

EL DORADO COUNTY AIR QUALITY MANAGEMENT DISTRICT

RULE 101 - GENERAL PROVISIONS AND DEFINITIONS

(Adopted: February 15, 2000, Amended June 20, 2017)

101.1 General

- A. **Title:** These Rules and Regulations shall be known as the Rules and Regulations of the El Dorado County Air Quality Management District.
- B. **Applicability:** Except as otherwise specifically provided in these rules and regulations or where the context otherwise indicates, the provisions of this rule shall apply to all rules and regulations of the El Dorado County Air Quality Management District.
- C. **Severability:** If any regulation, rule, section, subsection, sentence, clause, phrase, or portion of these rules and regulations is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of the Rules and Regulations of the El Dorado County Air Quality Management District.

101.2 Definitions

Except as otherwise provided in the Rules and Regulations or where the context otherwise indicates, words used in the Rules and Regulations are used in exactly the same sense as the same words used in Division 26 of the Health and Safety Code of the State of California.

Affected Pollutants Those pollutants for which an ambient air quality standard has been established by the Environmental Protection Agency or by the ARB and the precursors to such pollutants, and those pollutants regulated by the Environmental Protection Agency under the Federal Clean Air Act or by the ARB under the Health and Safety Code including volatile organic compounds, nitrogen oxides, sulfur oxides, PM-10, carbon monoxide, ethylene, lead, asbestos, beryllium, mercury, vinyl chloride, fluorides, sulfuric acid mist, hydrogen sulfide, total reduced sulfur, and reduced sulfur compounds, and those pollutants which the Environmental Protection Agency, after due process, or the ARB or the District, after public hearing, determine may have a significant adverse effect on the environment, the public health, or the public welfare.

Air Contaminant or Any matter which causes or tends to cause the degradation of air

Pollutant	quality when discharged, released, or propagated by other means into the atmosphere. Such matter includes, but is not limited to, smoke, dust, charred paper, soot, grime, carbon compounds, noxious acids, fumes, gases, odors, or particulate matter, or any combination thereof.
Air Pollution Control Officer	The Air Pollution Control Officer of the Air Quality Management District of El Dorado County or his authorized representative.
Allowable Emissions	The emission rate calculated using the maximum design capacity of the source, unless the source is subject to Permit to Operate conditions which limit the operating rate, hours of operation, or both; the most stringent of any applicable emission limitations contained in the Rules and Regulations; or, as specified in a Permit to Operate condition(s).
Alter	Any addition to, enlargement of, replacement of, major modification, or change of the design, capacity, process, or arrangement; or, increase in the connected loading of equipment or control apparatus, which will significantly increase or effect the kind or amount of air contaminants emitted.
Ambient	Local atmospheric conditions such as temperature, barometric pressure, wind speed and direction, pollutant concentrations, etc.
Ambient Air Quality Standards	The standards define maximum concentrations of pollutants, in the air, that the District is striving to achieve. Both the state and federal governments have promulgated standards. Primary standards are designed to protect health with an adequate margin of safety. Secondary standards are designed to protect public welfare from any known or anticipated adverse effects. The standards are subject to periodic revision as deemed necessary. All references to "ambient air quality standards" in these Rules and Regulations shall be considered to be the National Ambient Air Quality Standards unless denoted otherwise.
ARB	The California State Air Resources Board, or any person authorized to act on its behalf.
Atmosphere	The air that envelopes or surrounds the earth. Where air pollutants are emitted into a building not designed specifically as a piece of air pollution control equipment, such emissions into the building shall be considered to be an emission into the atmosphere.
Attainment Pollutant	A pollutant for which the Environmental Protection Agency has designated the Air Quality Management District or a sub-District zone, as either an attainment or unclassified area.
Baseline Concentration	The ambient concentration level reflecting actual air quality as monitored or modeled as of (1) January 1, 1981, minus any contribution from major stationary sources and major

modifications on which construction commenced on or after January 5, 1975, or attainment pollutants; and (2) the date an application for Authority to Construct is deemed complete by the Air Pollution Control Officer for nonattainment pollutants.

Board	The El Dorado County Air Quality Management Board of Directors.
Breakdown Condition	An unforeseeable failure or malfunction of (1) any air pollution control equipment or related operating equipment which causes a violation of any emission limitation or restriction prescribed by the Rules and Regulations or state law; or (2) any in-stack continuous monitoring equipment. The failure or malfunction shall not be the result of neglect or disregard of any air pollution control law, rule, or regulation; intentional or the result of negligence; the result of improper maintenance; a recurrent breakdown of the same equipment; or a nuisance.
Calendar Quarter	Any of the following three month periods: January 1 through March 31, April 1 through June 30, July 1 through September 30, or October 1 through December 31.
Calendar Year	The twelve-month period of January 1 through December 31.
California Environmental Quality Act (CEQA)	Public Resources Code Section 21000, et seq.
Cold Cleaner	Any batch loaded, non-boiling solvent degreaser.
Combustible or Flammable Waste	Any garbage, rubbish, trash, rags, paper, boxes, crates, excelsior, ashes, offal, carcass of a dead animal, petroleum product waste, or any other combustible or flammable refuse material.
Combustion Contaminant	Any particulate matter discharged into the atmosphere from the burning of any material which contains carbon in either the free or combined state.
Contiguous Property	Two or more parcels of land with a common boundary or separated solely by a public roadway or other public right-of-way.
Control Equipment	A device which reduces or eliminates the release of an air contaminant to the atmosphere.
Criteria Pollutant	An air pollutant regulated by a national ambient air quality standard contained within 40 CFR Part 50.
Day	The 24-hour period starting at twelve midnight and continuing up to the subsequent twelve midnight hour.
District	The Air Quality Management District of El Dorado County.
Dust	Minute solid particles released into the air by natural forces or by mechanical processes such as crushing, grinding, covering, bagging, sweeping, milling, drilling, demolishing, blasting, shoveling, conveying, or other similar processes

Emission	Air contaminants released into the atmosphere.
Emission Data	Measured or calculated concentrations or weights of air contaminants emitted into the atmosphere. Data used to calculate emission data is not emission data.
Emission Point	The place, located in a horizontal plane and vertical elevation, at which air contaminants enter the atmosphere.
Emission Unit	Any part of a stationary source which emits or could have the potential to emit any pollutant subject to regulation.
EPA	United States Environmental Protection Agency or any person authorized to act on its behalf.
Exempt Compounds:	Compounds which are not involved in the generation of ozone and, as such, are not considered to be a Volatile Organic Compound. They are as follows:
General compounds	<ul style="list-style-type: none"> Methane (CH₄) carbon monoxide (CO) carbon dioxide (CO₂) Carbonic acid (CO(OH)₂) acetone ammonium carbonate ((NH₄)HCO₃(NH₄)CO₂NH₂) metal carbides (M-C) or carbonates (M-CO₃) ethane methyl acetate completely methylated siloxanes methyl formate (HCOOCH₃)
Chlorinated compounds	<ul style="list-style-type: none"> methylene chloride (dichloromethane) 1,1,1-trichloroethane (methyl chloroform) 1,1,2,2-tetrachloroethane (perchloroethylene)
Fluorinated compounds	<ul style="list-style-type: none"> 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane trans -1,3,3,3 tetrafluoropropane (HFO-1234ze) trans -1 -chloro - 3,3,3 trifluoropropene (HFO-1233zd)
Chlorinated and fluorinated compounds	parachlorobenzotrifluoride (PCBTF) (1-chloro-4-trifluoromethyl benzene)
Chlorofluorocarbons (CFCs)	<ul style="list-style-type: none"> trichlorofluoromethane (CFC-11) dichlorodifluoromethane (CFC-12) 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113) 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114) chloropentafluoroethane (CFC-115)
Hydrochlorofluorocarbons (HCFCs)	<ul style="list-style-type: none"> chlorodifluoromethane (HCFC-22) chlorofluoromethane (HCFC-31) 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123) 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a) 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124) 1,1-dichloro-1-fluoroethane (HCFC-141b) 1-chloro-1,1-difluoroethane (HCFC-142b) 1-chloro-1-fluoroethane (HCFC-151a)

3,3-dichloror-1,1,1,2,2-pentafluoropropane (HCFC-225ca)
1,3-dichloror-1,1,2,2,3-pentafluoropropane (HCFC-225cb)

Hydrofluorocarbons (HFCs) trifluoromethane (HFC-23)
difluoromethane (HFC-32)
1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee)
pentafluoroethane (HFC-125)
1,1,2,2-tetrafluoroethane (HFC-134)
1,1,1,2-tetrafluoroethane (HFC-134a)
1,1,1-trifluoroethane (HFC-143a)
1,1-difluoroethane (HFC-152a)
ethylfluoride (HFC-161)
1,1,1,2,3,4,4,5,5,6,6,6-heptafluoropropane (HFC-227ea)
1,1,1,2,3,3-hexafluoropropane (HFC-236ea)
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)
1,1,1,3,3-pentafluorobutane (HFC-365mfc)

Perfluorocarbons (PFCs) The following four classes of

- a. Completely fluorinated alkanes.
- b. Completely fluorinated ethers, with no multiple bonding of carbons.
- c. Completely fluorinated tertiary amines with no multiple bonding of carbons.
- d. Those containing sulfur which bonds only with carbon and fluorine, but has no multiple bonding of carbons.

