of the tank, are displayed.
- 304.2 **Vapor Recovery Requirement:** Any gasoline delivery vehicle loading at a facility subject to the requirements of Section 8-39-302 shall be equipped with and use a vapor recovery system.
- 304.3 **Vapor Return Requirement:** A person shall not load at a facility exempt under Section 8-39-112 if the preceding load, or any portion thereof, was delivered to a storage tank equipped with Phase I.
- 304.4 **Purging Requirement:** A person shall not purge gasoline vapor from the tank of a delivery vehicle to the atmosphere.
- 8-39-305 **Equipment Maintenance:** All equipment associated with delivery and loading operations shall be maintained to be leak free, vapor tight and in good working order.
- 8-39-306 **Operating Practices:** Gasoline shall not be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation to the atmosphere.

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- 8-39-307 **Loading Practices:** Loading operations which use vapor processing equipment shall be operated in such a manner that the vapor processing capacity is not exceeded.
- 8-39-308 **Vapor Recovery System Requirements - Loading Rack:** The system shall be maintained and operated in a manner that prevents gauge pressure in the delivery tank from exceeding 46cm (18 in.) of water column during product loading.
- 8-39-400 **ADMINISTRATIVE REQUIREMENTS**
- 8-39-401 **Equipment Installation and Modification:** A person shall not install or modify stationary gasoline storage tanks greater than 1 cubic meter (260 gallons) or vapor recovery equipment, exclusive of repair, unless an authority to construct has been obtained pursuant to Section 301 of Regulation 2, Rule 1.
- 8-39-402 **Implementation:** Any person who must install or modify vapor recovery equipment as required by Section 8-39-302 of this rule shall meet the following increments of progress:
(a) By April 1, 1988 submit an application to the APCO for Authorities to Construct.
(b) By April 1, 1989, be in final compliance.
- 8-39-403 **Stationary Tanks:** Any person who must install Phase I vapor recovery on stationary tanks at a gasoline dispensing facility as required by the March 4, 1987 amendments to Regulation 8, Rule 7 shall meet the following increments of progress:
(a) By September 1, 1989, submit an application to the APCO for Authorities to Construct.
(b) By March 1, 1990, be in final compliance.
(Adopted October 7, 1987; Amended December 2, 1987)
- 8-39-500 **MONITORING AND RECORDS**
- 8-39-501 **Burden of Proof:** The burden of proof of eligibility for exemption from this rule is on the applicant. Persons seeking such an exemption shall maintain adequate records and furnish them to the APCO upon request.
- 8-39-600 **MANUAL OF PROCEDURES**
- 8-39-601 **Emission Rate Determination (Vapor Processing Systems):** The means by which mass emission rates of vapor processing systems are measured are set forth in the Manual of Procedures, Volume IV, ST-34. (Amended June 1, 1994)
- 8-39-602 **Emission Rate Determination (Vapor Balance System):** The means for determining mass emission rates from vapor balance systems are set forth in the Manual of Procedures, Volume IV, ST-3.
- 8-39-603 **Vapor Recovery System Loading Pressure:** The means of determining gauge pressure in the delivery truck are set forth in the Manual of Procedures, Volume IV, ST-34. Amended June 1, 1994)
- 8-39-604 **Vapor Tight - Delivery Vehicles:** The means for determining vapor integrity for delivery vehicles are set forth in the Manual of Procedures, Volume IV, ST-33.
- 8-39-605 **Analysis of Samples:** Samples of gasoline as specified in Section 8-39-203 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 13.

**REGULATION 8
ORGANIC COMPOUNDS
RULE 40
AERATION OF CONTAMINATED SOIL AND
REMOVAL OF UNDERGROUND STORAGE TANKS**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 40
AERATION OF CONTAMINATED SOIL AND
REMOVAL OF UNDERGROUND STORAGE TANKS**

(Adopted July 16, 1986)

8-40-100 GENERAL

8-40-101 Description: The purpose of this Rule is to limit the emission of organic compounds from soil that has been contaminated by organic chemical or petroleum chemical leaks or spills, and to describe an acceptable procedure for controlling emissions from underground storage tanks during removal or replacement.

(Amended 2/15/89; 12/15/99)

8-40-110 Exemption, Storage Piles: Calculations of aeration volume under Section 8-40-204 shall not include storage piles that are covered per Section 8-40-305, nor shall they include active storage piles.

(Amended December 15, 1999)

8-40-111 Exemption, Excavated Hole: The exposed surfaces of an excavated hole shall not be included in calculations of aerated volume under Section 8-40-204.

8-40-112 Exemption, Sampling: Contaminated soil exposed for the sole purpose of sampling shall not be considered to be aerated. Inactive storage piles may remain uncovered for no longer than one hour for soil sampling purposes.

(Amended December 12, 1999)

8-40-113 Exemption, Non-volatile Hydrocarbons: The requirements of all sections of this Rule shall not apply if the soil is contaminated solely by a known organic chemical or petroleum liquid and that chemical or liquid has an initial boiling point of 302°F or higher provided that the soil is not heated.

(Amended February 15, 1989)

8-40-114 Exemption, Contaminated Soil Excavation During Organic Liquid Service Pipeline Leak Repairs: The requirements of Section 8-40-402 shall not apply if contaminated soil is being excavated in order to repair leaking organic liquid service pipelines and if no more than 5 cubic yards of contaminated soil are generated, and provided the requirements in Section 8-40-404 are satisfied.

(Adopted 2/15/89; Amended 12/15/99)

8-40-115 Exemption, Contaminated Soil Excavation Unrelated to Underground Storage Tank Activities: The requirements of Section 8-40-402 shall not apply where contaminated soil is discovered during excavations unrelated to underground storage tank activities, and provided the requirements in Section 8-40-405 are satisfied.

(Adopted 2/15/89; Amended 12/15/99)

8-40-116 Exemption, Small Volume: The provisions of this rule shall not apply to excavation or aeration projects where:

116.1 The total volume of contaminated soil is no more than 1 cubic yard, or

116.2 The total volume of contaminated soil is no more than 8 cubic yards and organic content does not exceed 500 ppmw as determined by the procedures in Sections 8-40-601 and 8-40-602. The exemption of this subsection may be applied to any single excavation site or facility no more than once in any 3 month period.

(Adopted December 15, 1999)

8-40-117 Exemption, Accidental Spills: The provisions of this rule shall not apply to soil contaminated by accidental spillage of five gallons or less of liquid organic compounds.

(Adopted December 15, 1999)

8-40-118 Exemption, Aeration Projects of Limited Impact: The requirements of Sections 8-40-403 and 8-40-405 shall not apply to any aeration project in which total project emissions of volatile organic compounds are less than 150 lbs, and total project emissions of toxic air contaminants are less than the limits listed in Table 2-1-316 in District Regulation 2, Rule 1.

(Adopted December 15, 1999)

8-40-200 **DEFINITIONS**

- 8-40-201 **Active Storage Pile:** A storage pile to which soil is currently being added or from which soil is currently being removed. Activity must have occurred within one hour to be current. (Amended December 15, 1999)
- 8-40-202 **Aeration:** Exposure of excavated soil containing volatile organic compounds to the air. (Amended December 15, 1999)
- 8-40-203 **Aeration Depth:** The smaller of the following: the actual average depth of contaminated soil; or 0.15 meters (0.5 feet) multiplied by the daily frequency with which soil is turned. (Amended February 15, 1989)
- 8-40-204 **Aeration Volume:** The volume of soil being aerated shall be calculated as follows: the exposed surface area (in square feet or square meters) shall be multiplied by the aeration depth. The exposed surface area includes the pile of excavated soil unless the pile is covered per Section 8-40-305. (Amended 2/15/89; 12/15/99)
- 8-40-205 **Contaminated Soil:** Soil which has an organic content exceeding 50 ppmw as measured using the procedure in Section 8-40-602, or soil which registers an organic concentration greater than 50 ppmv (expressed as methane, C1) when measured using the procedure in Section 8-40-604. (Amended December 15, 1999)
- 8-40-206 **Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.
- 8-40-207 **Organic Content:** The concentration of volatile organic compounds measured in the composite sample collected and analyzed using the procedures in Sections 8-40-601 and 8-40-602. (Amended December 15, 1999)
- 8-40-208 **Vapor Free:** The process of purging gases from a tank using dry ice to replace organic vapors with an inert atmosphere.
- 8-40-209 **Ventilation:** The process of purging gases from a tank by blowing or drawing another gas through the tank.
- 8-40-210 **Emergency Removal or Replacement or Excavation:** A removal or replacement of a tank or an excavation of contaminated soil carried out pursuant to an order of a state or local government agency issued because the contaminated soil poses an imminent threat to public health and safety. (Adopted 2/15/89; Amended 12/15/99)
- 8-40-211 **Organic Concentration:** The concentration of volatile organic compounds measured in ppmv (expressed as methane, C1) above the soil surface using the procedures in Section 8-40-604. (Adopted December 15, 1999)
- 8-40-212 **Organic Liquid Service:** The conveyance or storage of volatile organic compounds that are typically liquid at standard temperature and pressure, as applied to tanks and pipelines. This does not include septic tanks, sewer lines, storm water drainage, fresh water lines, natural gas lines, or electrical conduit. (Adopted December 15, 1999)
- 8-40-213 **Volatile Organic Compound (VOC):** Any organic compound, as described in Section 8-40-206, which would be emitted to the atmosphere. (Adopted December 15, 1999)
- 8-40-214 **Vapor Suppressant:** Any material demonstrated to be at least as effective as water spray at reducing VOC emissions from contaminated soil to the atmosphere. (Adopted December 15, 1999)
- 8-40-215 **Backfill:** Replacement of contaminated soil to an excavated pit below existing grade or to a engineered fill location below final grade performed in such a way as to minimize exposure of contaminated soil to the atmosphere. To constitute backfill, replacement of soil may be back into the original excavation, or any other final fill site located on the site where the original excavation occurred. Backfill does not include the use of contaminated soil in daily, intermediate, or final cover operations at solid waste disposal sites (as defined in Regulation 8-34-201). (Adopted December 15, 1999)
- 8-40-216 **Storage Pile:** A pile of excavated contaminated soil located above existing grade level. (Adopted December 15, 1999)

8-40-300 STANDARDS

8-40-301 **Uncontrolled Contaminated Soil Aeration:** Until June 1, 2000, a person shall not aerate contaminated soil at a rate in excess of that specified in Table 1 for the degree of organic content. The limitations in Table 1 shall apply to the entire facility and indicate the volume of contaminated soil that may be added, on any one day, to contaminated soil that is already aerating. These limited aeration rates shall also apply to the use of contaminated soil in daily, intermediate, or final cover operations at solid waste disposal sites (as defined in Regulation 8-34-201).

Table 1
Allowable Rate of Uncontrolled Aeration

ORGANIC CONTENT ppm (weight)	RATE OF UNCONTROLLED AERATION	
	Cubic meters/day	Cubic yards/day
< 50	Exempt	Exempt
50 - 99	459.0	600
100 - 499	91.8	120
500 - 999	45.9	60
1000 - 1999	22.9	30
2000 - 2999	11.5	15
3000 - 3999	7.6	10
4000 - 4999	5.7	8
> 5000	0.08	0.1

Effective June 1, 2000, a person shall not aerate contaminated soil except as provided in sections 8-40-304 through 306. This prohibition includes the use of contaminated soil in daily, intermediate, or final cover operations at solid waste disposal sites (as defined in Regulation 8-34-201). (Amended 2/15/89; 12/15/99)

8-40-302 **Controlled Contaminated Soil Aeration:** Until June 1, 2000, contaminated soil may be aerated at rates exceeding the limitations of 8-40-301 provided emissions of organic compounds to the atmosphere are reduced by at least 90% by weight. (Amended December 15, 1999)

8-40-303 Deleted December 15, 1999

8-40-304 **Active Storage Piles:** Effective June 1, 2000, contaminated soil shall be kept visibly moist by water spray, treated with a vapor suppressant, or covered with continuous heavy duty plastic sheeting or other covering to minimize emissions of organic compounds to the atmosphere. Covering shall be in good condition, joined at the seams, and securely anchored to minimize headspace where vapors may accumulate. For any active storage pile, the surface area not covered by plastic sheeting or other covering shall not exceed 6,000 square feet. (Adopted December 15, 1999)

8-40-305 **Inactive Storage Piles:** Effective June 1, 2000, contaminated soil shall be covered during periods of inactivity longer than one hour. The contaminated soil shall be covered with continuous heavy duty plastic sheeting or other covering to minimize emissions to the atmosphere. The covering shall be in good condition, joined at the seams, and securely anchored to minimize headspace where vapors may accumulate. (Adopted December 15, 1999)

8-40-306 **Contaminated Soil - Excavation and Removal:** Effective June 1, 2000, any person excavating and/or permanently removing contaminated soil shall adopt the following procedure:

306.1 During excavation, all exposed contaminated soil surfaces above existing grade level shall be kept visibly moist by water spray, treated with an approved vapor suppressant, or covered with continuous heavy duty plastic sheeting or other covering to minimize emissions of organic compounds to the atmosphere. The covering shall be in good condition, joined at the seams, and securely anchored to minimize headspace where vapors may accumulate.

306.2 All contaminated soils loaded into trucks or trailers for off site disposal or treatment shall be covered with continuous heavy duty plastic sheeting or other covering so as to minimize emissions to the atmosphere. The covering

shall be in good condition, joined at the seams, and securely anchored to minimize headspace where vapors may accumulate.

- 306.3 All contaminated soil shall be stockpiled separately from soil which is not contaminated, unless emissions of VOC from the storage pile are minimized according to the provisions of this Rule.
- 306.4 Within 45 days of excavation, or within 90 days for soil of organic content less than 500 ppmw as determined by the procedures in Sections 8-40-601 and 8-40-602, the following shall take place:
 - 4.1 all contaminated soil shall be backfilled and covered with at least 6 inches of uncontaminated soil, or
 - 4.2 all contaminated soil shall be removed from the site, or
 - 4.3 treatment to remove the contamination shall be initiated.
- 306.5 Treatment of contaminated soil to remove the contamination shall be subject to all applicable District Rules and Regulations.
- 306.6 During backfilling, all exposed contaminated soil surfaces shall be kept visibly moist by water spray, or treated with an approved vapor suppressant, or covered with continuous heavy duty plastic sheeting or other covering to minimize emissions of organic compounds to the atmosphere. During periods of inactivity longer than 12 hours, backfilled contaminated soil shall be covered with at least 6 inches of uncontaminated soil, or covered with continuous heavy duty plastic sheeting or other covering to minimize emissions of organic compounds to the atmosphere. The covering shall be in good condition, joined at the seams, and securely anchored to minimize headspace where vapors may accumulate. (Adopted December 15, 1999)

8-40-310 Underground Storage Tanks - Removal or Replacement: Any person wishing to permanently remove or replace an underground storage tank which previously contained organic compounds shall follow the following procedure:

- 310.1 All piping shall be drained or flushed into the tank or other container.
- 310.2 All liquids and sludges shall be removed, to the extent possible, from the tank. A hand pump shall be used to remove the bottom few inches of product if necessary.
- 310.3 Vapors shall be removed from the tank using one of the following three methods:
 - 3.1 The tank may be filled with water, displacing vapors and hydrocarbon liquids.
 - 3.2 Vapor freeing.
 - 3.3 Ventilation.
- 310.4 Effective June 1, 2000, all soils disturbed and/or excavated as part of the tank removal shall be subject to the requirements of Sections 8-40-301 through 306, unless the soil has been determined to be not contaminated by measurement of organic content using the procedures in Section 8-40-601 and 8-40-602. (Amended 2/15/89; 6/15/94; 12/15/99)

8-40-311 Vapor Freeing: No person shall vapor free an underground storage tank of 250 gallons or greater capacity, unless emissions of organic compounds to the atmosphere are reduced by at least 90% by weight. The emission control system shall be operated until the concentration of organic compounds in the tank is less than 5,000 ppm expressed as methane. (Amended December 15, 1999)

8-40-312 Ventilation: No person shall ventilate an underground storage tank of 250 gallons or greater capacity, unless emissions of organic compounds to the atmosphere are reduced by at least 90% by weight. The emission control system shall be operated until the concentration of organic compounds in the tank is less than 5,000 ppm expressed as methane. (Amended December 15, 1999)

8-40-400 ADMINISTRATIVE REQUIREMENTS

8-40-401 Reporting, Removal or Replacement of Tanks: The person responsible for the removal or replacement of tanks which are subject to the provisions of Section 8-40-310 shall provide written notice to the APCO of intention to remove or replace tanks. The written notice shall be postmarked at least 5 days prior to commencement of

such removal or replacement. In the case of emergency removal or replacement of tanks, notice shall be provided as early as possible prior to the commencement of such emergency removal or replacement, to be followed by written verification not later than 30 working days after the removal or replacement is completed. The written notice of intention shall include:

401.1 Names and addresses of persons performing and responsible for the tank removal or replacement.

401.2 Location of site at which tank removal or replacement will occur.

401.3 Scheduled starting date of tank removal or replacement. The scheduled starting date may be delayed for no more than 5 working days, provided the APCO is notified by telephone as early as possible prior to the new starting date.

401.4 Procedures to be employed to meet the requirements of Sections 8-40-310.

401.5 If applicable, name, title and authority of the state or local government representative who has ordered a tank removal or replacement which is subject to emergency procedures.

401.6 Procedures to be employed to meet the requirements of Sections 8-40-301 through 306. (Adopted 2/15/89; Amended 12/15/99)

8-40-402 Reporting, Excavation of Contaminated Soil: The person responsible for the excavation of known contaminated soil subject to the provisions of Sections 8-40-301 through 8-40-306 shall provide written notice to the APCO of intention to excavate. The written notice shall be postmarked at least 5 days prior to commencement of such excavation. In the case of emergency excavations, notice shall be provided as early as possible prior to the commencement of such emergency excavation, to be followed by written verification not later than 30 working days after excavation is completed. Written notice of intention to excavate may be submitted to the APCO at the same time written notice of intention to remove or replace tanks is submitted provided that such notification precedes the commencement of either tank removal or replacement or contaminated soil excavation by at least 5 days as indicated by postmark. The written notice of intention shall include:

402.1 Names and addresses of persons performing and responsible for excavation.

402.2 Location of site at which excavation will occur.

402.3 Scheduled starting date of excavation. The scheduled starting date may be delayed for no more than 5 working days, provided the APCO is notified by telephone as early as possible prior to the new starting date.

402.4 Procedures to be employed to meet the requirements of Sections 8-40-301 through 306.

402.5 If applicable, name, title and authority of the state or local government representative who has ordered an excavation which is subject to emergency procedures.

402.6 Estimated quantity of contaminated soil to be excavated.

402.7 Estimated average organic content of contaminated soil.

(Adopted 2/15/89; Amended 12/15/99)

8-40-403 Reporting, Aeration of Soil: The person responsible for aeration of any soil shall provide written notice to the APCO of intention to aerate soil, with the following information. The written notice shall be postmarked at least 5 days prior to commencement of such excavation. The District shall again be notified within 24 hours of a change in one or more of the following parameters:

403.1 Estimated total quantity of soil to be aerated

403.2 Estimated quantity of soil to be aerated per day

403.3 Estimated average organic content of soil

403.4 Chemical composition of organic compounds (i.e., gasoline, methylene chloride, etc.)

403.5 A basis on which these estimates were derived (soil analysis test reports, etc.)

403.6 Names and addresses of persons performing and responsible for the aeration project.

403.7 Location of site at which the aeration project will occur.

(Amended, Renumbered 2/15/89; Amended 12/15/99)

- 8-40-404 Reporting, Contaminated Soil Excavation During Organic Liquid Service Pipeline Leak Repairs:** The person responsible for the excavation of no more than 5 cubic yards of contaminated soil generated by an organic liquid service pipeline leak repair shall provide written notice to the APCO as early as possible, but not later than 3040 working days, after excavation is completed. The written notice shall include:
- 404.1 Names and addresses of persons performing and responsible for excavation
 - 404.2 Location of site at which excavation occurred.
 - 404.3 Date of excavation.
 - 404.4 Quantity of contaminated soil excavated.
 - 404.5 Estimated average organic content of contaminated soil.
 - 404.6 Procedures to be employed to meet the requirements of Sections 8-40-301 through 306. (Adopted 2/15/89; Amended 12/15/99)
- 8-40-405 Reporting, Contaminated Soil Excavations Unrelated to Underground Storage Tank Activities:** The person responsible for contaminated soil excavations unrelated to underground storage tank activities where contaminated soil is discovered shall provide notice as early as possible upon detection of such contaminated soil, to be followed by written verification not later than 30 working days after excavation is completed. The written verification shall include:
- 405.1 Names and addresses of persons performing and responsible for excavation.
 - 405.2 Location of site at which excavation occurred.
 - 405.3 Date of excavation.
 - 405.4 Quantity of contaminated soil excavated.
 - 405.5 Estimated average organic content of contaminated soil.
 - 405.6 Procedures to be employed to meet the requirements of Sections 8-40-301 through 306. (Adopted 2/15/89; Amended 12/15/99)

8-40-600 MANUAL OF PROCEDURES

- 8-40-601 Contaminated Soil Sampling:** Composite samples shall be collected and analyzed for-excavated contaminated soil as follows:
- 601.1 Until June 1, 2000, for every 50 cubic yards of excavated contaminated soil to be aerated as per Table 1 in Section 8-40-301 Aat least one composite sample shall be collected from each storage pile within 12 hours of excavation.
 - 601.2 For excavation projects seeking exemption under the provisions of Section 8-40-116.2, at least one composite sample shall be collected and analyzed.
 - 601.3 For excavation projects subject to Sections 8-40-306.4 (90 day limit only) or 8-40-310.4, involving 250 cubic yards of contaminated soil or less, at least one composite sample shall be collected an analyzed for every 50 cubic yards of excavated contaminated soil.
 - 601.4 For excavation projects subject to Sections 8-40-306.4 (90 day limit only) or 8-40-310.4, involving more than 250 cubic yards of contaminated soil, at least one composite sample shall be collected and analyzed for every 100 cubic yards of excavated contaminated soil.
 - 601.5 Each composite sample shall consist of four separate soil samples taken using the procedures described below. The soil samples shall remain separate until they are combined in the laboratory just prior to analysis.
 - 601.6 Each pile for which a composite sample is required shall be considered to have four equal sectors. One sample shall be taken from the center of each sector. Samples shall be taken from at least twelve inches below the surface of the pile. Samples shall be taken using one of the following methods:
 - 6.1 Sarrples shall be taken using a driven-tube type sampler, capped and sealed with inert materials, and extruded in the lab in order to reduce the loss of volatile materials; or

6.2 Samples shall be taken using a clean brass tube (at least twelve inches long) driven into the soil with a suitable instrument. The ends of the brass tube shall then be covered with aluminum foil, then plastic end caps, and finally wrapped with a suitable tape. The samples shall then be immediately placed on ice, or dry ice, for transport to a laboratory.

(Amended 2/15/89; 12/15/99)

8-40-602 Measurement of Organic Content: Organic content of soil shall be determined by EPA Reference Methods 8015B and 8021B or any method determined to be equivalent by the United States Environmental Protection Agency and approved in writing by the APCO or designee.

(Amended 2/15/89; 10/6/93; 12/15/99)

8-40-603 Determination of Emissions: Emissions of organic compounds as specified in Sections 8-40-302, 8-40-311 and 8-40-312 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 referenced test methods exceed the standards of this rule.

(Amended 2/15/99; 6/15/94; 12/15/99)

8-40-604 Measurement of Organic Concentration: Organic concentration as specified in Section 8-40-205 shall be measured at a distance of three inches from the surface of the excavated soil with an organic vapor analyzer complying with 40 CFR Part 60 Appendix A, EPA Method 21 Section 3, "Determination of Volatile Organic Compound Leaks, Monitoring Instrument Specifications," or any method determined to be equivalent by the United States Environmental Protection Agency and approved in writing by the APCO or designee. For the purpose of determining contamination, the soil surface of the excavated soil pile may be disturbed to obtain a measurement.

(Adopted December 15, 1999)

8-40-605 Analysis of Samples, Initial Boiling Point: Samples of organic compounds shall be analyzed by ASTM D-1078-93 for the determination of initial boiling point as specified in Section 8-40-113.

(Adopted December 15, 1999)

REGULATION 8
ORGANIC COMPOUNDS
RULE 41
VEGETABLE OIL MANUFACTURING OPERATIONS

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 41
VEGETABLE OIL MANUFACTURING OPERATIONS
(Adopted December 17, 1986)**

8-41-100 GENERAL

8-41-101 Description: The purpose of this Rule is to limit emissions of precursor organic compounds from the vegetable oil solvent extraction operations.

8-41-110 Exemption, Laboratory and Experimental Operations: The requirements of this Rule shall not apply to equipment used exclusively for research, laboratory analysis or determination of product quality.

8-41-111 Exemption, Startup and Shutdown: The requirements of this Rule shall not apply to the solvent extraction plant during the first 24 hours of startup and the final 24 hours of shutdown.

8-41-200 DEFINITIONS

8-1-209 Organic Compound, Precursor: Any organic compound as defined in 1- 233 excepting the non-precursor organic compounds, 1-234.

8-41-201 Organic Compounds: Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonates, and methane

8-41-202 Vegetable Oil Plant: Any facility engaged in the extraction or refining of vegetable oil.

8-41-203 Solvent Extraction: Removal of vegetable oil from the seed or bean using a solvent in a contact system.

8-41-204 Desolventizer-Toaster: A process unit in which steam and air are forced through and across the meal to volatilize the solvent.

8-41-205 Equipment in Organic Service: Any pump, valve, pressure relief valve, sight glass sample connection, open-ended valve, or connector in VOC service.

8-41-206 Repaired: Equipment is adjusted or otherwise altered to maintain proper operating characteristic, including freedom from leakage.

8-41-207 Leaking Equipment: Any equipment from which precursor organic compounds can be detected or observed to be leaking, or producing a concentration in air exceeding 10,000 ppm (expressed as methane) one centimeter from the leak.

8-41-208 Mineral Oil Scrubber: A packed tower using mineral oil as an adsorbent for the extractant solvent.

8-41-209 Meal: Spent seed flakes containing adsorbed solvent after extraction.

8-41-210 Tumbler or Cooler: A device which reduces the temperature or moisture from the meal.

8-41-211 Conveyor: Any device which removes the meal by a mechanical means from one location to another location.

8-41-300 STANDARDS

8-41-301 Extractor, Desolventizer-Toaster: A person shall not operate any extractor or desolventizer-toaster that emits more than 6.8 kg (15 lb) of organic compounds per day (excluding the meal discharge), unless such emissions are controlled by one of the following:

301.1 A condenser and mineral oil scrubber which captures and reduces precursor organic compounds by at least 90 per cent by weight.

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- 301.2 An emission control device, approved by the APCO, which captures and reduces precursor organic compounds by at least 90 per cent by weight.
- 8-41-302 **Conveyor, Desolventizer-Toaster:** A person shall not operate a vegetable oil plant unless the desolventizer-toaster discharge conveyor prior to the cooler is vented to a mineral oil scrubber with a precursor organic compound capture and control efficiency of at least 90 per cent by weight.
- 8-41-303 **Equipment in Organic Service:** Each calendar month, a person operating a vegetable oil plant shall inspect all equipment for any indication of gaseous or liquid leakage of organic compounds. If the concentration of precursor organic compounds measured one cm. from any leak in such equipment exceeds 10,000 ppm (expressed as methane), or if leaks are visible, the leaking equipment shall be repaired within 10 days.
- 8-41-400 **ADMINISTRATIVE REQUIREMENTS:**
- 8-41-401 **Compliance Schedule:** The owner or operator subject to this Rule shall comply with the following increments of progress:
- 401.1 By January 2, 1987 submit to the APCO a plan describing the methods to be used to comply with the applicable requirements.
- 401.2 By March 1, 1987 submit a completed application for an Authority to Construct if needed.
- 401.3 By August 1, 1987 be in full compliance with requirements of this Rule.
- 8-41-500 **MONITORING AND RECORDS**
- 8-41-501 **Portable Hydrocarbon Detector:** Any instrument used for the measurement of organic compounds shall be a gas detector that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21 (40 CFR 60, Appendix A). (Amended June 1, 1994)
- 8-41-502 **Record Keeping:** The owner or operator of a vegetable oil plant shall be subject to the following requirements:
- 502.1 A readily visible identification, in the form of a weatherproof tag shall be attached to the leaking equipment. The identification may be removed upon repair.
- 502.2 The leaking equipment shall be repaired with an initial attempt as soon as possible but no later than 10 calendar days after it is detected.
- 502.3 When a leak is detected, the owner or operator shall record the date of detection and the date of repair. The log record of leak detection and repair shall be maintained for 2 years at the facility and be made available to a District representative upon request.
- 8-41-503 **Air Pollution Abatement Equipment, Recordkeeping Requirements:** Any person operating air pollution abatement equipment to comply with Section 8-14-301, and 302 shall record on a daily basis key system operating parameters to demonstrate continuous operation and compliance of the air pollution abatement equipment during periods of emission producing activities. Key system operating parameters are those necessary to ensure compliance, such as temperature, flow rates, and pressure. (Adopted June 1, 1994)

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8-41-600 MANUAL OF PROCEDURES

8-41-601 **Determination of Emissions:** Emissions of organic compounds as specified in 8-41-301 and 8-41-303 shall be measured by any of the following methods 1) BAAQMD Manual of Procedures, Volume IV ST-7, 2) EPA Method 25, 3) EPA Method 25A. A source shall be considered in violation if the VOC emissions measured by any of the test methods exceed the standards of this rule.

(Amended June 1, 1994)

8-41-602 **Inspection Procedures:** For the purposes of Section 8-41-303, leaks shall be measured using a portable gas detector as prescribed in EPA Reference Method 21 (40 CFR 60, Appendix A).

(Adopted June 1, 1994)

REGULATION 8
ORGANIC COMPOUNDS
RULE 42
LARGE COMMERCIAL BREAD BAKERIES

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REGULATION 8
ORGANIC COMPOUNDS
RULE 42
LARGE COMMERCIAL BREAD BAKERIES
(Adopted September 20, 1989)

8-42-100 GENERAL

- 8-42-101 **Description:** The purpose of this rule is to limit the emission of precursor organic compounds from bread ovens at large commercial bread bakeries.
- 8-42-110 **Exemption, Small Bakeries:** Except for Section 8-42-502, this rule shall not apply to bakeries whose total production of bread, buns, and rolls per operating day is less than 45,450 kg (100,000 pounds), averaged over all operating days in any one month. (Amended June 1, 1994)
- 8-42-111 **Exemption, Low Emitting Ovens:** Ovens demonstrated to the satisfaction of the APCO to emit less than 68.2 kg (150 pounds) of ethanol per operating day averaged over a period of one year shall be exempt from the requirements of Section 8-42-301.
- 8-42-112 **Exemption, Existing Ovens:** The requirements of Section 8-42-303 shall not apply to ovens, which commenced operation prior to January 1, 1988 and which are demonstrated to the satisfaction of the APCO to emit less than 113.7 kg (250 pounds) of ethanol per operating day, averaged over a period of one year.
- 8-42-113 **Exemption, Miscellaneous Bakery Products:** This rule does not apply to equipment used exclusively for the baking of bakery products other than bread, buns, and rolls. Such products include, but are not limited to, muffins, croutons, breadsticks, and crackers.
- 8-42-114 **Exemption, Chemically Leavened Products:** This rule does not apply to equipment used exclusively for the baking of bakery products leavened chemically in the absence of yeast.

8-42-200 DEFINITIONS

- 8-42-201 **Approved Emission Control System:** A system for reducing emissions of precursor organic compounds to the atmosphere consisting of a control device, which has been approved by the APCO and which satisfies the following conditions:
- 201.1 The control device shall achieve the control efficiency specified in the applicable standards section at all times during normal operation of the equipment being controlled.
- 201.2 The collection system shall vent all exhaust from the oven stack or stacks to the control device during normal operation.
- 8-42-202 **Baseline Emissions:** The average amount of precursor organic compounds emitted per operating day from an oven between January 1, 1988 and December 31, 1988. Emissions shall be calculated in accordance with Section 8-42-602.
- 8-42-203 **Bread:** A perishable foodstuff prepared from a dough whose primary ingredients are flour, sugar, salt, water, and yeast and which is baked into loaves, buns, or rolls.
- 8-42-204 **Fermentation Time:** Elapsed time between adding yeast to the dough or sponge and placing the loaves into the oven, expressed in hours.
- 8-42-205 **Large Commercial Bread Bakery:** Any bakery producing more than 45,454 kg (100,000 pounds) of breads, buns, and rolls per day.
- 8-42-206 **Leaven:** To raise a dough by causing gas to thoroughly permeate it.
- 8-42-207 **Yeast Percentage:** Pounds of yeast per hundred pounds of total recipe flour, expressed as a percentage.

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- 8-42-208 **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 Sections 8-42-302, and 303. (Adopted June 1, 1994)
- 8-42-300 **STANDARDS**
- 8-42-301 **New and Modified Bakery Ovens:** Effective January 1, 1989, a person subject to this rule shall not operate the following equipment unless the requirements of Section 8-42-302 are met:
- 301.1 Any newly constructed oven commencing operation after January 1, 1989.
 - 301.2 Any newly constructed oven replacing an existing oven and commencing operation after January 1, 1989.
 - 301.3 Any existing oven which has been modified, with modifications completed after January 1, 1989, at a cost exceeding 50% of replacement cost of the oven.
 - 301.4 Any oven with a change in production after January 1, 1989, resulting in an emission increase, averaged over a 30 day period, of 68.2 kg (150 pounds) per operating day above the baseline emissions.
- 8-42-302 **Emission Control Requirements, New and Modified Ovens:** All new and modified ovens shall be required to vent all emissions to an approved emission control system capable of reducing emissions of precursor organic compounds by 90% on a mass basis.
- 8-42-303 **Emission Control Requirements, Existing Ovens:** Effective January 1, 1992, all existing ovens which commenced operation prior to January 1, 1989, shall be required to vent emissions to a control system meeting the following standards:
- 303.1 Emission collection system shall capture all emissions of precursor organic compounds from all oven stacks.
 - 303.2 Collected emissions shall be vented to an approved emission control device which has a destruction efficiency of at least 90% on a mass basis.
- 8-42-304 **Delayed Compliance, Existing Ovens:** In lieu of complying with the requirements of Section 8-42-303, an applicant may elect to replace those ovens subject to Section 8-42-303 with new ovens meeting the requirements of Section 8-42-302 by January 1, 1994. Such election must be made by January 1, 1991, subject to approval of the APCO. In approving such an election, the APCO may require the posting of a bond and may impose permit conditions on the existing subject ovens in order to assure compliance with the January 1, 1994 installation of new ovens.
- 8-42-400 **ADMINISTRATIVE REQUIREMENTS**
- 8-42-401 **Compliance Schedule:** Any person subject to the requirements of Section 8-42-303 of this rule shall comply with the following increments of progress:
- 401.1 By January 1, 1990: Submit a status report to the APCO stating the options under consideration for retrofitting or replacing existing ovens.
 - 401.2 By January 1, 1991: Submit a plan describing the methods proposed to be used to comply with 8-42-303.
 - 401.3 By March 31, 1991: Submit a completed application for any Authority to Construct necessary to comply with these requirements.
 - 401.4 By January 1, 1992: Be in full compliance with all applicable requirements.

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- 8-42-402 Delayed Compliance Schedule: Any person seeking to comply with this rule under Section 8-42-304 shall comply with the following increments of progress:
- 402.1 By January 1, 1991: Submit a plan describing the methods proposed to be used to comply with 8-42-302.
 - 402.2 By January 1, 1992: Submit to the APCO a status report on the purchase of the new ovens.
 - 402.3 By January 1, 1993: Submit a completed application for any Authority to Construct necessary to comply with these requirements.
 - 402.4 By January 1, 1994: Be in full compliance with all applicable requirements.

8-42-500 MONITORING AND RECORDS

- 8-42-501 Approved Emission Control System, Recordkeeping Requirements: Any person operating air pollution abatement equipment to comply with Section 8-42-302, or 303 shall record key system operating parameters on a daily basis
(Adopted June 1, 1994)
- 8-42-502 Burden of Proof: Any person claiming the small bakery exemption per Section 8-20-110 must have information available, such as production records, that would allow the APCO to verify this exemption.
(Adopted June 1, 1994)

8-42-600 MANUAL OF PROCEDURES

- 8-42-601 Determination of Emissions: Emissions of organics shall be measured as prescribed in the Manual of Procedures, Source Test Procedure ST-32.
- 8-42-602 Emission Calculation Procedures: If emission measurements conducted in accordance with Section 8-42-601 are not available for a specific bakery product, oven emissions shall be calculated using the emission factors in Table I.

TABLE I

Yt*	Pounds VOC/ton bakery product	Yt*	Pounds VOC/ton bakery product
1.0	.8488	16.0	7.5176
1.5	1.0711	16.5	7.7399
2.0	1.2934	17.0	7.9622
2.5	1.5157	17.5	8.1845
3.0	1.7380	18.0	8.4068
3.5	1.9603	18.5	8.6291
4.0	2.1826	19.0	8.8514
4.5	2.4049	19.5	9.0737
5.0	2.6272	20.0	9.2959
5.5	2.8495	20.5	9.5182
6.0	3.0718	21.0	9.7405
6.5	3.2941	21.5	9.9628
7.0	3.5163	22.0	10.1851
7.5	3.7386	22.5	10.4074
8.0	3.9609	23.0	10.6297
8.5	4.1832	23.5	10.8520
9.0	4.4055	24.0	11.0743
9.5	4.6278	24.5	11.2966
10.0	4.8501	25.0	11.5189
10.5	5.0724	25.5	11.7412
11.0	5.2947	26.0	11.9635

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11.5	5.5170	26.5	12.1857
12.0	5.7393	27.0	12.4080
12.5	5.9616	27.5	12.6303
13.0	6.1839	28.0	12.8526
13.5	6.4061	28.5	13.0749
14.0	6.6284	29.0	13.2972
14.5	6.8507	29.5	13.5195
15.0	7.0730	30.0	13.7418
15.5	7.2953		

* $Y_t = (\text{yeast percentage}) * (\text{fermentation time})$.

If yeast is added in 2 steps, $Y_t = [(\text{initial yeast percentage}) * (\text{total fermentation time}) + (\text{remaining yeast percentage}) * (\text{remaining fermentation time})]$.

**REGULATION 8
ORGANIC COMPOUNDS
RULE 43
SURFACE PREPARATION AND COATING OF MARINE VESSELS**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 43
SURFACE PREPARATION AND COATING OF MARINE VESSELS**

(Adopted November 23, 1988)

8-43-100 GENERAL

8-43-101 Description: The purpose of this Rule is to limit the emission of volatile organic compounds from the surface preparation and coating of marine vessels, components and structures intended for exposure to a marine environment, including oil drilling platforms and navigational aids.

(Amended October 16, 2002)

8-43-110 Exemption, Pleasure Craft and Fishing Vessels: The provisions of this Rule shall not apply to the coating of pleasure craft or commercial fishing vessels using coatings purchased in containers of one gallon or less.

8-43-111 Exemption, Low Usage Coatings: The requirements of Section 8-43-301 and 302 shall not apply to any coating used in volumes less than 75.7 l (20 gal) in any one calendar year, provided the requirements of Section 8-43-401 are satisfied.

8-43-112 Exemption, Aerosol Cans: The provisions of this Rule shall not apply to coating operations employing hand held aerosol cans. Application of coating from aerosol cans is subject to the provisions of Regulation 8, Rule 49 or to the California Air Resources Board aerosol coating product regulation found in Title 17 of the California Code of Regulations, beginning at Section 94520.

(Amended 6/20/90; 10/16/02)

8-43-113 Exemption, Solid Film Lubricant: The provisions of this Rule shall not apply to any solid film lubricant.

8-43-114 Exemption, Touch-up: The provisions of this Rule shall not apply to Touch-up operations.

8-43-115 Exemption, Aircraft and Aerospace Vehicles: The provisions of this Rule shall not apply to the coating of aircraft and aerospace vehicles subject to Rule 29 of Regulation 8.

8-43-116 Exemption, Architectural Coatings: The provisions of this Rule shall not apply to bridges, piers or other stationary structures which require architectural coatings subject to Regulation 8, Rule 3.

(Amended October 6, 1993)

8-43-117 Exemption, Aluminum Hull Coatings: The provisions of this Rule shall not apply to antifoulant coating used on aluminum hulls, provided records are maintained as specified in Section 8-43-501.

8-43-118 Deleted October 16, 2002

8-43-119 Exemption, Historic Vessels: The brush or roller application of up to 55 gallons of coatings per year to historic vessels by a public museum or park is exempt from the VOC limits of Sections 8-43-301 and 302, provided records are maintained as specified in Section 8-43-501.

(Adopted April 18, 2001)

8-43-120 Limited Exemption, Specific Surface Preparation Operations: The requirements of Section 8-43-321 shall not apply to surface preparation solvent used on (i) surfaces prepared for adhesive bonding of dissimilar substrates, (ii) gears, turbines, turbine generators and associated housings with faying or working surfaces where surfaces are required to undergo material testing or application of transfer dyes, (iii) electrical and electronic components, or (iv) cleaning associated with research and development operations; performance testing to determine coating, adhesive or ink performance; or testing for quality control or quality assurance purposes.

(Adopted October 16, 2002)

8-43-121 Limited Exemption, Military Components: The requirements of Section 8-43-321 shall not apply to the surface preparation of any military component for which a contract exists that specifies the use of an organic solvent that does not comply with

the standards in Section 8-43-321, provided that contract has been entered into prior to December 1, 2005.

(Adopted October 16, 2002)

8-43-200 DEFINITIONS

8-43-201 Air-Dried Coating: Any coating which is not heated above 90°C (194°F) for the purpose of curing or drying.

8-43-202 Baked Coating: Any coating which is cured or dried in an oven where the oven air temperature exceeds 90°C (194°F).

8-43-203 Coating Operation: The sum of all steps involved in the application, drying and/or curing of surface coatings.

8-43-204 Antifoulant Coating: Any coating applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms and registered with the Environmental Protection Agency (EPA) as a pesticide.

8-43-205 Heat-Resistant Coating: Any coating which, during normal use, must withstand temperatures of at least 80°C (175°F).

8-43-206 High-Gloss Coating: Any coating which achieves at least 85% reflectance on a 60° meter when tested by ASTM Method D-523.

8-43-207 High-Temperature Coating: Any coating which, during normal use, must withstand temperatures of at least 426°C (800°F).

8-43-208 Inorganic Zinc Coating: A coating derived from zinc dust incorporated into an inorganic silicate binder for the express purpose of providing corrosion protection.

8-43-209 Navigational Aids: Buoys or other Coast Guard waterway markers. For the purposes of subsection 8-43-302.6, specialty coating limit applies only to the re-coating of in-use navigational aids done at the usage site to be returned immediately to the water.

8-43-210 Pleasure Craft: Privately owned vessels used for non-commercial purposes.

8-43-211 Pretreatment Wash Primer: Any coating which contains a minimum of 1/2% acid by weight applied directly to bare metal surfaces and is necessary to provide surface etching.

8-43-212 Deleted October 6, 1993

8-43-213 Solid Film Lubricant: A very thin coating consisting of an organic binder system containing as its chief pigment material one or more of the following: molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE) or other solids that act as a dry lubricant between meeting surfaces.

8-43-214 Touch-up: That portion of the surface preparation or coating operation which is incidental to the main coating process but necessary to cover minor imperfections or mechanical damage incurred prior to intended use.

(Amended October 16, 2002)

8-43-215 Volatile Organic Compounds: Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.

215.1 For purposes of calculating VOC content of a coating, any water or any of the following non-precursor organic compounds shall not be considered to be part of the coating:

- acetone
- methyl acetate
- parachlorobenzotrifluoride (PCBTF)
- cyclic, branched or linear, completely methylated siloxanes (VMS)

215.2 For the purposes of calculating the VOC content of a surface preparation or cleaning solvent, any water or the non-precursor organic compounds listed in subsection 8-43-215.1, above, shall be considered part of the volume of solvent but shall not be considered part of the VOC content of the solvent.

(Amended 12/20/95; 10/16/02)

8-43-216 Undersea Weapons System: All components of a weapons system that is launched or fired undersea.

- 8-43-217 Military Exterior Topcoat:** An exterior topcoat applied to military vessels, including U.S. Coast Guard vessels subject to specified chemical, biological, and radiological washdown requirements.
- 8-43-218 Specialty Interior Coating:** An extreme performance coating used on interior surfaces aboard ships which has the fire retardant properties and has a toxicity index of less than 0.03 in addition to existing military physical and performance requirements.
- 8-43-219 Wire Spray Aluminum:** A process of applying a molten aluminum coating to a steel substrate using an oxy-fuel combustion spray gun.
- 8-43-220 Sealant Coat for Wire Spray Aluminum:** A coating approximately one mil thick of epoxy, thinned one for one with appropriate solvent.
- 8-43-221 Special Marking Coating:** Coating used specifically for items such as flight decks, ships numbers and other demarcations for safety and other purposes.
- 8-43-222 Tack Coat:** An epoxy coat up to two mils thick applied to allow adhesion to a subsequent coating where the existing epoxy coating has aged beyond the time limit specified by the manufacturer for the application of the next coat.
- 8-43-223 Repair and Maintenance of Commercial Vessels:** The partial recoating of in-use non-U.S. Navy vessels over existing thermoplastic coatings.
- 8-43-224 Thermoplastic Coating:** A single package lacquer drying coating where the resin would become pliable with the application of heat such as vinyl, chlorinated rubber or bituminous.
- 8-43-225 Extreme High-Gloss Coating:** Any coating which achieves at least 95% reflectance on a 60° meter when tested by ASTM Method D-523.
- 8-43-226 Low Activation Interior Coating:** A special composition coating used on interior surfaces aboard ships to minimize the activation of pigments on painted surfaces within a radiation environment.
- 8-43-227 Key System Operating Parameter:** An air pollution abatement equipment 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 Sections 8-43-301, 302, 320 and/or 321.
- (Adopted 6/1/94; 10/16/02)*
- 8-43-228 Approved Emission Control System:** A system for reducing emissions to the atmosphere, consisting of an abatement device and a collection system, which achieves the abatement efficiency specified in the applicable standards at all times during the operation and meets the requirements of Regulation 2, Rule 1.
- (Adopted October 16, 2002)*
- 8-43-229 Surface Preparation:** The cleaning of marine vessels, components and structures subject to a marine environment prior to coating, further treatment, sale, or intended use. Solvent cleaning of marine components subject to and in compliance with Regulation 8, Rule 16: Solvent Cleaning Operations, is not subject to the surface preparation standards in this Rule.
- (Adopted October 16, 2002)*
- 8-43-230 Electrical and Electronic Components:** Components and assemblies of components that generate, convert, transmit, or modify electrical energy. Electrical and electronic components include, but are not limited to, wires, windings, stators, rotors, magnets, contacts, relays, printed circuit boards, printed wire assemblies, wiring boards, integrated circuits, resistors, capacitors and transistors. Cabinets in which electrical and electronic components are housed are not considered electrical and electronic components.
- (Adopted October 16, 2002)*
- 8-43-300 STANDARDS**
- 8-43-301 Limits:** Effective September 1, 1989, except as otherwise provided by this Rule, a person shall not apply to any marine vessel, component or structure intended for exposure to a marine environment any coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter of coating applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level (pounds VOC per gallon of solids) by an air pollution abatement equipment with an

abatement device efficiency of at least 85% that meets the requirements of Regulation 2, Rule 1.

301.1 Baked Coatings: 275 grams/liter (2.3 pounds/gallon)

301.2 Air-Dried Coatings: 340 grams/liter (2.8 pounds/gallon)

(Amended 10/6/93; 6/1/94)

8-43-302 Specialty Coating Limits: A person shall not apply to any marine vessel, component or structure intended for exposure to a marine environment any specialty coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter (pounds per gallon) of coating applied, excluding water, unless emissions to the atmosphere are controlled to an equivalent level (pounds VOC per gallon of solids) by an air pollution abatement equipment with an abatement device efficiency of at least 85% which meets the requirements of Regulation 2, Rule 1.

302.1 Anti-foulant 400 (3.3)

302.2 Heat Resistant (Air Dried) 420 (3.5)

Heat Resistant (Baked) 360 (3.0)

302.3 High-Gloss (Air Dried) 340 (2.8)

High Gloss (Baked) 275 (2.3)

302.4 High-Temperature 500 (4.2)

302.5 Inorganic Zinc 340 (2.8)

302.6 Navigational Aids 550 (4.6)

302.7 Pretreatment Wash Primer 420 (3.5)

302.8 Undersea Weapons System (Air Dried) 340 (2.8)

Undersea Weapons System (Baked) 275 (2.3)

302.9 Military Exterior Topcoat 340 (2.8)

302.10 Specialty Interior 340 (2.8)

302.11 Sealant Coat for Wire 610 (5.1)

Spray Aluminum

302.12 Special Marking 490 (4.1)

302.13 Tack Coat 610 (5.1)

302.14 Repair and Maintenance 340 (2.8)

Thermoplastic

302.15 Extreme High-Gloss (Air Dried) 490 (4.1)

Extreme High Gloss (Baked) 420 (3.5)

302.16 Low Activation Interior 420 (3.5)

Coating

(Amended 10/6/93; 6/1/94; 4/18/01)

8-43-303 Deleted October 6, 1993

8-43-304 Prohibition of Specification: No person shall require for use or specify the application of a coating or solvent subject to this Rule if such use or application results in a violation of any provision of this Rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating or solvent is applied to any marine vessel, component or structure intended for exposure to a marine environment at any physical location within the District.

(Amended October 16, 2002)

8-43-305 Compliance Statement Requirement: The manufacturer shall include a designation of VOC (as defined in Section 8-43-215) expressed in grams per liter or pounds per gallon on data sheets for all coatings and solvents which are offered for sale in the District to be used on marine vessels, components and structures intended for exposure to a marine environment.

(Amended October 16, 2002)

8-43-306 Deleted October 6, 1993

8-43-307 Deleted October 6, 1993

8-43-320 Solvent Evaporative Loss Minimization: Unless emissions to the atmosphere are controlled by an approved emission control system with an overall abatement efficiency of at least 85%, any person using solvent for surface preparation or cleanup or any person mixing, using or disposing of coatings containing organic solvent:

320.1 Shall use closed containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.

- 320.2 Shall close containers of coating, catalyst, and fresh or spent solvent when not in use.
- 320.3 Shall not use organic solvent for the cleanup of spray equipment, including paint lines, with a VOC content in excess of 50 g/l (0.42 lbs/gal) unless either (i) the solvent is pressurized through spray equipment with atomizing air off or dispensed from a small non-atomizing container, and collected and stored in a closed container until recycled or properly disposed of offsite, or (ii) a spray gun washer subject to and in compliance with the requirements of Regulation 8, Rule 16 is used.

(Amended October 16, 2002)

- 8-43-321 Surface Preparation Standards:** Effective June 1, 2003, no person shall use a surface preparation solvent with a VOC content that exceeds 50 g/l (0.42 lbs/gal) for surface preparation of any marine vessel, component or structure subject to a marine environment unless emissions to the atmosphere are controlled to an equivalent level by an approved emission control system with an abatement device efficiency of at least 85 percent that meets the requirements of Regulation 2, Rule 1.

(Adopted October 16, 2002)

8-43-400 ADMINISTRATIVE REQUIREMENTS

- 8-43-401 Low-Usage Coatings Petition:** Any person seeking to satisfy the conditions of Section 8-43-111 shall comply with the following requirements:

- 401.1 The user or specifier shall petition the APCO in writing that substitute complying coatings are not available.
- 401.2 If the APCO grants written approval, such petition will be repeated on an annual basis.

8-43-402 Deleted October 16, 2002

8-43-500 MONITORING AND RECORDS

- 8-43-501 Coating Records:** Any person using coatings or solvents subject this Rule shall:

- 501.1 Maintain, or have available, a current list of coatings in use which provides all of the coating data necessary to evaluate compliance, including the following information, as applicable:
- coating, catalyst and reducer used
 - mix ratio of components used
 - VOC content of coating as applied
 - military specification of the component or area coated
 - VOC content of solvent used for cleanup and surface preparation
- 501.2 Have available monthly records that provide the following information on a daily basis, as applicable:
- coating and mix ratio of components in the coating used
 - quantity of each coating applied
 - identification of specialty coating limit category
 - oven temperature
- 501.3 Have available monthly records of the type and amount of surface preparation and clean-up solvent, unless more frequently specified by permit conditions imposed by Regulation 2-1-403.
- 501.4 Records shall be retained and available for inspection by the APCO for the previous 24 month period.

(Amended October 16, 2002)

8-43-502 Deleted October 6, 1993

- 8-43-503 Air Pollution Abatement Equipment, Recordkeeping Requirements:** Any person operating air pollution abatement equipment to comply with Sections 8-43-301, 302, 320 or 321, in addition to Section 8-43-501, shall record key system operating parameters on a daily basis.

(Adopted 6/1/94; Amended 10/16/02)

8-43-600 MANUAL OF PROCEDURES

- 8-43-601 Analysis of Samples:** Samples of volatile organic compounds as specified in Sections 8-43-301 and 302 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 21 or 22.
(Amended October 6, 1993)
- 8-43-602 Determination of Emissions:** Emissions of volatile organic compounds as specified in Sections 8-43-301 302, 320 and/or 321 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. When either EPA Method 25, or 25A is used, control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule.
(Amended 6/1/94; 10/16/02)
- 8-43-603 Determination of Acid Content:** Measurement of acid content as specified in Section 8-43-211 shall be determined in accordance with ASTM Method D-1613-96.
(Adopted 10/6/93; Amended 10/16/02)
- 8-43-604 Analysis of Solvent Samples:** Samples of volatile organic compounds as specified in Section 8-43-320 and 321 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 31.
(Adopted October 16, 2002)
- 8-43-605 Analysis of Exempt Compounds:** Samples of PCBTF, VMS, and methyl acetate shall be analyzed by the Manual of Procedures, Volume III, Method 41, 43 and by ASTM Method D-6133-00, respectively.
(Adopted October 16, 2002)

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REGULATION 8
ORGANIC COMPOUNDS
RULE 44
MARINE VESSEL LOADING TERMINALS

(Adopted January 4, 1989)

8-44-100 GENERAL

- 8-44-101 **Description:** The purpose of this Rule is to limit emissions of precursor organic compounds into the atmosphere from the loading of organic liquid or the loading into tank vessels with prior cargo of organic liquid at marine terminals.
- 8-44-110 **Exemption, Loading Events:** Sections 8-44-301 through 305 of this Rule shall not apply to loading events of less than 159 cubic meters (1,000 bbls).
- 8-44-111 **Exemption, Marine Vessel Fueling:** Sections 8-44-301 through 305 of this Rule shall not apply to the loading of organic liquids associated with the fueling (bunkering) of marine vessels.
- 8-44-112 **Exemption, Lightering:** This Rule shall not apply to the transfer of organic liquids from one marine vessel to another marine vessel.
- 8-44-113 **Delayed Compliance, Limited Trade Vessel:** Until July 1, 1992, sections 8-44-301 through 304 of this Rule shall not apply to the loading of organic liquids into vessels making infrequent visits.
- 8-44-114 **Delayed Compliance, Small Terminals:** Until July 1, 1992, sections 8-44-301 through 304 of this Rule shall not apply to small terminals.

8-44-200 DEFINITIONS

- 8-44-201 **Marine Terminal:** Any facility or structure constructed to load or unload organic liquid bulk cargo into marine tank vessels.
- 8-44-202 **Marine Vessel:** Any tugboat, tanker, freighter, passenger ship, barge or other boat, ship or watercraft (as defined in Section 39037.1 of the California Health and Safety Code) except those used primarily for recreation.
- 8-44-203 **Tank Vessel:** Any vessel which is specially constructed or converted to carry liquid bulk cargo in tanks.
- 8-44-204 **Organic Liquid:** For the purpose of this Rule, organic liquid is defined as all gasoline, gasoline blending stocks, aviation gas and aviation fuel (JP-4 type) and crude oil.
- 8-44-205 **Emission Control Equipment:** Any equipment, machinery, apparatus or device used to recover or reduce emissions of organic vapors from escaping into the atmosphere.
- 8-44-206 **Organic Compound, Precursor:** Any organic compound as defined in Regulation 1, Section 233 excepting the non-precursor organic compounds in Regulation 1-234.
- 8-44-207 **Loading Event:** An incident or occurrence beginning with the connecting of marine terminal storage tanks to a tank vessel by means of piping or hoses, the transferring of organic liquid cargo from the storage tank into the tank vessel and ending with the disconnecting of the pipes or hoses.
- 8-44-208 **Leak Free:** A liquid leak of less than four drops per minute.
- 8-44-209 **Gas Tight:** A condition that exists when the concentration of precursor organic compounds, measured 1 centimeter from any source, does not exceed 10,000 ppm (expressed as methane) above background.
- 8-44-210 **Crude Oil:** A naturally occurring mixture consisting predominantly of hydrocarbons and/or sulfur, nitrogen and oxygen derivatives of hydrocarbons which is removed from the earth in a liquid state or is capable of being so removed.

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- 8-44-211 **Loading of Organic Liquid:** The loading of an organic liquid or the loading into a tank vessel where the prior cargo was an organic liquid.
- 8-44-212 **Infrequent Visits:** Not more than two loading events for any tank vessel in the District in any calendar year.
- 8-44-213 **Small Terminal:** Any marine terminal with a total organic liquid loading of less than 159,000 cubic meters (1,000,000 bbls) in any calendar year after 1985. Any marine terminal that loads more than 159,000 cubic meters (1,000,000 bbls) in any calendar year after 1985 cannot qualify for the small terminal exemption.

8-44-300 **STANDARDS**

- 8-44-301 **Marine Terminal Loading Limit:** By July 1, 1991, a person shall not load or permit the loading of an organic liquid into a marine tank vessel within the District unless:
- 301.1 The emissions of precursor organic compounds are limited to 5.7 grams per cubic meter (2 lbs per 1000 bbls) of organic liquid loaded, or
- 301.2 The emissions of precursor organic compounds are reduced at least 95 percent by weight from uncontrolled conditions.
- 8-44-302 **Emission Control Equipment:** The emission control equipment shall be designed and operated to collect and process all organic compound emissions from the loading of organic liquids into marine vessels.
- 8-44-303 **Operating Practice:** Effective July 1, 1991, all hatches, pressure relief valves, connections, gauging ports and vents associated with the loading of organic liquid into marine vessels at a marine terminal shall be maintained to be leak free and gas tight. The owner or operator of any equipment associated with the loading of organic liquid into tank vessels at a marine terminal shall maintain that equipment to be leak free and gas tight.
- 8-44-304 **Equipment Maintenance:** Effective July 1, 1991, a person shall not load or permit the loading of organic liquid into a marine vessel unless:
- 304.1 The owner or operator of the tank vessel loading organic liquid certifies to the terminal that the vessel is leak free, gas tight and in good working order, and
- 304.2 Loading ceases any time gas or liquid leaks as defined by Section 8-44-208 or 209 are discovered. Loading may continue only after leak(s) have been repaired.
- 8-44-305 **Ozone Excess Day Prohibition:** Effective July 1, 1989, and thereafter, loading of organic liquid into any marine tank vessel shall not be allowed on any day that the District predicts an excess of any Federal Ambient Air Quality Standard for ozone unless the emissions of precursor organic compounds are reduced at least 95% by weight from uncontrolled conditions, or they are limited to 5.7 grams per cubic meter (2 lbs/1000 barrels).

8-44-400 **ADMINISTRATIVE REQUIREMENTS**

- 8-44-401 **Compliance Schedule:** Any owner or operator of a marine terminal subject to Sections 8-44-301 through 305 of this Rule shall comply with the following increments of progress:
- 401.1 By July 1, 1989, submit to the APCO a control plan which describes the steps and schedule that will be taken to achieve compliance with the requirements of this Rule. This plan must be updated annually until final compliance with Section 8-44-301 is achieved.
- 401.2 By January 1, 1990, submit to the APCO an application for an authority to construct any shore side equipment required to comply with the requirements of Section 8-44-301.

Failure to meet any provision of the plans submitted in accordance with Section 8-44-401 is considered a violation.

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- 8-44-402 **Safety/Emergency Operations:** Nothing in this rule shall be construed as to:
- 402.1 Require any act or omission that would be in violation of any regulation or other requirement of the United States Coast Guard or;
 - 402.2 Prevent any act or omission that is necessary to secure the safety of a vessel or for saving life at sea.

8-44-500 **MONITORING AND RECORDS**

- 8-44-501 **Record Keeping:** Effective February 1, 1989, a person subject to Sections 8-44-110, 111, 113, 114, 301 through 305 of this Rule shall maintain operating records regarding each loading event. The records shall be maintained at the terminal for at least two years and shall be made available to the APCO upon request. The records shall include but are not limited to:
- 501.1 The name and location of the marine terminal at which the loading event occurred.
 - 501.2 The company responsible for the operation of the marine terminal.
 - 501.3 The date(s) and times at which the tank vessel arrived and departed from the marine terminal.
 - 501.4 The name, registry of the vessel loaded and legal owner of the vessel.
 - 501.5 The prior cargo carried by that tank vessel.
 - 501.6 The type and amount of organic liquid cargo loaded into the tank vessel.
 - 501.7 The condition of the tanks prior to being loaded, i.e., cleaned, crude oil washed, gas freed, etc.
- 8-44-502 **Burden of Proof:** Persons seeking to demonstrate compliance with Subsection 8-44-301.1 must maintain adequate test data and provide verification opportunities to the APCO on request.

8-44-600 **MANUAL OF PROCEDURES**

- 8-44-601 **Determination of Emissions:** Emissions of precursor organic compounds as specified in Section 8-44-301 shall be measured as prescribed in the Manual of Procedures, Volume IV, ST-34. This test shall be conducted so that the emissions from at least the last 50 percent of the total organic liquid loaded are included.
- 8-44-602 **Efficiency and Mass Emission Determination (Vapor Processing System):** The means by which mass emission rates of vapor processing systems are determined is set forth in the Manual of Procedures, Volume IV, ST-4.
- 8-44-603 **Leak Tests And Gas Tight Determinations:** The measurement of precursor organic compounds from equipment to determine whether they are leak free and gas tight shall be in accordance with the provisions contained in EPA reference method 21.

**REGULATION 8
ORGANIC COMPOUNDS
RULE 45
MOTOR VEHICLE AND MOBILE EQUIPMENT COATING OPERATIONS**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 45
MOTOR VEHICLE AND MOBILE EQUIPMENT COATING OPERATIONS**

(Adopted June 7, 1989)

8-45-100 GENERAL

- 8-45-101 Description:** The purpose of this Rule is to limit the emission of volatile organic compounds from the finishing or refinishing of motor vehicles, mobile equipment and their parts and components.
- 8-45-110 Exemption, Original Equipment Manufacturer:** The provisions of this Rule shall not apply to Original Equipment Manufacturer (OEM) coatings applied at manufacturing or assembly plants which are subject to Regulation 8, Rule 13.
- 8-45-111 Exemption, Touch-up:** The provisions of this Rule shall not apply to touch-up operations.
- 8-45-112 Exemption, Graphic Design Applications:** The provisions of this Rule shall not apply to graphic design applications.
- 8-45-113 Exemption, Military Vehicles and Ground Support Equipment:** The provisions of this Rule shall not apply to the coating of military vehicles and ground support equipment which is subject to the provisions of Regulation 8, Rule 19. Military vehicles include tanks and armored personnel carriers but do not include passenger vehicles. (Amended November 2, 1994)
- 8-45-114 Exemption, Radiators and Engine Components:** The provisions of this Rule shall not apply to the coating of radiators and engine components which is subject to the provisions of Regulation 8, Rule 19. (Amended November 2, 1994)
- 8-45-115 Exemption, Aerosol Paint Products:** The provisions of this Rule shall not apply to the application of aerosol paint products which is subject to the provisions of Regulation 8, Rule 49. (Adopted June 20, 1990)
- 8-45-116 Limited Exemption, Transfer Efficiency:** The provisions of Section 8-45-303 shall not apply to the application of high viscosity or thixotropic coatings with application equipment that is supplied with and is an integral part of the coating container or to the application of corrosion protective coatings to enclosed interior spaces. (Adopted November 2, 1994)

8-45-200 DEFINITIONS

- 8-45-201 Antiglare/Safety Coating:** A coating which minimizes light reflection for safety purposes. (Amended November 2, 1994)
- 8-45-202 Deleted November 2, 1994**
- 8-45-203 Camouflage Coating:** A coating applied on motor vehicles to conceal such vehicles from detection.
- 8-45-204 Catalyst:** A substance whose presence enhances the reaction between chemical compounds.
- 8-45-205 Color Match:** The ability of a repair coating to blend into an existing coating so that color difference is not visible.
- 8-45-206 Electrostatic Application:** The application of charged atomized paint droplets which are deposited by electrostatic attraction.
- 8-45-207 Deleted November 2, 1994**
- 8-45-208 Final Stage Manufacture:** Where an incomplete vehicle chassis is delivered to a manufacturer for installation and paint of a truck body and/or components to form a completed vehicle.

- 8-45-209 Graphic Design Application:** The application of logos, letters, numbers and graphics to a painted surface, with or without the use of a template.
- 8-45-210 Ground Support:** Vehicles used in support of aircraft activities at airports.
- 8-45-211 Group I Vehicles:** Passenger cars, large/heavy duty truck cabs and chassis, light- and medium-duty trucks and vans, and motorcycles.
- 8-45-212 Group II Vehicles and Equipment:** Public transit buses and mobile equipment.
- 8-45-213 High-Volume, Low-Pressure (HVL) Spray:** Equipment used to apply coatings by means of a gun which is designed to be operated and which is operated between 0.1 and 10 psig air atomizing pressure measured dynamically at the center of the air cap and at the air horns. (Amended October 6, 1993; November 2, 1994)
- 8-45-214 Large/Heavy Duty Trucks:** Any truck having a manufacturer's gross vehicle weight rating of over 10,000 pounds.
- 8-45-215 Light and Medium-Duty Trucks and Vans:** Any truck or van having a manufacturer's gross vehicle weight rating of 10,000 pounds or less.
- 8-45-216 Metallic/Iridescent Topcoat:** Any coating which contains more than 5 g/l (.042 lb/gal) of metal or iridescent particles, as identified on a technical or material safety data sheet, as applied, where such particles are visible in the dried film.
- 8-45-217 Mobile Equipment:** Any equipment which may be drawn or is capable of being driven on rails or on a roadway, including, but not limited to, trains, railcars, truck bodies, truck trailers, camper shells, mobile cranes, bulldozers, street cleaners, golf carts and implements of husbandry. (Amended November 2, 1994)
- 8-45-218 Precoat:** Any coating which is applied to bare metal primarily to deactivate the metal surface prior to application of a subsequent water-base primer surfacer. Effective April 1, 1995, a precoat shall be a coating that dries by oxidation or chemical polymerization. (Amended November 2, 1994)
- 8-45-219 Pretreatment Wash Primer:** Any coating which contains a minimum of 0.5% acid by weight, is necessary to provide surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.
- 8-45-220 Primer:** Any coating applied prior to the application of a topcoat for the purpose of corrosion resistance and adhesion of the topcoat. Primer Surfacer and primer sealer shall be considered as primer when applied to Group II vehicles. (Amended November 2, 1994)
- 8-45-221 Primer Sealer:** Any coating applied for the purpose of sealing the underlying metal or coating system prior to the application of a topcoat. (Amended November 2, 1994)
- 8-45-222 Primer Surfacer:** Any coating applied prior to the application of a topcoat for the purpose of corrosion resistance, adhesion of the topcoat, and which promotes a uniform surface by filling in surface imperfections.
- 8-45-223 Reducer:** The solvent used to thin enamel.
- 8-45-224 Refinishing:** Any coating of vehicles, their parts and components, or mobile equipment, including partial body collision repairs, for the purpose of protection or beautification and which is subsequent to the original coating applied at an Original Equipment Manufacturing (OEM) plant coating assembly line.
- 8-45-225 Specialty Coatings:** Unique coatings and compliant coatings with additives which are necessary due to unusual job performance requirements. Said coatings include, but are not limited to, adhesion promoters, uniform finish blenders, elastomeric materials, gloss flatteners, bright metal trim repair, and anti-glare/safety coatings. (Amended November 2, 1994)
- 8-45-226 Deleted November 2, 1994**
- 8-45-227 Multi-State Topcoat System:** A topcoat system composed of either a basecoat / clearcoat, a basecoat/midcoat/clearcoat, or a groundcoat
The VOC content of a basecoat/clearcoat coating system shall be calculated according to the following formula:

$$VOC_{MS} = \frac{VOC_{bc} + 2VOC_{cc}}{3}$$

The VOC content of a 3-Stage coating system shall be calculated according to the following formula:

$$VOC_{MS} = \frac{VOC_{bc} + VOC_{mc} + 2VOC_{cc}}{4}$$

The VOC content of a 4-Stage coating system shall be calculated according to the following formula:

$$VOC_{MS} = \frac{VOC_{gc} + VOC_{bc} + VOC_{mc} + 2VOC_{cc}}{5}$$

Where:

VOC_{MS} is the sum of the VOC content, as applied, and used to determine compliance with the standards in Section 8-45-301.

VOC_{gc} is the VOC content, as applied, of a pigmented groundcoat, basecoat or tinted primer sealer.

VOC_{bc} is the VOC content, as applied, of a pigmented basecoat or translucent midcoat.

VOC_{mc} is the VOC content, as applied, of a translucent midcoat or tinted clearcoat.

$2VOC_{cc}$ is two times the VOC content, as applied, of a transparent clearcoat.

(Amended November 2, 1994)

8-45-228 Topcoat: Any coating applied over a primer, primer system, or an original OEM finish for the purpose of protection or appearance. For the purposes of this Rule, the VOC limits for solid color and metallic/iridescent topcoats are for single stage applications. A multi stage topcoat may be either a solid or metallic/iridescent color, the VOC_{MS} of a multi stage topcoat system will determine compliance with the VOC standards in Section 8-45-301.1 or 301.2.

(Amended November 2, 1994)

8-45-229 Touch-up Coating: A coating applied by brush or air brush to repair minor surface damage and imperfections.

(Amended June 20, 1990)

8-45-230 Transfer Efficiency: The ratio of the amount of coating solids adhering to the object being coated to the total amount of coating solids used in the application process, expressed as a percentage.

8-45-231 Volatile Organic Compound: Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or surface coating.

231.1 For purposes of calculating VOC content of a coating, any water or any of the following compounds:

- acetone
- parachlorobenzotrifluoride (PCBTF)
- cyclic, branched or linear, fully methylated siloxanes
- shall not be considered to be part of the coating.