Perfluorocarbon and siloxane compounds are assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon and siloxane compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.

The following low-reactive organic compounds which have been exempted by the U.S. EPA:

- a. acetone
- b. ethane
- c. perchlorobenzotrifluoride
- d. perchloroethylene
- e. methyl acetate
- f. propylene carbonate (PC)
- g. dimethyl carbonate (DMC)
- h. tertiary-butyl acetate (TBAC)
- i. aminomethyl propanol (AMP, 2-amino-2-methyl-1-propanol)

Facility Any building, structure, facility, or emission unit which emits or may emit any affected pollutant directly or as a fugitive emission.

1. Building, structure, facility, or emission unit includes all

- pollutant emitting activities which:
- a. belong to the same industrial grouping;
 - b. are located on one property or on two or more contiguous properties; and,
 - c. are under the same or common ownership, operation, or control; or are owned or operated by entities which are under common control.
2. Pollutant emitting activities shall be considered as part of the same industrial grouping if:
- a. they have the same two-digit standard industrial classification code under the system described in the 1987 Standard Industrial Classification Manual; or
 - b. they are part of a common production process, i.e. an industrial, manufacturing, or any connected process which involves a common material.

Federal Land Manager	Means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.
Flue	Any duct or passage for air, gases or the like, such as a stack or chimney.
Fossil Fuel	Natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials.
Fossil Fuel Fired Steam Generator	A furnace or boiler which burns fossil fuel for the primary purpose of producing steam by heat transfer.
Fugitive Dust	Solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, as a result of operation of a facility.
Fugitive Emissions	Emissions which could not reasonably be passed through a stack, chimney, vent, or other functionally equivalent opening. Fugitive hazardous air pollutant emissions shall be considered when determining whether a source is a major stationary source pursuant to Title V of the Federal Clean Air Act as amended in 1990 and Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM. The fugitive emissions of a source shall not be considered in determining whether it is a major stationary source pursuant to Title V, unless the source belongs to one of the following categories of stationary sources listed in 40 CFR 70.2, "Definitions," "Major Source".
Fumes	Minute solid particles generated by the condensation of vapors from the sublimation of solid matter or evaporation of liquid matter.
Global Warming Potential	Each greenhouse gas's ability to retain infrared radiation expressed in terms of CO ₂ equivalents (CO ₂ e).

Greenhouse Gases (GHG)	Gases in the atmosphere that absorb and emit radiation in the thermal infrared range. The primary GHG are water vapor, carbon dioxide (CO ₂), methane (CH ₄), nitrous oxides (N ₂ O), and ozone (O ₃).
Hazardous Air Pollutant (HAP)	Any air pollutant listed pursuant to Section 112(b) of the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.).
Health and Safety Code	Division 26 of the State of California Health and Safety Code, unless specifically listed as otherwise.
Hearing Board	The appellate review board of the District as provided for in the Health and Safety Code.
Incineration	Operation in which waste material is combusted with the principle purpose, or with the principle result, being to reduce its bulk or facilitate its disposal.
Incinerator	Any furnace or other closed fire chamber used to dispose of combustible waste by burning; the products of combustion are directed through a flue or chimney.
Installation	The placement, assemblage, or construction of equipment or control apparatus at the premises where the equipment or control apparatus will be used, including all preparatory work at such premises.
Lake Tahoe Air Basin	Established pursuant to Section 39606 of the Health and Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60113(a) or 40 CFR 81.275. This air basin is delineated on an official map on file at the California Air Resources Board Headquarters Office.
Lowest Achievable Emission Rate	For any source, the most stringent of: <ol style="list-style-type: none"> 1. The most effective emission limitation which the Environmental Protection Agency has certified as contained in the implementation plan of any state, approved under the Clean Air Act, for such class or category of source, unless the owner or operator of the proposed source demonstrates to the satisfaction of the Air Pollution Control Officer that such limitation is not achievable; 2. The most effective emissions control technique which has been achieved in practice, for such category or class of source; or 3. Any other emission control technique found, after public hearing, by the Air Pollution Control Officer to be technologically feasible and cost effective for such class or category of sources, or for a specific source.

In no event shall the application of lowest achievable emission rate allow for emissions in excess of those allowable under 40 CFR Part 60.

Major Stationary Source

A stationary source which emits or has the potential to emit: 25 tons per year (tpy) or more of nitrogen oxides, 25 tpy or more of volatile organic compounds, 100 tpy or more of carbon monoxide, 100 tpy or more of PM10, 100 tpy of sulfur oxides, 100 tpy of any regulated pollutant or levels specified by the U.S. Environmental Protection Agency pursuant to the Federal Clean Air Act of 1990, Section 112(a)(1). In addition, any physical change occurring at a stationary source not otherwise qualifying as a major stationary source, which would constitute a major stationary source by itself makes the source a major stationary source. For the purposes of *Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM*, a major stationary source also includes any source which emits or has a potential to emit 10 tpy of one HAP or 25 tpy of two or more Hazardous Air Pollutants (HAPs), as listed pursuant to Section 112(b) of the Federal Clean Air Act, or any lesser quantity threshold promulgated by the U.S. Environmental Protection Agency.

Major Modification

Modification to a major stationary source which results in an increase in the potential to emit greater than: 25 tons per year of nitrogen oxides, 25 tons per year of volatile organic compounds, 100 tons per year of carbon monoxide, 40 tons per year of sulfur oxides, or 15 tons per year of PM10 aggregated with all other increases in potential to emit over the period of five consecutive years before the application for modification, and including the calendar year of the most recent application.

Modification

Any physical change, change in method of operation (including change in fuel characteristics), addition to, or any change in hours of operation, or change in production rate of, which:

1. For an emissions unit:
 - a. Would necessitate a change in permit conditions;
 - b. Is not specifically limited by a permit condition; or
 - c. Results in an increase, a decrease, or no change in emissions which are not subject to emission limitations.
2. For a stationary source: is a modification of any emission units, or addition of any new emission units.
3. The following shall not be considered a modification:
 - a. A change in ownership;
 - b. Routine maintenance and repair;
 - c. A reconstructed stationary source or emission unit

which shall be treated as a new stationary source or emission unit; and

- d. The addition of a continuous emission monitoring system.

Mountain Counties Air Basin	Established pursuant to Section 39606 of the Health and Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60111 (i), the Mountain Counties Air Basin includes all of El Dorado County except that portion included in the Lake Tahoe Air Basin, defined by 17 CCR 60113(b).
Multiple-Chamber Incinerator	Any article, machine, equipment, contrivance, structure, or part of a structure used to dispose of combustible refuse by burning, consisting of three or more refractory lined combustion furnaces in series, physically separated by refractory walls, interconnected by gas passage-ports or ducts employing adequate design parameters necessary for maximum combustion of the material to be burned.
Nonattainment Pollutant	Any pollutant for which an ambient air quality standard was exceeded within the District more than three (3) discontinuous times (or, for annual standards, more than one (1) time) within the three (3) years immediately preceding the date when the application for the Authority to Construct was filed, or which has been designated nonattainment pursuant to final rule-making by the Environmental Protection Agency published in the Federal Register, or which has been designated nonattainment by the ARB pursuant to Section 39607 of the Health and Safety Code. Any pollutant which is a precursor to a nonattainment pollutant is, itself, a nonattainment pollutant.
NOx	The sum of all oxides of nitrogen, except for nitrous oxide, collectively expressed as nitrogen dioxide.
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 in the chemical composition or properties of a material
Orchard or Citrus Heaters	Any article, machine, equipment, or other contrivance, burning any type of fuel or material, used or capable of being used for the purpose of giving protection from frost damage.
Organic Solvents	Any organic materials used for cleaning which are liquids at standard conditions.
Owner or Operator	Any person who owns, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.
Particulate Matter	Any material which can exist in a finely divided form as a liquid

or solid at standard conditions, except uncombined water.