231.2 For the purposes of calculating the VOC content of surface preparation solvent subject to 308.4 or temporary protective coating, any water shall be considered to be part of the product. The following compounds:

- acetone
- parachlorobenzotrifluoride (PCBTF)
- cyclic, branched or linear, completely methylated siloxanes (VMS)
- shall not be considered part of the VOC content of the solvent

(Amended November 2, 1994; December 20, 1995; November 6, 1996)

8-45-232 Aerosol Paint Product: A mixture of resins, pigments, liquid solvents and gaseous propellants, packaged in a disposable can for hand-held application.
(Adopted June 20, 1990)

8-45-233 Key System Operating Parameter: An air pollution abatement 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 8-45-301.
(Adopted June 1, 1994)

8-45-234 Utility Body: A body designed for and mounted on a light or medium duty truck or van.
(Adopted November 2, 1994)

8-45-235 Temporary Protective Coating: A coating applied for the purpose of protecting adjacent areas to that being painted from overspray. The temporary protective coating is removed after primer or topcoat application.
(Adopted November 2, 1994)

8-45-300 STANDARDS

8-45-301 Limits: Effective on the dates specified, any person who applies coatings to Group I or II vehicles, mobile equipment, their parts and components, shall comply with Subsections 301.1 or 301.2 below:

301.1 Group I Vehicles: A person shall not refinish Group I vehicles, their parts and components, using any coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter (or pounds per gallon) of coating applied, excluding water and exempt solvents, unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 85% and which meets the requirements of Regulation 2, Rule 1:

	January 1, 1992 VOC	April 1, 1995 VOC
Pretreatment Wash Primer	780 g/l (6.5 lbs/gal)	780 g/l (6.5 lbs/gal)
Precoat	780 g/l (6.5 lbs/gal)	600 g/l (5.0 lbs/gal)
Primer/Primer Surfacer	340 g/l (2.8 lbs/gal)	250 g/l (2.1 lbs/gal)
Primer Sealer	420 g/l (3.5 lbs/gal)	420 g/l (3.5 lbs/gal)
Solid Color Topcoat	600 g/l (5.0 lbs/gal)	420 g/l (3.5 lbs/gal)
Metallic/Iridescent Topcoat	600 g/l (5.0 lbs/gal)	520 g/l (4.3 lbs/gal)
Multi -Stage Topcoat System	600 g/l (5.0 lbs/gal)	540 g/l (4.5 lbs/gal)

301.2 Group II Vehicles and Mobile Equipment: A person shall not finish or refinish Group II vehicles and equipment or their parts and components using any coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter (or pounds per gallon) of coating applied, excluding water and exempt solvents, unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 85% and which meets the requirements of Regulation 2, Rule 1:

	January 1, 1992 VOC	April 1, 1995 VOC
Pretreatment Wash Primer	780 g/l (6.5 lbs/gal)	780 g/l (6.5 lbs/gal)
Precoat	780 g/l (6.5 lbs/gal)	600 g/l (5.0 lbs/gal)
Primer	340 g/l (2.8 lbs/gal)	250 g/l (2.1 lbs/gal)
Primer Sealer	340 g/l (2.8 lbs/gal)	340 g/l (2.8 lbs/gal)
Topcoat	420 g/l (3.5 lbs/gal)	420 g/l (3.5 lbs/gal)

Metallic/Iridescent Topcoat	420 g/l (3.5 lbs/gal)	420 g/l (3.5 lbs/gal)
Camouflage	420 g/l (3.5 lbs/gal)	420 g/l (3.5 lbs/gal)

(Amended November 2, 1994)

8-45-302 Deleted October 6, 1993

8-45-303 Transfer Efficiency: A person shall not apply any coating to any Group I or II vehicles or mobile equipment or their parts and components unless one of the following methods is used:

- 303.1 Electrostatic application equipment, operated in accordance with the manufacturer's recommendations;
- 303.2 High-Volume, Low-Pressure (HVLP) spray equipment, operated in accordance with the manufacturer's recommendations; or
- 303.3 Any other coating application which achieves a transfer efficiency equivalent to the application methods listed in subsection 303.1 or 303.2. Prior written approval from the APCO shall be obtained for each equivalent method used.

(Amended October 6, 1993; November 2, 1994)

8-45-304 Prohibition of Specification: No person shall solicit or require for use or specify the application of a coating on a Group I or II vehicle, mobile equipment, or part or component thereof if such use or application results in a violation of the provisions of this Rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating which is subject to the provisions of this Rule is to be applied to any motor vehicle, mobile equipment, or part or component at any physical location within the District.

8-45-305 Prohibition of Sale: A person shall not offer for sale, sell within the District, or ship into the District, any coating if such product is prohibited by any of the provisions of this Rule. The prohibition of this Section shall apply to the sale of any coating which will be applied at any physical location within the District.

(Amended November 2, 1994)

8-45-306 Compliance Statement Requirement: The manufacturer of coatings subject to this Rule shall include a designation of VOC (as defined in Section 8-45-231) as supplied, including coating components, expressed in grams per liter or pounds per gallon, excluding water and exempt solvents, on data sheets.

8-45-307 Deleted November 2, 1994

8-45-308 Surface Preparation and Solvent Loss Minimization: Any person using organic solvent for surface preparation and cleanup or mixing, using or disposing of coating or stripper containing organic solvent:

- 308.1 Shall close containers used for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.
- 308.2 Shall close containers of fresh or spent solvent, coating, catalyst, thinner, reducer, or solvent when not in use.
- 308.3 Shall not use organic compounds for the cleanup of spray equipment, including paint lines, unless equipment for collecting the organic compounds and minimizing their evaporation to the atmosphere is used.
- 308.4 Effective April 1, 1995, the VOC content of surface preparation solvent shall not exceed 72 g/l (0.6 lb/gal). This limit shall not apply to surface preparation solvent applied from a hand held spray bottle. The VOC content of surface preparation solvent used to clean plastic parts shall not exceed 780 g/l (6.5 lbs/gal).

(Amended November 2, 1994).

8-45-309 Deleted October 6, 1993

8-45-310 Deleted October 6, 1993

8-45-311 Small Production/Utility Bodies: A person shall not coat utility bodies where the coating must match that of the vehicles upon which they will be mounted using any

coating with a VOC content in excess of the standards set forth in Subsection 301.1, provided production is less than 20 vehicles per day.

8-45-312 Specialty Coatings: A person shall not use any specialty coating with a VOC content in excess of 840 g/l (7.0 lbs/gal), as applied, excluding water and exempt solvents. Use of all specialty coatings except antiglare/safety coatings shall not exceed 5.0 percent of all coatings applied, on a monthly basis.

(Amended November 2, 1994)

8-45-313 Temporary Protective Coating: A person shall not use any temporary protective coating with a VOC content in excess of 60 g/l (0.5 lbs/gal), excluding water.

(Adopted November 2, 1994)

8-45-314 Precoat Limitation: A person shall not use precoat in excess of 25%, by volume, of the amount of waterborne primer surfacer used.

(Adopted November 2, 1994)

8-45-315 HVLP Marking: Effective April 1, 1995, a person shall not sell or offer for sale for use within the District any HVLP gun without a permanent marking denoting the maximum inlet air pressure in psig at which the gun will operate within the parameters specified in Section 8-45-213.

(Adopted November 2, 1994)

8-45-316 Filtration: Effective April 1, 1995, a person shall not apply single or multi-stage topcoats subject to Section 8-45-301 to any vehicle except when exhausted through a properly maintained particulate filtration media. The filter system shall meet the requirements of Regulation 2, Rule 1.

(Adopted November 2, 1994)

8-45-400 ADMINISTRATIVE REQUIREMENTS

8-45-401 Deleted November 2, 1994

8-45-500 MONITORING AND RECORDS

8-45-501 Coating Records: Any person subject to Sections 8-45-301.1 and 301.2 shall:

501.1 Maintain and have available during an inspection a current list of coatings in use that provides all of the coating data necessary to evaluate compliance, including the following information, as applicable:

- a. coating, catalyst and reducer used
- b. mix ratio of components used
- c. VOC content of coating as applied

501.2 Record, on a weekly basis, the following information:

- a. coating and mix ratio of components in the coating used
- b. quantity of each coating applied

501.3 Record, on a daily basis, the following information:

- a. quantity and mix ratio of each specialty coating applied

501.4 Record on a monthly basis the type and amount of solvent used for cleanup and surface preparation.

501.5 Records shall be retained and available for inspection by the APCO for the previous 24-month period.

(Amended November 2, 1994)

8-45-502 Air Pollution Abatement Equipment, Recordkeeping Requirements: Any person operating air pollution abatement equipment to comply with Sections 8-45-301.1 and 301.2, in addition to Section 8-45-501 shall record on a daily basis:

- a. coating and mix ratio of components in the coating used
- b. key system operating parameters.

(Adopted June 1, 1994; Amended November 2, 1994)

- 8-45-503 Precoat Limitation Records:** Any person using precoat shall retain purchase invoices to verify compliance with Section 8-45-314. Such invoices shall be available for inspection upon request. (Adopted November 2, 1994)
- 8-45-504 Sales Records:** Any person within the District selling coatings subject to this Rule shall make receipts of customer purchases available for inspection upon request. Cash sales shall be recorded including the customer's name and business address. (Adopted November 2, 1994)
- 8-45-600 MANUAL OF PROCEDURES**
- 8-45-601 Analysis of Samples:** Samples of volatile organic compounds as specified in Sections 8-45-301.1 or 301.2 shall be analyzed as prescribed in the Manual of Procedures (MOP), Volume III, Method 21 or 22. Samples of volatile organic compounds as specified in Section 8-45-308.4 shall be analyzed as prescribed in the MOP, Volume III, Method 31. Samples containing parachlorobenzotrifluoride shall be analyzed as prescribed in the MOP, Vol. III, Method 41. Samples containing volatile methylsiloxanes shall be analyzed as prescribed in the MOP, Vol. III, Method 43. (Amended November 2, 1994; November 6, 1996)
- 8-45-602 Determination of Emissions:** Emissions of volatile organic compounds as specified in Sections 8-45-301.1 or 301.2 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. When either EPA Method 25 or 25A is used, control device equivalency shall be determined as prescribed in 55 FR 26865 (June 29, 1990). For the purpose of determining abatement device efficiency, any acetone, PCBTF or VMS shall be included as a volatile organic compound. A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule. (Amended June 1, 1994; November 6, 1996)
- 8-45-603 Deleted October 6, 1993**
- 8-45-604 Determination of Acid Content:** Measurement of acid content as specified in Section 8-45-219 shall be determined in accordance with ASTM Test Method D-1613-85. (Adopted October 6, 1993)

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 46
MARINE TANK VESSEL TO MARINE TANK VESSEL LOADING
(Adopted July 12, 1989)**

8-46-100 GENERAL

8-46-101 Description: The purpose of this Rule is to limit emissions of precursor organic compounds into the atmosphere resulting from the loading of liquid into a marine tank vessel from another marine tank vessel.

8-46-110 Exemption, Loading Events: Sections 8-46-301 through 305 of this Rule shall not apply to loading events of less than 159 cubic meters (1,000 bbls).

8-46-200 DEFINITIONS

8-46-201 Crude Oil: A naturally occurring mixture consisting predominantly of hydrocarbons and/or sulfur, nitrogen and oxygen derivatives of hydrocarbons which is removed from the earth in a liquid state or is capable of being so removed.

8-46-202 Emission Control Equipment: Any equipment, machinery, apparatus or device used to recover or reduce emissions of precursor organic compounds from escaping into the atmosphere.

8-46-203 Gas Tight: A condition that exists when the concentration of precursor organic compounds, measured 1 centimeter from any source, does not exceed 10,000 ppm (expressed as methane) above background.

8-46-204 Leak Free: A liquid leak of less than four drops per minute.

8-46-205 Loading Event: An incident or occurrence beginning with the connecting of a marine tank vessel to a marine tank vessel by means of pipes or hoses, the transferring of liquid cargo from one marine tank vessel to the other marine tank vessel and ending with the disconnecting of the pipes or hoses. In addition, emissions resulting from venting of precursor organic compounds within the District prior to or after a loading event are included in that loading event.

8-46-206 Marine Tank Vessel: Any marine vessel which is specially constructed or converted to carry liquid bulk cargo in tanks.

8-46-207 Marine Terminal: Any facility or structure constructed to load or unload organic liquid bulk cargo into or out of marine tank vessels.

8-46-208 Marine Vessel: Any tugboat, tanker, freighter, passenger ship, barge or other boat, ship or watercraft (as defined in Section 39037.1 of the California Health and Safety Code) except those used primarily for recreation.

8-46-209 Organic Compound, Precursor: Any organic compound as defined in Regulation 1, Section 233 excepting the non-precursor organic compounds in Regulation 1, Section 234.

8-46-210 Organic Liquid: For the purpose of this Rule, organic liquid is defined as all gasoline, gasoline blending stocks, aviation gas and aviation fuel (JP-4 type) and crude oil.

8-46-300 STANDARDS

8-46-301 Marine Tank Vessel To Marine Tank Vessel Loading Limit: By July 1, 1991, a person shall not conduct a loading event within the District unless:

301.1 The emissions of precursor organic compounds are limited to 5.7 grams per cubic meter (2 lbs per 1000 bbls) of liquid loaded into a marine tank vessel from another marine tank vessel, or

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301.2 The emissions of precursor organic compounds are reduced at least 95 percent by weight from uncontrolled conditions.

8-46-302 Emission Control Equipment: The emission control equipment shall be designed and operated to collect and process all emissions of precursor organic compounds resulting from a loading event.

8-46-303 Operating Practice: Effective July 1, 1991, all hatches, pressure relief valves, connections, gauging ports and vents associated with a loading event shall be maintained to be leak free and gas tight. The owner or operator of any equipment associated with the loading event shall maintain that equipment to be leak free and gas tight.

8-46-304 Equipment Maintenance: Effective July 1, 1991, a person shall not initiate or continue a loading event unless:

304.1 The owners or operators of the marine tank vessels certify that the marine tank vessels are leak free, gas tight and in good working order, and

304.2 Loading ceases any time gas or liquid leaks as defined by Sections 8-46-203 and 204, respectively, are discovered. Loading may continue only after leak(s) have been repaired.

8-46-305 Ozone Excess Day Prohibition: Effective July 15, 1989, and thereafter, loading events shall not be allowed on any day that the District predicts an excess of any Federal Ambient Air Quality Standard for ozone unless the emissions of precursor organic compounds meet the standards of Section 8-46-301.

8-46-400 ADMINISTRATIVE REQUIREMENTS

8-46-401 Compliance Schedule:

401.1 Any owner or operator of a marine tank vessel to be used in lightering operations subject to Sections 8-46-301 through 305 of this Rule shall, by January 1, 1990, submit to the APCO a control plan which describes the steps and schedule that will be taken to achieve compliance with the requirements of this Rule.

401.2 Any owner or operator of a marine terminal shall, by January 1, 1990, submit to the APCO a control plan which describes the steps and schedule that will be taken to achieve compliance with the requirements of this Rule.

401.3 This plan must be updated annually until final compliance with Section 8-46-301 is achieved.

401.4 Failure to meet any provision of a plan submitted in accordance with Section 8-46-401 is considered a violation.

8-46-402 Safety/Emergency Operations: Nothing in this rule shall be construed as to:

402.1 Require any act or omission that would be in violation of any regulation or other requirement of the United States Coast Guard or;

402.2 Prevent any act or omission that is necessary to secure the safety of a vessel or for saving life at sea.

8-46-403 Notification: Until July 1, 1993, the operator of a marine tank vessel intending to engage in a loading event shall notify the APCO. Notification should be in writing although notification by telephone or in person may be made during normal District business hours. Notification must be received by the APCO at least 24 hours prior to the loading event and include names of marine tank vessels, operators, cargo, location, plus estimated start and duration of loading event.

8-46-500 MONITORING AND RECORDS

8-46-501 Record Keeping: Effective January 1, 1990, a person subject to Sections 8-46-110, and 301 through 305 of this Rule shall maintain operating records regarding each loading event. The records shall be maintained for at least two years and shall be

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made available to the APCO upon request. The records shall include but are not limited to:

- 501.1 The location of each loading event.
- 501.2 The company responsible for the operation of the loading event.
- 501.3 The date(s) and times at which the marine tank vessels arrived and departed from location of the loading event.
- 501.4 The name, registry of the vessels and legal owner of the marine tank vessels participating in the loading event.
- 501.5 The prior cargo carried by the receiving marine tank vessel.
- 501.6 The type and amount of liquid cargo loaded into the receiving marine tank vessel.
- 501.7 The condition of the receiving tanks prior to being loaded, (i.e., cleaned, crude oil washed, gas freed, etc).
- 501.8 Equipment maintenance certification required in accordance with Section 8-46-304.
- 501.9 Amount of ballast water added to unsegregated ballast tanks.
- 501.10 Description of operating procedure to prevent venting while ballasting into unsegregated ballast tanks.
- 501.11 The departure and arrival ports or marine terminals for all the marine tank vessels participating in a loading event.

8-46-502 Burden of Proof: Persons seeking to demonstrate compliance with Subsection 8-46-301 must maintain adequate test data and provide verification opportunities to the APCO on request.

8-46-600 MANUAL OF PROCEDURES

8-46-601 Determination of Emissions: Emissions of precursor organic compounds as specified in Section 8-46-301 shall be measured as prescribed in the Manual of Procedures, Volume IV, ST-34. This test shall be conducted so that the emissions from at least the last 50 percent of the total liquid loaded are included.

8-46-602 Efficiency and Mass Emission Determination (Vapor Processing System): The means by which mass emission rates of vapor processing systems are determined is set forth in the Manual of Procedures, Volume IV, ST-4.

8-46-603 Leak Tests And Gas Tight Determinations: The measurement of precursor organic compounds from equipment to determine whether they are leak free and gas tight shall be in accordance with the provisions contained in EPA Reference Method 21.

REGULATION 8
ORGANIC COMPOUNDS
RULE 47
AIR STRIPPING AND SOIL VAPOR EXTRACTION OPERATIONS

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REGULATION 8
ORGANIC COMPOUNDS
RULE 47

AIR STRIPPING AND SOIL VAPOR EXTRACTION OPERATIONS
(Adopted December 20, 1989)

8-47-100 GENERAL

8-47-101 **Description:** The purpose of this Rule is to limit emissions of organic compounds from contaminated groundwater and soil. The provisions of this Rule shall apply to new and modified air stripping and soil vapor extraction equipment used for the treatment of groundwater or soil contaminated with organic compounds.

8-47-109 **Exemption, Small Operations:** The provisions of Section 8-47-301 shall not apply to operations that satisfy both of the following requirements:

109.1 Operations that emit no more than one of the following compounds: benzene, vinyl chloride, trichloroethylene, perchloroethylene or methylene chloride; and

109.2 Benzene emissions do not exceed 0.05 pounds per day, vinyl chloride emissions do not exceed 0.2 pounds per day or trichloroethylene, perchloroethylene or methylene chloride emissions do not exceed 0.5 pounds per day.

8-47-110 **Exemption, Sewage Treatment Facilities:** The requirements of this Rule shall not apply to aeration of wastewater at sewage treatment facilities.

8-47-111 **Exemption, Industrial Wastewater Treatment Facilities:** The requirements of this Rule shall not apply to industrial wastewater treatment facilities.

8-47-112 **Exemption, Specified Operation:** This Rule shall not apply to operations that are subject to the requirements of Regulation 8, Rule 40.

8-47-113 **Exemption, Air Stripping and Soil Vapor Extraction Operations Less Than 1 Pound per Day:** The provisions of Section 8-47-301 shall not apply to operations with total emissions of less than 1 pound per day of benzene, vinyl chloride, perchloroethylene, methylene chloride and/or trichloroethylene, provided the requirements of Section 8-47-402 are satisfied. Once an exemption pursuant to this section is granted, if the emissions of an operation exceed 1 pound per day, then that operation is subject to Section 8-47-301. The operator of the source may submit a petition to the APCO in writing requesting review under this exemption if uncontrolled emissions have been shown, due to sustained remediation activities, to have dropped to a constant emission rate of less than 1 pound per day.

8-47-200 DEFINITIONS

8-47-201 **Air Stripping:** Equipment which is used to transfer organic compounds from contaminated water to the atmosphere by bringing water into intimate contact with air.

8-47-202 **Soil Vapor Extraction:** An underground and/or aboveground active system installed to extract organic compounds from the soil and vent them to the atmosphere. Operations subject to Regulation 8, Rule 40, are not subject to this Rule.

8-47-203 **Active System:** A system which forcibly aerates soil by mechanically drawing air through the soil or applying heat to the soil.

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8-47-204 **Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.

8-47-300 **STANDARDS**

8-47-301 **Emission Control Requirement, Specific Compounds:** Any air stripping and soil vapor extraction operations which emit benzene, vinyl chloride, perchloroethylene, methylene chloride and/or trichloroethylene shall be vented to a control device which reduces emissions to the atmosphere by at least 90 percent by weight.

8-47-302 **Organic Compounds:** Any air stripping and soil vapor extraction operations with a total organic compound emission greater than 15 pounds per day shall be vented to a control device which reduces the total organic compound emissions to the atmosphere by at least 90 percent by weight.

8-47-400 **ADMINISTRATIVE REQUIREMENTS**

8-47-401 **Reporting, Superfund Amendments and Reauthorization Act (SARA) Sites:** Any person responsible for air stripping or soil vapor extraction operations which have not applied for a District permit shall provide written notification to the APCO of intention to operate. This notice shall include:

- 401.1 Address of the remediation site.
- 401.2 Schedule of starting date 30 days prior to start-up.
- 401.3 Written certification that the proposed operation will be in compliance with the requirements of this Rule.
- 401.4 Any person seeking to satisfy the conditions of Section 8-47-113 shall submit the risk analysis for APCO approval as required in Section 8-47-402.

8-47-402 **Less Than 1 Pound Per Day Petition:** Any person seeking to satisfy the conditions of Section 8-47-113 shall:

- 402.1 Submit a petition to the APCO in writing requesting review and written approval of a risk analysis for the benzene, vinyl chloride, perchloroethylene, methylene chloride and/or trichloroethylene organic compound emissions that are less than 1 pound per day.

8-47-500 **MONITORING AND RECORDS**

8-47-501 **Records:** Any person subject to the requirement of this Rule shall keep records of the following:

- 501.1 Any water analysis results as required by Section 8-47-601.
- 501.2 Any vapor monitoring results that have been collected to monitor the performance of a control device. Such records shall be retained for a minimum of two years from date of entry and be made available to District staff upon request.

8-47-600 **MANUAL OF PROCEDURES**

8-47-601 **Air Stripper Water Sampling:** For each of the first three days of operation at least one sample of influent water into the air stripper shall be collected and analyzed. At least one sample shall be collected and analyzed thereafter for each calendar month of operation. Samples shall be collected in accordance with the EPA's or the Regional Water Quality Control Board's Analytical Methods.

(Amended October 6, 1993)

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- 8-47-602** **Measurement of Organic Content:** Organic compound concentration in the water shall be determined by the Regional Water Quality Control Board's Analytical Methods. (Amended October 6, 1993)
- 8-47-603** **Determination of Emissions:** Emissions of organic compounds, as specified in sections 8-47-301 and 8-47-302, 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 referenced test methods exceed the standards of this rule.
(Adopted December 20, 1989; Amended June 15, 1994)

REGULATION 8
ORGANIC COMPOUNDS
RULE 49
AEROSOL PAINT PRODUCTS
(ADOPTED JUNE 20, 1990)

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8-49-100 GENERAL

- 8-49-101 **Description:** The purpose of this rule is to limit emissions of organic compounds from the use of hand-held aerosol paint products.
- 8-49-110 **Exemption, Non-Paint Aerosol Products:** The provisions of this rule shall not apply to aerosol lubricants, mold releases, asphaltic automotive underbody coatings, electrical coatings, cleaners, belt dressings, anti-static sprays, layout fluids and removers, adhesives, maskants, dyes or inks. (Adopted August 21, 1991)
- 8-49-111 **Exemption, Shipment and Use Outside District:** The provisions of this rule shall not apply to aerosol coatings sold, manufactured or warehoused in the District for shipment and use outside of the District. (Adopted August 21, 1991)

8-49-200 DEFINITIONS

- 8-49-201 **Aerosol:** A suspension of solid or liquid particles in a gas.
- 8-49-202 **Aerosol Paint Product:** A mixture of pigments, resins, liquid solvents and gaseous propellants, packaged in a disposable can for hand-held application.
- 8-49-203 **Organic Compound, Non-Precursor:** Methylene chloride, 1,1,1-trichloroethane, 1,1,2-trichlorotrifluoroethane (CFC-113), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), chlorodifluoromethane (HCFC-22), trifluoromethane (HFC-23), dichlorotrifluoroethane (HCFC-123), tetrafluoroethane (HFC-134a), dichlorofluoroethane (HCFC-141b), chlorodifluoroethane (HFC-142b), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,1,2-tetrafluoroethane (HFC-134), 1,1,1-trifluoroethane (HFC-143a), and 1,1-difluoroethane (HFC-152a). (Amended August 21, 1991)
- 8-49-204 **Organic Compound, Precursor:** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate, excepting the non-precursor organic compounds listed in Section 8-49-203.
- 8-49-205 **Solids:** The non-volatile portion of an aerosol paint product, consisting of the film-forming ingredients (pigments and resins).
- 8-49-206 **Paint:** A mixture of pigments, resins, and liquid solvents which can be applied to a surface to form a thin and closely adherent coating. For the purposes of this regulation, this definition shall include but shall not be limited to clear coatings, primers, metallic coatings, and wood stains.
- 8-49-207 **Propellant:** A liquified or compressed gas which expels the contents of a container when the pressure is released.
- 8-49-208 **Art Varnish:** A coating labelled exclusively as such which provides a protective sealant for oil paintings or other closely related art uses. (Adopted August 21, 1991)
- 8-49-209 **Auto Body Primer:** A heavily pigmented automotive primer or primer surfacer coating labelled exclusively as such and applied directly to an uncoated vehicle body substrate or on top of a precoat for purposes of corrosion resistance, building a repair area to a condition in which it, after drying, can be sanded to a smooth surface. (Adopted August 21, 1991)

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- 8-49-210 **Automotive Bumper and Trim Products:** Coatings formulated and labeled exclusively as such which are used to repair and refinish automotive bumpers and plastic trim parts including adhesion promoters and chip sealants.
(Adopted August 21, 1991)
- 8-49-211 **Aviation Propeller Coating:** An epoxy coating formulated and labeled exclusively as such which provides abrasion resistance and corrosion protection for aircraft propellers.
(Adopted August 21, 1991)
- 8-49-212 **Aviation Zinc Primer:** Zinc chromate or zinc oxide coatings formulated to military specification MIL-P-8989 and labeled exclusively as such.
(Adopted 8/21/91)
- 8-49-213 **Clear Coating:** A coating which is colorless, containing binders but no pigment, and which is formulated to form a transparent or translucent solid film.
(Adopted August 21, 1991)
- 8-49-214 **Corrosion Resistant Brass/Bronze/Copper Coating:** A clear coating formulated and labeled exclusively as such to prevent tarnish and corrosion of brass, bronze and copper surfaces.
(Adopted August 21, 1991)
- 8-49-215 **Enamel:** A coating which cures by chemical cross-linking of its base resin. Enamels can be readily distinguished from lacquers because enamels are not resolvable in their original solvent.
(Adopted August 21, 1991)
- 8-49-216 **Engine Paint:** A coating, labeled exclusively as such, applied to the exterior surface of motor vehicle engine blocks or components attached to a motor vehicle engine. The cans shall be labeled with the Original Equipment Manufacturer's (O.E.M.) part number.
(Adopted August 21, 1991)
- 8-49-217 **Exact Match Finish, Automotive:** A topcoat labeled exclusively as such, which is formulated to exactly match the color of the original, factory-applied automotive finish coating during touch-up or minor repair operations. The cans shall be labeled with the Original Equipment Manufacturer's (O.E.M.) part number. Can contents shall not exceed six ounces by weight if offered for retail sale.
(Adopted August 21, 1991)
- 8-49-218 **Exact Match Finish, Industrial:** A coating which is formulated to exactly match the color of an original, factory-applied industrial coating. The cans shall be labeled with the manufacturer's name for which they were formulated, and with the Original Equipment Manufacturer's (O.E.M.) part number. This category applies primarily to touch-up of manufactured products prior to shipment or during initial installation; retail sales will be allowed through authorized O.E.M. dealers only.
(Adopted August 21, 1991)
- 8-49-219 **Flat Paint Products:** A coating which, when fully dry, has a gloss of 5 or less on a 60° meter.
(Adopted August 21, 1991)
- 8-49-220 **Floral Spray:** A coating labeled exclusively as such, which is sprayed on fresh flowers for the purpose of preserving and protecting their appearance.
(Adopted August 21, 1991)
- 8-49-221 **Fluorescent Coating:** A coating labeled as such which converts absorbed incident light energy into emitted light of a different hue.
(Adopted August 21, 1991)
- 8-49-222 **Glass Coating:** A coating labeled exclusively as such, which is applied to glass to tint or darken the color of the glass while retaining transparency.
(Adopted August 21, 1991)
- 8-49-223 **Ground Traffic/Marking Coating:** A coating used to delineate vehicular or pedestrian traffic flow in a manufacturing facility or on a public highway, or to mark or define locations used by public utilities (e.g. gas, telephone, electric).
(Adopted August 21, 1991)
- 8-49-224 **High Temperature Coating:** A coating labeled exclusively as such, which is formulated for and applied to substrates which will, in normal use, be subjected to temperatures in excess of 400°F.
(Adopted August 21, 1991)
- 8-49-225 **Hobby/Model/Craft Coating:** A coating primarily for hobby applications. Can contents shall not exceed six ounces by weight.
(Adopted August 21, 1991)

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- 8-49-226 **Lacquer:** A thermoplastic film-forming material dissolved in organic solvent, which dries primarily by solvent evaporation, and hence is resolvable in its original solvent. (Adopted August 21, 1991)
- 8-49-227 **Marine Spar Varnish:** A coating labelled exclusively as such which provides a protective sealant for marine wood products. (Adopted August 21, 1991)
- 8-49-228 **Metallic Coating:** A topcoat containing metallic particles which impart a metallic appearance when dry. (Adopted August 21, 1991)
- 8-49-229 **Multi-Component Kits:** Aerosol spray paint systems which require the application of more than one component (e.g. foundation coat and top coat), where both components are sold together in one package and neither is sold separately. (Adopted August 21, 1991)
- 8-49-230 **Non-Flat Paint Products:** A coating which, when fully dry, has a gloss of greater than 5 on a 60° meter. (Adopted August 21, 1991)
- 8-49-231 **Photographic Emulsion Coating:** A coating formulated and labelled exclusively as such, applied to finished photographs to allow corrective retouching or protection of the image. (Adopted August 21, 1991)
- 8-49-232 **Primer:** A coating formulated and labelled as such to be applied to a surface to provide a bond between that surface and subsequent coats. (Adopted 8.21.91)
- 8-49-233 **Retail Sales:** The sale of goods directly to a non-commercial consumer. For the purposes of this Rule, sales to jobbers and industrial end-users shall not be deemed retail sales. (Adopted August 21, 1991)
- 8-49-234 **Shellac Sealer:** A clear or pigmented coating formulated solely with the resinous secretion of the lac beetle (*Laccifer lecca*), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction. (Adopted August 21, 1991)
- 8-49-235 **Slip-Resistant Epoxy Coating:** An epoxy ester coating labelled exclusively as such which is formulated with synthetic grit, and used as a safety coating. (Adopted August 21, 1991)
- 8-49-236 **Spatter Coating:** A coating wherein spots, globules, or spatters of individual or contrasting colors appear on or within the surface of a contrasting or similar background. (Adopted August 21, 1991)
- 8-49-237 **Vinyl/Fabric/Polycarbonate:** A coating labelled exclusively as such, which is used exclusively to coat vinyl, fabric, or polycarbonate substrates. (Adopted 8/21/91)
- 8-49-238 **Webbing/Veiling Coating:** A coating labelled exclusively as such, which is formulated to give a stranded or spider webbed appearance when applied. (Adopted August 21, 1991)
- 8-49-239 **Weid-Through Primer:** A coating formulated and labelled exclusively as such which provides a bridging or conducting effect to provide corrosion protection following welding. (Adopted August 21, 1991)
- 8-49-240 **Wood Stain:** A coating which is formulated to change the color of a wood surface but not conceal the surface. (Adopted August 21, 1991)
- 8-49-241 **Wood Touch-Up/Repair/Restoration:** A coating formulated and labelled exclusively as such which provides an exact color or sheen match on finished wood products. (Adopted August 21, 1991)
- 8-49-242 **Workable Art Fixative:** A clear coating formulated and labelled exclusively as such which provides protection for pencil, charcoal, chalk and pastel drawings, while providing a workable surface. (Adopted August 21, 1991)
- 8-49-243 **Volatile Organic Compounds (VOC):** Any precursor or non-precursor organic compound which would be emitted during the use, application, curing or drying of an aerosol paint product. (Adopted August 21, 1991)

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8-49-300 STANDARDS

8-49-301 Limits: A person shall not sell, offer for sale, apply, solicit or manufacture for sale within the District any hand-held aerosol paint product with a VOC content in excess of the following limits, expressed as percent VOC by weight of product:

301.1	General Coatings	VOC Limits (%)
	Clear Coating	67
	Flat Paint Products	60
	Fluorescent	65
	Ground Traffic Marking Coating	66
	Metallic Coating	80
	Non-Flat Paint Products	65
	Primer	60
301.2	Specialty Coatings	
301.2.1	Specialty Clear and Tinted Coatings	
	Corrosion Resistant Brass/Bronze/Copper Coating	92
	Photographic Emulsion Coating	95
	Art Varnish	92
	Marine Spar Varnish	92
	Vinyl/Fabric/Polycarbonate	95
	Webbing/Veiling Coating	95
	Wood Stain	95
	Workable Art Fixative	95
301.2.2	Exact Match Finish	
	Engine Enamel	80
	Automotive	88
	Industrial	88
301.2.3	Miscellaneous Coatings	
	Auto Body Primer	80
	High Temperature Coating	80
	Hobby/Model/Craft Coatings	
	Enamel	80
	Lacquer	88
	Clear, Metallic	95
	Shellac Sealer	
	Clear	88
	Pigmented	75
	Spatter Coating	80
301.3	Non-Retail Specialty Coatings	
	Automotive Bumper and Trim Products	95
	Aviation Propeller Coating	84
	Aviation Zinc Primer	82
	Floral Spray	95
	Glass Coating	95
	Slip-Resistant Epoxy Coating	85
	Weld-Through Primer	75
	Wood Touch-up/Repair/Restoration	95

(Amended August 21, 1991)

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- 8-49-302 **Prohibition of Non-Intended Use:** A person shall not use within the District any coating subject to the standards of Section 8-49-301 for any use other than that shown on the product label. (Adopted August 21, 1991)
- 8-49-303 **Multi-Component Applications:** A person shall not sell, offer for sale, apply, sell or manufacture for sale within the District any multi-component aerosol kit as defined in Section 8-49-229 unless the total VOC emitted from the use of that multi-component kit does not exceed the VOC which would be allowed from a single-component product in the same specialty category listed in Section 8-49-301. (Adopted August 21, 1991)
- 8-49-304 **Prohibition of Retail Sale:** If any coating subject to the VOC limitations of Section 8-49-301.3, Non-Retail Specialty Coatings is offered for retail sale to the general public, that coating shall be subject to the VOC standards in Section 8-49-301.1, General Coatings. Retail sale of exact match industrial coatings will be allowed through authorized Original Equipment Manufacturer (O.E.M.) dealers only. (Adopted August 21, 1991)
- 8-49-305 **Interim Limit:** Until July 1, 1992 any product which has been reformulated to meet the 2.0 grams VOC/grams solid limit (67%) in effect June 20, 1990 shall be legal for manufacture, sale and use within the District, provided the requirements of Section 8-49-403 are met. (Adopted August 21, 1991)

8-49-400 ADMINISTRATIVE REQUIREMENTS

- 8-49-401 **Labelling Requirements:** Each container of any aerosol paint product subject to this rule manufactured for sale, sold or offered for sale within the District shall be permanently and exclusively labelled (e.g. "for automotive use only") by coating type and shall display the maximum organic compound content expressed as % VOC as determined under Section 8-49-601. (Amended August 21, 1991)
- 8-49-402 **Duplicate Specification Standards:** If anywhere on the container of any aerosol paint product listed in section 8-49-301, or on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the product may be used as, or is suitable for use as a product for which a lower VOC standard is specified, then the lowest applicable VOC standard shall apply. (Adopted August 21, 1991)
- 8-49-403 **Reformulated Product Petitioning Requirement:** Any person seeking to meet the interim limit pursuant to Section 8-49-305 shall petition the APCO in writing. The petition shall contain the following information:
- 403.1 Date of product reformulation
 - 403.2 VOC of product prior to reformulation
 - 403.3 Average monthly sales data of product in the Bay Area immediately prior to and subsequent to reformulation.
 - 403.4 Earliest expected date of reformulation to current VOC standards.
- (Adopted August 21, 1991)

8-49-500 MONITORING AND RECORDS

- 8-49-501 **Recordkeeping Requirement:** Each persons who manufactures hand-held aerosol paint products for sale in the District shall maintain sales data by category and organic compound content expressed as % VOC by weight. These data shall be submitted to the APCO every three months. The first sales data shall be due October 31, 1991; subsequent reports shall be due at three month intervals. (Amended August 21, 1991)

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8-49-600 MANUAL OF PROCEDURES

8-49-601 **Determination of Compliance, Hand-Held Aerosol Paint Products:** The means by which compliance of hand-held aerosol paint products is determined are found in the Manual of Procedures, Volume III, Method 35 and 36. (Amended 8-21-91)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 50
POLYESTER RESIN OPERATIONS
(Adopted December 5, 1990)**

8-50-100 GENERAL

- 8-50-101 Description:** The purpose of this Rule is to limit organic compound emissions from the manufacturing of products using polyester resins.
- 8-50-110 Limited Exemption, Touch-up and Repair:** The requirements of Sections 8-50-301 shall not apply to touch-up and repair.

8-50-200 DEFINITIONS

- 8-50-201 Catalyst:** A substance added to the resin to initiate polymerization.
- 8-50-202 Cleaning Materials:** Materials used to clean hands, tools, molds, application equipment, work area, and other process related equipment.
- 8-50-203 Closed-mold System:** A system of forming objects from polyester resins by placing the material in a confining cavity and applying pressure and/or heat.
- 8-50-204 Control System:** A control device and collection system designed in accordance with good engineering practices.
- 8-50-205 Corrosion-resistant Materials:** Halogenated, furan, bisphenol-A, Vinyl-ester, or isophthalic resins used to make products for corrosive or fire retardant services.
- 8-50-206 Cross-linking:** The chemical process of joining two or more polymer chains together.
- 8-50-207 Fiberglass:** A fiber similar in appearance to wool or cotton fiber but made from glass.
- 8-50-208 Gel Coat:** A polyester resin surface coating that provides a cosmetic enhancement and improves resistance to degradation from exposure to the environment.
- 8-50-209 Inhibitor:** A substance used to slow down or prevent a chemical reaction.
- 8-50-210 Low-VOC Emission Resin System:** A polyester resin material which contains additives to reduce monomer evaporation loss.
- 8-50-211 Monomer:** A relatively low molecular weight organic compound that combines with itself or other similar compounds to become a polymerized thermosetting resin.
- 8-50-212 Polyester:** A complex polymeric ester containing difunctional acids.
- 8-50-213 Polyester Resin Material:** Any VOC containing materials used in polyester resin operations which include, but are not limited, to unsaturated polyester resins such as isophthalic, orthophthalic, halogenated, bisphenol-A, vinyl-ester, or furan resins; cross-linking agents; catalysts, gel coats, inhibitors, accelerators, promoters, and any other VOC containing materials.
- 8-50-214 Polyester Resin Operations:** Methods used for the production or rework of product by mixing, pouring, hand laying-up, impregnating, injecting, forming, spraying, and/or curing unsaturated polyester materials with fiberglass, fillers, or any other reinforcement materials and associated clean-up.
- 8-50-215 Polymer:** A substance consisting of a large number of chemical groups and which is formed by the chemical linking of monomers.
- 8-50-216 Polymerize:** Transformation from a liquid to a solid or semi-solid state to achieve desired product physical properties, including hardness.
- 8-50-217 Repair:** The part of the fabrication process that requires the addition of polyester material to portions of a previously fabricated product in order to mend minor structural damage immediately following normal fabrication operations.

- 8-50-218 Resin:** Any class of organic polymers of natural or synthetic origin used in reinforced products to surround and hold fibers, and is solid or semi-solid in the polymerized state.
- 8-50-219 Touch-up:** The portion of the fabrication process that is necessary to cover minor imperfections.
- 8-50-220 Volatile Organic Compound (VOC):** Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of a solvent or polyester resin material.
- 220.1 For purposes of calculating the VOC content of a polyester resin material, any water or any of the following non-precursor organic compounds shall not be considered to be part of the polyester resin material:
- acetone
 - parachlorobenzotrifluoride (PCBTF)
 - cyclic, branched or linear completely methylated siloxanes (VMS)
- 220.2 For the purposes of calculating the VOC content of a solvent, any water shall be considered part of the material. (Amended December 20, 1995)
- 8-50-221 Vapor Suppressant:** A substance added to resin to minimize the outward diffusion of monomer vapor into the atmosphere.
- 8-50-222 Waste Materials:** Materials including, but not limited to, any scrap resulting from cutting and grinding operations, any paper or cloth used for cleaning operations, waste resins, non-polymerized waste resins, and any spent cleaning materials.
- 8-50-223 Airless Spray:** Equipment used to apply materials by use of fluid pressure without atomizing air, including heated airless spray.
- 8-50-224 Air Assisted Airless Spray:** Equipment used to apply materials that uses fluid pressure to atomize coating and air pressure between 0.1 and 10 psig to adjust the spray pattern.
- 8-50-225 High-Volume Low-Pressure (HVLV) Spray:** Equipment used to apply materials by means of a gun which operates between 0.1 and 10 psig air pressure.
- 8-50-226 Electrostatic Air Spray:** Equipment used to apply materials by charging atomized particles that are deposited by electrostatic attraction.
- 8-50-227 Approved Emission Control System:** A system for reducing emissions of VOC to the atmosphere, consisting of a control device and a collection system, which achieves the overall abatement efficiency specified in the applicable standards section at all times during operation of the equipment being controlled.
(Adopted June 15, 1994)
- 8-50-228 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 standard in Section 8-50-303.
(Adopted June 15, 1994)
- 8-50-300 STANDARDS**
- 8-50-301 Process Requirements:** Effective June 1, 1991, a polyester resin operation shall use one or more of the following emission reducing methods except as provided in Section 8-50-304:
- 301.1 Use polyester resin material with a monomer content of no greater than 35 percent by weight.
 - 301.2 Use a resin containing vapor suppressant, such that weight loss from VOC emissions do not exceed 60 grams per square meter of exposed surface area during resin polymerization.
 - 301.3 Use a closed-mold system.

- 8-50-302 Spraying Operations:** A polyester resin operation using spray application equipment shall use one or more of the following spray equipment:
302.1 Airless Spray
302.2 Air-assisted Airless Spray
302.3 Electrostatic Spray
302.4 High-volume, Low-pressure Spray
- 8-50-303 Emission Control Requirement:** The requirements of Sections 8-50-301 and 302 shall not apply to polyester resin operations which install and properly operate an approved emission control system that meets the requirements of Regulation 2, Rule 1 and reduces organic compound emissions by at least 85 percent overall.
(Amended June 15, 1994)
- 8-50-304 Corrosion-resistant Materials:** Effective June 1, 1991, any polyester resin operation using corrosion-resistant materials to manufacture products for corrosive or fire retardant service shall use a polyester resin material with a monomer content of no greater than 50 percent by weight.
- 8-50-305 Surface Preparation and Clean-up Solvent:** The requirements of this section shall apply to any polyester resin operation using organic solvent for surface preparation and clean-up.
305.1 A polyester resin operation shall use closed containers for the storage of all polyester resin materials, cleaning materials and any unused VOC-containing materials except when accessed for use.
305.2 A polyester resin operation shall 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.
305.3 A polyester resin operation 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.
305.4 A polyester resin operation shall use cleaning materials that contain no greater than 200 grams of VOC per liter of material.
- 8-50-306 Equipment Requirements:** Effective June 1, 1991, all resin baths shall be covered to reduce organic compound emissions.
- 8-50-307 Gel Coat Requirement:** A person shall not use a gel coat which contains more than 250 grams of volatile compounds per liter of coating applied.

8-50-500 MONITORING AND RECORDS

- 8-50-501 Records:** Effective June 1, 1991, any polyester resin operation shall comply with the following requirements, as applicable:
501.1 Maintain a list of resin, catalyst, and cleaning material used.
501.2 Maintain a list of the weight of VOC (in percent) in the polyester resin materials and the grams of VOC per liter for the cleaning materials.
501.3 For vapor suppressed resins, maintain a list of the weight loss (grams per square meter) during resin polymerization, the monomer percentage, and the gel time for each resin.
501.4 Maintain records on a daily basis that provide the following information as applicable:
a. the amount of each of the polyester resin materials and cleaning materials used.
b. the volume of resin and cleaning materials used for touch-up and repair.
501.5 Such records shall be retained and available for inspection by the APCO for the previous 24-month period.

- 8-50-502 Approved Emission Control System, Recordkeeping Requirements:** Any person operating an approved emission control system to comply with Section 8-50-303 shall record key system operating parameters on a daily basis.
(Adopted June 15, 1994)
- 8-50-600 MANUAL OF PROCEDURES**
- 8-50-601 Analysis of Samples:** Samples from polyester resin operations shall be analyzed as follows:
- 601.1** Samples of gel coat as specified in Sections 8-50-307 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 26.
 - 601.2** Samples of cleaning materials as specified in Section 8-50-305.4 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 31.
 - 601.3** Samples of polyester resin material as specified in Sections 8-50-301 and 304 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 23.
- 8-50-602 Determination of Emissions:** Emissions from polyester resin operations as specified in Section 8-50-303 shall be analyzed 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 referenced test methods exceed the standards of this rule.
(Amended June 15, 1994)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 51
ADHESIVE AND SEALANT PRODUCTS**

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**REGULATION 8
ORGANIC COMPOUNDS
RULE 51
ADHESIVE AND SEALANT PRODUCTS**

(Adopted November 18, 1992)

8-51-100 GENERAL

8-51-101 Description: The purpose of this Rule is to limit the emissions of organic compounds from adhesive and sealant products. Any operation determined to be exempt from the provisions of this Rule shall be subject to the provisions of Rule 4, if not already subject to another Rule of Regulation 8.

8-51-111 Exemption, Aerosol Adhesive Products: The provisions of this Rule shall not apply to aerosol adhesive products as defined in Section 8-51-204.

(Amended November 16, 1994, January 7, 1998, May 2, 2001)

8-51-112 Exemption, Aerospace and Undersea-based Weapons Systems Components: The provisions of this Rule shall not apply to the use of adhesive or sealant products in the manufacture or repair of aerospace or undersea-based weapons systems components.

8-51-113 Exemption, Consumer Adhesives : The requirements of this Rule shall not apply to adhesives subject to the California Air Resources Board consumer products regulation found in Title 17 of the California Code of Regulations, beginning at Section 94507.

(Amended June 5, 1996, January 7, 1998)

8-51-114 Exemption, Low Usage: The requirements of Section 8-51-302 shall not apply to the combined use of non-complying adhesive products at a facility in a volume of less than 75.7 liters (20 gallons) in any calendar year.

(Amended June 5, 1996)

8-51-115 Exemption, Low VOC Adhesive or Sealant Products: The requirements of this Rule shall not apply to any adhesive or sealant product with a VOC content, as defined in Section 8-51-226, of less than 20 grams per liter of VOC.

(Amended January 7, 1998)

8-51-116 Exemption, Medical Equipment Manufacturing: The requirements of this Rule shall not apply to the use of adhesive products in the manufacture of medical equipment.

(Amended June 5, 1996)

8-51-117 Exemption, Research and Development Operations: Except for the recordkeeping requirement of Section 8-51-501.1.a, the provisions of this Rule shall not apply to the testing and evaluation of adhesive or sealant products in research and development laboratories, quality assurance laboratories, or analytical laboratories, or to research and development facilities which produce only non-commercial products solely for research and development purposes.

(Amended November 16, 1994, May 2, 2001)

8-51-118 Exemption, Specific Operations: The requirements of this Rule shall not apply to the use of adhesives in the following operations.

118.1 Adhesives and sealants applied in Metal, Can and Coil Operations subject to Regulation 8, Rule 11.

118.2 Adhesives applied to Paper, Fabric and Film subject to Regulation 8, Rule 12.

118.3 Adhesive and sealant products applied in Light and Medium Duty Motor Vehicle Assembly Plants subject to the requirements of Regulation 8, Rule 13.

118.4 Adhesives applied in Graphic Arts Operations subject to the requirements of Regulation 8, Rule 20.

118.5 Adhesives applied in Flat Wood Paneling Operations subject to the requirements of Regulation 8, Rule 23.

8-51-119 Exemption, Tire Repair: The requirements of this Rule shall not apply to adhesive or sealant products used in tire repair provided the label conspicuously states "For Tire Repair Use Only."

8-51-120 Exemption, Prohibition of Sale: The requirements of Section 8-51-307 shall not apply to the following:

- 120.1 Adhesive and sealant products shipped, supplied or sold to persons outside the District for use outside the District.
- 120.2 Adhesive or sealant products sold to any person who complies with the requirements of Section 8-51-305.
- 120.3 Any manufacturer of adhesive or sealant products, provided the manufacturer has provided the maximum VOC content and category information for the product and the product was not sold directly to a user or a sales outlet located in the District, or the product was sold to an independent distributor located in the District that is not a subsidiary of, or under the direct control of the manufacturer.
- 120.4 The VOC limits for "Contact Bond Adhesives" in Section 8-51-301.4, provided, however, that no person shall sell or offer for sale any contact bond adhesive with a VOC content that exceeds 540 grams per liter.
(Adopted November 16, 1994; Amended January 7, 1998, May 2, 2001)
- 8-51-121 Exemption, ABS, CPVC, PVC and Plastic Welding Cement Primers:** Until August 1, 2001 the requirements of this rule shall not apply to adhesive primer used in conjunction with ABS, CPVC, PVC, and other plastic welding adhesive applications.
(Adopted November 16, 1994; Amended May 2, 2001)
- 8-51-122 Deleted January 7, 1998**
- 8-51-123 Exemption, Small Container:** The requirements of this Rule shall not apply to any adhesive or sealant product sold in units of product, less packaging, that weigh one pound or less or contain 16 fluid ounces or less except that, effective August 1, 2001, this exemption shall not apply to plastic welding adhesive and plastic welding adhesive primer.
(Adopted June 5, 1996; Amended May 2, 2001)
- 8-51-124 Exemption, Consumer Contact Bond Adhesive:** The requirements of Section 8-51-301.4 shall not apply to contact bond adhesives that are subject to the Consumer Product Safety Commission regulations in 16 C.F.R. Part 1302, that have a flash point greater than 20°F. as determined pursuant to those regulations, that are sold in packages that contain 3.79 liters (1 gallon) or less, and that are used at a home, a construction site, or at any location other than in a facility, as defined in Regulation 1.
(Adopted June 5, 1996; Amended January 7, 1998)
- 8-51-125 Limited Exemption, Low Usage of Contact Bond Adhesive:** The requirements of Section 8-51-301.4 shall not apply to a facility that uses no more than 55 gallons of contact bond adhesive in a twelve month period, provided that the VOC content, as defined in Section 8-51-226, of the adhesive used does not exceed 540 grams per liter.
(Adopted January 7, 1998; Amended May 2, 2001)
- 8-51-126 Limited Exemption, Facilities Using Contact Bond Adhesive Primarily for Special Substrates:** Where 80% or more of the annual contact bond adhesive use at a single facility meets the definition in Section 8-51-249 of "Contact Bond Adhesive - Special Substrates," the applicable limit in Section 8-51-301.4 shall apply to all contact bond adhesive usage at the facility.
(Adopted January 7, 1998)
- 8-51-127 Exemption, Large Tire Retreading:** The requirements of Section 8-51-301 shall not apply to the use of tire retread adhesive in retreading off-the-road and industrial tires that are rated or used for non-highway service and have a minimum nominal rim diameter of 20 inches.
(Adopted January 7, 1998)
- 8-51-128 Exemption, Self-Curing Adhesives and Sealants With Reactive Diluents:** The requirements of this rule shall not apply to self-curing adhesives and sealants with reactive diluents.
(Adopted January 7, 1998)
- 8-51-200 DEFINITIONS**
- 8-51-201 Adhesive:** Any material which is applied for the primary purpose of bonding two surfaces together by surface attachment.
(Amended June 5, 1996)
- 8-51-202 Adhesive Primer:** Any material which is applied to a substrate prior to the application of an adhesive to provide a bonding surface.
- 8-51-203 Adhesive Product:** For the purposes of this Rule, an adhesive product includes, but is not limited to, the following products: adhesives, glues, cements, mastic, adhesive primers.

- 8-51-204 Aerosol Adhesive:** An adhesive subject to the California Air Resources Board consumer products regulation found in Title 17 of the California Code of Regulations, beginning at Section 94507, that is packaged as an aerosol product in which the spray mechanism is permanently housed in a nonrefillable can designed for hand-held application without the need for ancillary hoses or spray equipment.
(Amended May 2, 2001)
- 8-51-205 Aerospace Component:** For the purposes of this Rule, the fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile, or space vehicle, including passenger safety equipment.
- 8-51-206 Approved Emission Control System:** A system for reducing emissions of volatile organic compounds to the atmosphere, consisting of a control device and a collection system that meets the requirements of Regulation 2, Rule 1, and achieves the overall abatement efficiency specified in the applicable standards section at all times during operation of the equipment being controlled.
(Amended November 16, 1994)
- 8-51-207 Architectural:** Stationary structures and their appurtenances, including mobile homes. Appurtenances to an architectural structure include but are not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain gutters and down spouts, and windows.
- 8-51-208 Drywall Installation:** The installation of gypsum drywall to studs or solid surfaces.
- 8-51-209 Indoor Floor Covering Installation:** The installation of wood flooring, indoor carpet, resilient tile, vinyl tile, vinyl backed carpet, resilient sheet and roll, or artificial grass.
(Amended November 16, 1994, May 2, 2001)
- 8-51-210 Deleted May 2, 2001**
- 8-51-211 Medical Equipment Manufacturing:** The manufacture of medical devices, such as, but not limited to, catheters, heart valves, blood cardioplegia machines, tracheostomy tubes, blood oxygenators, and cardiatory reservoirs.
- 8-51-212 Multipurpose Construction:** The installation or repair of various construction materials using adhesives, including but not limited to drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile, acoustical tile.
(Amended November 16, 1994, May 2, 2001)
- 8-51-213 Panel Installation:** The installation of plywood, predecorated hardboard, tileboard, fiberglass reinforced plastic, and similar predecorated or nondecorated panels to studs or solid surfaces.
- 8-51-214 Plastic:** Synthetic materials chemically formed by the polymerization of organic (carbon-based) substances.
- 8-51-215 Deleted January 7, 1998**
- 8-51-216 Porous Material:** A material whose surface is permeable to liquids; such materials include but are not limited to foam, paper, corrugated paperboard, stone and wood.
(Amended November 16, 1994)
- 8-51-217 Roadways:** Public streets, highways, and other surfaces, including but not limited to curbs, berms, driveways, and parking lots.
- 8-51-218 Sealant Products:** Any material with adhesive properties that is used primarily to fill, seal, waterproof, or weatherproof gaps or joints between two surfaces. Sealant products include sealant primers and caulk.
- 8-51-219 Single-Ply Roof Material Installation/Repair:** The installation or repair of prefabricated single-ply flexible roofing membrane that is field applied using just one layer of membrane material. The membrane itself may be manufactured from several layers of material. Installation includes the use of adhesives and adhesive primers provided the containers are labeled exclusively for such use.
- 8-51-220 Solvent:** Organic compounds which are used as diluents, thinners, dissolvers, viscosity reducers, cleaning agents, or for similar uses.
- 8-51-221 Deleted November 16, 1994**
- 8-51-222 Structural Glazing:** Use of an adhesive/sealant to adhere glass, ceramic, metal, stone, or composite panels to exterior building frames.
- 8-51-223 Subfloor Installation:** The installation of subflooring material, typically plywood, over flooring joists. Subflooring is covered by a finish surface material.

- 8-51-224 **Tire Repair:** The repair of a hole, tear, fissure, or blemish in a tire casing by grinding and gouging, applying adhesive or sealant product and filling the hole or crevice with rubber.
- 8-51-225 **Undersea-based Weapons Systems Components:** The fabricated part, assembly of parts, or completed units of any portion of the missile launching system used on undersea ships.
- 8-51-226 **Volatile Organic Compound (VOC) Content:** All organic compounds (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides of carbonates, and ammonium carbonate) which would be emitted during use, application, curing, or drying of an adhesive or sealant product.
- 226.1 For the purposes of calculating the VOC content of an adhesive, sealant, or primer, water and the following compounds:
acetone
parachlorobenzotrifluoride (PCBTF)
cyclic, branched or linear, fully methylated siloxanes (VMS)
difluoroethane (HFC-152a)
shall not be considered part of the product.
- 226.2 For the purposes of calculating the VOC content of low solids adhesives, sealants and primers, as defined in Section 8-51-234, any water shall be considered to be part of the product. The following compounds:
acetone
parachlorobenzotrifluoride (PCBTF)
cyclic, branched or linear, fully methylated siloxanes (VMS)
shall not be considered part of the VOC content of the product.
(Amended 6/2/93; 1/19/94; 11/16/94; 12/20/95, 1/7/98, 5/2/01)
- 8-51-227 **Deleted November 16, 1994**
- 8-51-228 **Wood Flooring Installation:** The installation of a wood floor surface, including but not limited to, parquet tiles, planks, or strip-wood.
- 8-51-229 **ABS Welding:** The welding of acrylonitrile styrene (ABS) plastic using a plastic welding adhesive. (Adopted November 16, 1994, amended May 2, 2001)
- 8-51-230 **Automotive Glass Primer:** Any adhesive primer that is applied to automotive glass prior to installation with an adhesive/sealant that improves adhesion to the pinch weld and blocks ultraviolet light. (Adopted November 16, 1994)
- 8-51-231 **Computer Diskette Jacket Manufacturing:** The manufacture of computer diskettes where the fold-over flaps are glued to the body of a vinyl jacket. (Adopted November 16, 1994)
- 8-51-232 **CPVC Welding:** The welding of chlorinated polyvinyl chloride (CPVC) plastic using a plastic welding adhesive. (Adopted November 16, 1994, amended May 2, 2001)
- 8-51-233 **Key System Operating Parameter:** An approved emission control system operating parameter, such as temperature, flow rate or pressure, that ensures operation of the emission control system within manufacturer specifications and compliance with the standard in Sections 8-51-305. (Adopted November 16, 1994)
- 8-51-234 **Low Solids Adhesive, Sealant, and Primer:** Any adhesive, sealant, or primer that contains less than 120 grams of solids per liter of material. (Adopted November 16, 1994)
- 8-51-235 **Marine Deck Sealant:** A sealant that is used to seal gaps on wooden decks of marine vessels. (Adopted November 16, 1994)
- 8-51-236 **Nonmembrane Roof Installation/Repair:** Any product that is intended for the installation or repair of roofs and that is not intended for the installation of prefabricated single-ply roofing membrane, including but not limited to plastic or asphalt roof cement, asphalt roof coatings, or cold application cement. (Adopted November 16, 1994)
- 8-51-237 **Outdoor Floor Covering Installation:** The installation of floor covering, except ceramic tile, that is not in an enclosure and is exposed to ambient weather conditions during normal use. (Adopted November 16, 1994)
- 8-51-238 **Rubber:** Any natural or man-made rubber substrate, including but not limited to styrene-butadiene (SBR), polychloroprene (neoprene), butyl rubber, nitrile rubber,

- chlorosulfonated polyethylene (CSM), urethane, and ethylene propylene diene terpolymer (EPDM). (Adopted November 16, 1994, amended May 2, 2001)
- 8-51-239 Thin Metal Laminating:** The process of bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 mils.
(Adopted November 16, 1994; Amended May 2, 2001)
- 8-51-240 Tire Retreading:** The process of attaching a new tread to a tire through any tire retreading procedure, including but not limited to, mold curing, hot capping, and cold process.
(Adopted November 16, 1994, amended May 2, 2001)
- 8-51-241 Plastic Welding Adhesive:** Any adhesive, including ABS, CPVC, and PVC welding adhesive, which is used to dissolve the surface of plastic to form a bond between mating surfaces.
(Adopted November 16, 1994; Amended May 2, 2001)
- 8-51-242 Contact Bond Adhesive:** An adhesive that forms an instantaneous, non-repositionable bond when substrates, on which the adhesive was applied and allowed to dry, are brought together using momentary pressure.
(Adopted June 5, 1996)
- 8-51-243 Waterproof Resorcinol Glue:** A two-part, resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.
(Adopted June 5, 1996)
- 8-51-244 Pavement Marking Tape Primer:** An adhesive primer designed for application to pavement prior to the application of adhesive-backed pavement marking tape.
(Adopted June 5, 1996)
- 8-51-245 Deleted May 2, 2001**
- 8-51-246 Deleted May 2, 2001**
- 8-51-247 Self-Curing Adhesives and Sealants with Reactive Diluents:** A cyanoacrylate or silicone-based adhesive or sealant with a reactive diluent content of at least 95% by weight.
(Adopted January 7, 1998)
- 8-51-248 Reactive Diluent:** A liquid reactant that is part of an adhesive or sealant prior to cure and that reacts to become part of the solid adhesive or sealant during cure.
(Adopted January 7, 1998)
- 8-51-249 Contact Bond Adhesive - Special Substrates:** A contact bond adhesive that is used for the bonding of nonporous substrates to each other; the bonding of decorative laminate in postforming operations; or the bonding of any substrate to one of the following substrates: metal, rubber, flexible vinyl, rigid plastic, wood veneer not exceeding 1/16" in thickness, or melamine-covered board.
(Adopted January 7, 1998; Amended May 2, 2001)
- 8-51-250 Ceramic Tile Installation:** The installation of ceramic tiles. (Adopted May 2, 2001)
- 8-51-251 Cove Base Installation:** The installation of cove base (or wall base), which is generally made of vinyl or rubber, on a wall or vertical surface at floor level.
(Adopted May 2, 2001)
- 8-51-252 PVC Welding:** The welding of polyvinyl chloride (PVC) plastic using a plastic welding adhesive.
(Adopted May 2, 2001)
- 8-51-253 Perimeter Bonded Sheet Vinyl Flooring Installation:** The installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip of up to four inches wide around the perimeter of the sheet flooring.
(Adopted May 2, 2001)
- 8-51-254 Top and Trim Installation:** The installation of automotive, marine, or aeronautical trim, including, but not limited to, headliners, vinyl tops, vinyl trim, dash covering, door covering, floor covering, panel covering, and upholstery.
(Adopted May 2, 2001)
- 8-51-255 Immersible Product Manufacturing:** The manufacture of products intended for immersion in liquids, including wetsuits, rubber fuel bladders, inflatable boats, and life preservers.
(Adopted May 2, 2001)
- 8-51-256 Rubber Vulcanization Bonding:** The bonding of rubber to metal, rubber, or polyester or nylon fabrics during one or more of the following vulcanization processes: (1) molded vulcanization - the application of heat and pressure to uncured rubber in a mold; (2) sheet-applied vulcanization - the application of heat after rubber stock sheets have been adhered to the walls of tanks, tankers, elbow joints, protective earthquake building pads, or rail cars; or the application of heat after one or more layers of rubber stock sheets have been built up to form a rubber product; (3) cold

vulcanization - the chemical reaction of an adhesive with rubber stock sheets that are adhered to earthmoving equipment, other high impact/abrasion devices, or industrial belting devices, without the application of heat or pressure. Rubber vulcanization bonding does not include tire retreading. (Adopted May 2, 2001)

8-51-257 Pre-formed Rubber Product: Any rubber product that has undergone a vulcanization process and is in its final state for further use and is not intended to be further vulcanized. (Adopted May 2, 2001)

8-51-300 STANDARDS

8-51-301 Adhesive Product, Application Limits: Except as provided in Section 8-51-305, a person shall not use in the following applications any adhesive product with a VOC content, as defined in Section 8-51-226, that exceeds the following VOC limits (expressed as grams of VOC per liter):

301.1 Architectural:		Effective 8/1/01
Indoor Floor Covering Installation	150	
Multipurpose Construction	200	
Nonmembrane Roof Installation/Repair	300	
Outdoor Floor Covering Installation	250	
Single-Ply Roof Material Installation/Repair	250	
Structural Glazing	100	
Ceramic Tile Installation	200	130
Cove Base Installation	200	150
Perimeter Bonded Sheet Vinyl Flooring Installation	660	
301.2 Specialty:		
Computer Diskette Jacket Manufacturing	850	
ABS Welding	400	
CPVC Welding	490	
PVC Welding	510	
Other Plastic Welding	500	
Thin Metal Laminating	780	
Tire Retread	100	
Rubber Vulcanization Bonding	850	
Waterproof Resorcinol Glue	170	
Immersible Product Manufacturing	650	
Top and Trim Installation	540	
301.3 Adhesive Primers:		Effective 8/1/01
Automotive Glass Primer	700	
Pavement Marking Tape Primer	550	150
Plastic Welding Primer	-	650
Other	250	
301.4 Contact Bond Adhesive:		
Contact Bond Adhesive	250	
Contact Bond Adhesive - Special Substrates	400	
(Amended November 16, 1994; June 5, 1996, January 7, 1998, May 2, 2001)		

8-51-302 Adhesive Product, Substrate Limits: Except as provided in Sections 8-51-301 and 305, a person shall not use with the following substrates or substrate combinations any adhesive product with a VOC content, as defined in Section 8-51-226, that exceeds the following limits (expressed as grams of VOC per liter):

		Effective 8/1/01
Metal	30	
Porous Materials	150	120
Wood	150	120
Pre-formed Rubber Products	650	250
All Other Substrates	250	

If an adhesive product is used to bond two different substrates from the table above, the limit for the substrate with the highest VOC content shall apply.

(Amended November 16, 1994; June 5, 1996, January 7, 1998, May 2, 2001)

8-51-303 Deleted May 2, 2001

8-51-304 Sealant Product Limits: Except as provided in Section 8-51-305, a person shall not use in the following applications any sealant product with a VOC content, as defined in Section 8-51-226, that exceeds the following limits (expressed as grams of VOC per liter):

Sealant:	
Architectural	250
Marine Deck	760
Roadways	250
Single Ply Roof Material Installation/Repair	450
Nonmembrane Roof Installation/Repair	300
Other	420

Sealant Primer:	
Architectural - Nonporous	250
Architectural - Porous	775
Other	750

(Amended November 16, 1994; June 5, 1996, January 7, 1998, May 2, 2001)

8-51-305 Approved Emission Control System: The limits of Section 8-51-301, 302 or 304 shall not apply when emissions to the atmosphere are controlled to an equivalent level by an APCO approved emission control system that has an overall abatement efficiency of at least 85 percent. Where incineration is used to control emissions, at least 90 percent of the organic carbon shall be oxidized to carbon dioxide.

8-51-306 Prohibition of Specification: No person shall require for use or specify the application of an adhesive or sealant product subject to this Rule if such use or application results in a violation of any of the standards of this Rule. The prohibition of specification shall apply to all written or oral contracts under the terms of which any adhesive product is to be applied at any physical location within the District.

8-51-307 Prohibition of Sale: Except as provided in Section 8-51-120, no person shall sell, or offer for sale any adhesive or sealant product that does not meet the VOC limits as specified in Sections 8-51-301 and 304.

(Adopted November 16, 1994; Amended January 7, 1998, May 2, 2001)

8-51-308 Limits for Pressurized Containers: Adhesive and sealant products that are not aerosol adhesives as defined in Section 8-51-204 but are supplied in pressurized containers from which adhesive or sealant is expelled by a propellant are subject to the VOC limits in Sections 8-51-301, 302, and 304 of this Rule.

(Adopted May 2, 2001)

8-51-320 Solvent Evaporative Loss Minimization: The requirements of this section shall apply to any person using organic solvent for surface preparation and cleanup or to any person mixing, using, or disposing of adhesive or sealant product containing organic solvent.

- 320.1 A person shall use closed containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.
- 320.2 A person shall store fresh or spent solvent in closed containers.
- 320.3 A person shall not use organic compounds for the cleanup of mixing, storage, or spray equipment unless equipment for collecting the cleaning compounds and minimizing their evaporation to the atmosphere is used.
- 320.4 A person shall not leave containers of adhesive product, sealant product, or thinner open to the atmosphere when not in use.

8-51-400 ADMINISTRATIVE REQUIREMENTS

8-51-401 Date of Manufacture: Containers for all adhesive and sealant products subject to this Rule shall display the date of manufacture of the contents or a code indicating the date of manufacture. If a code is used, the manufacturers of such products shall file with the APCO an explanation of each code.

8-51-402 Labeling Requirement: Each container of adhesive or sealant product subject to this Rule and manufactured after July 1, 1994, shall display the VOC content, as defined in Section 8-51-226, of the adhesive or sealant product as supplied.

(Amended November 16, 1994, May 2, 2001)

8-51-403 Deleted January 7, 1998

8-51-404 Deleted November 16, 1994

8-51-500 MONITORING AND RECORDS

8-51-501 Stationary Source, Recordkeeping Requirement: Any person operating a source of adhesive or sealant emissions subject to Regulation 2, Rule 1 shall:

501.1 Maintain a current list of adhesive or sealant products in use which provides all of the data necessary to evaluate compliance, including the following, as applicable:

- a. Identification of each product by manufacturer, product name, and manufacturer's product number.
- b. VOC content of each product as supplied.
- c. Mix ratio of components in the product used, and final VOC content as applied.
- d. Identification of specialty limit category and/or exemption that applies to each product.

501.2 Except as provided in Section 8-51-501.3, record facility-wide usage on a monthly basis for each adhesive or sealant product applied.

501.3 For a facility that emits 330 pounds per month or more of total VOC emissions from the use of adhesive and sealant products subject to this Rule, maintain, in addition to the records required by Section 8-51-501.2, daily records of the use, pursuant to Section 8-51-114, of any products that do not comply with the VOC limits in the Rule.

501.4 Retain and have all records available for inspection by the APCO for the previous 24-month period, unless a longer period is specified in an applicable permit.

(Amended November 16, 1994, June 5, 1996, January 7, 1998, May 2, 2001)

8-51-502 Alternative Recordkeeping Requirements: In lieu of meeting the monthly recordkeeping requirements of Sections 8-51-501.2, a person may use an alternative recordkeeping plan under the following circumstances:

502.1 The plan is for a government or university research facility that:

- a. For activities not exempt pursuant to Section 8-51-117, uses only adhesives and sealants that comply with the VOC limits in the Rule;
- b. Uses adhesives or sealants in five or more buildings on the facility site; and
- c. Tracks their distribution and use through a centralized information system.