Pathological Waste	Includes, but not limited to, human or animal tissue, or natural constituents thereof.								
Person	Any person, company, association, organization, user, partnership, business trust, corporation, firm, contractor, supplier, installer, operator, owner or operator, government agency or public district, or officer or employee thereof.								
PM_{2.5} (PM_{2.5})	Particulate matter with an aerodynamic diameter smaller than or equal to a nominal 2.5 microns as measured by an applicable reference test method or method found in Article 2, Subchapter 6, Title 17, California Code of Regulations (commencing with Section 94100).								
PM₁₀ (PM₁₀)	Particulate matter with an aerodynamic diameter smaller than or equal to a nominal 10 microns as measured by an applicable reference test method or method found in Article 2, Subchapter 6, Title 17, California Code of Regulations (commencing with Section 94100).								
Portable Equipment	Equipment which is periodically relocated and is not operated more than a total of 180 days at any one location in the District within any continuous 12 month period.								
PPMV	Parts per million by volume expressed on a dried gas basis.								
Precursor	A pollutant that, when emitted into the atmosphere, may undergo either a chemical or physical change which then produces another pollutant for which an ambient air quality standard has been adopted, or whose presence in the atmosphere will contribute to the violation of one or more ambient air quality standards. The following precursor-secondary air contaminant relationships shall be used: <table><thead><tr><th>Precursor</th><th>Secondary Air Contaminant</th></tr></thead><tbody><tr><td><i>Volatile Organic Compounds</i></td><td>Ozone PM10 (organic fraction)</td></tr><tr><td><i>Oxides of Nitrogen</i></td><td>Ozone Nitrogen dioxide PM10 (nitrate fraction)</td></tr><tr><td><i>Oxides of Sulfur</i></td><td>Sulfur dioxide Sulfates PM10 (sulfate fraction)</td></tr></tbody></table>	Precursor	Secondary Air Contaminant	<i>Volatile Organic Compounds</i>	Ozone PM10 (organic fraction)	<i>Oxides of Nitrogen</i>	Ozone Nitrogen dioxide PM10 (nitrate fraction)	<i>Oxides of Sulfur</i>	Sulfur dioxide Sulfates PM10 (sulfate fraction)
Precursor	Secondary Air Contaminant								
<i>Volatile Organic Compounds</i>	Ozone PM10 (organic fraction)								
<i>Oxides of Nitrogen</i>	Ozone Nitrogen dioxide PM10 (nitrate fraction)								
<i>Oxides of Sulfur</i>	Sulfur dioxide Sulfates PM10 (sulfate fraction)								
Process Weight Per Hour	The total weight, including contained moisture, of all materials introduced into any specific process, which process may cause an emission. Solid fuels are considered as part of the process weight, but liquid and gaseous fuels and combustion air are not. (The Process Weight Per Hour will be derived by dividing the total process weight by number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the								

	equipment is idle.)
Public Record	Any record made available to the public containing any information relating to the conduct of the public's business that is prepared, owned, used or retained by the District, except "trade secrets" as defined in Rule 514.
Reactive Organic Compound	Same as Volatile Organic Compounds.
Record	Handwriting, typewriting, printing, photostating, photographing, and every other means of recording upon any form of communication or representation, including letters, words, pictures, sounds, or symbols, or any combination thereof, and all papers, maps, magnetic or punched cards, drums, electronic media, files, and other documents.
Reduced Sulfur Compounds	Hydrogen sulfide, carbon disulfide, and carbonyl sulfide.
Regulated Air Pollutant	<p>A pollutant which is emitted into or otherwise enters the atmosphere and for which the State or the EPA has adopted an emission limit, standard, or other requirement. Regulated air pollutants include:</p> <ol style="list-style-type: none"> 1. Oxides of nitrogen and volatile organic compounds; 2. Any pollutant for which a national ambient air quality standard has been promulgated pursuant to Section 109 of the Federal Clean Air Act; 3. Any pollutant subject to a new source performance standard promulgated pursuant to Section 111 of the Federal Clean Air Act; 4. Any ozone depleting substance specified as a Class I (chlorofluorocarbons) or Class II (hydrofluorocarbons) substance pursuant to Title VI of the Federal Clean Air Act; and 5. Any pollutant subject to a standard or requirement promulgated pursuant to Section 112 of the Federal Clean Air Act, including: <ol style="list-style-type: none"> a. Any pollutant listed pursuant to Section 112(r) of the Federal Clean Air Act (Prevention of Accidental Releases) shall be considered a "regulated air pollutant" upon promulgation of the list. b. Any HAP subject to a standard or other requirement promulgated by the U.S. Environmental Protection

Agency pursuant to Section 112(d) or adopted by the District pursuant to 112(g) and (j) of the Federal Clean Air Act shall be considered a "regulated air pollutant" for all sources or categories of sources:

1. upon promulgation of the standard or requirement, or
2. 18 months after the standard or requirement was scheduled to be promulgated pursuant to Section 112(e)(3) of the Federal Clean Air Act.

- c. Any HAP subject to a District case-by-case emissions limitation determination for a new or modified source, prior to the U.S. Environmental Protection Agency promulgation or scheduled promulgation of an emissions limitation shall be considered a "regulated air pollutant" when the determination is made pursuant to Section 112(g)(2) of the Federal Clean Air Act. In case-by-case emissions limitation determinations, the HAP shall be considered a "regulated air pollutant" only for the individual source for which the emissions limitation determination was made.

Residential Rubbish Refuse originating from residential uses and includes wood, paper, cloth, cardboard, tree trimmings, leaves, lawn clippings, and dry plants.

Rubbish Combustible and noncombustible solid wastes of commercial and industrial establishments, institutions, etc., exclusive of the highly putrescible wastes (garbage). Rubbish consists of such materials as paper, metal, wood, cans, furniture, yard trimmings, and ceramics.

Responsible Official An individual with the authority to certify that a source complies with all applicable requirements, including the conditions of permits issued such source in accordance with Regulation V PERMITS TO OPERATE. A responsible official is:

1. **For a corporation** - a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - a. The facilities employ more than 250 people or have

- gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
- b. The delegation of authority to such representative is approved in advance by the Air Pollution Control Officer.

2. **For a partnership or sole proprietorship** - a general partner or the proprietor, respectively.
3. **For a municipality, state, federal, or other public agency** - either the principal executive officer or a ranking elected official.
4. **For an acid rain unit subject to Title IV (Acid Deposition Control) of the Clean Air Act** - the designated representative of that unit for any purposes under Title IV and Rule 522 Title V - FEDERAL OPERATING PERMITS PROGRAM.

School	Any public or private school used for the primary purpose of the education of more than 12 children in kindergarten or grades 1 through 12, but does not include any private school in which education is primarily conducted in private homes.
Secondary Emissions	Emissions within the District from (1) all cargo carriers, excluding motor vehicles as defined in the Vehicle Code, which load or unload at a facility, and (2) all offsite support facilities which would be constructed as a result of construction or modification of a facility.
Section	All section references are to the Health and Safety Code unless some other code is specifically mentioned.
Sensitive Receptor	Areas, facilities, or groups that may be more heavily impacted by various activities, which create air pollutants, based on the nature of the contaminant. Examples include, but are not limited to, towns and villages, campgrounds, hospitals, nursing homes, schools, airports, public events, shopping centers, and mandatory Class I Federal areas, the elderly, the young, and people with respiratory difficulty.
Short Lived Climate Pollutants (SLCP)	<p>Pollutants that remain in the atmosphere for a much shorter time period than longer-lived climate pollutants, such as carbon dioxide. Their relative atmospheric heating potency can be tens, hundreds, or thousands of times greater than carbon dioxide. SLCP include three main components:</p> <ol style="list-style-type: none"> 1. Black Carbon – Fine particulate matter produced from old diesel engines and incomplete combustion of fuels and biomass burning. Its atmospheric residency is on the

order of days but it can continue to have an effect when it settles on snow/ice.

2. **Hydrofluorocarbons (HFCs)** – Man-made gases used in air conditioning, refrigeration, solvents, foam blowing agents, and aerosols used primarily as replacement for ozone depleting substances. Their atmospheric residency is approximately 15 years.
3. **Methane (CH₄)** – A greenhouse gas (GHG) and the principal component in natural gas and a main precursor to tropospheric ozone. Its atmospheric residency is approximately 12 years.

Source Operation	The last operation preceding the emission of an air contaminant, which operation (a) results in the separation of the air contaminants from the process materials, or the conversion of process materials into air contaminants, as in the case of combustion of fuel, and (b) is not an air pollution abatement operation.
SO_x	The sum of all oxides of sulfur, collectively expressed as sulfur dioxide.
Standard Conditions	A temperature of 68 degrees Fahrenheit and an atmospheric pressure of 14.7 pounds per square inch absolute. Results of all analyses and tests shall be calculated and reported at this temperature and pressure.
Standard Cubic Foot of Gas	The amount of gas that would occupy a volume of one (1) cubic foot, if free of water vapor, at standard conditions.
Stationary Source	Same as Facility.
Tahoe Basin	Same as Lake Tahoe Air Basin.
Totally Reduced Sulfur Compounds	Hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide.
Toxic Air Contaminant	An air contaminant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health, including air contaminants listed as such in the California Code of Regulations Title 17 Section 93000, and hazardous air pollutants identified pursuant to the federal Clean Air Act, Title I, Section 112(b).
Volatile Organic Compounds	Any compound containing carbon except exempt compounds as defined in this rule.
Wipe Cleaning	Method of cleaning which utilizes a material, such as a rag, wetted with solvent coupled with a physical rubbing process to

remove contaminants from surfaces.

101.3 Standards

Disclosure of Data: The Air Pollution Control Officer shall, upon due notice, make the following data and information available to the public and other government agencies for examination and provide copies thereof where appropriate:

- a. Air pollution data, including trade secrets, shall be disclosed in accordance with the provisions of Government Code Section 6254.7.
- b. Data required to be submitted to the District under the Air Toxics "Hot Spots" Information and Assessment Act, and which the operator believes to be a trade secret, shall be protected from disclosure in accordance with the provisions of Health and Safety Code Section 44346.

RULE 204 - WET PLUMES

Where the presence of uncombined water is the only reason for the failure of an emission to meet the limitation of Rule 202 that Rule shall not apply. The burden of proof which established the application of this Rule shall be upon the person seeking to come within its provisions.

RULE 215 - ARCHITECTURAL COATINGS

(Revised: 9/08/94; 9/27/94, 6/20/2017, 08/ 25/2020)

215.1 APPLICABILITY:

- A. Except as provided in Section 215.3, this rule is applicable to any person who supplies, manufactures, blends, repackages, sells, offers for sale, applies, or solicits the application of any architectural coating for use in the District.

215.2 SEVERABILITY:

- A. Each provision of this rule shall be deemed severable. In the event that any provision of this rule is determined to be invalid, the remainder of this rule shall continue in full force and effect.

215.3 EXEMPTIONS:

- A. The requirements of this rule shall not apply to:
 - 1. Any architectural coating that is supplied, sold, offered for sale, or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging.
 - 2. Architectural coatings supplied in containers having capacities of one liter (1.057 quart) or less provided the following requirements are met:
 - a. The container is not bundled together with other containers of the same specific coating category (listed in the Table of Standards) to be sold as a unit that exceeds one liter (1.057 quarts), excluding containers packed together for shipping to a retail outlet.
 - b. The label or any other product literature does not suggest combining multiple containers of the same specific category (listed in the Table of Standards) so that the combination exceeds one liter (1.057 quarts).
 - 3. Architectural coatings sold in non-refillable aerosol containers having capacities of one liter or less, or as defined as “Aerosol Coating Product” in Section 215.9.

215.4 REQUIREMENTS:

- A. Except as provided in Sections 215.4B and 215.4C, no person shall, within the District, supply, sell, offer for sale, apply, or solicit the application of or manufacture, blend, repackage for use within the District, any architectural coating which, at the time of sale or manufacture, contains more than the corresponding limit specified in the **Table of Standards**. Limits are expressed as “VOC Regulatory”, thinned to the manufacturer’s maximum thinning recommendation, excluding any colorant added to tint bases.

**TABLE OF STANDARDS
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS**

VOC COATINGS CATEGORY Grams VOC/L less water and exempt organic compounds	Limit (g/L)
Flat Coatings	50
Nonflat Coatings	100

VOC COATINGS CATEGORY Grams VOC/L less water and exempt organic compounds	Limit (g/L)
Nonflat - High Gloss Coatings	150
Specialty Coatings	
Aluminum Roof Coatings	400
Basement Specialty Coatings	400
Bituminous Roof Coatings	50
Bituminous Roof Primers	350
Bond Breakers	350
Concrete Curing Compounds	350
Concrete/Masonry Sealers	100
Driveway Sealers	50
Dry Fog Coatings	150
Faux Finishing Coatings	350
Fire Resistive Coatings	350
Floor Coatings	100
Form Release Compounds	250
Graphic Arts Coatings (Sign Paints)	500
High Temperature Coatings	420
Industrial Maintenance Coatings	250
Low-Solids Coatings*	120
Magnesite Cement Coatings	450
Mastic Texture Coatings	100
Metallic Pigmented Coatings	500
Multi-Color Coatings	250
Pre-Treatment Wash Primers	420
Primers, Sealers, and Undercoaters	100
Reactive Penetrating Sealers	350
Recycled Coatings	250
Roof Coatings	50
Rust Preventative Coatings	250
Shellacs: Clear	730
Shellacs: Opaque	550
Specialty Primers, Sealers, and Undercoaters	100
Stains	250
Stone Consolidants	450
Swimming Pool Coatings	340
Traffic Marking Coatings	100
Tub and Tile Refinish Coatings	420
Waterproofing Membranes	250
Wood Coatings	275
Wood Preservatives	350
Zinc-Rich Primers	340

*For Low-Solids Coatings the limit is expressed as VOC Actual.

B. **MOST RESTRICTIVE VOC LIMIT:** If a coating meets the definition in Section 215.9 for one or more specialty coating categories listed in the Table of Standards, then that coating is required to meet the VOC limit for the applicable specialty coating listed in the Table of Standards rather than the VOC limits for Flat, Nonflat, or Nonflat – High Gloss coatings.

With the exception of the specialty coating categories specified in subsections 215.4B.1 through 215.4B.12, if a coating is recommended for use in more than one of the coating categories listed in the Table of Standards, the most restrictive (or lowest) VOC content limit shall apply. This requirement applies to: usage recommendations that appear anywhere on the coating container, anywhere on 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.

1. Metallic pigmented coatings.
2. Shellacs.
3. Pretreatment wash primers.
4. Industrial maintenance coatings.
5. Low-solids coatings.
6. Wood preservatives.
7. High temperature coatings.
8. Bituminous roof primers.
9. Specialty primers, sealers, and undercoaters.
10. Aluminum roof coatings.
11. Zinc-rich primers.
12. Wood Coatings.

- C. **SELL-THROUGH OF COATINGS:** A coating manufactured prior to January 1, 2018 and that complied with the standards in effect at the time the coating was manufactured, may be sold, supplied, or offered for sale for up to three years after January 1, 2018. Such coatings may be applied at any time, both before and after January 1, 2018. This section does not apply to any coating that does not display the date or date-code required by Section 215.5A.
- D. **PAINTING PRACTICES:** All architectural coating containers shall be closed when not in use. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.
- E. **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 the Table of Standards.
- F. **COATINGS NOT LISTED IN THE TABLE OF STANDARDS:** The VOC content limit for coatings that do not meet the definition for any of the coating categories listed in the Table of Standards shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat – High Gloss coating, based on its gloss, as defined in Sections 215.9R, 215.9KK, and 215.9LL. The corresponding Flat, Nonflat, or Nonflat – High Gloss VOC limits in the Table of Standards shall apply.

215.5 CONTAINER LABELING REQUIREMENTS:

Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections 215.5A through 215.5K on the coating container (or label) in which the coating is sold or distributed.

- A. **DATE CODE:** The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid, or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the California Air Resources Board (CARB).
- B. **THINNING RECOMMENDATIONS:** The manufacturer's thinning recommendations shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.

- C. **VOC CONTENT:** One of the following values in grams of VOC per liter of coating shall be indicated on the container:
1. Maximum VOC Content as determined from all potential product formulations;
 2. VOC Content as determined from actual formulation data; or
 3. VOC Content as determined using the test methods in Section 215.7B.
- If thinning is not recommended, the container must display the VOC Content, as supplied. If thinning is recommended, the container must display the VOC Content, including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multi-component product, the container must display the VOC content as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing. VOC Content shall be determined as defined in Sections 215.9TTT, 215.9UUU, and 215.9VVV.
- D. **FAUX FINISHING COATINGS:** Effective January 1, 2018, the labels of all clear topcoat Faux Finishing coatings shall prominently display the statement “This product can only be sold or used as part of a Faux Finishing coating system.”
- E. **INDUSTRIAL MAINTENANCE COATINGS:** Effective January 1, 2018, the labels of all Industrial Maintenance coatings shall prominently display the statement “For industrial use only” or “For professional use only” or “Not for residential use” or “Not intended for residential use.”
- F. **RUST PREVENTATIVE COATINGS:** The labels of all rust preventative coatings shall prominently display the statement “For Metal Substrates Only.”
- G. **REACTIVE PENETRATING SEALERS:** Effective January 1, 2018, the labels of all Reactive Penetrating Sealers shall prominently display the statement “Reactive Penetrating Sealer.”
- H. **STONE CONSOLIDANTS:** Effective January 1, 2018, the labels of all Stone Consolidants shall prominently display the statement “Stone Consolidant - For Professional Use Only.”
- I. **NONFLAT - HIGH GLOSS COATINGS:** Effective January 1, 2018, the labels of all Nonflat – High Gloss coatings shall prominently display the words “High Gloss.”
- J. **WOOD COATINGS:** Effective January 1, 2018, the labels of all Wood Coatings shall prominently display the statement “For Wood Substrates Only.”
- K. **ZINC RICH PRIMERS:** Effective January 1, 2018, the labels of all Zinc Rich Primers shall prominently display the statement “For industrial use only” or “For professional use only” or “Not for residential use” or “Not intended for residential use.”

215.6 REPORTING REQUIREMENTS:

- A. **SALES DATA:** A responsible official from each manufacturer shall upon request of the Executive Officer of the CARB or the District Air Pollution Control Officer (APCO), or his or her delegate, provide data concerning the distribution and sales of architectural coatings for emissions inventory purposes. The responsible official shall, within 180 days of written notice, provide information, including but not limited to:
1. The manufacturer name, location of manufacture and mailing address;
 2. The contact person name, address, and telephone number;
 3. Coating product name as it appears on the label and the applicable coating category;
 4. Whether the product is marketed for interior or exterior use or both;
 5. The number of gallons sold in California in containers greater than one liter (1.057 quart) and equal to or less than one liter (1.057 quart);
 6. The VOC Actual content and VOC Regulatory content in grams per liter. If thinning is recommended, list the VOC Actual content and VOC Regulatory content after maximum recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately. If the coating is a multi-component product, provide the VOC content as mixed or catalyzed;
 7. The VOC constituents names and CAS numbers;

8. The names and CAS numbers of any compounds in the product specifically exempted from the VOC definition, as listed in Rule 101, Section 101.2 Definitions "Exempt Compounds;"
 9. Whether the product is marketed as solventborne, waterborne, or 100 percent solids;
 10. Description of resin or binder in the product;
 11. Whether the coating is a single-component or multi-component product;
 12. The density of the product in pounds per gallon; and
 13. The percent by weight of: solids, all volatile materials, water, and any compounds in the product specifically exempted from the VOC definition, as listed in Section 215.9SSS; and the percent by volume of: solids, water, and any compounds in the product specifically exempted from the VOC definition, as listed in Rule 101, Section 101.2 Definitions "Exempt Compounds."
- B. All sales data listed in Section 215.6A shall be maintained by the responsible official for a minimum of three years. Sales data submitted by the responsible official to the APCO may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations Sections 91000-91022.