502.2. The person meets each of the following requirements:

- a. A written petition that includes a description of the facility, a description of the facility's centralized information system, a list of adhesive and sealant products used by the facility, and an estimate of the monthly usage for each adhesive and sealant product shall be submitted to and approved by the APCO prior to implementing the plan.
 - b. The monthly total quantity of each adhesive and sealant product purchased or acquired shall be recorded.
 - c. The annual total usage of each adhesive and sealant product shall be reported at the time the facility's permit to operate is renewed.
- 502.3. A violation of Sections 8-51-301, 302, or 304 within the annual reporting period allowed by Section 8-51-502.2 shall be presumed to be a violation for each day of the reporting period up to the day the violation is discovered, but a person may rebut this presumption by presenting evidence, such as usage records, purchase orders, work orders, contracts, or other documents which demonstrate that the violation did not occur on each day of the reporting period.
(Adopted May 2, 2001)
- 8-51-503 Approved Emission Control System, Recordkeeping Requirement:** Any person that installs an approved emission control system, subject to Sections 8-51-305 shall:
- 502.1 Record on a daily basis the amount of adhesive or sealant product, and solvent used.
 - 502.2 Record on a daily basis applicable key system operating parameter(s).
 - 502.3 Retain and have such records available for inspection by the APCO for the previous 24-month period.
(Amended November 16, 1994; Renumbered May 2, 2001)
- 8-51-504 Burden of Proof:** Any facility claiming the low usage exemption pursuant to Sections 8-51-114 or 125, the low VOC product exemption pursuant to Section 8-51-115, or the substrate exemption pursuant to Section 8-51-126 must have information available, such as purchase orders, material safety data sheets, work orders, or contracts, that would allow the APCO to verify eligibility for the exemption.
(Amended January 7, 1998; Renumbered May 2, 2001)
- 8-51-600 MANUAL OF PROCEDURES**
- 8-51-601 Analysis of Samples:** The VOC content of adhesive and sealant products shall be analyzed for compliance with the limits specified in Sections 8-51-115, 125, 126, 301, 302, and 304 using Manual of Procedures, Volume III, Method 21 or 22. The VOC content of low solids adhesive, sealant products or primers as defined in Section 8-51-234 shall be analyzed using Manual of Procedures, Volume III, Method 31. Samples containing parachlorobenzotrifluoride shall be analyzed using Manual of Procedures, Volume III, Method 41.
(Amended January 19, 1994; June 5, 1996, January 7, 1998, May 2, 2001)
- 8-51-602 Determination of Control and Collection Efficiency:** The control and capture efficiency of an approved emission control system as referenced in Section 8-51-305 shall be measured by any of the following methods: (1) BAAQMD Manual of Procedures, Volume IV, ST-7, (2) EPA Method 25 or 25A. When either EPA Method 25 or 25 A is used, capture efficiency shall be determined as prescribed in EPA's Guidelines for Determining Capture Efficiency, dated January 9, 1995. For the purpose of determining abatement device efficiency, any acetone, PCBTF, or VMS shall be included as volatile organic compounds. A source shall be considered in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this rule.
(Amended November 16, 1994; June 5, 1996, January 7, 1998)
- 8-51-603 Analysis of Plastic Welding Adhesives:** The VOC content of ABS, CPVC, PVC or other plastic welding adhesives shall be analyzed for compliance with the limits specified in Section 8-51-301 using Manual of Procedures, Volume III, Method 40.
(Adopted June 5, 1996; Amended January 7, 1998, May 2, 2001)

**REGULATION 8
ORGANIC COMPOUNDS
RULE 52
POLYSTYRENE, POLYPROPYLENE AND POLYETHYLENE FOAM
PRODUCT MANUFACTURING OPERATIONS**

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REGULATION 8
ORGANIC COMPOUNDS
RULE 52
POLYSTYRENE, POLYPROPYLENE, AND POLYETHYLENE FOAM
PRODUCT MANUFACTURING OPERATIONS

(Adopted July 7, 1999)

8-52-100 GENERAL

8-52-101 Description: The purpose of this Rule is to limit the emissions of volatile organic compounds (VOC) from the manufacture of foam products composed of polystyrene, polyethylene or polypropylene.

8-52-110 Exemption, Polymer or Resin Manufacturing: The requirements of this Rule shall not apply to operations performed to manufacture polymers or resins. Such manufacturing operations are subject to the applicable provisions of District Regulation 2, Regulation 10, and Regulation 8, Rule 36.

8-52-111 Exemption, Use of Non-VOC Blowing Agent: The requirements of this Rule shall not apply to any polystyrene, polyethylene or polypropylene foam product manufacturing operation where a VOC blowing agent is not used, provided the person claiming this exemption satisfies the requirements of Section 8-52-504.

8-52-112 Exemption, Solid Product Manufacturing: The requirements of this Rule shall not apply to operations performed to manufacture non-foam solid polystyrene, polyethylene or polypropylene products, provided the person claiming this exemption satisfies the requirements of Section 8-52-504. Such operations are subject to the applicable provisions of District Regulation 2 and Regulation 8, Rule 2.

8-52-113 Limited Exemption, Recycled Polystyrene Foam Processes: The requirements of Section 8-52-302 shall not apply to equipment or operations performed to process expanded polystyrene foam waste into recycled polystyrene pellets, which are subsequently used to manufacture recycled polystyrene loose fill. Such operations are subject to the applicable provisions of District Regulation 2 and Regulation 8, Rule 2.

8-52-114 Limited Exemption, Loose Fill Research and Development: The requirements of Section 8-52-302 shall not apply to equipment used exclusively to research and/or develop recycled polystyrene loose fill production processes. Such equipment is subject to the applicable provisions of District Regulation 2 and Regulation 8, Rule 2.

8-52-115 Limited Exemption, Shape and Block Molding, Low Throughput: The requirements of subsection 8-52-301.2 shall not apply to expandable polystyrene shape and block molding product manufacturing operations that process less than 1,000,000 pounds of expandable polystyrene beads in any consecutive 12-month period, provided all VOC emissions from expandable bead storage, expansion and intermediate pre-puff storage/aging are controlled by an approved emission control system that satisfies the requirements of Section 8-52-304 and achieves a capture and control efficiency of at least 85 percent by weight.

8-52-200 DEFINITIONS

8-52-201 Approved Emission Control System: A system for reducing emissions of volatile organic compounds to the atmosphere, consisting of an abatement device and a collection system that meets the requirements of Regulation 2, Rule 1, and achieves the control efficiency specified in the applicable standards section at all times for the operation being controlled.

8-52-202 Blowing Agent: Any liquid, gaseous or solid substance that alone or in conjunction with other substances is capable of producing a cellular (foam) structure in a polymeric material.

8-52-203 Expandable Polystyrene Molding: A series of processes where expandable polystyrene beads, which are polystyrene resin particles impregnated with blowing

agent, undergo expansion, aging and then cup, shape or block molding to form a low-density foam product. During expansion, the beads are expanded to the appropriate desired density by exposure to steam or hot air in a pre-expander. During aging, the expanded beads (or pre-puff) are transferred to storage silos or mesh bags to stabilize and dry. During molding, the aged pre-puff is exposed to heat in a closed mold that causes the beads to soften, re-expand, and fuse together to form the shaped product. For the purposes of this Rule, cup molding refers to the molding of cups and containers such as bowls.

- 8-52-204 Extrusion:** The process in which a plastic resin is melted in an extruder and continuously forced through a die opening shaped like the finished product. As it leaves the die opening, the extruded plastic melt partially expands and is then drawn by a puller through forming equipment that sizes, cools, and cuts the product to length or winds it into a roll. With extruded foam products, expandable beads are used as the raw material or blowing agent is injected under pressure directly into the extruder where it mixes with the plastic melt.
- 8-52-205 Foam:** A solid material in a lightweight cellular form (having internal voids or cavities called cells that contain air or a gas) resulting from the introduction or generation of gas bubbles throughout its mass during processing.
- 8-52-206 Foam Board:** A form of expanded thermoplastic foam that is manufactured by an extrusion process that injects blowing agent into the extruder and uses a slit aperture die that forms a slab, or by a block molding process using expandable beads. For the purposes of this Rule, a foam board product includes foam board and those products made from foam board.
- 8-52-207 Foam Sheet:** A form of thermoplastic foam that is manufactured by a tubular extrusion process using expandable beads or by extrusion with blowing agent injected into the extruder. For the purposes of this Rule, a foam sheet product includes foam sheet and those products made from foam sheet.
- 8-52-208 Loose Fill:** A form of expanded polystyrene foam, which is used as a protective packaging material because of its low density (less than 0.5 lbs/ft³), resiliency, and cushioning characteristics. This material is primarily manufactured with a series of steam expansion and aging (or curing) processes using expandable polystyrene beads as the raw material. When recycled polystyrene is used as the raw material, extrusion (with blowing agent injected directly into an extruder) and forming processes partially expand, shape, and cut the plastic material prior to the expansion and aging processes.
- 8-52-209 Polyethylene:** Any grade, class, or type of thermoplastic polymer, copolymer, interpolymer, alloy, or blend, or of cross-linked thermoset polymer, composed primarily of polymerized ethylene.
- 8-52-210 Polymer:** A high molecular weight organic compound that is formed by the polymerization of small molecules or monomers and that has a chemical structure represented by repeating units. When two or more different monomers polymerize, a copolymer is formed.
- 8-52-211 Polypropylene:** Any grade, class, or type of thermoplastic polymer, copolymer, interpolymer, alloy, or blend, or of cross-linked thermoset polymer, composed primarily of polymerized propylene.
- 8-52-212 Polystyrene:** Any grade, class, or type of thermoplastic polymer, copolymer, interpolymer, alloy, or blend composed primarily of polymerized styrene.
- 8-52-213 Product Manufacturing Operation:** A production line or lines consisting of all steps in the processing of a polymer or resin, from the receipt of raw polymeric material by the manufacturing facility through the final step prior to shipment of the finished foam product that results in a change in the form, chemical composition, or any chemical or physical property of the material, and that results in VOC emissions to the atmosphere. Individual steps include, but are not limited to, expandable bead storage, finished product storage/aging, extrusion, expansion, softening or annealing, intermediate (pre-puff) storage/aging, decomposition, molding, grinding, and forming. For the purposes of this rule, polyethylene and polypropylene foam product

manufacturing operations shall include all processes from and including expandable bead storage through and including 24 hours of finished product storage/aging.

8-52-214 Raw Material: All polystyrene, polyethylene and polypropylene, and blowing agent used in the manufacture of foam products, including virgin and recycled polymeric materials.

8-52-215 Resin: Any of a class of solid or semisolid products of natural or synthetic origin, generally of high molecular weight with no definite melting point. Most resins are polymers or copolymers.

8-52-216 Solid: A state of matter that has a crystalline or amorphous structure, a rigidity of form and tendency to maintain a definite shape, and whose uniformly compact interior results from the close proximity of the component atoms, ions, or molecules and the strength of the forces between them.

8-52-217 Volatile Organic Compound (VOC): Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted from a foam product manufacturing operation subject to this Rule.

217.1 For the purposes of determining emissions, the following organic compounds:

pentafluoroethane (HFC-125)
1,1,2,2-tetrafluoroethane (HFC-134)
1,1,1,2-tetrafluoroethane (HFC-134a)
1,1-difluoroethane (HFC-152a)
acetone
ethane

shall not be considered a VOC subject to this Rule.

8-52-300 STANDARDS

8-52-301 Polystyrene Foam Product Manufacturing Operations: Effective June 1, 2000, except as provided in Sections 8-52-111, 115 and 302, a person shall not manufacture polystyrene foam products within the District unless, for each 100 pounds of raw material processed, VOC emissions, which include emissions from the product manufacturing operation and residual blowing agent in the finished foam product, do not at any time exceed:

301.1 2.8 pounds for expandable polystyrene cup molding product manufacturing operations; or

301.2 2.7 pounds for expandable polystyrene shape and block molding product manufacturing operations; or

301.3 2.4 pounds for loose fill product manufacturing operations; or

301.4 2.4 pounds for extruded polystyrene foam board and sheet product manufacturing operations.

8-52-302 Recycled Polystyrene Loose Fill Product Manufacturing Operations: Effective June 1, 2000, a person manufacturing loose fill from recycled polystyrene shall capture at least 50% by weight of the total VOCs added to the product manufacturing operation. The captured emissions shall be vented to an abatement device with a control efficiency of at least 98% by weight at all times.

8-52-303 Polyethylene and Polypropylene Foam Product Manufacturing Operations: Effective June 1, 2000, except as provided in Section 8-52-111, a person shall not manufacture polyethylene or polypropylene foam products within the District unless at least 85% by weight of the VOC emissions from the product manufacturing operation are captured and vented to an abatement device with a control efficiency of at least 98% by weight at all times.

8-52-304 Approved Emission Control System: A person subject to the limits in Sections 8-52-301, 302 or 303 may comply by using an approved emission control system. Where incineration is used to control emissions, at least 98 percent by weight of the organic carbon shall be oxidized to carbon dioxide.

8-52-400 ADMINISTRATIVE REQUIREMENTS

8-52-401 Compliance Schedule: A person subject to this Rule shall comply with the following increments of progress:

401.1 By November 15, 1999, submit to the APCO an application for an Authority to Construct and a Permit to Operate new or modified equipment to achieve compliance with this Rule.

401.2 By June 1, 2000, be in full compliance with this Rule.

8-52-500 MONITORING AND RECORDS

8-52-501 Records: Effective June 1, 2000, a person subject to this Rule shall comply with the following requirements, as applicable:

501.1 Maintain current data that provides the following information:

a. The type of resin(s) and blowing agent(s) used in product manufacturing operations; and

b. The amount of polymerized styrene, ethylene, propylene, and blowing agent in each resin formulation used in percent by weight as indicated by the specifications of the foam product manufacturer, and the manufacturer or supplier of the raw polymeric material.

501.2 Maintain monthly records of the amount of each raw polymeric material processed, the amount of each finished foam product manufactured, the amount of each VOC blowing agent used, and the hours of operation.

501.3 Such records shall be retained for the previous 24-month period and shall be made available for inspection by the APCO upon request.

8-52-502 Polyethylene and Polypropylene VOC Loss Data: A person manufacturing polyethylene and polypropylene foam using a VOC blowing agent shall maintain data showing the VOC loss from the product manufacturing operation for each type of resin used, expressed as a weight percent of the initial VOC blowing agent concentration. This VOC loss data shall be established at the time of source testing for a Permit to Operate. All supporting documentation related to this information shall also be maintained.

8-52-503 Approved Emission Control System, Recordkeeping Requirements: A person operating an approved emission control system to comply with Section 8-52-301, 302 or 303 shall record key system operating parameters such as temperature, flow rate, and pressure on a daily basis.

8-52-504 Extruder Blowing Agent Injection Rate, Monitoring: A person operating an extruder into which VOC blowing agent is injected shall install and maintain in good working order a device which continuously records the blowing agent injection rate(s) at all times during extrusion. Such monitoring devices, which include but are not limited to mass flow meters and recorders, shall be calibrated according to the procedures recommended by the instrumentation manufacturer or at least twice in any consecutive 12-month period, and meet manufacturer's specifications for accuracy and precision. Records and calibration dates shall be maintained for the previous 24-month period and shall be made available for inspection by the APCO upon request.

8-52-505 Burden of Proof: A person claiming any exemption in this Rule must have the information available, such as raw material used, laboratory analyses, technical data sheets or source test results, that would allow the APCO to verify eligibility for the exemption.

8-52-600 MANUAL OF PROCEDURES

8-52-601 Analysis of Samples: The VOC content and exempt compound content of raw polymerized materials subject to this Rule shall be analyzed using BAAQMD Manual of Procedures, Volume III, Method 22, and South Coast Air Quality Management District (SCAQMD) Test Method 306-91.

8-52-602 Determination of Emissions: The capture and control efficiency of an approved emission control system as referenced in Sections 8-52-301, 302 and 303 shall be measured by any of the following methods: 1) BAAQMD Manual of Procedures, Volume IV, ST-7, or 2) EPA Method 25 or 25A. When either EPA Method 25 or 25A is used, capture efficiency shall be determined as prescribed in EPA's "Guidelines for Determining Capture Efficiency" dated January 9, 1995, or EPA Methods 204 and 204A through 204F. For the purpose of determining control device efficiency, any compound listed in Section 8-52-217 shall be included as volatile organic compounds. A source shall be in violation if the VOC emissions measured by any of the referenced test methods exceed the standards of this Rule. For polyethylene and polypropylene foam product manufacturing operations, the VOC loss from the operation as established at the time of source testing for a Permit to Operate shall be applicable for subsequent emissions determinations.

9-14-92

REGULATION 9

INORGANIC GASEOUS POLLUTANTS

RULE 1

SULFUR DIOXIDE

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REGULATION 9

INORGANIC GASEOUS POLLUTANTS

RULE 1

SULFUR DIOXIDE

9-1-100 GENERAL

9-1-101 Description: This Rule establishes emission limits for sulfur dioxide from all sources including ships, and limits ground level concentrations of sulfur dioxide.

9-1-110 Conditional Exemption, Area Monitoring: The 300 ppm limitation of Section 9-1-302 shall not apply to a person who meets the requirements of subsections 9-1-110.1 and 110.2, provided such person has complied with those requirements prior to January 1, 1980.

110.1 A person shall be subject to the monitoring, records and reporting requirements contained in Regulation 1, including Sections 1-510, 530, 540, 542, 543, and 544.

110.2 A person shall not emit sulfur dioxide in quantities which result in ground level concentrations of sulfur dioxide in excess of the limits specified in Section 9-1-301. This subsection shall not apply to ground level concentrations occurring on the property from which such emission occurs, provided such property, from the emission point to the point where the excess occurs, is physically secured against public access by the person responsible for the emission. (Amended May 20, 1992)

9-1-200 DEFINITIONS

9-1-201 Deleted May 20, 1992

9-1-202 Deleted May 20, 1992

9-1-203 Deleted May 20, 1992

9-1-204 Start-up: For the purposes of Section 9-1-605, start-up begins at the time the feed stock is introduced into the process and may proceed for a period not to exceed four consecutive hours. (Amended May 20, 1992)

9-1-205 Fresh Fruit Sulfuring Operation: Any operation where freshly cut fruit is placed in a sulfur house in order to come into contact with sulfur dioxide. (Adopted February 16, 1983)

9-1-206 Sulfur Removal and Recovery System: A set of process units which remove H₂S from refinery gas streams and the reduced sulfur compounds and ammonia from process water streams. The sulfurous compounds are recovered as elemental sulfur or as sulfuric acid. The process units consist of a sour water stripper, regenerative gas treatment system, and a sulfur recovery plant or a sulfuric acid plant. (Adopted July 18, 1990)

9-1-207 Sour Water Stripper: A process unit which removes reduced sulfur compounds from process water using a distillation (stripping) process. (Adopted July 18, 1990)

9-1-208 Regenerative Gas Treatment System: A regenerative process system that removes H₂S from refinery gas streams and recovers the H₂S as H₂S or sulfur. (Adopted July 18, 1990)

9-1-209 Sulfur Recovery Plant: A process unit which processes sulfur and ammonia containing material and produces a final product of elemental sulfur. (Adopted July 18, 1990)

9-1-210 Sulfuric Acid Plant: A process unit which processes sulfur containing material and produces a final product of sulfuric acid or oleum. (Adopted July 18, 1990)

- 9-1-211 **Shutdown:** For the purposes of Section 9-1-605, shutdown begins at the time the feed stock is discontinued. (Adopted May 20, 1992)
- 9-1-300 **STANDARDS .**
- 9-1-301 **Limitations on Ground Level Concentrations:** A person shall not emit from sources other than ships, sulfur dioxide in quantities which result in ground level concentrations in excess of 0.5 ppm continuously for 3 consecutive minutes or 0.25 ppm averaged over 60 consecutive minutes, or 0.05 ppm averaged over 24 hours. This section shall not apply to ground level concentrations occurring on the property from which such emission occurs, provided such property, from the emission point to the point where the excess occurs, is physically secured against public access by the person responsible for the emission. (Amended May 20, 1992)
- 9-1-302 **General Emission Limitation:** A person shall not emit from any source, other than a ship, a gas stream containing sulfur dioxide in excess of 300 ppm (dry). This section shall not apply to the following sources:
 302.1 Any source which is subject to any of the limitations in Sections 9-1-304 through 9-1-312.
 302.2 Any source which satisfies the conditions in Sections 9-1-110. (Amended February 16, 1983)
- 9-1-303 **Emissions from Ships:** A person shall not emit a gas stream containing sulfur dioxide in excess of 2000 ppm from any ship, except when the ship is entering the port from outside the District. Emissions resulting only from the combustion of liquid fuel with a sulfur content less than or equal to 3.34% by weight shall be considered in compliance with this Section.
- 9-1-304 **Fuel Burning (Liquid and Solid Fuels):** A person shall not burn any liquid fuel having a sulfur content in excess of 0.5% by weight, or solid fuel of such sulfur content as would result in the emission of a gas stream containing more than 300 ppm (dry) of sulfur dioxide. This section shall not apply to:
 304.1 The burning of sulfur, hydrogen sulfide, acid sludge or other compounds used in the manufacture of sulfur compounds;
 304.2 The use of liquid or solid fuels to propel any motor vehicle, aircraft, missile, boat or ship;
 304.3 The use of liquid or solid fuels which do not result in the emission of a gas stream containing more than 300 ppm (dry) of sulfur dioxide.
- 9-1-305 **Deleted May 20, 1992**
- 9-1-306 **Deleted May 20, 1992**
- 9-1-307 **Emission Limitations for Sulfur Recovery Plants:** A person shall not emit, from any source in a sulfur recovery plant, effluent process gas containing sulfur dioxide in excess of 250 ppm by volume (dry) calculated at zero percent oxygen. Plants which emit less than 45 kg (100 lbs.) per day of sulfur dioxide shall not be subject to this limitation. (Amended February 16, 1983; May 20, 1992)
- 9-1-308 **Deleted May 20, 1992**
- 9-1-309 **Emission Limitations for Sulfuric Acid Plants:** A person shall not emit, from any source in a sulfuric acid plant, effluent process gas containing sulfur dioxide in excess of 300 ppm by volume calculated at 12% oxygen. (Amended February 16, 1983; May 20, 1992)
- 9-1-310 **Emission Limitations for Fluid Catalytic Cracking Units, Fluid Cokers, and Coke Calcining Kilns:**
 310.1 A person shall not emit, from any source in a fluid catalytic cracking unit or fluid coker, effluent process gas containing sulfur dioxide in excess of 1,000 ppm by volume.

- 310.2 A person shall not emit, from any coke calcining kiln, effluent process gas containing sulfur dioxide in excess of 400 ppm by volume or in excess of 113 kg (250 pounds) per hour, whichever is more restrictive.
- 310.3 A person subject to subsections 9-1-310.1 or 310.2 shall comply with the requirements in subsections 9-1-110.1 and 110.2.
- 9-1-311 Emission Limitations for Catalyst Manufacturing Plants:**
- 311.1 Deleted May 20, 1992
- 311.2 A person shall not emit, from any source in a catalyst manufacturing plant, effluent process gas containing sulfur dioxide in excess of 22 kg (50 pounds) per hour. (Adopted May 21, 1980; Amended May 20, 1992)
- 9-1-312 Emission Limitations for Fresh Fruit Sulfuring Operations:**
- 312.1 A person shall not operate any fresh apricot sulfuring operation which uses greater than 4.5 kg (10 pounds) of elemental sulfur or 0.9 kg (20 pounds) of gaseous SO₂ per 0.9 metric ton (1 short ton) of fresh apricots.
- 312.2 A person shall not operate any fresh peach sulfuring operation which uses greater than 5.5 kg (12 pounds) of elemental sulfur or 10.9 kg (24 pounds) of gaseous SO₂ per 0.9 metric ton (1 short ton) of fresh peaches.
- 312.3 A person shall not operate any fresh pear sulfuring operation which uses greater than 6.8 kg (15 pounds) of elemental sulfur or 13.6 kg (30 pounds) of gaseous SO₂ per 0.9 metric ton (1 short ton) of fresh pears.
(Adopted February 16, 1983; Amended May 20, 1992)
- 9-1-313 Sulfur Removal Operations at Petroleum Refineries:** Effective September 1, 1990, a person shall not operate a petroleum refinery processing more than 20,000 barrels per stream day of crude oil unless one of the following is met:
- 313.1 The sulfur content of the crude oil does not exceed 0.10 percent by weight,
or
- 313.2 There is a sulfur removal and recovery system that removes and recovers, on a refinery wide basis, 95% of the H₂S from the refinery fuel gas, that removes and recovers, on a refinery wide basis, 95% of the H₂S from the process water streams, and removes 95% of the ammonia from the process water streams.
- 313.3 A binding, legally enforceable agreement or court order exists which mandates the construction of a sulfur removal and recovery system pursuant to a schedule set forth therein; provided, however, that the sulfur removal and recovery system must be constructed by October 1, 1993, unless, in the judgment of the Air Pollution Control Officer, failure to complete construction by that date results from circumstances beyond the reasonable control of the refinery operator in which case the Air Pollution Control Officer may grant a reasonable extension of the October 1, 1993 deadline. The Air Pollution Control Officer may grant such extension, however, only if the refinery operator has made substantial progress in completing construction of its sulfur removal and recovery system by October 1, 1993.
(Adopted July 18, 1990)
- 9-1-400 ADMINISTRATIVE REQUIREMENTS**
- 9-1-401 Deleted May 20, 1992
- 9-1-402 Deleted May 20, 1992
- 9-1-403 Deleted May 20, 1992
- 9-1-404 Deleted May 20, 1992

9-1-500 MONITORING AND RECORDS

9-1-501 Area Monitoring Requirements: Upon request of the APCO, a person subject to Section 9-1-301 shall comply with the monitoring, maintenance, records, and reporting requirements of Regulation 1, including Sections 1-510, 1-530, 1-540, 1-542, 1-543 and 1-544.

9-1-502 Emission Monitoring Requirements: A person subject to Section 9-1-304, 307, 309 or 310 (with the exception of coke calcining kilns), shall comply with the monitoring requirements of 1-520 and 522.

(Amended March 17, 1982; May 20, 1992)

9-1-503 Fresh Fruit Sulfuring Recordkeeping Requirements: Any persons subject to Section 9-1-312 of this Rule shall record the daily weight of elemental sulfur burned or gaseous SO₂ used per unit weight of fresh fruit for each sulfuring operation. Records of the weights used shall be kept for the length of the specific fruit season and shall be made available to the APCO upon request.

(Adopted February 16, 1983)

9-1-600 MANUAL OF PROCEDURES

9-1-601 Sampling and Analysis of Gas Streams: The method of sampling and analysis of gas streams of sulfur dioxide concentrations is described in the Manual of Procedures, Volume IV, ST-19 A or B. (Amended March 17, 1982)

9-1-602 Sulfur Content of Fuels: The sulfur content of solid and liquid fuels shall be determined as specified in the Manual of Procedures, Volume III, Method 10.

(Amended March 17, 1982)

9-1-603 Averaging Times: The averaging times for production determination and emission analysis are specified in the Manual of Procedures, Volume IV.

(Amended March 17, 1982)

9-1-604 Ground Level Monitoring: The monitoring requirements for ground level concentrations of sulfur dioxide, including siting procedures and instrument specifications, calibration and maintenance procedures, are described in the Manual of Procedures, Volume VI, Section 1. (Amended March 17, 1982)

9-1-605 Emission Monitoring: The emission monitoring requirements, including instrument placement, specifications, calibration, and maintenance procedures are described in the Manual of Procedures, Volume V. (Amended March 17, 1982).

9-1-606 Analysis of Gas Streams for H₂S: The method for analyzing refinery fuel gas streams for H₂S before and after control shall be as prescribed in the Manual of Procedures, Volume III, LAB 32 or equivalent method approved by the APCO.

(Adopted July 18, 1990; Amended May 20, 1992)

9-1-607 Analysis of Water Streams for H₂S: The method for analyzing refinery process water streams for H₂S before and after control shall be as prescribed in the Manual of Procedures, Volume III, LAB 32 or equivalent method approved by the APCO.

(Adopted July 18, 1990; Amended May 20, 1992)

9-1-608 Analysis of Water Streams for NH₃: The method for analyzing refinery process water streams for NH₃ before and after control shall be as prescribed in the Manual of Procedures, Volume III, LAB 1 or equivalent method approved by the APCO.

(Adopted July 18, 1990; Amended May 20, 1992)

9-1-609 Analysis of Sulfur Content of Crude Oil: The method for analyzing the sulfur content of the crude oil shall be as prescribed in the Manual of Procedures, Volume III, Method LAB 10 or equivalent method approved by the APCO.

(Adopted July 18, 1990; Amended May 20, 1992)

REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 3
NITROGEN OXIDES FROM HEAT TRANSFER OPERATIONS

1/28/81

- 9-3-202 Modified Heat Transfer Operation: Any heat transfer operation which has been changed so as to result in an increase in the emissions of nitrogen oxides. The following shall not be regarded as a change within the meaning of this Section:
- 202.1 Any alterations or changes in the methods of operation which do not require an authority to construct (see Regulation 2);
 - 202.2 The addition or use of any air pollution control equipment.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

REGULATION 9

INORGANIC GASEOUS POLLUTANTS

RULE 4

NITROGEN OXIDES FROM FAN TYPE RESIDENTIAL CENTRAL FURNACES

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REGULATION 9

INORGANIC GASEOUS POLLUTANTS

RULE 4

NITROGEN OXIDES FROM FAN TYPE RESIDENTIAL CENTRAL FURNACES

9-4-100 GENERAL

9-4-101 Description: This Rule limits emissions of nitrogen oxides from natural gas-fired fan type residential central furnaces. (Amended December 7, 1983)

9-4-200 DEFINITIONS

9-4-201 Fan Type Central Furnace: A self-contained space heater providing for circulation of heated air at pressures other than atmospheric through ducts more than 25 cm (10 in) in length with an input rate of less than 175,000 BTU/hr, excluding heating/cooling units utilizing three phase electric current. (Amended December 7, 1983)

9-4-202 Annual Fuel Utilization Efficiency: The efficiency as defined by Section 4.2.35 of the Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix N. (Amended December 7, 1983)

9-4-203 Useful Heat Delivered to the Heated Space: The Annual Fuel utilization efficiency (expressed as a fraction) multiplied by the heat input. (Amended December 7, 1983)

9-4-300 STANDARDS

9-4-301 Residential Central Furnaces: A person shall not sell, install or offer for sale within the District any stationary residential natural gas-fired fan type central furnace manufactured after January 1, 1984 that emits more than 40 nanograms of oxides of nitrogen expressed as NO₂ per joule of useful heat delivered to the heated space. (Amended December 7, 1983)

9-4-302 Certified Furnaces: A person shall not sell, install or offer for sale within the District furnaces subject to the requirements of Section 9-4-301 unless such furnaces are certified in accordance with Section 9-4-401, 402, 403, and 404. (Amended and Renumbered December 7, 1983)

9-4-400 ADMINISTRATIVE REQUIREMENTS

9-4-401 Certification: The manufacturer shall have each appliance model tested in accordance with the following:

401.1 Oxides of nitrogen measurements, test equipment, and other required test procedures shall be in accordance with methods and standards or equivalent procedures approved by the APCO.

401.2 Operation of the furnace shall be in accordance with the procedures specified in Section 3.1 of Code of Federal Regulations, Title 10, part 430, Subpart B, Appendix N.

401.3 The following calculation shall be used to determine the nanograms of NO_x per joule of useful heat delivered to heated space:

$$\underline{(3.655 \times 10^{10})P \text{ or } 4.566 \times 10^4 \times P \times U}$$

$$N = (20.9 - Y) Z E \quad N = H \times C \times E$$

Where:

N = Nanograms of NO_x emitted per joule of useful heat delivered to the heated space.

P = Parts per million of NO_x

Y = Percentage of O₂ in flue gas.

Z = Heating value of gas in joules per (meter)³

E = AFUE (percentage).

U = Volume percent CO₂ in water-free flue gas for stoichiometric combustion.

H = Gross heating value of the fuel, BTU/cu. ft. (60°F, 30-in Hg.)

C = Measured volume percent of CO₂ in water-free flue gas, assuming complete combustion and no CO present. (Amended December 7, 1983)

9-4-402 Compliance Statement: The manufacturer shall submit to the APCO a statement that the model is in compliance with this Rule. The statement shall be signed and dated, and shall attest to the accuracy of all information. The statement shall include the brand name, model number as is appears on the furnace rating plate, and be on forms provided by the APCO. (Amended December 7, 1983)

9-4-403 Identification: The manufacturer shall display the model number of the furnace complying with this rule on the shipping carton and rating plate.

9-4-404 Enforcement: The APCO may require the emission test results to be provided when deemed necessary to verify compliance and may periodically conduct such tests as are deemed necessary to insure compliance.

**REGULATION 9
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RULE 7
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**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 7
NITROGEN OXIDES AND CARBON MONOXIDE FROM INDUSTRIAL,
INSTITUTIONAL, AND COMMERCIAL BOILERS, STEAM GENERATORS, AND
PROCESS HEATERS**

(ADOPTED SEPTEMBER 16, 1992)

9-7-100 GENERAL

9-7-101 Description: This rule limits the emissions of nitrogen oxides and carbon monoxide from industrial, institutional, and commercial boilers, steam generators, and process heaters.

9-7-110 Exemptions: The requirements of this rule shall not apply to the following:

110.1 Boilers, steam generators, and process heaters with a rated heat input less than 10 million BTU/hour, if fired exclusively with natural gas, liquefied petroleum gas, or any combination thereof.

110.2 Boilers, steam generators and process heaters with a rated heat input less than 1 million BTU/hour fired with any fuel.

110.3 Boilers, steam generators, and process heaters that are used in petroleum refineries.

110.4 Boilers used by public electric utilities or qualifying small power production facilities, as defined in Section 228.5 of the Public Utilities Code, to generate electricity;

110.5 Waste heat recovery boilers that are used to recover sensible heat from the exhaust of combustion turbines or reciprocating internal combustion engines;

110.6 Kilns, ovens, and furnaces used for drying, baking, heat treating, cooking, calcining, or vitrifying.

9-7-111 Limited Exemption, Low Fuel Usage: The requirements of Sections 9-7-301, 302, and 303 shall not apply to the use of any boiler, steam generator, or process heater with an annual heat input less than 90,000 therms during each consecutive 12-month period after July 1, 1993, or that accepts a limiting condition in their operating permit to limit the annual heat input to less than 90,000 therms, provided the requirements of Sections 9-7-304 and 504 are satisfied.

9-7-200 DEFINITIONS

9-7-201 Annual Heat Input: The total heat input of fuels burned by a combustion source during any consecutive 12-month period, as determined from the higher heating value and cumulative annual usage of each fuel.

9-7-202 Boiler or Steam Generator: Any combustion equipment used to produce steam or to heat water.

9-7-203 British Thermal Unit (BTU): The amount of heat required to raise the temperature of one pound of water from 59°F to 60°F at one atmosphere.

9-7-204 Heat Input: The heat of combustion released due to burning a fuel in a source, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.