215.7 COMPLIANCE PROVISIONS AND TEST METHODS:

- A. **CALCULATION OF VOC CONTENT:** For the purpose of determining compliance with the VOC content limits in the Table of Standards, the VOC content of a coating shall be determined as defined in Sections 215.9TTT, 215.9UUU, or 215.9VVV. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured. If the manufacturer does not recommend thinning, the VOC Content must be calculated for the product as supplied. If the manufacturer recommends thinning, the VOC Content must be calculated including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multi-component product, the VOC content must be calculated as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.
- B. **VOC CONTENT:** To determine the physical properties of a coating to perform the calculations in Section 215.9TTT or 215.9VVV, the reference method is U.S. EPA Method 24, except as provided in Sections 215.7C and 215.7D. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised 1996). The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised 1993), BAAQMD Method 43 (Revised 1996), or BAAQMD Method 41 (Revised 1995). To determine the VOC content of a coating, the manufacturer may use U.S. EPA Method 24, or an alternative method as provided in Section 215.7C, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance, checks, recordkeeping). If there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 test results will govern, except when an alternative method is approved as specified in section 215.7C. The APCO may require the manufacturer to conduct a Method 24 analysis.
- C. **ALTERNATIVE TEST METHODS:** Other test methods may also be used if demonstrated to provide results that are acceptable for purposes of determining compliance with Section 215.7B and after review and approval by the staff of the District, the CARB, and the U.S. EPA.
- D. **METHACRYLATE TRAFFIC MARKING COATINGS:** Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of U.S. EPA Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in Section 215.7E.11. 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.
- E. **TEST METHODS:** The following test methods are incorporated by reference herein and shall be used to test coatings subject to the provisions of this rule:

1. **FLAME SPREAD INDEX:** ASTM E 84-07, “Standard Test Method for Surface Burning Characteristics of Building Materials.”
2. **FIRE RESISTANCE RATING:** ASTM E 119-07, “Standard Test Methods for Fire Tests of Building Construction and Materials.”
3. **GLOSS DETERMINATION:** ASTM D 523-89 (1999), “Standard Test Method for Specular Gloss.”
4. **METAL CONTENT:** SCAQMD Method 318-95, “Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction,” SCAQMD Laboratory Methods of Analysis for Enforcement Samples.
5. **ACID CONTENT:** ASTM D 1613-06, “Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products.”
6. **EXEMPT COMPOUNDS--SILOXANES:** Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes shall be analyzed as exempt compounds for compliance with Section 215.7 by BAAQMD Method 43, “Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials,” BAAQMD Manual of Procedures, Volume III, adopted 11/6/96.
7. **EXEMPT COMPOUNDS--PARACHLOROBENZOTRIFLUORIDE (PCBTF):** BAAQMD Method 41, “Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride,” BAAQMD Manual of Procedures, Volume III, adopted 12/20/95.
8. **EXEMPT COMPOUNDS:** Under U.S. EPA Method 24: SCAQMD Method 303-91 (Revised 1993), “Determination of Exempt Compounds,” SCAQMD Laboratory Methods of Analysis for Enforcement Samples.
9. **VOC CONTENT OF COATINGS:** U.S. EPA Method 24 as it exists in appendix A of 40 Code of Federal Regulations (CFR) part 60, “Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings.”
10. **ALTERNATIVE VOC CONTENT OF COATINGS:** Either U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), “Determination of Volatile Organic Compounds (VOC) in Various Materials,” SCAQMD Laboratory Methods of Analysis for Enforcement Samples.
11. **METHACRYLATE MULTICOMPONENT TRAFFIC MARKING COATINGS:** 40 CFR part 59, subpart D, appendix A, “Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings.”
12. **HYDROSTATIC PRESSURE FOR BASEMENT SPECIALTY COATINGS:** ASTM D7088-04, “Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry.”
13. **TUB AND TILE REFINISH COATING ADHESION:** ASTM D 4585-99, “Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation” and ASTM D3359-02, “Standard Test Methods for Measuring Adhesion by Tape Test.”
14. **TUB AND TILE REFINISH COATING HARDNESS:** ASTM D 3363-05, “Standard Test Method for Film Hardness by Pencil Test.”
15. **TUB AND TILE REFINISH COATING ABRASION RESISTANCE:** ASTM D 4060-07, “Standard Test Methods for Abrasion Resistance of Organic Coatings by the Taber Abraser”.
16. **TUB AND TILE REFINISH COATING WATER RESISTANCE:** ASTM D 4585-99, “Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation” and ASTM D714-02e1, “Standard Test Method for Evaluating Degree of Blistering of Paints.”
17. **WATERPROOFING MEMBRANE:** ASTM C836-06, “Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course.”
18. **MOLD AND MILDEW GROWTH FOR BASEMENT SPECIALTY COATINGS:** ASTM D3273-00, “Standard Test Method for Resistance to Growth of Mold on the Surface of Interior

Coatings in an Environmental Chamber” and ASTM D3274-95, “Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation.”

19. **REACTIVE PENETRATING SEALER WATER REPELLENCY:** ASTM C67-07, “Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile”; or ASTM C97-02, “Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone”; or ASTM C140-06, “Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units.”
20. **REACTIVE PENETRATING SEALER WATER VAPOR TRANSMISSION:** ASTM E96/E96M-05, “Standard Test Method for Water Vapor Transmission of Materials.”
21. **REACTIVE PENETRATING SEALER - CHLORIDE SCREENING APPLICATIONS:** National Cooperative Highway Research Report 244 (1981), “Concrete Sealers for the Protection of Bridge Structures.”
22. **STONE CONSOLIDANTS:** ASTM E2167-01, “Standard Guide for Selection and Use of Stone Consolidants.”

215.8 VIOLATIONS:

- A. Failure to comply with any provision of this rule shall constitute a violation of this rule.

215.9 DEFINITIONS:

- A. **ADHESIVE:** Any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.
- B. **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.
- C. **ALUMINUM ROOF COATING:** A coating labeled and formulated exclusively for application to roofs and containing at least 84 grams of elemental aluminum pigment per liter of coating (at least 0.7 pounds per gallon). Pigment content shall be determined in accordance with SCAQMD Method 318-95, incorporated by reference in Section 215.7E.4 Metal Content of Coatings.
- D. **APPURTENANCES:** Accessories to an architectural structure, coated at the site of installation whether installed or detached, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down spouts, window screens, doors, elevators, lamp-posts, heating and air conditioning equipment, other fixed mechanical equipment, large fixed stationary tools, partitions, pipes and piping systems, stairways, fixed ladders, catwalks, fire escapes, and concrete forms.
- E. **ARCHITECTURAL COATINGS:** A coating to be applied to stationary structures or their appurtenances at the site of installation, portable buildings at the site of installation, to pavements, or 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 purposes of this rule.
- F. **BASEMENT SPECIALTY COATING:** A clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaces to provide a hydrostatic seal for basements and other below-grade surfaces. Basement Specialty Coatings must meet the following criteria:
 1. Coating must be capable of withstanding at least 10 psi of hydrostatic pressure, as determined in accordance with ASTM D7088-04, which is incorporated by reference in subsection 215.7E.12 Hydrostatic Pressure for Basement Specialty Coatings; and,
 2. Coating must be resistant to mold and mildew growth and must achieve a microbial growth rating of 8 or more, as determined in accordance with ASTM D3273-00 and ASTM D3274-95,

incorporated by reference in Section 215.7E.18 Mold and Mildew Growth for Basement Specialty Coatings.