- 9-7-205 Heat-Input Weighted Average:** The heat input of the gaseous fuel per unit time divided by the total heat input per unit time and the heat input per unit time of the non-gaseous fuel divided by the total heat input per unit time. The calculated fractions are used to calculate the applicable weighted average ppmv emission limit of Section 9-7-303.
- 9-7-206 Higher Heating Value (HHV):** The total heat liberated per mass of fuel burned (BTU per pound), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. The HHV is determined as specified in Section 9-7-605.
- 9-7-207 Natural Gas:** Any mixture of gaseous hydrocarbons containing at least 80 percent methane by volume, as determined according to Standard Method ASTM D1945-64.
- 9-7-208 Nitrogen Oxide (NO_x) Emissions:** The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.
- 9-7-209 Non-Gaseous Fuel:** Any fuel which is not a gas at 68^oF and one atmosphere.
- 9-7-210 Process Heater:** Any combustion equipment which transfers heat from combustion gases to water or process streams. A process heater does not include any kiln, furnace, or oven used for drying, baking, heat treating, cooking, calcining, or vitrifying.
- 9-7-211 Rated Heat Input:** The heat input capacity specified on the nameplate of the combustion source. If the combustion source has been physically modified such that its maximum heat input is different than the heat input capacity specified on the nameplate, the modified maximum heat input, per Section 9-7-502, shall be considered as the rated heat input.
- 9-7-212 Therm:** One hundred thousand (100,000) BTU's.
- 9-7-300 STANDARDS**
- 9-7-301 Emission Limits - Gaseous Fuel:** Effective January 1, 1996, a person shall not operate a boiler, steam generator, or process heater with a rated heat input greater than or equal to 10 million BTU per hour, fired on gaseous fuel, unless the following emission limits are met:
- 301.1 Nitrogen oxides (NO_x) shall not exceed 30 ppmv, dry at 3 percent oxygen;
 - 301.2 Carbon monoxide (CO) shall not exceed 400 ppmv, dry at 3 percent oxygen.
- 9-7-302 Emission Limits - Non-Gaseous Fuel:** Effective January 1, 1996, a person shall not operate a boiler, steam generator, or process heater, with a rated heat input greater than or equal to 10 million BTU per hour, fired on non-gaseous fuel, unless the following emission limits are met:
- 302.1 Nitrogen oxides (NO_x) shall not exceed 40 ppmv, dry at 3 percent oxygen;
 - 302.2 Carbon monoxide (CO) shall not exceed 400 ppmv, dry at 3 percent oxygen.
- 9-7-303 Emission Limits - Gaseous and Non-Gaseous Fuel:** Effective January 1, 1996, a person shall not operate a boiler, steam generator, or process heater, with a rated heat input greater than or equal to 10 million BTU per hour, fired simultaneously on combinations of gaseous and non-gaseous fuels, unless the heat-input weighted average of the emission limits specified in subsections 9-7-301.1, 301.2, 302.1, and 302.2 are not exceeded.

- 9-7-304 Low Fuel Usage Requirements:** Effective January 1, 1996, a person who operates any boiler, steam generator, or process heater with rated heat input greater than or equal to 10 million BTU per hour and qualifying for the limited exemption in Section 9-7-111, or with rated heat input less than 10 million BTU per hour with the capability of firing any fuel other than natural gas or liquefied petroleum gas, shall meet one of the following conditions:
- 304.1** Operate in a manner that maintains stack-gas oxygen concentrations at less than or equal to 3 percent by volume on a dry basis; or
 - 304.2** Tune at least once every twelve months by a technician in accordance with the procedure specified in Section 9-7-604; or
 - 304.3** Meet the emission limits specified in Sections 9-7-301, 302, or 303.
- 9-7-305 Natural Gas Curtailment - Non-Gaseous Fuel:** Effective January 1, 1996, if natural gas is unavailable for use, a person shall not operate a boiler, steam generator, or process heater, fired on non-gaseous fuel, unless the following emission limits are met:
- 305.1** Nitrogen oxides (NOx) shall not exceed 150 ppmv, dry at 3 percent oxygen;
 - 305.2** Carbon monoxide (CO) shall not exceed 400 ppmv, dry at 3 percent oxygen.
- 9-7-306 Equipment Testing - Non-Gaseous Fuel:** Effective January 1, 1996, a person shall not operate a boiler, steam generator, or process heater, fired on non-gaseous fuel for equipment testing, unless the following limits are met:
- 306.1** Nitrogen oxides (NOx) shall not exceed 150 ppmv, dry at 3 percent oxygen.
 - 306.2** Carbon monoxide (CO) shall not exceed 400 ppmv, dry at 3 percent oxygen.
 - 306.3** Equipment testing shall not exceed a combined total of 48 hours during any calendar year.
- 9-7-400 ADMINISTRATIVE REQUIREMENTS**
- 9-7-401 Compliance Schedule - Emissions and Usage Limits:** A person who must modify existing sources or equipment to comply with the requirements of Sections 9-7-301, 302, 303, 305, or 306 shall comply with the following increments of progress:
- 401.1** By January 1, 1994: Submit an application for any required Authority to Construct to achieve compliance with such requirements.
 - 401.2** By January 1, 1995: Submit a status report to the APCO stating the progress of the modification or installation.
 - 401.3** By January 1, 1996: Be in compliance with all the requirements of this rule.
- 9-7-402 Compliance Schedule - Low Fuel Usage Requirements:** A person who must comply with the requirements of Section 9-7-304 shall comply with the following increments of progress:
- 402.1** By January 1, 1995: Submit a plan for approval by the APCO containing the following items:
 - 1.1** A list of all sources with the rated heat input capacities and anticipated annual heat inputs; and
 - 1.2** A selection of one of the three options specified in subsections 9-7-304.1, 304.2, and 304.3.
 - 402.2** By January 1, 1996: Be in compliance with all the requirements of this rule.

9-7-403 Initial Demonstration of Compliance: By July 1, 1996, any person subject to this rule shall conduct source tests, as specified in Sections 9-7-601 or 602, for the purpose of demonstrating compliance with Sections 9-7-301, 302, 303, or subsection 9-7-304.1.

9-7-500 MONITORING AND RECORDS

9-7-501 Combinations of Different Fuels: Any person who simultaneously fires combinations of different fuels in a source with a rated heat input greater than or equal to 10 million BTU per hour and is subject to the requirements of Section 9-7-303 shall install a non-resettable totalizing fuel meter in each fuel line for each source.

9-7-502 Modified Maximum Heat Input: Any person who operates a boiler, steam generator, or process heater that has been physically modified such that its maximum heat input is different than the heat input specified on the nameplate shall demonstrate to the APCO the maximum heat input by a fuel meter, while operating the source at maximum capacity.

9-7-503 Records: Any person subject to the requirements of this rule shall keep records of the following:

503.1 Documentation verifying annual tune-ups performed in accordance with subsection 9-7-304.2.

503.2 In the event that natural gas is unavailable for use, documentation from the natural gas supplier verifying that natural gas was unavailable due to a natural gas curtailment.

503.3 Documentation verifying the hours of equipment testing during each calendar month to demonstrate compliance with subsection 9-7-306.3.

503.4 The results of any source testing required by Section 9-7-403.

Such records shall be retained for a minimum of 24 months from date of entry and be made available to District staff upon request.

9-7-504 Low Fuel Usage - Monitoring and Records: Any person who operates boilers, steam generators, or process heaters with rated heat inputs greater than or equal to 10 million BTU per hour and qualifying for the limited exemption of Section 9-7-111 shall comply with the following requirements:

504.1 Install by July 1, 1993, a non-resettable totalizing meter for each fuel that demonstrates that the source operated at or below the applicable heat input level, or receive APCO approval for using utility service meters, purchase or tank fill records, or any other acceptable methods for measuring the cumulative annual usage of each fuel; and

504.2 Have available for inspection by the APCO by July 1, 1994, and each year thereafter, annual fuel use data and the Higher Heating Value of each fuel used, for the preceding consecutive 12-month period. Records shall be maintained and made accessible to the APCO for a period of 24 months from the date the record is made.

9-7-600 MANUAL OF PROCEDURES

9-7-601 Determination of Nitrogen Oxides: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of nitrogen oxides are set forth in the District Manual of Procedures, Volume IV, ST-13 A or B.

- 9-7-602** Determination of Carbon Monoxide and Stack-Gas Oxygen: Compliance with the carbon monoxide emission requirements of Section 9-7-301 and the stack-gas oxygen concentration requirement of subsection 9-7-302.1 shall be determined as set forth in the District Manual of Procedures, Volume IV, ST-6 (carbon monoxide) and ST-14 (oxygen).
- 9-7-603** Compliance Determination: All emission determinations shall be made in the as-found operating condition, except that emission determinations shall include at least one source test conducted at the rated heat input of the source, and no compliance determination shall be established within two hours after a continuous period in which fuel flow to the unit is zero or is shut off for 30 minutes or longer.
- 9-7-604** Tune-Up Procedures: The tuning procedure required by Section 9-7-304.2 shall be performed in accordance with the procedure set forth in the District Manual of Procedures, Volume I, Chapter 5. (Adopted September 15, 1993)
- 9-7-605** Determination of Higher Heating Value: If certification of the Higher Heating Value is not provided by the third-party fuel supplier, it shall be determined by one of the following test methods: (1) ASTM D2015-85 for solid fuels; (2) ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuels; or (3) ASTM D1826-88, or ASTM D1945-81 in conjunction with ASTM D3588-89, for gaseous fuels.

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 8
NITROGEN OXIDES AND CARBON MONOXIDE
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**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 8
NITROGEN OXIDES AND CARBON MONOXIDE
FROM STATIONARY INTERNAL COMBUSTION ENGINES
(Adopted January 20, 1993)**

9-8-100 GENERAL

9-8-101 Description: This rule limits the emissions of nitrogen oxides and carbon monoxide from stationary internal combustion engines fired on gaseous fuels or any combination of gaseous and liquid fuels. This rule does not apply to emergency standby engines excluded under Regulation 1-110.2.

9-8-110 Exemptions: The requirements of this rule shall not apply to the following:

110.1 Engines rated by the manufacturer at less than 250 brake horsepower output rating.

110.2 Engines fired exclusively by liquid fuels including, but not limited to, diesel fuel, gasoline, and methanol.

110.3 Engines used directly and exclusively for the growing of crops or the raising of fowl or animals.

9-8-111 Limited Exemption for Low Usage: The requirements of Sections 9-8-301 and 302 shall not apply to the following low use operations provided the requirements of Section 9-8-502 are met:

111.1 Engines rated at, or below, 1000 brake horsepower which operate less than 200 hours in any 12-consecutive-month period.

111.2 Engines rated above 1000 brake horsepower which operate less than 100 hours in any 12-consecutive-month period.

9-8-200 DEFINITIONS

9-8-201 Gaseous Fuels: For the purposes of this rule, gaseous fuels include, but are not limited to:

201.1 Fossil derived fuel gas such as natural gas, methane, ethane, propane, refinery fuel gas, and butane, including gases stored as liquids such as liquified petroleum gas (LPG).

201.2 Waste derived fuel gas such as sewage sludge digester gas or landfill gas.

9-8-202 Nitrogen Oxide (NO_x) Emissions: The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the engine exhaust, collectively expressed as nitrogen dioxide.

9-8-203 Rated Brake Horsepower: The maximum brake horsepower rating at maximum revolutions per minute (RPM) specified for the engine by the manufacturer or indicated on the engine nameplate.

9-8-204 Stationary Internal Combustion Engine (Engine): Any spark or compression ignited internal combustion engine that is operated, or intended to be operated, at a specific site for more than one year or is attached to a foundation at that site.

9-8-205 Rich-Burn Engine : Any spark or compression ignited internal combustion engine that is designed to be operated with an exhaust stream oxygen concentration of less than 4 percent, by volume. The exhaust gas oxygen content shall be determined from the uncontrolled exhaust stream.

9-8-206 Lean-Burn Engine : Any spark or compression ignited internal combustion engine that is designed to be operated with an exhaust stream oxygen concentration of 4 percent, by volume, or greater. The exhaust gas oxygen content shall be determined from the uncontrolled exhaust stream.

9-8-300 STANDARDS

9-8-301 Emission Limits - Fossil Derived Fuel Gas: Effective January 1, 1997, a person shall not operate a stationary internal combustion engine fired exclusively on fossil derived fuel gas, unless the following emission limits are met:

301.1 Rich-Burn Engines: Nitrogen oxide (NOx) emissions shall not exceed 56 ppmv as corrected to 15% oxygen, dry basis.

301.2 Lean-Burn Engines: Nitrogen oxide (NOx) emissions shall not exceed 140 ppmv as corrected to 15% oxygen, dry basis.

301.3 Carbon monoxide (CO) emissions shall not exceed 2000 ppmv as corrected to 15% oxygen, dry basis.

9-8-302 Emission Limits - Waste Derived Fuel Gas: Effective January 1, 1997, a person shall not operate a stationary internal combustion engine fired on waste derived fuel gas or any combination of gaseous fuels and liquid fuels unless the following emission limits are met:

302.1 Lean-Burn Engines: Nitrogen oxide (NOx) emissions shall not exceed 140 ppmv as corrected to 15% oxygen, dry basis.

302.2 Rich-Burn Engines: Nitrogen oxide (NOx) emissions shall not exceed 210 ppmv as corrected to 15% oxygen, dry basis.

302.3 Carbon monoxide (CO) emissions shall not exceed 2000 ppmv as corrected to 15% oxygen, dry basis.

9-8-400 ADMINISTRATIVE REQUIREMENTS

9-8-401 Compliance Schedule: A person subject to the requirements of Section 9-8-301 or 302 shall submit an application for any Authority to Construct, necessary to achieve compliance with such requirements, by January 1, 1996, and be in compliance with all of the requirements of this rule by January 1, 1997.

9-8-500 MONITORING AND RECORDS

9-8-501 Initial Demonstration of Compliance: A person who must modify existing sources or install new control equipment shall conduct a District approved source test, pursuant to Sections 9-8-601 and 602 by March 31, 1997, for the purpose of demonstrating compliance with Section 9-8-301 or 302. Source test results shall be submitted to the District by May 31, 1997.

9-8-502 Recordkeeping: Any person who operates engines which are exempt from the requirements of Section 9-8-301 or 302 by Section 9-8-111 shall keep records of the number of hours the engines are fired on a monthly basis. Such records shall be retained for a minimum of 24 months from the date of entry and made available to District staff upon request.

9-8-600 MANUAL OF PROCEDURES

9-8-601 Determination of Nitrogen Oxides: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of nitrogen oxides are set forth in the District's Manual of Procedures, Volume IV, ST-13 A or B.

9-8-602 Determination of Carbon Monoxide and Stack Gas Oxygen: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of carbon monoxide and stack gas oxygen are set forth in the District's Manual of Procedures, Volume IV, ST-6 (carbon monoxide) and ST-14 (oxygen).

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 9
NITROGEN OXIDES FROM STATIONARY
GAS TURBINES
(Adopted May 5, 1993)**

9-9-100 GENERAL

- 9-9-101 Description:** The purpose of this Rule is to limit emissions of nitrogen oxides (NO_x) from stationary gas turbines.
- 9-9-110 Exemption, Small Gas Turbines:** This Rule shall not apply to stationary gas turbines with a power rating less than 0.3 megawatts (MW).
- 9-9-111 Exemption, General:** The requirements of this Rule shall not apply to:
- 111.1 Testing of aircraft gas turbine engines for flight certification.
- 111.2 Gas turbines used solely for firefighting and/or flood control.
- 111.3 Emergency standby gas turbines excluded under Regulation 1-110.2
- 9-9-112 Limited Exemption, Low Usage:** The requirements of this Rule shall not apply to the operation of gas turbines rated less than 4.0 MW which operate less than 877 hours per year, provided the requirements of Section 9-9-502 are satisfied.
- 9-9-113 Exemption, Inspection and Maintenance Periods:** The emission limits of Sections 9-9-301, 303, and 304 shall not apply during inspection and maintenance periods, with the following limitations:
- 113.1 Inspection and maintenance periods shall be limited to a total of 48 hours between May 1 and October 31 in a calendar year.
- 113.2 For a calendar year in which a boiler inspection required by California Labor Code Section 7682 is not performed, inspection and maintenance periods shall be limited to a total of 144 hours.
- 113.3 For a calendar year in which a boiler inspection required by California Labor Code Section 7682 is performed, inspection and maintenance periods shall be limited to 144 hours plus additional time required for the boiler inspection, provided, however, that the additional time shall not cause the calendar-year total of all inspection and maintenance periods to exceed 312 hours.
(Adopted September 21, 1994)
- 9-9-114 Exemption, Start-up and Shutdown Periods:** The emission limits of Sections 9-9-301, 302, 303, 304, and 305 shall not apply during start-up or shutdown periods.
(Adopted September 21, 1994)

9-9-200 DEFINITIONS

- 9-9-201 EFF:** Thermal efficiency.
- 9-9-202 Essential Gas Turbine:** A gas turbine which cannot be taken out of service without shutting down the process unit which it serves. (Adopted September 21, 1994)
- 9-9-203 HHV:** The higher heating value of fuel. (Renumbered September 21, 1994)
- 9-9-204 LHV:** The lower heating value of fuel. (Renumbered September 21, 1994)
- 9-9-205 Inspection and Maintenance Period:** A period of time during which the boiler associated with an essential gas turbine is taken out of service for inspection or maintenance and during which gas turbine emissions are vented to a bypass stack rather than through the boiler to the SCR unit. (Adopted September 21, 1994)
- 9-9-206 Natural Gas:** Any mixture of gaseous hydrocarbons containing at least 80 percent methane by volume, as determined according to Standard Method ASTM D1945-64.
(Adopted September 21, 1994)

- 9-9-207 Nitrogen Oxide (NO_x) Emissions:** The sum of nitric oxide and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.
(Adopted September 21, 1994)
- 9-9-208 Non-Gaseous Fuel:** Any fuel which is not a gas at 68° F and one atmosphere.
(Adopted September 21, 1994)
- 9-9-209 Power Augmentation:** An increase in the gas turbine shaft output or the decrease in turbine fuel consumption by the addition of energy recovered from exhaust heat.
(Renumbered September 21, 1994)
- 9-9-210 Rating:** The continuous megawatt (MW) rating or mechanical equivalent by a manufacturer for gas turbine(s) without power augmentation.
(Renumbered September 21, 1994)
- 9-9-211 Refinery Fuel Gas:** A mixture of hydrogen and gaseous hydrocarbons generated by petroleum refinery processes and used by the refinery for on-site combustion in boilers, process heaters, turbines, and other combustion equipment.
(Adopted September 21, 1994)
- 9-9-212 SCR: Selective Catalytic Reduction.** (Renumbered September 21, 1994)
- 9-9-213 Shutdown Period:** A period of time, not to exceed one hour, during which a gas turbine is brought from normal operating power output to inactive status.
(Adopted September 21, 1994)
- 9-9-214 Start-up Period:** A period of time, not to exceed three hours, during which a gas turbine is brought from inactive status to normal operating power output.
(Amended September 21, 1994)
- 9-9-215 Stationary Gas Turbine:** Any gas turbine system which is attached to a foundation and is gas and/or liquid fueled with or without power augmentation. Two or more gas turbines powering one shaft shall be treated as one unit.
(Renumbered September 21, 1994)
- 9-9-300 STANDARDS**
- 9-9-301 Emission Limits, General:** Except as provided by Sections 9-9-302, 9-9-303, 9-9-305, or 9-9-401, effective January 1, 1997, a person shall not operate a stationary gas turbine unless nitrogen oxides (NO_x) emission concentrations, corrected to 15 percent O₂ (dry basis), do not exceed the compliance limit listed below:
- 301.1 Gas turbines rated at 0.3 MW to less than 10.0 MW shall not exceed 42 ppmv, except that, for refinery fuel gas firing, the limit shall be 55 ppmv, and for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 65 ppmv.
- 301.2 Gas turbines rated at 10.0 MW and over, without SCR, shall not exceed 15 ppmv, except that, for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 42 ppmv.
- 301.3 Gas Turbines rated at 10.0 MW and over, with SCR, shall not exceed 9 ppmv, except that, for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 25 ppmv.
(Amended September 21, 1994)
- 9-9-302 Emission Limits, Low Usage:** Effective January 1, 1997, a person shall not operate a stationary gas turbine rated at 4.0 MW or greater and operating less than 877 hours per year unless nitrogen oxides (NO_x) emission concentrations, corrected to 15 percent O₂ (dry basis), do not exceed 42 ppmv when firing with natural gas and 65 ppmv when firing with non-gaseous fuel, and provided the requirements of Section 9-9-502 are satisfied.
(Amended September 21, 1994)
- 9-9-303 Emission Limits, Alternative Schedule:** A person operating a stationary gas turbine rated at 10 MW to less than 30MW, without SCR, which is otherwise subject to Section 9-9-301.2, may comply with both of the following emission limitations instead of complying with Section 9-9-301.2:

303.1 Effective January 1, 1996, a person shall not operate such a stationary gas turbine unless nitrogen oxides (NOx) emission concentrations, corrected to 15 percent O₂ (dry basis), do not exceed 25 ppmv, except that, for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 42 ppmv.

303.2 Effective January 1, 2000, a person shall not operate such a stationary gas turbine unless nitrogen oxides (NOx) emission concentrations, corrected to 15 percent O₂ (dry basis), do not exceed 15 ppmv, except that, for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 42 ppmv. (Adopted September 21, 1994)

9-9-304 Emission Limits, Interim RACT: Effective May 31, 1995, a person shall not operate a stationary gas turbine rated at 30 MW or greater and operating 877 hours per year or more unless nitrogen oxides (NOx) emission concentrations, corrected to 15 percent O₂ (dry basis), do not exceed 42 ppmv when firing with natural gas or 65 ppmv when firing with non-gaseous fuels. (Adopted September 21, 1994)

9-9-305 Emission Limits, Existing Low-NOx Turbines: Effective January 1, 1997, a person shall not operate a stationary gas turbine which 1) received a permit to operate prior to May 5, 1993, 2) was required to comply with Best Available Control Technology provisions limiting NOx emissions to 25 ppm or below, and 3) used a technology other than SCR to comply with that limit unless nitrogen oxides (NOx) emissions, corrected to 15 percent O₂ (dry basis), do not exceed 18 ppmv, except that, for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 42 ppmv. (Adopted September 21, 1994)

9-9-400 ADMINISTRATIVE REQUIREMENTS

9-9-401 Certification, Efficiency: If a person who operates a gas turbine subject to the limits of subsections 9-9-301.2, 301.3, 9-9-303, or 9-9-305 can demonstrate a thermal efficiency (EFF) greater than 25 percent in accordance with subsections 401.2.1 or 401.2.2, the emissions limit may be adjusted in accordance with Section 9-9-401.1.

$$401.1 \text{ Adjusted Emission Limit} = \frac{\text{Emission Limit} \times \text{EFF}}{25}$$

401.2 EFF (percent efficiency) is the higher of 2.1 or 2.2. An EFF that is less than 25% shall be assigned a value of 25%.

$$2.1 \text{ EFF} = \frac{3412 \times 100\%}{\text{Actual Heat Rate at HHV of Fuel (BTU/KW-HR)}}$$

which is the demonstrated percent efficiency of the gas turbine only as calculated without consideration of any downstream energy recovery (not used for power augmentation) from the actual heat rate, (BTU/KW-HR) or 1.34 (BTU/HP-HR); corrected to the HHV (higher heating value) of the fuel and standard conditions, as measured at peak load for that facility.

or

$$2.2 \text{ EFF} = \text{Manufacturer's Rated Efficiency}^* \times \frac{\text{LHV}}{\text{HHV}}$$

*With Air Pollution Equipment at LHV

which is the manufacturer's continuous rated percent efficiency of the gas turbine with air pollution equipment after correction from LHV to HHV of the fuel.

(Amended September 21, 1994)

9-9-402 Compliance Schedule: A person who must modify existing sources or install new control equipment to meet the requirements of Section 9-9-301 or 302 shall comply with the following increments of progress:

402.1 By January 1, 1995: Submit an application for any Authority to Construct to achieve compliance with such requirements.

402.2 By January 1, 1996: Submit a status report to the APCO stating the progress of the modification or installation.

402.3 By January 1, 1997: Be in compliance with all requirements of this Rule.

9-9-403 Alternative Compliance Schedule: A person who must modify existing sources or install new control equipment to meet the requirements of Section 9-9-303 shall comply with the following increments of progress:

403.1 By January 1, 1995: Submit an application for any Authority to Construct to achieve compliance with Section 9-9-303.1.

403.2 By July 1, 1995: Submit a status report to the APCO stating the progress of the modification or installation to achieve compliance with Section 9-9-303.1.

403.3 By January 1, 1996: Be in compliance with the requirements of Section 9-9-303.1 and all other applicable requirements of this Rule.

403.4 By January 1, 1998: Submit an application for any Authority to Construct to achieve compliance with Section 9-9-303.2.

403.5 By January 1, 1999: Submit a status report to the APCO stating the progress of the modification or installation to achieve compliance with Section 9-9-303.2.

403.6 By January 1, 2000: Be in compliance with the requirements of Section 9-9-303.2 and all other applicable requirements of this Rule

(Adopted September 21, 1994)

9-9-500 MONITORING AND RECORDS

9-9-501 Monitoring and Recordkeeping Requirements: A person who operates any stationary gas turbine rated equal to or greater than 10.0 MW and operated an average of more than 4000 hours per year over the last three years before April 21, 1993, shall install, operate and maintain in calibration a continuous emissions monitor (CEM), or alternative monitoring system, capable of determining exhaust gas NO_x concentrations. A CEM must meet the requirements of the District Manual of Procedures, Volume V. Any alternative monitoring system must be approved by the APCO. Such approval will only be granted upon a determination, pursuant to the criteria of 40 CFR Part 75, Subpart E, that the alternative monitoring system provides information with the same precision, reliability, accessibility, and timeliness as that provided by a CEM for the source. (Amended September 21, 1994)

9-9-502 Records, Low Usage: A person subject to the requirements of Section 9-9-302 or seeking exemption per Section 9-9-112 of this Rule shall maintain a daily gas turbine operating record that includes, the actual start-up and stop time, total hours of operation, type and quantity of fuel used (liquid/gas). This information shall be available to District staff upon request for at least two years from the date of entry.

9-9-503 Initial Demonstration of Compliance: A person who must modify existing sources or install new control equipment shall conduct a District approved source test by the following dates and submit the results to the District within two months after the following dates:

- 503.1 March 31, 1996, for the purpose of demonstrating compliance with Section 9-9-303.1.
- 503.2 March 31, 1997, for the purpose of demonstrating compliance with Section 9-9-301, 302, or 305.
- 503.3 March 31, 2000, for the purpose of demonstrating compliance with Section 9-9-303.2.
(Amended September 21, 1994)

9-9-600 MANUAL OF PROCEDURES

- 9-9-601 Determination of Emissions:** Emissions of oxides of nitrogen, as specified in Sections 9-9-301, 302, 303, 304, and 305 shall be measured as prescribed in the District Manual of Procedures, Volume IV, ST-13A or B.
(Amended September 21, 1994)
- 9-9-602 Determination of Stack Gas Oxygen:** Oxygen content of the exhaust gas shall be determined by using District Manual of Procedures, Volume IV, ST-14.
- 9-9-603 Continuous Emission Monitoring:** Continuous Emissions Monitoring (CEM) procedures shall be determined using District Manual of Procedures, Volume V.
- 9-9-604 Determination of HHV and LHV:** The HHV and LHV shall be determined using 1) ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuel; or 2) ASTM 1826-88 or ASTM 1945-81 in conjunction with ASTM D3588-89 for gaseous fuels.

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 10
NITROGEN OXIDES AND CARBON MONOXIDE FROM BOILERS, STEAM
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**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 10**

**NITROGEN OXIDES AND CARBON MONOXIDE FROM BOILERS, STEAM
GENERATORS, AND PROCESS HEATERS IN PETROLEUM REFINERIES**

(Adopted January 5, 1994)

9-10-100 GENERAL

9-10-101 Description: This Rule limits the emissions of nitrogen oxides and carbon monoxide from boilers, steam generators, and process heaters in petroleum refineries.

9-10-110 Exemptions: The requirements of this Rule shall not apply to the following:

110.1 Boilers, steam generators, and process heaters with a rated heat input less than 10 million BTU/hour, if fired exclusively with natural gas, liquefied petroleum gas, or any combination thereof;

110.2 Boilers, steam generators, and process heaters with a rated heat input less than 1 million BTU/hour fired with any fuel;

110.3 Waste heat recovery boilers that are used to recover sensible heat from the exhaust of combustion turbines or reciprocating internal combustion engines;

110.4 Boilers, steam generators, and process heaters processing hydrogen sulfide process flue gas in sulfur recovery plants and their tail-gas treating units, or sulfuric acid manufacturing plants.

110.5 Boilers, steam generators, and process heaters fired on non-gaseous fuel when natural gas is unavailable for use.

9-10-111 Limited Exemption, Small Units: The requirements of Section 9-10-303 shall not apply to the use of any small units, provided the requirements of Section 9-10-306 are satisfied.

9-10-112 Limited Exemption, Low Fuel Usage: The requirements of Sections 9-10-303 and 306 shall not apply to the use of any boiler, steam generator, or process heater that has an annual heat input less than 90,000 therms during each consecutive 12-month period or that accepts a condition in their operating permit limiting the annual heat input to less than 90,000 therms, provided the requirements of Sections 9-10-306 and 502.2 are satisfied.

9-10-200 DEFINITIONS

9-10-201 Affected Unit: Any refinery boiler, steam generator, and process heater not exempted under Sections 9-10-110, 111, and 112.

9-10-202 Boiler or Steam Generator: Any combustion equipment used to produce steam or heat water.

9-10-203 British Thermal Unit (BTU): The amount of heat required to raise the temperature of one pound of water from 59° F to 60° F at one atmosphere.

9-10-204 CO Boiler: Any boiler or furnace which processes the off-gases from a catalytic cracking unit regenerator or a coker burner.

9-10-205 Combustion Modification: Any modification of the burner, combustion air flow (including flue-gas recirculation), or fuel-flow system which reduces nitrogen oxide emissions.

9-10-206 Heat-Input: The heat of combustion released due to burning a fuel in a source, using higher heating value of the fuel. This does not include the sensible heat of incoming combustion air. In the case of carbon monoxide boilers, the heat input includes the sensible heat of regenerator off-gases and the heat of combustion of the incoming carbon monoxide and of the auxiliary fuel.

9-10-207 Higher Heating Value (HHV): The total heat liberated per mass of fuel burned (BTU per pound) when fuel and dry air at standard conditions undergo complete combustion

and all resultant products are brought to their standard states at standard conditions per Section 9-10-604.

- 9-10-208 Natural Gas:** Any mixture of gaseous hydrocarbons containing at least 80 percent methane by volume, as determined according to Standard Method ASTM D1945-64.
- 9-10-209 Nitrogen Oxides (NO_x):** The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.
- 9-10-210 Non-Gaseous Fuel:** Any fuel which is not a gas at 68° F and one atmosphere.
- 9-10-211 Operating Day:** 24 hours from midnight to midnight.
- 9-10-212 Out of Service:** The period of time during which a unit is in an inactive state following shutdown.
- 9-10-213 Petroleum Refinery:** Any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking, or reforming of unfinished petroleum derivatives.
- 9-10-214 Process Heater:** Any combustion equipment that transfers heat from combustion gases to water or process streams.
- 9-10-215 Rated Heat Input:** The heat input capacity specified on the nameplate of the combustion source. If the combustion source has been physically modified and/or operated in such a manner that its maximum heat input is different from the heat input capacity specified on the nameplate, then the modified maximum heat input per Section 9-10-503 shall be considered as the rated heat input.
- 9-10-216 Refinery-wide Emission Rate:** The ratio of the total mass of discharge into the atmosphere of nitrogen oxides, in pounds, from affected units, excluding CO boilers, to the sum of the actual heat input to those units in million BTU, calculated over a twenty-four (24) hour operating day.
- 9-10-217 Small Unit:** Any refinery boiler, steam generator, or process heater with a rated heat input less than 10 million BTU/hour but greater than or equal to 1 million BTU/hour that has the capability of firing any fuel other than natural gas or liquefied petroleum gas.
- 9-10-218 Start-up or Shutdown:** Start-up is that period of time, not to exceed twelve (12) hours unless specifically extended by a permit condition, during which a unit is brought up to its normal operating temperature from a cold start, initially at zero fuel flow, by following a prescribed series of separate steps or operations. Shutdown is that period of time, not to exceed nine (9) hours unless specifically extended by a permit condition, during which a unit is taken out of service from a normal operating mode to an inactive status following a prescribed series of separate steps or operations.
- 9-10-219 Therm:** One hundred thousand (100,000) BTUs.
- 9-10-220 Unit:** Any petroleum refinery boiler, steam generator, or process heater, as defined in Sections 9-10-202 and 214 of this Section, having an Authority to Construct or a Permit to Operate prior to January 5, 1994.

9-10-300 STANDARDS

- 9-10-303 Interim Emission Limit For Facility (Federal Requirements):** Effective May 31, 1995, a person shall not exceed a refinery-wide emission rate from affected units, excluding CO boilers, of 0.20 pounds NO_x per million BTU of heat input, based on an operating-day average.
- 303.1 Effective May 31, 1995, except during start-up and shutdown, a person shall not shall not operate a CO boiler unless the emissions of nitrogen oxides (NO_x) do not exceed 300 ppm, dry at 3% oxygen, based on an operating-day average.
- 9-10-306 Small Unit Requirements:** Except as provided in Section 9-10-403, effective July 1, 1997, a person shall not operate a small unit unless at least one of the following is met:
- 306.1 Operate in a manner that maintains stack-gas oxygen concentrations at less than or equal to 3 percent by volume on a dry basis; or
- 306.2 Tune at least once every twelve (12) months, or within two weeks of unit start-up if not operated in the last twelve (12) months, by a technician in accordance with the procedure specified in Section 9-10-605.

9-10-400 ADMINISTRATIVE REQUIREMENTS

9-10-402 Control Plan Submittal, Small Units: A person subject to Section 9-10-306 of this Rule shall comply with the following increments of progress:

402.1 No later than twelve (12) months prior to the compliance date of Section 306, submit to the APCO a plan to comply with the requirements of Section 9-10-306. The plan shall contain, at a minimum:

- 1.1 A list of all sources with the rated heat input capacities; and
- 1.2 A selection on one of the options specified in Section 306.

9-10-403 Compliance Date, Clean-Fuel Extension Allowance: Notwithstanding the effective date specified in Section 9-10-306, affected facilities that are in the process of, or have completed, making modifications to comply with the State Phase II Reformulated Gasoline Requirement (California Code of Regulations, Section 2260 et seq.) and the Federal Reformulated Gasoline Requirement (1990 Clean Air Act, 42 U.S.C.A., Section 7545) shall meet a compliance date of July 1, 2002. Effective July 1, 1997, any affected facility not producing the state and federal clean fuels shall comply with the effective dates in Section 9-10-306.

403.1 Commencing six (6) months after January 5, 1994, and every six months thereafter until clean-fuels project completion, facilities shall submit a status report verifying progress toward compliance with state and federal clean-fuel requirements.

9-10-500 MONITORING AND RECORDS

9-10-502 Monitoring: A person subject to Section 9-10-303 shall submit to the APCO a monitoring plan to provide, properly install, maintain in good working order, and operate the following equipment:

502.1 An in-stack nitrogen oxide (NO_x), carbon monoxide (CO), and oxygen (O₂) continuous emission monitoring system (CEMS), or equivalent verification system. The CEMS must meet the requirements of the District Manual of Procedures, Volume V, Continuous Emission Monitoring, Policy and Procedures.

502.2 A fuel-flow meter in each fuel line for each affected unit.

(Amended July 17, 2002)

9-10-503 Modified Maximum Heat Input: Any unit that has been physically modified such that its maximum heat input is different than the heat input specified on the nameplate shall demonstrate to the APCO the maximum heat input while operating the source at maximum capacity.

9-10-504 Records: The owner/operator of a source subject to this rule shall keep the following records, in a form suitable for inspection for a period of at least five (5) years. Such records shall be retained for a minimum of sixty (60) months from date of entry and made available to the APCO upon request. These records shall include, but are not limited to the following:

504.1 For all sources subject to the requirements of, effective July 17, 2002, Section 9-10-303:

- 1.1 The continuous emission monitoring measurements or equivalent system parameters for NO_x, CO, and O₂ in ppmv; and hourly (lb/hour) and daily (lb/day) NO_x emissions for each source;
- 1.2 The type, heat input (BTU/hr and BTU/day), and higher heating value of each fuel burned, and the injection rate for any reactant chemicals used by the emission control system(s) on a daily basis.
- 1.3 The date, time, and duration of any start-up, shutdown or malfunction in the operation of any unit, emission control equipment, or emission monitoring equipment; and
- 1.4 The results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of any continuous emission monitors that have been installed pursuant to Section 9-10-502 of this Rule.

- 1.5 A list of all sources subject to the NO_x refinery-wide emission rate limits in Sections 9-10-303.
- 1.6 Total NO_x emissions and total heat input for all sources listed in subsection 504.1.5, on a daily basis; and
- 1.7 The date, time and duration of all startups and shutdowns for affected sources.

504.2 For all sources subject to subsection 9-10-306.2, records of annual tune-ups.
(Amended July 17, 2002)

9-10-505 Reporting Requirements: A person subject to the requirements of Sections 9-10-303 and/or 306 shall meet the following reporting requirements:

- 505.1 Report to the APCO any violation of Section 9-10-303 and/or 306, in writing within ninety-six (96) hours after such occurrence.
- 505.2 Submit a written report for each calendar quarter to the APCO. The report shall be due on the 30th day following the end of the calendar quarter and shall include:
 - 2.1 A summary of the data obtained from the CEMS and the fuel meters installed pursuant to Section 9-10-502; and
 - 2.2 The date, time, duration, and magnitude of emissions in excess of the appropriate standards; the nature and cause of the excess (if known); the corrective actions taken; and the preventive measure adopted.

(Amended July 17, 2002)

9-10-600 MANUAL OF PROCEDURES

9-10-601 Determination of Nitrogen Oxides: Compliance with the nitrogen oxide emission requirements of Section 9-10-303 shall be determined by continuous emission monitors that have been installed, or by equivalent verification system pursuant to Section 9-10-502, and meet the requirements of Volume V of the District Manual of Procedures. CEMS shall be verified by source test as set forth in the District Manual of Procedures, Volume IV, ST-13A (nitrogen oxides) and ST-14 (oxygen).

(Amended July 17, 2002)

9-10-603 Compliance Determination: All emission determinations shall be made in the as-found operating condition, except during periods of start-up or shutdown as specified by Section 9-10-218. In addition to any continuous monitoring system (CEMS) required by Sections 9-10-502, 601, and 602, emission determinations shall include at least one source test, as specified in Section 9-10-501.

9-10-604 Determination of Higher Heating Value: If certification of the higher heating value is not provided by the third-party fuel supplier, it shall be determined by one of the following test methods: (1) ASTM D2015-85 for solid fuels; (2) ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuels; or (3) ASTM D1826-88 or ASTM D1945-81 in conjunction with ASTM D3588-89 for gaseous fuels.

9-10-605 Tune-Up Procedures: The tuning procedure required by Section 9-10-306.2 shall be performed in accordance with the procedure set forth in the District Manual of Procedures, Volume I, Chapter 5.

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 11
NITROGEN OXIDES AND CARBON MONOXIDE FROM
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**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 11
NITROGEN OXIDES AND CARBON MONOXIDE FROM
ELECTRIC POWER GENERATING STEAM BOILERS**

(Adopted February 16, 1994)

9-11-100 GENERAL

9-11-101 Description: This Rule limits the emissions of nitrogen oxides and carbon monoxide from electric power generating steam boilers. (Amended May 17, 2000)

9-11-110 Exemption, Limited Heat Input Capacity: The requirements of this Rule shall not apply to any boiler with a rated heat input capacity less than 250 million BTU/hour. (Amended November 15, 1995)

9-11-111 Exemption, Startup or Shutdown: The emission limits of Sections 9-11-302, 304, 306, 308, 310, and 311 shall not apply during the startup or shutdown period of any applicable boiler, with the following limitations:

111.1 Startup: For boilers with a rated heat input capacity greater than or equal to 5.0 billion BTU/hour, the duration of each startup procedure shall not exceed twenty (20) hours unless catalytic reaction temperature has not been reached, if applicable. For boilers with a rated heat input capacity of less than 5.0 billion BTU/hour, the duration of each startup procedure shall not exceed twelve (12) hours unless catalytic reaction temperature has not been reached, if applicable;

111.2 Shutdown: The duration of each shutdown procedure shall not exceed eight (8) hours. (Amended November 15, 1995)

9-11-112 Exemption, Oil Testing: The non-gaseous fuel firing limitations of subsections 9-11-302.1.4, 304.2, and 306.4 shall not apply to oil-burn readiness testing or state or federal agency required performance testing not to exceed a total of twenty-four (24) hours per boiler between May 1 and October 31 in any one year and a total of ninety-six (96) hours per boiler in any calendar year, or oil-burn emission testing required by the APCO. (Amended 11/15/95; 5/17/00)

9-11-114 Exemption, Heat Recovery Steam Generators: The requirements of this Rule shall not apply to duct burners and heat recovery steam generators that are used to recover sensible heat from the exhaust of combustion turbines. (Adopted May 17, 2000)

9-11-200 DEFINITIONS

9-11-201 Annual Heat Input: The total heat input of fuels burned by a boiler during the consecutive 12-month period of any calendar year, as determined from the higher heating value and cumulative annual usage of each fuel.

9-11-202 Boiler: Any combustion equipment used to produce steam or to heat water.

9-11-203 British Thermal Unit (BTU): The amount of heat required to raise the temperature of one pound of water from 59°F to 60°F at one atmosphere.

9-11-204 Capacity Factor: The ratio of the actual heat input burned by a boiler divided by the heat input that would have been burned by the boiler if it had operated at full rated heat input capacity, calculated over a specified period of time and expressed as a percentage (e.g., an annual capacity factor would be calculated over a calendar year).

9-11-205 Catalytic Reaction Temperature: The minimum temperature required by a catalytic emission abatement system to achieve the design emission reduction efficiency.

9-11-206 Electric Power Generating System: The combined total of all affected steam boilers used for electric power generation in the Bay Area Air Quality Management District that are owned and/or operated by a person or persons under common ownership or contractual obligation. (Amended May 17, 2000)

- 9-11-207 Electric System Emergency:** When an electric power generating system is required to request or provide emergency electrical support, as defined in Item 6 of the Coordinated Bulk Power Supply Program, Western Systems Coordinating Council (April 1, 1992). For the purposes of this Rule, this definition is limited to those situations in which the specified procedures for requesting emergency relief have been followed, including a determination that normal arrangements for capacity and energy are not sufficient to avoid area brownouts or blackouts.
(Amended May 17, 2000)
- 9-11-208 Force Majeure Natural Gas Curtailment:** An interruption in natural gas service, such that the daily fuel needs of a boiler cannot be met with natural gas available, due to one of the following reasons:
- 208.1 An unforeseeable failure or malfunction, not resulting from an intentional act or omission that the governing state, federal, or local agency finds to be due to an act of gross negligence on the part of the owner or operator of the boiler; or
 - 208.2 A natural disaster; or
 - 208.3 The natural gas is curtailed pursuant to governing state, federal, or local agency rules or orders; or
 - 208.4 The serving natural gas supplier provides notice to the District that, with forecasted natural gas supplies and demands, natural gas service is expected to be curtailed pursuant to governing state, federal, or local agency rules or orders.
(Amended May 17, 2000)
- 9-11-209 Heat Input:** The heat of combustion released due to burning a fuel in a boiler, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.
- 9-11-210 Heat Input Weighted Average:** The heat input of the gaseous fuel per unit time divided by the total heat input per unit time and the heat input per unit time of the non-gaseous fuel divided by the total heat input per unit time. The calculated fractions are used to calculate the applicable weighted average ppmv emission limit of subsections 9-11-302.1.3, 304.1.3, and 306.3.
- 9-11-211 Higher Heating Value (HHV):** The total heat liberated per mass or volume of fuel burned (BTU per pound or BTU per cubic feet), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. The HHV is determined as specified in Section 9-11-605.
- 9-11-212 Natural Gas:** Any mixture of gaseous hydrocarbons containing at least 80 percent methane by volume, as determined according to Standard Method ASTM D1945-64 or equivalent method approved by the APCO.
(Amended November 15, 1995)
- 9-11-213 Nitrogen Oxide (NO_x) Emissions:** The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.
- 9-11-214 Non-Gaseous Fuel:** Any fuel which is not a gas at 68°F and one atmosphere.
- 9-11-215 Operating Day:** Twenty-four (24) hours from midnight to midnight.
- 9-11-216 Rated Heat Input Capacity:** The heat input capacity specified on the nameplate of the boiler. If the boiler has been physically modified and/or operated in such a manner that its maximum heat input capacity is different from that specified on the nameplate, then the modified maximum heat input capacity per Section 9-11-502 shall be considered as the rated heat input capacity.
(Amended November 15, 1995)
- 9-11-217 Refractory Lined Furnace Hopper:** The bottom of a boiler firebox (the compartment of a boiler in which the fuel burns), when this bottom is lined with a refractory material.
(Amended November 15, 1995)
- 9-11-218 Startup or Shutdown:** Startup is that period of time during which a boiler is brought up to its normal operating temperature and pressure from an inactive status, initially at zero fuel flow, by following a prescribed series of separate steps or operations. Shutdown is that period of time during which a boiler is taken out of service from a normal operating mode to an inactive status of no fires by following a prescribed series of separate steps or operations.
- 9-11-219 Systemwide NO_x Emission Rate:** The ratio of the total mass of discharge into the atmosphere of nitrogen oxides in pounds from all affected steam boilers of an electric

power generating system to the sum of the actual heat input to those boilers in million BTU, calculated over a specified period of time. (Amended 11/15/95; 5/17/00)

9-11-220 Electric Power Generating Steam Boiler: A boiler that produces steam used to make electricity. (Adopted May 17, 2000)

9-11-300 STANDARDS

9-11-302 Interim Compliance NO_x Emission Limits for Boilers with a Rated Heat Input Capacity Greater Than or Equal to 1.75 billion BTU/hour: For any single electric power generating system as defined in Section 9-11-206, a person shall not operate an electric power generating steam boiler with a rated heat input greater than or equal to 1.75 billion BTU per hour unless the following conditions and emission limits are met:

- 302.1 Effective May 31, 1995, nitrogen oxides (NO_x) shall not exceed the following:
- 1.1 Gaseous Fuel: For gaseous fuel firing, NO_x emissions shall not exceed 175 ppmv, dry at 3 percent oxygen;
 - 1.2 Non-Gaseous Fuel: For non-gaseous fuel firing, NO_x emissions shall not exceed 300 ppmv, dry at 3 percent oxygen;
 - 1.3 Gaseous and Non-Gaseous Fuel: For simultaneous gaseous and non-gaseous fuel firing, the heat input weighted average of the NO_x emission limits specified in subsections 9-11-302.1.1 and 302.1.2 shall not be exceeded; and
 - 1.4 Limitation on Non-Gaseous Fuel Firing: From May 1 to October 31 in any calendar year, a person shall not fire an electric power generating steam boiler with a non-gaseous fuel unless gaseous fuel is not available because of a force majeure natural gas curtailment as defined by Section 9-11-208. (Amended May 17, 2000)

9-11-304 Interim Compliance NO_x Emission Limits for Boilers with a Rated Heat Input Capacity Less Than 1.75 billion BTU/hour and Greater Than or Equal to 1.5 billion BTU/hour: For any single electric power generating system as defined in Section 9-11-206, a person shall not operate an electric power generating steam boiler with a rated heat input less than 1.75 billion BTU/hour and greater than or equal to 1.5 billion BTU/hour unless the following conditions and emission limits are met:

- 304.1 Effective May 31, 1995, nitrogen oxides (NO_x) shall not exceed the following:
- 1.1 Gaseous Fuel: For gaseous fuel firing, NO_x emissions shall not exceed 175 ppmv, dry at 3 percent oxygen;
 - 1.2 Non-Gaseous Fuel: For non-gaseous fuel firing, NO_x emissions shall not exceed 700 ppmv, dry at 3 percent oxygen; and
 - 1.3 Gaseous and Non-Gaseous Fuel: For simultaneous gaseous and non-gaseous fuel firing, the heat input weighted average of the NO_x emission limits specified in subsections 9-11-304.1.1 and 304.1.2 shall not be exceeded.
- 304.2 Limitation on Non-Gaseous Fuel Firing: Effective May 31, 1995, a person shall not fire an electric power generating steam boiler with a non-gaseous fuel unless gaseous fuel is not available because of a force majeure natural gas curtailment as defined by Section 9-11-208. (Amended May 17, 2000)

9-11-306 Interim Compliance NO_x Emission Limits for Boilers with a Rated Heat Input Capacity Less Than 1.5 billion BTU/hour: Effective May 31, 1995, a person shall not operate an electric power generating steam boiler with a rated heat input less than 1.5 billion BTU/hour unless the following conditions and emission limits are met:

- 306.1 Gaseous Fuel: For gaseous fuel firing in boilers with refractory lined furnace hoppers, nitrogen oxides (NO_x) shall not exceed 175 ppmv, dry at 3 percent oxygen. For gaseous fuel firing in all other boilers, nitrogen oxides (NO_x) shall not exceed 120 ppmv, dry at 3 percent oxygen;
- 306.2 Non-Gaseous Fuel: For non-gaseous fuel firing, nitrogen oxides (NO_x) shall not exceed 500 ppmv, dry at 3 percent oxygen;

- 306.3 Gaseous and Non-Gaseous Fuel: For simultaneous gaseous and non-gaseous fuel firing, the heat input weighted average of the emission limits specified in subsections 9-11-306.1 and 306.2 shall not be exceeded; and
- 306.4 Limitation on Non-Gaseous Fuel Firing: A person shall not fire an electric power generating steam boiler with a non-gaseous fuel unless gaseous fuel is not available because of a force majeure natural gas curtailment as defined by Section 9-11-208 and there exists an electric system emergency as defined in Section 9-11-207.
- 9-11-308 Systemwide NO_x Emission Rate Limit:** Effective May 31, 1995, the systemwide average nitrogen oxides (NO_x) emission rate from an electric power generating system, as defined in Sections 9-11-206 and 219, shall not exceed 0.28 lb/MMBTU of heat input, calculated each operating day as the average of all hourly data for the preceding 30 operating days, excluding periods of force majeure natural gas curtailment as defined in Section 9-11-208. (Amended May 17, 2000)
- 9-11-310 CO Emission Limits for Boilers with a Rated Heat Input Capacity Greater Than or Equal to 250 million BTU/hour:** Effective May 31, 1995, a person shall not operate an electric power generating steam boiler with a rated heat input greater than or equal to 250 million BTU per hour unless the following emission limits are met:
- 310.1 During steady state compliance source tests, carbon monoxide (CO) shall not exceed 400 ppmv, dry at 3 percent oxygen, based on the test methods referenced in Section 9-11-602;
- 310.2 During normal operation (CEMS compliance monitoring), carbon monoxide (CO) shall not exceed 1000 ppmv, dry at 3 percent oxygen, based on a clock hour average. (Amended November 15, 1995)
- 9-11-311 Ammonia Emission Limit for Boilers with a Rated Heat Input Capacity Greater Than or Equal to 250 million BTU/hour:** No person shall allow the discharge from any electric power generating steam boiler with a rated heat input greater than or equal to 250 million BTU per hour, ammonia (NH₃) emissions in excess of 10 ppmv, dry at 3 percent oxygen, based on a rolling 60-minute average, resulting from the operation of any emission control device installed pursuant to the requirements of Sections 9-11-302, 304, 306, or 308. (Amended November 15, 1995)
- 9-11-400 ADMINISTRATIVE REQUIREMENTS**
- 9-11-401 Compliance Schedule - Emissions Limits:** A person who must modify existing sources or equipment to comply with any of the requirements of Sections 9-11-302, 304, 306, 308, 310, or 311 shall comply with the following increments of progress:
- 401.1 By December 31, 1994, submit to the APCO a plan for compliance for each affected boiler. The plan shall include at a minimum:
- 1.1 A list of all boilers subject to this Rule, including the manufacturer, model number, and maximum rated heat input capacity for each boiler;
 - 1.2 A description of the boiler design and the NO_x control system being considered for each boiler, as well as a description of any ancillary equipment related to the control of emissions. Data on the expected performance of the NO_x control system shall also be included;
 - 1.3 A compliance schedule for each boiler, including, but not limited to, specific dates for the following events: final engineering, contract award, begin construction, boiler outage, complete construction, and final compliance.
- 401.2 No later than 12 months prior to each applicable compliance date for each boiler, submit to the APCO applications for all Authorities to Construct required to install or modify any equipment necessary to comply with the respective sections of this Rule.
- 401.3 By the applicable compliance date for each boiler, be in compliance with all the applicable requirements of this Rule. (Amended November 15, 1995)
- 9-11-402 Initial and Annual Demonstration of Compliance:** Within 90 boiler operating days of the applicable compliance schedule specified in Sections 9-11-302, 304, 306, or

310 for each type of fuel, any person subject to this Rule shall conduct source tests, as specified in Sections 9-11-601, 602, or 603, for the purpose of demonstrating compliance with the appropriate Sections 9-11-302, 304, 306, 310, or 311. Compliance determination by source test with the respective emission limits shall be based on the methods referenced in Sections 9-11-601, 602, and 603. These source tests shall be conducted for each boiler at least once in any calendar year or within 12 months following the actual operation of each boiler during any calendar year. Source testing for compliance with the ammonia emission limit of Section 9-11-311 shall be conducted at least once quarterly, for each boiler that operated during the calendar quarter and was equipped with an ammonia-based NO_x control device. In no event shall this Section be interpreted to require non-gaseous fuel burning, solely to perform emissions testing or compliance demonstrations. Initial and annual source testing for NO_x and CO shall not be required to demonstrate compliance with Sections 9-11-302, 304, 306, 308, or 310, provided CEMS are in place pursuant to Section 9-11-503.

(Amended 11/15/95; 5/17/00)

9-11-500 MONITORING AND RECORDS

9-11-501 Fuels Monitoring: Any person who operates an electric power generating steam boiler subject to Sections 9-11-302, 304, 306, 308, or 310 shall install a non-resettable, totalizing and continuous recording fuel meter in each fuel line of each such boiler.
(Amended 11/15/95; 5/17/00)

9-11-502 Modified Maximum Heat Input Capacity: Any person who operates an electric power generating steam boiler that has been physically modified and/or operated in such a manner that its maximum heat input capacity is different from that specified on the nameplate shall demonstrate to the APCO the maximum heat input capacity, as measured by a fuel meter, while operating the source at maximum capacity.
(Amended 11/15/95; 5/17/00)

9-11-503 Emissions Monitoring: Any person who operates an electric power generating steam boiler subject to Sections 9-11-302, 304, 306, 308, or 310 shall provide, properly install, maintain in good working order, and operate an in-stack continuous emission monitoring system (CEMS) for each such boiler, approved by the APCO to demonstrate compliance with the provisions of this Rule by measuring the pollutants nitrogen oxides (NO_x) and carbon monoxide (CO) and diluents oxygen (O₂) or carbon dioxide (CO₂), following the procedures of subsection 9-11-503.1. The operator of a boiler with a rated heat input capacity less than 1.5 billion BTU/hour may petition the APCO to certify the alternative monitoring methods for nitrogen oxides (NO_x) and carbon monoxide (CO) referenced in subsection 9-11-503.2.

503.1 The CEMS must meet the requirements of the District Manual of Procedures, Volume V, Continuous Emission Monitoring, Policy and Procedures, and the federal requirements referenced in Sections 9-11-601 and 602. Each CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive six (6) minute period for boilers with a rated heat input capacity greater than or equal to 1.5 billion BTU/hour, and for each successive fifteen (15) minute period for boilers with a rated heat input capacity less than 1.5 billion BTU/hour.

503.2 For any boiler that has (1) a heat input capacity less than 1.5 billion BTU/hr, (2) an average capacity factor of 10 percent or less during the previous three calendar years, (3) a capacity factor of 20 percent or less in each of those three calendar years, and (4) no ammonia-based NO_x control device installed, the owner and/or operator may, as an alternative to the CEMS:

2.1 Measure and record NO_x emissions by the source test correlation of emissions with boiler operating load, excess oxygen levels, fuels, and any other specified parameters, following the procedures specified in 40 CFR Pt. 75, Appendix E;

2.2 Measure and record CO emissions by following the analogous procedure (for NO_x emissions) specified in 40 CFR Pt. 75, Appendix

E, except that CO emissions (instead of NO_x emissions) will be determined by using 40 CFR Pt. 60, Appendix A, Method 10.

(Amended 11/15/95; 5/17/00)

9-11-504 Records: Any person who operates an electric power generating steam boiler subject to Sections 9-11-302, 304, 306, 308, or 310 shall maintain permanent hourly continuous emission monitoring records for each such boiler, in a form suitable for inspection and approved by the APCO, for a period of at least five (5) years. Such records shall be made available to the APCO upon request. These records shall include, but are not limited to:

504.1 The type of fuel burned and its sulfur content, quantity of fuel burned (BTU/hour), gross energy production in megawatt hours (MW-hour), and the injection rate for any reactant chemicals used by the emission control system(s);

504.2 The continuous emission monitoring measurements for NO_x and CO, each expressed in ppmv and lb/hour, and also in lb/MMBTU for NO_x, and for O₂ or CO₂, expressed in volume percent;

504.3 The date, time, and duration of any startup, shutdown or malfunction in the operation of any boiler, emission control equipment, or emission monitoring equipment;

504.4 The results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of any continuous emission monitors that have been installed pursuant to Section 9-11-503 of this Rule;

504.5 The results of any source testing required by Section 9-11-402; and

504.6 The capacity factors of any boiler affected by Sections 9-11-503.

504.7 The systemwide NO_x emission rate as specified in Sections 9-11-308, as applicable.

(Amended 11/15/95; 5/17/00)

9-11-505 Reporting Requirements: Any person who operates an electric power generating steam boiler subject to Sections 9-11-302, 304, 306, 308, 310, or 311 shall meet the following reporting requirements:

505.1 Report to the APCO any violation of any emission standard with which the boiler is required to comply, in writing within 96 hours after such occurrence;

505.2 Submit a written report for each calendar month to the APCO. The report shall be submitted within 30 days of the close of the month reported on and shall include:

2.1 A summary of the data obtained from the continuous emission monitoring systems that have been installed pursuant to Section 9-11-503. The format of the summary shall be approved in writing by the APCO; and

2.2 The date, time, duration, and magnitude of emissions in excess of the appropriate standards required by Sections 9-11-302, 304, 306, 308, 310, or 311; the nature and cause of the excess (if known); the corrective actions taken; and the preventive measures adopted.

(Amended 11/15/95; 5/17/00)

9-11-600 MANUAL OF PROCEDURES

9-11-601 Determination of Nitrogen Oxides: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of nitrogen oxides are set forth in the District Manual of Procedures, Volume IV, ST-13A. Compliance with the nitrogen oxides emission limits of Sections 9-11-302, 304, and 306 shall be determined by the source tests specified in Section 9-11-402 using ST-13A (nitrogen oxides) and ST-14 (oxygen) or ST-5 (carbon dioxide), and by the continuous emission monitors that have been installed pursuant to Section 9-11-503 and meet the requirements of Volume V of the District Manual of Procedures and the federal requirements specified in 40 CFR Pt. 75 and Appendices. Compliance with the nitrogen oxides emission limits of Sections 9-11-308 shall also be determined by these continuous emission monitors.

(Amended November 15, 1995)

9-11-602 Determination of Carbon Monoxide and Stack Gas Oxygen or Carbon Dioxide: Compliance with the carbon monoxide emission limits of Section 9-11-310 shall be

determined by the source tests specified in Section 402 using the methods set forth in the District Manual of Procedures, Volume IV, ST-6 (carbon monoxide) and ST-14 (oxygen) or ST-5 (carbon dioxide), and by the continuous emission monitors that have been installed pursuant to Section 503 and meet the requirements of Volume V of the District Manual of Procedures and the federal requirements specified in 40 CFR Pt. 60, App. B, Spec. 4 (CO), and 40 CFR Pt. 75 and Appendices (O₂ and CO₂).

(Amended November 15, 1995)

9-11-603 Determination of Ammonia: Compliance with the ammonia emission limit of Section 9-11-311 shall be determined by the source tests specified in Section 9-11-402 using the methods set forth in the District Manual of Procedures, Volume IV, ST-1B, and EPA Method 350.3, or an alternate method approved by the APCO.

(Amended November 15, 1995)

9-11-604 Compliance Determination: All emission determinations shall be made in the as-found operating condition, except that no compliance determination be established during periods of startup or shutdown, as specified by Section 9-11-111. In addition to the continuous emission monitoring system (CEMS) required by Sections 9-11-503, 601 and 602, emission determinations shall include at least one source test for each boiler, conducted at its rated or attainable heat input capacity, in any calendar year or within twelve (12) months following the actual operation of each boiler during any calendar year, as specified in Section 9-11-402. Source testing for compliance with the ammonia emission limit of Section 9-11-311 shall be conducted at least once quarterly for each boiler that operated during the calendar quarter. Compliance determination by source test with the respective emission limits of Sections 9-11-302, 304, 306, 310 and 311 shall be in accordance with the methods specified in Sections 9-11-601, 602 and 603. Initial and annual source testing for NO_x and CO shall not be required to demonstrate compliance with Sections 9-11-302, 304, 306, 308, or 310, provided CEMS are in place pursuant to Section 9-11-503. Compliance determination by CEMS shall be based on a clock hour average.

(Amended November 15, 1995)

9-11-605 Determination of Higher Heating Value: If certification of the Higher Heating Value is not provided by the third party fuel supplier, it shall be determined by one of the following test methods: (1) ASTM D2015-85 for solid fuels; (2) ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuels; or (3) ASTM D1826-88 or ASTM D1945-81 in conjunction with ASTM D3588-89 for gaseous fuels.

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 12
NITROGEN OXIDES FROM GLASS MELTING FURNACES**

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REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 12
NITROGEN OXIDES FROM GLASS MELTING FURNACES
(Adopted January 19, 1994)

9-12-100 GENERAL

9-12-101 Description: This Rule limits the emission of nitrogen oxides (NO_x) from glass melting furnaces.

9-12-110 Exemptions: The requirements of this Rule shall not apply to the following:

110.1 Furnaces in which all the heat required for melting is provided by electric current from electrodes submerged in the molten glass, except that heat may be supplied by fossil fuels for start-up when the furnace contains no molten glass.

110.2 Furnaces with a production capacity of 4550 kilograms (5 short tons) of glass per day or less.

9-12-200 DEFINITIONS

9-12-201 Glass Melting Furnace: Any unit in which heat is used to produce molten glass.

9-12-202 Idling: Operation at less than 25 percent of the production capacity stated on the Permit to Operate.

9-12-203 Nitrogen Oxide Emissions (NO_x): The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.

9-12-204 Pull: To remove glass from the furnace.

9-12-205 Shutdown: The period of time during which a furnace is allowed to cool from operating temperature to a cooler temperature.

9-12-206 Start-up: The period of time during which a furnace is heated to operating temperature from a lower temperature.

9-12-300 STANDARDS

9-12-301 Emission Limit: A person subject to this Rule shall reduce nitrogen oxides emissions (NO_x) from any glass melting furnace pursuant to the following increments of progress until emissions do not exceed the emission limit of 2.75 grams of NO_x per kilogram (5.5 lbs of NO_x per short ton) of glass pulled, averaged over any consecutive 3-hour period excluding start-up, shutdown, and idling periods.

301.1 Effective January 1, 1997, a person shall not emit NO_x from any glass melting furnace at a rate in excess of 90 percent of the baseline emission rate established pursuant to Section 9-12-403.

301.2 Effective January 1, 1999, a person shall not emit NO_x from any glass melting furnace at a rate in excess of 75 percent of the baseline emission rate established pursuant to Section 9-12-403.

301.3 Effective January 1, 2001, a person shall not emit NO_x from any glass melting furnace at a rate in excess of 55 percent of the baseline emission rate established pursuant to Section 9-12-403, and this percentage shall be reduced by 10 percent effective each January 1 thereafter until NO_x emissions do not exceed the emission limit set forth in Section 9-12-301.

9-12-400 ADMINISTRATIVE REQUIREMENTS

9-12-401 Compliance Schedule: A person subject to this Rule shall follow the compliance schedule below:

401.1 By February 1, 1995, submit a list of the quantity of glass produced, average cullet content, and average electric boost rate for each furnace on each day for calendar year 1994.

401.2 By March 1, 1995, submit for District approval proposed furnace operating parameters for source tests, as required by Section 9-12-402.

401.3 By August 1, 1995, conduct District-approved source tests for determining the baseline emission rate pursuant to Section 9-12-403.

401.4 By September 1, 1995, submit the results of each source test conducted pursuant to Section 9-12-401.3 accompanied by the supporting data required by Section 9-12-402.3.

401.5 By 12 months prior to the effective date of an increment of progress pursuant to Section 9-12-301, submit a complete application for any Authority to Construct necessary to achieve compliance with that increment of progress.

9-12-402 Furnace Operating Parameters for Source Tests: Source tests pursuant to Sections 9-12-403 and 9-12-404 shall be conducted while furnaces are operating within District-approved parameters established as follows:

402.1 A person subject to this Rule shall submit proposed ranges of operating parameters for APCO approval. These ranges shall be representative of operation at or near maximum sustained production capacity as determined from data submitted pursuant to Section 9-12-401.1. Proposed ranges shall include, at a minimum, ranges for excess oxygen as measured at the top of the regenerators, bridgewall temperature, firing rate, electric boost rate, cullet content, and pull rate.

402.2 The APCO shall review the proposed ranges of parameters. Ranges representative of operation at or near maximum sustained production capacity will be approved by the APCO in writing.

402.3 For each source test conducted pursuant to Sections 9-12-403 and 9-12-404, sufficient data to confirm that the furnace was operated within the approved parameters shall be submitted with the source test results. At a minimum this data shall include average excess oxygen as measured at the top of the regenerators, average bridgewall temperature, average firing rate, average electric boost rate, average cullet content, and average pull rate.

9-12-403 Baseline Emission Rate Determinations: A person subject to this Rule shall establish the baseline emission rate for each glass melting furnace as follows:

403.1 One or more District-approved source tests shall be conducted for each furnace in accordance with the requirements of Sections 9-12-601 through 9-12-604.

403.2 Each source test shall be conducted while the furnace is operating within parameters approved by the APCO pursuant to Section 9-12-402.

403.3 Where one source test is conducted for a furnace, the baseline emission rate for that furnace shall be the emission rate per ton of glass pulled as determined by the source test.

403.4 Where more than one source test is conducted for a furnace, the baseline emission rate for that furnace shall be the sum of the mass emissions per hour as determined by each source test divided by the sum of the glass production per hour as determined for each source test.

- 9-12-404 Compliance Determinations:** A person subject to this Rule shall demonstrate compliance with Section 9-12-301 for each glass melting furnace as follows:
- 404.1 By April 1, 1997, and by each April 1 thereafter, one or more District-approved source tests shall be conducted for each furnace in accordance with the provisions of Sections 9-12-601 through 9-12-604.
 - 404.2 Each source test shall be conducted while the furnace is operating within parameters approved by the APCO pursuant to Section 9-12-402.
 - 404.3 Where one source test is conducted for a furnace, the emission rate for that furnace shall be the emission rate per ton of glass as determined by the source test.
 - 404.4 Where more than one source test is conducted for a furnace, the emission rate for that furnace shall be the sum of the mass emissions per hour as determined by each source test divided by the sum of the glass production per hour as determined for each source test.
 - 404.5 Source test results shall be submitted to the APCO (Attn: Source Test Section) by May 1 of each year.

9-12-500 MONITORING AND RECORDS

- 9-12-501 Production Monitoring:** Any person who operates a glass melting furnace subject to this Rule shall maintain a means of determining the quantity of glass pulled during a source test administered pursuant to Sections 9-12-601 through 9-12-604.
- 9-12-502 Fuel Monitoring:** Any person who operates a glass melting furnace subject to this Rule shall maintain a non-resettable totalizing fuel meter which monitors fuel usage for each glass melting furnace.

9-12-600 MANUAL OF PROCEDURES

- 9-12-601 Determination of Nitrogen Oxides:** Emissions of nitrogen oxides shall be determined using the source test procedure set forth in the District Manual of Procedures, Volume IV, ST-13A or B, as modified by Section 9-12-603.
- 9-12-602 Determination of Oxygen:** Emissions of oxygen shall be determined using the source test procedure set forth in the District Manual of Procedures, Volume IV, ST-14, as modified by Section 9-12-603.
- 9-12-603 Sampling and Averaging Period:** Sampling shall be conducted for three hours of continuous furnace operation as specified in Section 9-12-301. Concentrations of nitrogen oxides and oxygen shall be averaged over three hours.
- 9-12-604 Calculation of Mass Emission Rate Per Ton of Glass Pulled:** For purposes of determining compliance with Section 9-12-301, concentration of nitrogen oxides shall be converted to a mass emission rate pursuant to EPA Method 19, 40 CFR Part 60 Appendix A, and this result shall be converted to a mass emission rate per ton of glass pulled.

6/2/80

REGULATION 11
HAZARDOUS POLLUTANTS
RULE 1
LEAD

11-1-100 GENERAL

- 11-1-101 Description:** The purpose of this Rule is to control the emission of lead to the atmosphere.
- 11-1-102 Optional Standards:** A person responsible for the emission of lead may elect, by written notification to the APCO, to be regulated by the requirements of Section 11-1-303 rather than Section 11-1-302.

11-1-300 STANDARDS

- 11-1-301 Daily Limitation:** A person shall not discharge any emission of lead, or compound of lead calculated as lead, from any emission point in excess of 6.75 kg (15 lbs) per day.
- 11-1-302 Ground Level Concentration Limit Without Background:** A person shall not discharge any emission of lead, or compound of lead calculated as lead, that will result in ground level concentrations in excess of 1.0 ug/m³ averaged over 24 hours.
- 11-1-303 Ground Level Concentration Limit With Background:** A person electing to be regulated by this Section shall not discharge any emission of lead, or compound of lead, which results in ground level concentrations of lead in excess of 1.0 ug/m³ above the background concentrations of lead averaged over 30 days. This Section shall not apply to the ground level concentrations occurring on the property from which such emission occurs, provided such property from the emission point to the point of such concentration is controlled by the person responsible for the emissions.

11-1-500 MONITORING AND RECORDS

- 11-1-501 Monitoring:** A person electing to be regulated by Section 11-1-303 shall provide, install and maintain monitoring equipment.

11-1-600 MANUAL OF PROCEDURES

- 11-1-601 Determination of Emission Limits:** Emissions limited by Section 11-1-302 shall be determined by use of dispersion calculations described in the Manual of Procedures.
- 11-1-602 Determination of Background Concentrations:** Background concentrations of lead shall be determined in accordance with procedures described in the Manual of Procedures.
- 11-1-603 Monitoring Equipment:** Monitoring equipment required by Section 11-1-501, and procedures for siting, use and maintenance, shall be as specified in the Manual of Procedures.

REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 2
RENDERING PLANTS

6/2/80

12-2-100 GENERAL

12-2-101 Description: This Rule applies to plants whose purpose is the reduction of animal matter, commonly referred to as rendering plants.

12-2-200 DEFINITIONS

12-2-201 Reduction: Any heated process including rendering, cooking, drying, dehydrating, digesting, evaporating and protein concentrations.

12-2-300 STANDARDS

12-2-301 Processing of Gases: A person shall not reduce animal matter unless all gases, vapors and gas-entrained effluents are incinerated at a temperature of not less than 650°C (1202°F) for a period of not less than 0.3 seconds; or processed in a manner which is equally or more effective for the purpose of air pollution odor control, as determined by the APCO.

12-2-500 MONITORING AND RECORDS

12-2-501 Monitoring: A person incinerating or processing gases, vapors or gas-entrained effluents pursuant to this Rule shall provide, install, calibrate and maintain in good working order, devices for indicating temperature, pressure or other operating conditions, as specified by the APCO.

REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 3
ASPHALT AIR BLOWING

6/2/80

12-3-100 GENERAL

12-3-101 Description: This Rule applies to operations involving the air blowing of asphalt.

12-3-300 STANDARDS

12-3-301 Processing of Gases: A person shall not engage in the air blowing of asphalt unless all gases, vapors and gas-entrained effluents are incinerated at temperatures of not less than 650°C (1202°F) for a period of not less than 0.3 seconds; or processed in a manner which is equally or more effective for the purpose of air pollution odor control as determined by the APCO.