- G. **BELOW GROUND WOOD PRESERVATIVES:** Coatings formulated to protect below ground wood from decay or insect attack and which contains a wood preservative chemical registered by the California Department of Food and Agriculture. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Wood Preservatives” category.
- H. **BITUMINOUS COATING MATERIALS:** Black or brownish materials, soluble in carbon disulfide, consisting mainly of hydrocarbons and which are obtained from natural deposits or as residues from the distillation of crude petroleum oils, or of low grades of coal. Bitumens include, but are not limited to, asphalt, tar, pitch, and asphaltite.
 - 1. **BITUMINOUS ROOF COATING:** A coating which incorporates bitumens that is labeled and formulated exclusively for roofing.
 - 2. **BITUMINOUS ROOF PRIMER:** A primer which incorporates bitumens that is labeled and formulated exclusively for roofing and intended for the purpose of preparing a weathered or aged surface or improving the adhesion of subsequent surfacing components.
- I. **BOND BREAKERS:** Coatings labeled and formulated for application between layers of concrete to prevent the freshly poured top layer of concrete from bonding to the layer over which it is poured.
- J. **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.
- K. **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.
- L. **CLEAR WOOD FINISHES:** Clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Wood Coatings” category.
- M. **CONCRETE CURING COMPOUND:** Coatings labeled and formulated for application to freshly poured concrete to retard the evaporation of water or harden or dustproof the surface.
- N. **CONCRETE MASONRY SEALER:** A clear or opaque coating that is labeled and formulated primarily for application to concrete and masonry surfaces to perform one or more of the following functions:
 - 1. Prevent penetration of water;
 - 2. Provide resistance against abrasion, alkalis, acids, mildew, staining, or ultraviolet light; or
 - 3. Harden or dustproof the surface of aged or cured concrete.
- O. **DRIVEWAY SEALER:** A coating labeled and formulated for application to worn asphalt driveway surfaces to perform one or more of the following functions:
 - 1. Fill cracks;
 - 2. Seal the surface to provide protection; or
 - 3. Restore or preserve the appearance.
- P. **DRY FOG COATING:** Coatings labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with other surfaces.
- Q. **EXEMPT ORGANIC COMPOUNDS:** A compound identified as exempt under the definition of Volatile Organic Compound (VOC), Section 215.9SSS. Exempt compounds content of a coating shall be determined by U.S. EPA Method 24 or South Coast Air Quality Management District (SCAQMD) Method 303-91 (Revised 1993), incorporated by reference in Sections 215.7E.8 and 215.7E. 9.
- R. **FAUX FINISHING COATING:** A coating labeled and formulated to meet one or more of the following criteria:
 - 1. A glaze or textured coating used to create artistic effects;
 - 2. A decorative coating used to create a metallic, iridescent, or pearlescent appearance that contains at least 48 grams of pearlescent mica pigment or other iridescent pigment per liter of coating as applied (at least 0.4 pounds per gallon);

3. A decorative coating used to create a metallic appearance that contains less than 48 grams of elemental metallic pigment per liter of coating as applied (less than 0.4 pounds per gallon), when tested in accordance with SCAQMD Method 318-95, incorporated by reference in Section 215.7E.4;
 4. A decorative coating used to create a metallic appearance that contains greater than 48 grams of elemental metallic pigment per liter of coating as applied (greater than 0.4 pounds per gallon) and which requires a clear topcoat to prevent the degradation of the finish under normal use conditions. The metallic pigment content shall be determined in accordance with SCAQMD Method 318-95, incorporated by reference in Section 215.7E.4; or
 5. A clear topcoat to seal and protect a Faux Finishing coating that meets the requirements of Sections 215.9R.1, 215.9R.2, 215.9R.3, or 215.9R.4. These clear topcoats must be sold and used solely as part of a Faux Finishing coating system, and must be labeled in accordance with Section 215.5D.
- S. **FIRE RESISTIVE COATINGS:** A coating labeled and formulated to protect structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials. The Fire Resistive category includes sprayed fire resistive materials and intumescent fire resistive coatings that are used to bring structural materials into compliance with federal, state, and local building code requirements. Fire Resistive coatings shall be tested in accordance with ASTM Designation E 84-07, incorporated by reference in Section 215.7E.2. Fire Resistive coatings and testing agencies must be approved by building code officials.
- T. **FIRE RETARDANT COATINGS:** Coatings which have a flame spread index of less than 25 when tested in accordance with ASTM Designation E-84-07, "Standard Test Method for Surface Burning Characteristics of Building Material," after application to Douglas fir according to the manufacturer's recommendations or when tested by an equivalent method approved in writing by the APCO. Effective January 1, 2018, the Fire Retardant coating category is eliminated and coatings with fire retardant properties will be subject to the VOC limit of their primary category (e.g., Flat, Nonflat, etc.)
- U. **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 Section 215.7E.3.
- V. **FLOOR COATING:** An opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, garage floors, and other horizontal surfaces which may be subject to foot traffic.
- W. **FORM RELEASE COMPOUNDS:** Coatings 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 material other than concrete.
- X. **GRAPHIC ARTS COATINGS (SIGN PAINTS):** Coatings labeled, formulated for, and hand-applied by artists using brush, air brush, or roller techniques to indoor and outdoor signs (excluding structural components) and murals, including lettering enamels, poster colors, copy blockers, and bulletin enamels.
- Y. **HIGH-TEMPERATURE COATINGS:** A high-performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 400°F.
- Z. **HIGH-TEMPERATURE INDUSTRIAL MAINTENANCE COATINGS:** High performance coatings labeled, formulated for, and applied to substrates exposed continuously or intermittently to temperatures above 400°F. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for "High Temperature Coatings" category.
- AA. **INDUSTRIAL MAINTENANCE ANTI-GRAFFITI COATINGS:** Two component clear industrial maintenance coatings formulated for and applied to exterior walls and murals to resist repeated scrubbing and exposure to harsh solvents. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for "Industrial Maintenance Coating" category.

- BB. INDUSTRIAL MAINTENANCE COATING:** High-performance architectural coatings including primers, sealers, undercoaters, intermediate coats, and topcoats formulated for application to substrates, including floors, exposed to one or more of the following extreme environmental conditions listed in subsections 215.9BB.1 through 215.9BB.5 and labeled as specified in Section 215.5E.
1. Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;
 2. Acute or chronic exposure to corrosive, caustic, or acidic agents or to chemicals, chemical fumes, chemical mixtures, or solutions;
 3. Frequent exposure to temperatures in excess of 250°F;
 4. Frequent heavy abrasion, including mechanical wear and frequent scrubbing with industrial solvents, cleaners, or scouring agents; or
 5. Exterior exposure of metal structures.
- CC. LACQUER:** Clear or pigmented coating formulated with nitrocellulose or synthetic resins to dry, by evaporation without chemical reaction and to provide a quick drying, solid protective film. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Wood Coatings” category.
- DD. LOW-SOLIDS COATING:** Coatings containing one pound or less of solids per gallon of material. The VOC content for Low Solids Coating shall be calculated in accordance with Sections 215.9UUU and 215.9TTT.
- EE. MAGNESITE CEMENT COATINGS:** Coatings labeled and formulated for and applied to magnesite cement decking to protect the magnesite cement substrate from erosion by water.
- FF. MANUFACTURER’S MAXIMUM THINNING RECOMMENDATION:** The maximum recommendation for adding thinning solvent(s) indicated on the label or lid of the coating container.
- GG. MASTIC TEXTURE COATINGS:** Coatings labeled and formulated to cover holes, minor cracks, and conceal surface irregularities and which are applied in a thickness of at least 10 mils (dry single coat).
- HH. MEDIUM DENSITY FIBERBOARD (MDF):** A composite wood product, panel, molding, or other building material composed of cellulosic fibers (usually wood) made by dry forming and pressing of a resinated fiber mat.
- II. METALLIC PIGMENTED COATINGS:** A coating that is labeled and formulated to provide a metallic appearance. Coatings containing at least 0.4 pounds of elemental metallic pigment (excluding zinc) per gallon of coating as applied when tested in accordance with SCAQMD Method 318-95. The Metallic Pigmented Coating category does not include coatings applied to roofs or Zinc-Rich Primers.
- JJ. MULTI-COLORED COATINGS:** Coatings labeled and formulated to exhibit more than one color when applied and which are packaged in a single container and applied in a single coat.
- KK. NON-FLAT COATINGS:** 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 five or greater on a 60 degree meter, according to ASTM Designation D 523-89 (1999).
- LL. NONFLAT – HIGH GLOSS COATINGS:** A nonflat coating that registers a gloss of 70 or greater on a 60-degree meter according to ASTM Designation D 523-89 (1999). Nonflat – High Gloss coatings must be labeled in accordance with Section 215.5I.
- MM. OPAQUE STAINS:** All stains not classified as semi-transparent stains. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Stains” category.
- NN. OPAQUE WOOD PRESERVATIVES:** Wood preservatives not classified as clear or semi-transparent wood preservatives or as below ground wood preservatives or low solids wood preservatives. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Wood Preservatives” category.
- OO. PARTICLE BOARD:** A composite wood product panel, molding, or other building material composed of cellulosic material in the form of discrete particles, as distinguished from fibers, flakes, or

strands, which are pressed together with a resin.

- PP. **PEARLESCENT:** Exhibiting various colors depending on the angles of illumination and viewing.
- QQ. **PLYWOOD:** A panel product consisting of layers of wood veneers or composite core pressed together with resin. Plywood includes panel products made by either hot or cold pressing (with resin) veneers to a platform.
- RR. **POST CONSUMER COATING:** Finished coatings generated by a business or consumer that were used and are recovered from or otherwise diverted from the waste stream for the purpose of recycling.
- SS. **PRE-TREATMENT WASH PRIMER:** A coating which contains at least one-half percent acid, by weight, when tested in accordance with ASTM Designation D 1613-06 that is labeled and formulated for application directly to bare metal surfaces to provide necessary surface etching and corrosion resistance and to promote adhesion of subsequent topcoats.
- TT. **PRIMERS, SEALERS, AND UNDERCOATERS:** Coatings labeled, formulated and applied to substrates to:
1. Provide a firm bond between the substrate and subsequent coats;
 2. Prevent subsequent coatings from being absorbed by the substrate;
 3. Prevent harm to subsequent coatings by materials in the substrate;
 4. Provide a smooth surface for the substrate application of coatings;
 5. Provide a clear finish coat to seal the substrate; or
 6. Block materials from penetrating into or leaching out of a substrate
- UU. **REACTIVE PENETRATING SEALER:** A clear or pigmented coating that is labeled and formulated for application to above-grade concrete and masonry substrates to provide protection from water and waterborne contaminants, including, but not limited to, alkalis, acids, and salts. Reactive Penetrating Sealers must penetrate into concrete and masonry substrates and chemically react to form covalent bonds with naturally occurring minerals in the substrate. Reactive Penetrating Sealers line the pores of concrete and masonry substrates with a hydrophobic coating, but do not form a surface film. Reactive Penetrating Sealers must meet all of the following criteria:
1. The Reactive Penetrating Sealer must improve water repellency at least 80 percent after application on a concrete or masonry substrate. This performance must be verified on standardized test specimens, in accordance with one or more of the following standards, incorporated by reference in Section 215.7E.19: ASTM C67-07, or ASTM C97-02, or ASTM C140-06;
 2. The Reactive Penetrating Sealer must not reduce the water vapor transmission rate by more than 2 percent after application on a concrete or masonry substrate. This performance must be verified on standardized test specimens, in accordance with ASTM E96/E96M-05; and
 3. Products labeled and formulated for vehicular traffic surface chloride screening applications must meet the performance criteria listed in the National Cooperative Highway Research Report 244 (1981). Reactive Penetrating Sealers must be labeled in accordance with Section 215.5G.
- VV. **RECYCLED COATING:** An architectural coating formulated such that it contains a minimum of 50 percent by volume post-consumer coating, with a maximum of 50 percent by volume secondary industrial materials or virgin materials.
- WW. **RESIDENTIAL:** Areas where people reside or lodge.
- XX. **ROOF COATINGS:** Non-bituminous coatings labeled and formulated for application to exterior 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 coatings shall not be considered to be in this category, but shall be considered to be in the metallic pigmented coatings category.
- YY. **RUST PREVENTATIVE COATING:** A coating formulated to prevent the corrosion of metal surfaces for direct-to-metal coating or application over rusty, previously coated surfaces. This category applies to coatings for metal substrates only and must be labeled as such in accordance with the labeling requirements in Section 215.5F. This category does not include coatings required to be applied as a topcoat over a primer, or coatings for use on wood or other non-metallic surface.

- ZZ. **SANDING SEALERS:** Clear wood coatings formulated for and applied to bare wood for sanding and to seal the wood for subsequent application of varnish. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Wood Coating” category.
- AAA. **SECONDARY INDUSTRIAL MATERIALS:** Products or by-products of the paint manufacturing process that are of known composition and have economic value but can no longer be used for their intended purpose.
- BBB. **SEMI-TRANSPARENT STAINS:** Coatings that contain binders and colored pigments and are formulated to change the color of a surface but not conceal the surface grain pattern or texture. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Stains” category.
- CCC. **SEMI-TRANSPARENT WOOD PRESERVATIVES:** Wood preservative stains formulated and used to protect exposed wood from decay or insect attack by the addition of a wood preservative chemicals registered by the California Department of Food and Agriculture, which change the color of a surface but do not conceal the surface, including clear wood preservatives. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Wood Preservatives” category.
- DDD. **SHELLACS:** Clear or opaque coatings formulated solely with the resinous secretions of the lac (*Lacifer lacca*) beetle, and formulated to dry by evaporation without a chemical reaction.
- EEE. **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).
- FFF. **SOLICIT:** To require for use or to specify, by written or oral contract.
- GGG. **SPECIALTY PRIMERS, SEALERS, AND UNDERCOATERS:** Coatings formulated and used only to repair fire, smoke, or water damage.
- HHH. **STAIN:** A semitransparent or opaque coating labeled and formulated to change the color of a surface but not conceal the grain pattern or texture.
- III. **STONE CONSOLIDANT:** A coating that is labeled and formulated for application to stone substrates to repair structures damaged by weathering or other decay mechanisms. Stone Consolidants must penetrate into stone substrates to create bonds between particles and consolidate deteriorated material. Stone Consolidants must be specified and used in accordance with ASTM E2167-01. This coating is for professional use only and must be labeled as such, in accordance with the labeling requirements in Section 215.5H.
- JJJ. **SWIMMING POOL COATINGS:** Coatings labeled, formulated, and used to coat the interior of swimming pools and to resist swimming pool chemicals. Effective January 1, 2018, this category will also include coatings for swimming pool repair and maintenance.
- KKK. **SWIMMING POOL REPAIR COATINGS:** Chlorinated rubber based coatings used for the repair and maintenance of swimming pools over existing chlorinated rubber based coatings. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Swimming Pool Coatings” category.
- LLL. **TINT BASE:** An architectural coating to which colorant is added after packaging in sale units to produce a desired color.
- MMM. **TRAFFIC COATINGS:** Coatings formulated for and applied to public streets, highways, and other surfaces including, but not limited to curbs, berms, driveways, parking lots, sidewalks and airport runways. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Traffic Marking Coating” category.
- NNN. **TRAFFIC MARKING COATING:** Coatings labeled and formulated for and applied to public streets, highways, and other surfaces including curbs, berms, driveways, parking lots, sidewalks and airport runways.
- OOO. **TUB AND TILE REFINISH COATING:** Clear or opaque coating that is labeled and formulated exclusively for refinishing the surface of a bathtub, shower, sink, or countertop. Tub and Tile Refinish

coatings must meet all of the following criteria:

1. Have a scratch hardness of 3H or harder and a gouge hardness of 4H or harder determined on bonderite 1000 in accordance with ASTM D3363-05 incorporated by reference in Section 215.7E.14;
2. Have a weight loss of 20 milligrams or less after 1000 cycles as determined by CS-17 wheels on bonderite 1000 in accordance with ASTM D4060-07, incorporated by reference in Section 215.7E.15;
3. Withstand 1,000 hours or more of exposure with few or no #8 blisters as determined on unscribed bonderite, in accordance with ASTM D4585-99, and ASTM D714-02e1, incorporated by reference in Section 215.7E.16; and
4. Have an adhesion rating of 4B or better after 24 hours of recovery. This must be determined on unscribed bonderite, in accordance with ASTM D4585-99 and ASTM D3359- 02.

PPP. **VARNISHES:** Clear wood finishes formulated with various resins to dry by chemical reaction on exposure to air. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Wood Coatings” category.

QQQ. **VENEER:** Thin sheets of wood peeled or sliced from logs for use in the manufacture of wood products such as plywood, laminated veneer lumber, or other products.

RRR. **VIRGIN MATERIAL:** Materials that contain no post-consumer coatings or secondary industrial materials.

SSS. **VOLATILE ORGANIC COMPOUNDS (VOC):** Any volatile compound containing at least one atom of carbon, excluding those compounds listed in District Rule 101, Section 101.2 Definitions “Exempt Compounds.”

TTT. **VOC ACTUAL:** The weight of VOC per volume of coating and it is calculated with the following equation:

$$\text{VOC Actual} = \frac{(W_s - W_w - W_{ec})}{(V_m)}$$

Where:

VOC Actual = the grams of VOC per liter of coating (also known as “Material VOC”).

W_s = weight of volatiles, in grams.

W_w = weight of water, in grams.

W_{ec} = weight of exempt compounds, in grams.

V_m = volume of coating, in liters.

UUU. **VOC CONTENT:** The weight of VOC per volume of coating. VOC Content is VOC Regulatory, as defined in Section 215.9VVV, for all coatings except those in the Low Solids category. For coatings in the Low Solids category, the VOC Content is VOC Actual, as defined in Section 215.9TTT. If the coating is a multi-component product, the VOC content is VOC Regulatory as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.

VVV. **VOC REGULATORY:** The weight of VOC per volume of coating, less the volume of water and exempt compounds. It is calculated with the following equation:

$$\text{VOC Regulatory} = \frac{(W_s - W_w - W_{ec})}{(V_m - V_w - V_{ec})}$$

Where:

VOC Regulatory = the grams of VOC per liter of coating, less water and exempt compounds (also known as “Coating VOC”).

W_s = weight of volatiles, in grams.

W_w = weight of water, in grams.

W_{ec} = weight of exempt compounds, in grams.

- V_m = volume of coating, in liters.
- V_w = volume of water, in liters.
- V_{ec} = volume of exempt compounds, in liters.

WWW. WATERPROOFING MEMBRANE: A clear or opaque coating labeled and formulated for application to concrete and masonry surfaces to provide a seamless waterproofing membrane that prevents penetration of water into the substrate. Waterproofing Membranes are intended for the following waterproofing applications: below-grade surfaces, between concrete slabs, inside tunnels, inside concrete planters, and under flooring materials. The Waterproofing Membrane category does not include topcoats that are included in the Concrete/Masonry Sealer category (e.g., parking deck topcoats, pedestrian deck topcoats, etc.). Waterproofing Membranes must meet the following criteria:

1. Coating must be applied in a single coat of at least 25 mils (at least 0.025 inch) dry film thickness; and
2. Coatings must meet or exceed the requirements contained in ASTM C836-06.

The Waterproofing Membrane category does not include topcoats that are included in the Concrete/Masonry Sealer category (e.g., parking deck topcoats, pedestrian deck topcoats, etc.).

XXX. WATERPROOFING SEALERS: Clear, colorless, or opaque coatings formulated and applied for the sole purpose of protecting porous substrates by preventing the penetration of water and which do not alter the surface appearance or texture. Effective January 1, 2018, any coating meeting this definition will be subject to the VOC content limit for “Waterproofing Membranes” category.