12-3-500 MONITORING AND RECORDS

12-3-501 Monitoring: A person incinerating or processing gases, vapors or gas-entrained effluents pursuant to this Rule shall provide, install, calibrate and maintain in good working order devices for indicating temperature, pressure or other operating conditions, as specified by the APCO.

6/2/80

REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 4
SANDBLASTING

12-4-100 GENERAL

- 12-4-101 Description:** The standards in this Rule are uniform throughout the State and apply to sandblasting operations other than permanent abrasive blasting operations or equipment. Visible emissions from permanent operations or equipment are controlled by Regulation 6.
- 12-4-102 Multiple Nozzles:** Emissions from unconfined blasting employing multiple nozzles shall be judged as a single source unless it can be demonstrated by the owner or operator that each nozzle, evaluated separately, meets the emission and performance standards provided for in this Rule.

12-4-200 DEFINITIONS

- 12-4-201 Abrasives:** Any material used in abrasive blasting operations including but not limited to sand, slag, steel shot, garnet or walnut shells.
- 12-4-202 Abrasive Blasting:** The operations of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface.
- 12-4-203 Abrasive Blasting Equipment:** Any equipment utilized in abrasive blasting operations.
- 12-4-204 Confined Blasting:** Any abrasive blasting conducted in an enclosure which significantly restricts air contaminants from being emitted to the ambient atmosphere, including but not limited to shrouding, tanks, drydocks, buildings and structures.
- 12-4-205 Hydroblasting:** Any abrasive blasting using high pressure liquid as the propelling force.
- 12-4-206 Multiple Nozzles:** More than one nozzle being used to abrasive blast the same surface in such close proximity that their separate plumes are indistinguishable.
- 12-4-207 Permanent Abrasive Blasting Operations or Equipment:** Abrasive blasting operations conducted, or abrasive blasting equipment located in a building which is used in whole or in part for abrasive blasting operations.
- 12-4-208 Sandblasting:** Abrasive blasting.
- 12-4-209 Source:** The impact surface from any single abrasive blasting nozzle.
- 12-4-210 Unconfined Blasting:** Any abrasive blasting which does not conform with Sections 12-4-204 and 207.
- 12-4-211 Vacuum Blasting:** Any abrasive blasting in which the spent abrasive and surface material is immediately collected by a vacuum device.
- 12-4-212 Wet Abrasive Blasting:** Any abrasive blasting using compressed air as the propelling force, which in the judgement of the APCO uses an amount of water adequate to minimize the plume.

12-4-300 STANDARDS

- 12-4-301 Ringelmann 1 Limitations:** Except as provided in Section 12-4-302 a person shall not discharge from any abrasive blasting, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than No. 1 on the Ringelmann Chart.
- 12-4-302 Ringelmann 2 Limitations:** A person shall not discharge from any abrasive blasting, if he complies with applicable standards in Section 12-4-303 and Sections 12-4-305 through 307, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than No. 2 on the Ringelmann Chart.
- 12-4-303 Performance Standards For Abrasive Blasting For Traffic Markers:** Surface prepa-

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ration for raised traffic delineating markers and pavement marking removal using abrasive blasting shall comply with at least one of the following performance standards:

303.1 Wet abrasive blasting, hydroblasting or vacuum blasting shall be used.

303.2 Dry unconfined abrasive blasting for removal or surface preparation for immediate application of pavement markings of less than 93 m² (1,000 ft.²), or for surface preparation for raised traffic delineating markers shall use abrasives as defined in Sections 12-4-305 through 307.

12-4-304 Performance Standards For Other Abrasive Blasting: Any abrasive blasting operation except as provided for in Section 12-4-303 shall comply with at least one of the following performance standards:

304.1 Confined blasting shall be used.

304.2 Wet abrasive blasting shall be used.

304.3 Hydroblasting shall be used.

304.4 Dry unconfined blasting shall use abrasives as defined in Sections 12-4-305 through 307.

12-4-305 Performance Standards For Abrasives: All abrasives used for dry unconfined blasting shall comply with the following performance standards:

305.1 Before blasting, the abrasive shall not contain more than 1% by weight material passing a #70 U.S. Standard sieve when tested in accordance with "Method of Test for Abrasive Media Evaluation," Test Method No. California 371-A. Certified abrasives re-used for dry unconfined blasting must conform with Section 12-4-305.1.

305.2 After blasting, the abrasive shall not contain more than 1.8% by weight material five micron or smaller when tested in accordance with "Method of Test for Abrasive Media Evaluation", Test Method No. California 371-A. Certified abrasives re-used for dry unconfined blasting are exempt from Section 12-4-305.2.

12-4-306 Certification of Abrasives: A person shall not conduct dry unconfined blasting unless the abrasive(s) used in such operation have been certified by the ARB, on at least an annual basis, to comply with the performance standards set forth in Section 12-4-305. Any person who desires certification of an abrasive shall furnish to the ARB an adequate test sample, together with fees to defray the cost of testing. The ARB maintains an up-to-date list of certified abrasives.

12-4-307 Abrasive Labeling by Suppliers: All manufacturers and suppliers of abrasives certified for dry unconfined abrasive blasting shall legibly and permanently label the invoice, bill of lading and abrasive packaging or container with the following statement: "ARB certified for dry unconfined blasting."

12-28-94

FEDERAL GENERAL CONFORMITY REGULATION

The Code of Federal Regulations, title 40, chapter I, subchapter C, parts 6 and 51 are amended and part 93 is added as follows:

PART 6--[AMENDED]

1. The authority citation for part 51 continues to read as follows:

Authority: 42 U.S.C. 7401-7671q.

2. Section 6.303 is amended by reserving paragraphs (c) through (g) and revising paragraphs (a) and (b) to read as follows:

(a) The Clean Air Act, as amended in 1990, 42 U.S.C. 7476(c), requires Federal actions to conform to any State implementation plan approved or promulgated under section 110 of the Act. For EPA actions, the applicable conformity requirements specified in 40 CFR part 51, subpart W, 40 CFR part 93, subpart B, and the applicable State implementation plan must be met.

(b) In addition, with regard to wastewater treatment works subject to review under Subpart E of this part, the responsible official shall consider the air pollution control requirements specified in section 316(b) of the Clean Air Act, 42 U.S.C. 7616, and Agency implementation procedures.

PART 51--[AMENDED]

1. The authority citation for part 51 continues to read as follows:

Authority: 42 U.S.C. 7401-7671q.

2. Part 51 is amended by adding a new subpart W to read as follows:

W -- DETERMINING CONFORMITY OF GENERAL FEDERAL ACTIONS TO STATE OR FEDERAL IMPLEMENTATION PLANS

Sec.

51.850 Prohibition.

51.852 Definitions.

51.853 Applicability.

51.854 Conformity analysis.

51.855 Reporting requirements.

51.856 Public participation.

51.857 Frequency of conformity determinations.

- 51.858 Criteria for determining conformity of general Federal actions.
- 51.859 Procedures for conformity determinations of general Federal actions.
- 51.860 Mitigation of air quality impacts.

W – DETERMINING CONFORMITY OF GENERAL FEDERAL ACTIONS TO STATE OR FEDERAL IMPLEMENTATION PLANS

§51.850 Prohibition.

- (a) No department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan.
- (b) A Federal agency must make a determination that a Federal action conforms to the applicable implementation plan in accordance with the requirements of this rule before the action is taken.
- (c) The preceding sentence does not include Federal actions where either:
 - (1) A National Environmental Policy Act (NEPA) analysis was completed as evidenced by a final environmental assessment (EA), environmental impact statement (EIS), or finding of no significant impact (FONSI) that was prepared prior to the effective date of this rule, or
 - (2) (i) Prior to the effective date of this rule, an EA was commenced or a contract was awarded to develop the specific environmental analysis,
 - (ii) Sufficient environmental analysis is completed by March 15, 1994 so that the Federal agency may determine that the Federal action is in conformity with the specific requirements and the purposes of the applicable SIP pursuant to the agency's affirmative obligation under section 176(c) of the Clean Air Act (Act), and
 - (iii) A written determination of conformity under section 176(c) of the Act has been made by the Federal agency responsible for the Federal action by March 15, 1994.
- (d) Notwithstanding any provision of this subpart, a determination that an action is in conformance with the applicable implementation plan does not exempt the action from any other requirements of the applicable implementation plan, the NEPA, or the Act.

§51.852 Definitions.

Terms used but not defined in this part shall have the meaning given them by the Act and EPA's regulations, in that order of priority.

Affected Federal land manager means the Federal agency or the Federal official charged with direct responsibility for management of an area designated as Class I under 42 U.S.C. 7472 of the Act that is located within 100 km of the proposed Federal action.

Applicable implementation plan or applicable SIP means the portion (or portions) of the SIP or most recent revision thereof, which has been approved under section 110 of the Act, or promulgated under section 110(c) of the Act (Federal implementation plan), or promulgated or approved pursuant to regulations promulgated under section 301(d) of the Act and which implements the relevant requirements of the Act.

Areawide air quality modeling analysis means an assessment on a scale that includes the entire nonattainment or maintenance area which uses an air quality dispersion model to determine the effects of emissions on air quality.

Cause or contribute to a new violation means a Federal action that:

- (1) Causes a new violation of a national ambient air quality standard (NAAQS) at a location in a nonattainment or maintenance area which would otherwise not be in violation of the standard during the future period in question if the Federal action were not taken, or
- (2) Contributes, in conjunction with other reasonably foreseeable actions, to a new violation of a NAAQS at a location in a nonattainment or maintenance area in a manner that would increase the frequency or severity of the new violation.

Caused by, as used in the terms "direct emissions" and "indirect emissions," means emissions that would not otherwise occur in the absence of the Federal action.

Criteria pollutant or standard means any pollutant for which there is established a NAAQS at 40 CFR part 50.

Direct emissions means those emissions of a criteria pollutant or its precursors that are caused or initiated by the Federal action and occur at the same time and place as the action.

Emergency means a situation where extremely quick action on the part of the Federal agencies involved is needed and where the timing of such Federal activities makes it impractical to meet the requirements of this rule, such as natural disasters like hurricanes or earthquakes, civil disturbances such as terrorist acts, and military mobilizations.

Emissions budgets are those portions of the applicable SIP's projected emissions inventories that describe the levels of emissions (mobile, stationary, area, etc.) that provide for meeting reasonable further progress milestones, attainment, and/or maintenance for any criteria pollutant or its precursors.

Emission offsets, for purposes of section 51.858, are emissions reductions which are quantifiable, consistent with the applicable SIP attainment and reasonable further progress demonstrations, surplus to reductions required by, and credited to, other applicable SIP provisions, enforceable at both the State and Federal levels, and permanent within the timeframe specified by the program.

Emissions that a Federal agency has a continuing program responsibility for means emissions that are specifically caused by an agency carrying out its authorities, and does not include emissions that occur due to subsequent activities, unless such activities are required by the Federal agency. Where an agency, in performing its normal program responsibilities, takes actions itself or imposes conditions that result in air pollutant emissions by a non-Federal entity taking subsequent actions, such emissions are covered by the meaning of a continuing program responsibility.

EPA means the United States Environmental Protection Agency.

Federal action means any activity engaged in by a department, agency, or instrumentality of the Federal government, or any activity that a department, agency or instrumentality of the Federal government supports in any way, provides financial assistance for, licenses, permits, or approves, other than activities related to transportation plans, programs, and projects developed, funded, or approved under title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 *et seq.*). Where the Federal action is a permit, license, or other approval for some aspect of a non-Federal undertaking, the relevant activity is the part, portion, or phase or the non-Federal undertaking that requires the Federal permit, license, or approval.

Federal agency means, for purposes of this rule, a Federal department, agency, or instrumentality of the Federal government.

Increase the frequency or severity of any existing violation of any standard in any area means to cause a nonattainment area to exceed a standard more often or to cause a violation at a greater concentration than previously existed and/or would

otherwise exist during the future period in question, if the project were not implemented.

Indirect emissions means those emissions of a criteria pollutant or its precursors that:

- (1) Are caused by the Federal action, but may occur later in time and/or may be farther removed in distance from the action itself but are still reasonably foreseeable, and
- (2) The Federal agency can practicably control and will maintain control over due to a continuing program responsibility of the Federal agency.

Local air quality modeling analysis means an assessment of localized impacts on a scale smaller than the entire nonattainment or maintenance area, including, for example, congested roadway intersections and highways or transit terminals, which uses an air quality dispersion model to determine the effects of emissions on air quality.

Maintenance area means an area with a maintenance plan approved under section 175A of the Act.

Maintenance plan means a revision to the applicable SIP, meeting the requirements of section 175A of the Act.

Metropolitan Planning Organization (MPO) is that organization designated as being responsible, together with the State, for conducting the continuing, cooperative, and comprehensive planning process under 23 U.S.C. 134 and 49 U.S.C. 1607.

Milestone has the meaning given in sections 182(g)(1) and 189(c)(1) of the Act.

National ambient air quality standards (NAAQS) are those standards established pursuant to section 109 of the Act and include standards for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone, particulate matter (PM-10), and sulfur dioxide (SO₂).

NEPA is the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq.*).

Nonattainment Area (NAA) means an area designated as nonattainment under section 107 of the Act and described in 40 CFR part 81.

Precursors of a criteria pollutant are:

- (1) For ozone, nitrogen oxides (NO_x), unless an area is exempted from NO_x requirements under section 182(f) of the Act, and volatile organic compounds (VOC) and
- (2) For PM-10, those pollutants described in the PM-10 nonattainment area applicable SIP as significant contributors to the PM-10 levels.

Reasonably foreseeable emissions are projected future indirect emissions that are identified at the time the conformity determination is made; the location of such emissions is known and the emissions are quantifiable, as described and documented by the Federal agency based on its own information and after reviewing any information presented to the Federal agency.

Regionally significant action means a Federal action for which the direct and indirect emissions of any pollutant represent 10 percent or more of a nonattainment or maintenance area's emissions inventory for that pollutant.

Regional water and/or wastewater projects include construction, operation, and maintenance of water or wastewater conveyances, water or wastewater treatment facilities, and water storage reservoirs which affect a large portion of a nonattainment or maintenance area.

Total of direct and indirect emissions means the sum of direct and indirect emissions increases and decreases caused by the Federal action; i.e., the "net" emissions considering all direct and indirect emissions. The portion of emissions which are exempt or presumed to conform under section 51.853, paragraph (c), (d), (e), or (f) are not included in the "total of direct and indirect emissions." The "total of direct and indirect emissions" includes emissions of criteria pollutants and emissions of precursors of criteria pollutants.

§51.853 Applicability.

(a) Conformity determinations for Federal actions related to transportation plans, programs, and projects developed, funded, or approved under title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 *et seq.*) must meet the procedures and criteria of 40 CFR part 51, subpart T, in lieu of the procedures set forth in this subpart.

(b) For Federal actions not covered by paragraph (a) of this section, a conformity determination is required for each pollutant where the total of direct and indirect

emissions in a nonattainment or maintenance area caused by a Federal action would equal or exceed any of the rates in paragraphs (b)(1) or (2) of this section.

(1) For purposes of paragraph (b) of this section, the following rates apply in nonattainment areas (NAAs):

	<u>Tons/Year</u>
Ozone (VOC's or NO_x)	
Serious NAA's	50
Severe NAA's	25
Extreme NAA's	10
Other ozone NAA's outside an ozone transport region	100
Marginal and moderate NAA's inside an ozone transport region	
VOC	50
NO _x	100
Carbon monoxide	
All NAA's	100
SO₂ or NO₂	
All NAA's	100
PM-10	
Moderate NAA's	100
Serious NAA's	70
Pb	
All NAA's	25

(2) For purposes of paragraph (b) of this section, the following rates apply in maintenance areas:

	<u>Tons/Year</u>
Ozone (NO_x), SO₂ or NO₂	
All Maintenance Areas	100
Ozone (VOC's)	
Maintenance areas inside an ozone transport region	50
Maintenance areas outside an ozone transport region	100
Carbon monoxide	
All maintenance areas	100
PM-10	
All maintenance areas	100
Pb	
All maintenance areas	25

(c) The requirements of this subpart shall not apply to:

(1) Actions where the total of direct and indirect emissions are below the emissions levels specified in paragraph (b) of this section.

(2) The following actions which would result in no emissions increase or an increase in emissions that is clearly de minimis:

(i) Judicial and legislative proceedings.

(ii) Continuing and recurring activities such as permit renewals where activities conducted will be similar in scope and operation to activities currently being conducted.

(iii) Rulemaking and policy development and issuance.

(iv) Routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails, and facilities.

(v) Civil and criminal enforcement activities, such as investigations, audits, inspections, examinations, prosecutions, and the training of law enforcement personnel.

(vi) Administrative actions such as personnel actions, organizational changes, debt management or collection, cash management, internal agency audits, program budget proposals, and matters relating to the administration and collection of taxes, duties and fees.

(vii) The routine, recurring transportation of materiel and personnel.

(viii) Routine movement of mobile assets, such as ships and aircraft, in home port reassignments and stations (when no new support facilities or personnel are required) to perform as operational groups and/or for repair or overhaul.

(ix) Maintenance dredging and debris disposal where no new depths are required, applicable permits are secured, and disposal will be at an approved disposal site.

(x) Actions, such as the following, with respect to existing structures, properties, facilities and lands where future activities conducted will be similar in scope and operation to activities currently being conducted at the existing structures, properties,

facilities, and lands; for example, relocation of personnel, disposition of federally-owned existing structures, properties, facilities, and lands, rent subsidies, operation and maintenance cost subsidies, the exercise of receivership or conservatorship authority, assistance in purchasing structures, and the production of coins and currency.

(xi) The granting of leases, licenses such as for exports and trade, permits, and easements where activities conducted will be similar in scope and operation to activities currently being conducted.

(xii) Planning, studies, and provision of technical assistance.

(xiii) Routine operation of facilities, mobile assets and equipment.

(xiv) Transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of the transfer.

(xv) The designation of empowerment zones, enterprise communities, or viticultural areas.

(xvi) Actions by any of the Federal banking agencies or the Federal Reserve Banks, including actions regarding charters, applications, notices, licenses, the supervision or examination of depository institutions or depository institution holding companies, access to the discount window, or the provision of financial services to banking organizations or to any department, agency or instrumentality of the United States.

(xvii) Actions by the Board of Governors of the Federal Reserve System or any Federal Reserve Bank to effect monetary or exchange rate policy.

(xviii) Actions that implement a foreign affairs function of the United States.

(xix) Actions (or portions thereof) associated with transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly after a specific, reasonable condition is met, such as promptly after the land is certified as meeting the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and where the Federal agency does not retain continuing authority to control

emissions associated with the lands, facilities, title, or real properties.

(xx) Transfers of real property, including land, facilities, and related personal property from a Federal entity to another Federal entity and assignments of real property, including land, facilities, and related personal property from a Federal entity to another Federal entity for subsequent deeding to eligible applicants.

(xxi) Actions by the Department of the Treasury to effect fiscal policy and to exercise the borrowing authority of the United States.

(3) Actions where the emissions are not reasonably foreseeable, such as the following:

(i) Initial Outer Continental Shelf lease sales which are made on a broad scale and are followed by exploration and development plans on a project level.

(ii) Electric power marketing activities that involve the acquisition, sale and transmission of electric energy.

(4) Actions which implement a decision to conduct or carry out a conforming program such as prescribed burning actions which are consistent with a conforming land management plan.

(d) Notwithstanding the other requirements of this subpart, a conformity determination is not required for the following Federal actions (or portion thereof):

(1) The portion of an action that includes major new or modified stationary sources that require a permit under the new source review (NSR) program (section 173 of the Act) or the prevention of significant deterioration (PSD) program (title I, part C of the Act).

(2) Actions in response to emergencies or natural disasters such as hurricanes, earthquakes, etc., which are commenced on the order of hours or days after the emergency or disaster and, if applicable, which meet the requirements of paragraph (e) of this section;

(3) Research, investigations, studies, demonstrations, or training [other than those exempted under section 51.853(c)(2)], where no environmental detriment is incurred and/or, the particular action furthers air quality research, as determined by the State agency primarily responsible for the applicable SIP;

(4) Alteration and additions of existing structures as specifically required by new or existing applicable environmental legislation or environmental regulations (e.g., hush houses for aircraft engines and scrubbers for air emissions).

(5) Direct emissions from remedial and removal actions carried out under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and associated regulations to the extent such emissions either comply with the substantive requirements of the PSD/NSR permitting program or are exempted from other environmental regulation under the provisions of CERCLA and applicable regulations issued under CERCLA.

(e) Federal actions which are part of a continuing response to an emergency or disaster under section 51.853(d)(2) and which are to be taken more than 6 months after the commencement of the response to the emergency or disaster under section 51.853(d)(2) are exempt from the requirements of this subpart only if:

(1) The Federal agency taking the actions makes a written determination that, for a specified period not to exceed an additional 6 months, it is impractical to prepare the conformity analyses which would otherwise be required and the actions cannot be delayed due to overriding concerns for public health and welfare, national security interests and foreign policy commitments; or

(2) For actions which are to be taken after those actions covered by paragraph (e)(1) of this section, the Federal agency makes a new determination as provided in paragraph (e)(1) of this section.

(f) Notwithstanding other requirements of this subpart, actions specified by individual Federal agencies that have met the criteria set forth in either paragraph (g)(1) or (g)(2) and the procedures set forth in paragraph (h) of this section are presumed to conform, except as provided in paragraph (j) of this section.

(g) The Federal agency must meet the criteria for establishing activities that are presumed to conform by fulfilling the requirements set forth in either paragraph (g)(1) or (g)(2) of this section:

(1) The Federal agency must clearly demonstrate using methods consistent with this rule that the total of direct and indirect emissions from the type of activities which would be presumed to conform would not:

(i) Cause or contribute to any new violation of any standard in any area;

(ii) Interfere with provisions in the applicable SIP for maintenance of any standard;

(iii) Increase the frequency or severity of any existing violation of any standard in any area; or

(iv) Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area including, where applicable, emission levels specified in the applicable SIP for purposes of:

(A) A demonstration of reasonable further progress;

(B) A demonstration of attainment; or

(C) A maintenance plan; or

(2) The Federal agency must provide documentation that the total of direct and indirect emissions from such future actions would be below the emission rates for a conformity determination that are established in paragraph (b) of this section, based, for example, on similar actions taken over recent years.

(h) In addition to meeting the criteria for establishing exemptions set forth in paragraphs (g)(1) or (g)(2) of this section, the following procedures must also be complied with to presume that activities will conform:

(1) The Federal agency must identify through publication in the Federal Register its list of proposed activities that are presumed to conform and the basis for the presumptions;

(2) The Federal agency must notify the appropriate EPA Regional Office(s), State and local air quality agencies and, where applicable, the agency designated under section 174 of the Act and the MPO and provide at least 30 days for the public to comment on the list of proposed activities presumed to conform;

(3) the Federal agency must document its response to all the comments received and make the comments, response, and final list of activities available to the public upon request; and

(4) the Federal agency must publish the final list of such activities in the Federal Register.

(i) Notwithstanding the other requirements of this subpart, when the total of direct and indirect emissions of any pollutant from a Federal action does not equal or exceed the rates specified in paragraph (b) of this section, but represents 10 percent or more of a nonattainment or maintenance area's total emissions of that pollutant, the action is defined as a regionally significant action and the requirements of section 51.850 and sections 51.855-860 shall apply for the Federal action.

(j) Where an action otherwise presumed to conform under paragraph (f) of this section is a regionally significant action or does not in fact meet one of the criteria in paragraph (g)(1) of this section, that action shall not be presumed to conform and the requirements of section 51.850 and sections 51.855-860 shall apply for the Federal action.

(k) The provisions of this subpart shall apply in all nonattainment and maintenance areas.

§51.854 Conformity analysis.

Any Federal department, agency, or instrumentality of the Federal government taking an action subject to this subpart must make its own conformity determination consistent with the requirements of this subpart. In making its conformity determination, a Federal agency must consider comments from any interested parties. Where multiple Federal agencies have jurisdiction for various aspects of a project, a Federal agency may choose to adopt the analysis of another Federal agency or develop its own analysis in order to make its conformity determination.

§51.855 Reporting requirements.

(a) A Federal agency making a conformity determination under section 51.858 must provide to the appropriate EPA Regional Office(s), State and local air quality agencies and, where applicable, affected Federal land managers, the agency designated under section 174 of the Act and the MPO a 30 day notice which describes the proposed action and the Federal agency's draft conformity determination on the action.

(b) A Federal agency must notify the appropriate EPA Regional Office(s), State and local air quality agencies and, where applicable, affected Federal land managers, the agency designated under section 174 of the Clean Air Act and the MPO within 30 days after making a final conformity determination under section 51.858.

§51.856 Public participation.

(a) Upon request by any person regarding a specific Federal action, a Federal agency must make available for review its draft conformity determination under section 51.858 with supporting materials which describe the analytical methods and conclusions relied upon in making the applicability analysis and draft conformity determination.

(b) A Federal agency must make public its draft conformity determination under section 51.858 by placing a notice by prominent advertisement in a daily newspaper of general circulation in the area affected by the action and by providing 30 days for written public comment prior to taking any formal action on the draft determination. This comment period may be concurrent with any other public involvement, such as occurs in the NEPA process.

(c) A Federal agency must document its response to all the comments received on its draft conformity determination under section 51.858 and make the comments and responses available, upon request by any person regarding a specific Federal action, within 30 days of the final conformity determination.

(d) A Federal agency must make public its final conformity determination under section 51.858 for a Federal action by placing a notice by prominent advertisement in a daily newspaper of general circulation in the area affected by the action within 30 days of the final conformity determination.

§51.857 Frequency of conformity determinations.

(a) The conformity status of a Federal action automatically lapses 5 years from the date a final conformity determination is reported under section 51.855, unless the Federal action has been completed or a continuous program has been commenced to implement that Federal action within a reasonable time.

(b) Ongoing Federal activities at a given site showing continuous progress are not new actions and do not require periodic redeterminations so long as such activities are within the scope of the final conformity determination reported under section 51.855.

(c) If, after the conformity determination is made, the Federal action is changed so that there is an increase in the total of direct and indirect emissions above the levels in section 51.853(b), a new conformity determination is required.

§51.858

Criteria for determining conformity of general Federal actions.

(a) An action required under section 51.853 to have a conformity determination for a specific pollutant, will be determined to conform to the applicable SIP if, for each pollutant that exceeds the rates in section 51.853, paragraph (b), or otherwise requires a conformity determination due to the total of direct and indirect emissions from the action, the action meets the requirements of paragraph (c) of this section, and meets any of the following requirements:

(1) For any criteria pollutant, the total of direct and indirect emissions from the action are specifically identified and accounted for in the applicable SIP's attainment or maintenance demonstration;

(2) For ozone or nitrogen dioxide, the total of direct and indirect emissions from the action are fully offset within the same nonattainment or maintenance area through a revision to the applicable SIP or a similarly enforceable measure that effects emission reductions so that there is no net increase in emissions of that pollutant;

(3) For any criteria pollutant, except ozone and nitrogen dioxide, the total of direct and indirect emissions from the action meet the requirements:

(i) specified in paragraph (b) of this section, based on areawide air quality modeling analysis and local air quality modeling analysis, or

(ii) meet the requirements of paragraph (a)(5) and, for local air quality modeling analysis, the requirement of paragraph (b) of this section;

(4) For CO or PM-10,

(i) Where the State agency primarily responsible for the applicable SIP determines that an areawide air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in paragraph (b) of this section, based on local air quality modeling analysis or

(ii) Where the State agency primarily responsible for the applicable SIP determines that an areawide air quality modeling analysis is appropriate and that a local air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in paragraph (b) of this section, based on areawide modeling, or meet the requirements of paragraph (a)(5) of this section; or

(5) For ozone or nitrogen dioxide, and for purposes of paragraphs (a)(3)(ii) and (a)(4)(ii) of this section, each portion of the action or the action as a whole meets any of the following requirements:

(i) Where EPA has approved a revision to an area's attainment or maintenance demonstration after 1990 and the State makes a determination as provided in paragraph (A) or where the State makes a commitment as provided in paragraph (B):

(A) The total of direct and indirect emissions from the action (or portion thereof) is determined and documented by the State agency primarily responsible for the applicable SIP to result in a level of emissions which, together with all other emissions in the nonattainment (or maintenance) area, would not exceed the emissions budgets specified in the applicable SIP.

(B) The total of direct and indirect emissions from the action (or portion thereof) is determined by the State agency responsible for the applicable SIP to result in a level of emissions which, together with all other emissions in the nonattainment (or maintenance) area, would exceed an emissions budget specified in the applicable SIP and the State Governor or the Governor's designee for SIP actions makes a written commitment to EPA which includes the following:

(1) A specific schedule for adoption and submittal of a revision to the SIP which would achieve the needed emission reductions prior to the time emissions from the Federal action would occur;

(2) Identification of specific measures for incorporation into the SIP which would result in a level of emissions which, together with all other emissions in the nonattainment or maintenance area, would not exceed any emissions budget specified in the applicable SIP;

(3) A demonstration that all existing applicable SIP requirements are being implemented in the area for the pollutants affected by the Federal action, and that local authority to implement additional requirements has been fully pursued;

(4) A determination that the responsible Federal agencies have required all reasonable mitigation measures associated with their action; and

(5) Written documentation including all air quality analyses supporting the conformity determination.

(C) Where a Federal agency made a conformity determination based on a State commitment under subparagraph (a)(5)(i)(B) of this paragraph, such a State commitment is automatically deemed a call for a SIP revision by EPA under section 110(k)(5) of the Act, effective on the date of the Federal conformity determination and requiring response within 18 months or any shorter time within which the State commits to revise the applicable SIP;

(ii) The action (or portion thereof), as determined by the MPO, is specifically included in a current transportation plan and transportation improvement program which have been found to conform to the applicable SIP under 40 CFR part 51, subpart T, or 40 CFR part 93, subpart A;

(iii) The action (or portion thereof) fully offsets its emissions within the same nonattainment or maintenance area through a revision to the applicable SIP or an equally enforceable measure that effects emission reductions equal to or greater than the total of direct and indirect emissions from the action so that there is no net increase in emissions of that pollutant;

(iv) Where EPA has not approved a revision to the relevant SIP attainment or maintenance demonstration since 1990, the total of direct and indirect emissions from the action for the future years [described in paragraph (d) of section 51.859] do not increase emissions with respect to the baseline emissions;

(A) The baseline emissions reflect the historical activity levels that occurred in the geographic area affected by the proposed Federal action during:

(1) Calendar year 1990,

(2) The calendar year that is the basis for the classification (or, where the classification is based on multiple years, the most representative year), if a classification is promulgated in 40 CFR part 81, or

(3) The year of the baseline inventory in the PM-10 applicable SIP;

(B) The baseline emissions are the total of direct and indirect emissions calculated for the future years [described in paragraph (d) of section 51.859] using the historic activity levels [described in subparagraph (a)(5)(iv)(A) of this paragraph] and appropriate emission factors for the future years; or

(v) Where the action involves regional water and/or wastewater projects, such projects are sized to meet only the needs of population projections that are in the applicable SIP.

(b) The areawide and/or local air quality modeling analyses must:

(1) Meet the requirements in section 51.859 and

(2) Show that the action does not:

(i) Cause or contribute to any new violation of any standard in any area; or

(ii) Increase the frequency or severity of any existing violation of any standard in any area.

(c) Notwithstanding any other requirements of this section, an action subject to this subpart may not be determined to conform to the applicable SIP unless the total of direct and indirect emissions from the action is in compliance or consistent with all relevant requirements and milestones contained in the applicable SIP, such as elements identified as part of the reasonable further progress schedules, assumptions specified in the attainment or maintenance demonstration, prohibitions, numerical emission limits, and work practice requirements.

(d) Any analyses required under this section must be completed, and any mitigation requirements necessary for a finding of conformity must be identified before the determination of conformity is made.

§51.859 Procedures for conformity determinations of general Federal actions.

(a) The analyses required under this subpart must be based on the latest planning assumptions.

(1) All planning assumptions must be derived from the estimates of population, employment, travel, and congestion most recently approved by the MPO, or other agency authorized to make such estimates, where available.

(2) Any revisions to these estimates used as part of the conformity determination, including projected shifts in geographic location or level of population, employment, travel, and congestion, must be approved by the MPO or other agency authorized to make such estimates for the urban area.

(b) The analyses required under this subpart must be based on the latest and most accurate emission estimation techniques available as described below, unless such techniques are inappropriate. If such techniques are inappropriate and written approval of the EPA Regional Administrator is obtained for any modification or substitution, they may be modified or another technique substituted on a case-by-case basis or, where appropriate, on a generic basis for a specific Federal agency program.

(1) For motor vehicle emissions, the most current version of the motor vehicle emissions model specified by EPA and available for use in the preparation or revision of SIPs in that State must be used for the conformity analysis as specified below:

(i) The EPA must publish in the Federal Register a notice of availability of any new motor vehicle emissions model; and

(ii) A grace period of three months shall apply during which the motor vehicle emissions model previously specified by EPA as the most current version may be used. Conformity analyses for which the analysis was begun during the grace period or no more than 3 years before the Federal Register notice of availability of the latest emission model may continue to use the previous version of the model specified by EPA.

(2) For non-motor vehicle sources, including stationary and area source emissions, the latest emission factors specified by EPA in the "Compilation of Air Pollutant Emission Factors (AP-42)" must be used for the conformity analysis unless more accurate emission data are available, such as actual stack test data from stationary sources which are part of the conformity analysis.

(c) The air quality modeling analyses required under this Subpart must be based on the applicable air quality models, data bases, and other requirements specified in the most recent version of the "Guideline on Air Quality Models (Revised)" (1986), including supplements (EPA publication no. 450/2-78-027R), unless:

(1) The guideline techniques are inappropriate, in which case the model may be modified or another model substituted on a case-by-case basis or, where appropriate, on a generic basis for a specific Federal agency program; and

(2) Written approval of the EPA Regional Administrator is obtained for any modification or substitution.

(d) The analyses required under this subpart, except section 51.858, paragraph (a)(1), must be based on the total of direct and indirect emissions from the action and must reflect emission scenarios that are expected to occur under each of the following cases:

(1) The Act mandated attainment year or, if applicable, the farthest year for which emissions are projected in the maintenance plan;

(2) The year during which the total of direct and indirect emissions from the action is expected to be the greatest on an annual basis; and

(3) any year for which the applicable SIP specifies an emissions budget.

§51.860 **Mitigation of air quality impacts.**

(a) Any measures that are intended to mitigate air quality impacts must be identified and the process for implementation and enforcement of such measures must be described, including an implementation schedule containing explicit timelines for implementation.

(b) Prior to determining that a Federal action is in conformity, the Federal agency making the conformity determination must obtain written commitments from the appropriate persons or agencies to implement any mitigation measures which are identified as conditions for making conformity determinations.

c) Persons or agencies voluntarily committing to mitigation measures to facilitate positive conformity determinations must comply with the obligations of such commitments.

(d) In instances where the Federal agency is licensing, permitting or otherwise approving the action of another governmental or private entity, approval by the Federal agency must be conditioned on the other entity meeting the mitigation measures set forth in the conformity determination.

(e) When necessary because of changed circumstances, mitigation measures may be modified so long as the new mitigation measures continue to support the conformity determination. Any proposed change in the mitigation measures is subject to the reporting requirements of section 51.856 and the public participation requirements of section 51.857.

(f) Written commitments to mitigation measures must be obtained prior to a positive conformity determination and such commitments must be fulfilled.

(g) After this SIP revision is approved by EPA, any agreements, including mitigation measures, necessary for a conformity determination will be both State and federally enforceable. Enforceability through the applicable SIP will apply to all persons who agree to mitigate direct and indirect emissions associated with a Federal action for a conformity determination.