YYY. WOOD COATINGS: Coatings labeled and formulated for application to wood substrates only. This category includes the following clear and semitransparent coatings: lacquers; varnishes; sanding sealers; penetrating oils; clear stains; wood conditioners used as undercoats; and wood sealers used as topcoats. This category also includes the following opaque wood coatings: opaque lacquers; opaque sanding sealers; and opaque lacquer undercoaters. Wood Coatings must be labeled “For Wood Substrates Only,” in accordance with Section 215.5J. The Wood Coatings category does not include the following: clear sealers that are labeled and formulated for use on concrete/masonry surfaces or coatings intended for substrates other than wood.

ZZZ. WOOD PRESERVATIVE: A coating labeled and formulated to protect exposed wood from decay or insect attack that is registered with both the U.S. EPA 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.

AAAA. WOOD SUBSTRATE: A layer made of wood, particleboard, plywood, medium density fiberboard, rattan, wicker, bamboo, or composite products with exposed wood grain. Wood Substrates do not include items comprised of simulated wood.

BBBB. ZINC-RICH PRIMER: A coating that meets all of the following specifications:

1. Contains at least 65 percent metallic zinc powder or zinc dust by weight of total solids;
2. Is formulated for application to metal substrates to provide a firm bond between the substrate and subsequent applications of coatings; and
3. Is intended for professional use only and is labeled as such, in accordance with the labeling requirements in Section 215.5K.

RULE 224

CUTBACK AND EMULSIFIED ASPHALT PAVING MATERIALS

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RULE 224

CUTBACK AND EMULSIFIED ASPHALT PAVING MATERIALS

224.1 GENERAL

- A. **APPLICABILITY:** A person shall not discharge to the atmosphere volatile organic compounds (VOC's) caused by the use or manufacture, mixing, storage and application of Cutback or Emulsified asphalt for paving, road construction or road maintenance.
- B. **EXEMPTIONS:** The provisions of Rule 224.3 shall not apply to:
 - a. The use of cutback asphalt or emulsified asphalt in the manufacturing of paving materials where such materials are for immediate shipment and eventual use outside of the County of El Dorado, State of California, and where such area is designated as attainment for the State and Federal Ozone Standard.

224.2 DEFINITIONS

- A. **ASPHALT** - A dark brown to black cementitious material (solid, semisolid, or liquid in consistency) of which the main constituents are bitumens which occur naturally or as a residue of petroleum refining.
- B. **CUTBACK ASPHALT** - "Cutback asphalt" means asphalt cement that has been liquefied by blending with petroleum solvents (dilutents). Upon exposure to atmospheric conditions, the dilutents evaporate, leaving the asphalt cement to perform its function. Paving grade asphalt liquified with petroleum distillate and conforming to specifications of the American Society for Testing and Materials (ASTM) as follows:
 - Rapid Cure Type: ASTM D2028-76 (1986)
 - Medium Cure Type: ASTM D2027-76 (1986)
 - Slow Cure Type: ASTM D2026-72 (1985)
- C. **DUST PALLIATIVE** - Means any light application of liquified asphalt (cutback or emulsified asphalt) for the express purpose of controlling loose dust.
- D. **EMULSIFIED ASPHALT** - "Emulsified asphalt" means an emulsion of asphalt cement and water that contains a small amount of an emulsifying agent; it is a heterogeneous system containing two normally immiscible phases (asphalt and water) in which the water forms the continuous phase of the emulsion and minute globules of asphalt form the discontinuous phase.
- E. **PAVING MATERIAL** - A mixture consisting mainly of an asphalt ar

aggregate.

- F. **PAVING AND MAINTENANCE OPERATIONS** - All activities involved in the new construction and maintenance of roadways and parking areas.
- G. **PENETRATING PRIME COAT** - "Penetrating prime coat" means an application of low-viscosity liquid asphalt to an absorbent surface. It is used to prepare an untreated base for an asphalt surface. The prime coat penetrates the base, plugs the voids, and hardens and helps bind the top to the overlying asphalt course. The penetrating prime coat also reduces the necessity of maintaining an untreated base course prior to placing the asphalt pavement. Prime coats do not include dust palliatives or tack coats.
- H. **TACK COAT** - Means any application of asphalt to an existing surface to provide a bond between new surfacing and existing surface and to eliminate slippage places where the new and existing surfaces meet.
- I. **VOLATILE ORGANIC COMPOUND (VOC)** - Means any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, ammonium carbonate, metallic carbides, metallic carbonates, 1,1,1/trichloroethane, methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (HCFC-22), trifluoromethane (HFC-23), 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113), 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,2,2-tetrafluoroethane (HFC-134), 1,1,1,2-tetrafluoroethane (HFC-134a), 1,1-dichloro-1-fluoroethane (HCFC-141b), 1-chloro-1,1-difluoroethane (HCFC-142b), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), and the following four classes of perfluorocarbon (PFC) compounds:
- 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) saturated perfluorocarbons containing sulfur with sulfur bonds only to carbon and fluorine.

224.3 STANDARDS

- A. Cutback Asphalt: A person shall not manufacture for sale nor use for paving, road construction or road maintenance any:
- a. Rapid cure cutback asphalt.
 - b. Medium cure cutback asphalt except as provided in Rule

224.1.B.

- c. Slow cure cutback asphalt containing more than 0.5 percent by volume organic compounds which evaporate at 260°C (500°F) or lower as determined by ASTM Method D402-76 (1987).

- B. Emulsified Asphalt: A person shall not manufacture for paving, road construction or road maintenance any emulsified asphalt containing organic compounds in excess of three percent by volume which evaporate at 260°C (500°F) or lower as determined by ASTM Method D244-91.

224.4 ADMINISTRATIVE

A. Test Methods:

- a. Analysis of Cutback Asphalt samples for VOC content shall be in accordance with ASTM Method D402-76 (1987).
- b. Analysis of Emulsified Asphalt samples for VOC content shall be in accordance with ASTM Method D244-91, in excess of three percent by volume.

B. Recordkeeping:

Any person who manufactures cutback asphalts and or emulsified asphalts shall maintain records showing the types and amounts of these products produced and shipped, including the destinations of these products. Test method results should also be recorded.

Any person who sells, offers for sale, uses or applies for paving any asphalt material subject to this rule shall maintain a record of the amount received, sold and/or used and a current list of all asphalt materials in use and Material Safety Data Sheets (MSDS) or manufacturer specifications for each asphalt material containing sufficient information to readily determine compliance with Subsections 224.3.A and 224.3.B of this rule, as applicable.

These records shall be maintained daily and kept on site for at least three years and made available to the District upon verbal or written request.

Adopted 9-16-91

Amended 9-27-94

Revised 6/6/94:md\rule224MAS.V

RULE 225 ORGANIC SOLVENT CLEANING AND DEGREASING OPERATIONS

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11/30/94

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RULE 225

ORGANIC SOLVENT CLEANING AND DEGREASING OPERATIONS

225.1 GENERAL

- A. **PURPOSE:** To limit the emission of volatile organic compounds from degreasers.
- B. **EXEMPTIONS:**
1. The provisions of Section 225.3 B., of this rule do not apply to non-vapor degreasers which have an air-solvent interface area less than or equal to 1.0 ft², or to remote reservoir degreasers using a non-volatile solvent spray which is drained into the remote reservoir concurrently with the degreasing operation.
 2. The provisions of Section 225.3 F.7., of this rule do not apply to open-top vapor degreasers where solvent flow is conducted pursuant to Section 225.3 F.10.b., and liquid solvent does not splash above the air-vapor interface.

225.2 DEFINITIONS

- A. **CONVEYORIZED DEGREASER:** Any continually loaded, conveyORIZED degreaser, using solvent that is maintained either above or below the initial boiling point temperature of the solvent.
- B. **DEGREASER:** A container that contains solvent or into which solvent is sprayed and concurrently drained, used to remove oil, grease, soil, coating, dirt or other undesirable matter from workloads.
- C. **EXEMPT COMPOUNDS:** The following compounds are exempt from the definition of VOC in Section 225.2 Q.:
1. methane (CH₄)
 2. carbon dioxide (CO₂)
 3. carbon monoxide (CO)
 4. carbonic acid ((CO(OH)₂)
 5. metallic carbides (M-C) or carbonates (M-CO₃)

6. ammonium carbonate ((NH₄)HCO₃(NH₄)CO₂NH₂)
7. 1,1,1-trichloroethane (methyl chloroform)
8. methylene chloride (dichloromethane)
9. trichlorofluoromethane (CFC-11)
10. dichlorodifluoromethane (CFC-12)
11. chlorodifluoromethane (HCFC-22)
12. trifluoromethane (HFC-23)
13. 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)
14. 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
15. chloropentafluoroethane (CFC-115)
16. 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)
17. 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
18. pentafluoroethane (HFC-125)
19. 1,1,2,2-tetrafluoroethane (HFC-134)
20. 1,1,1,2-tetrafluoroethane (HFC-134a)
21. 1,1-dichloro-1-fluoroethane (HCFC-141b)
22. 1-chloro-1,1-difluoroethane (HCFC-142b)
23. 1,1,1-trifluoroethane (HFC-143a)
24. 1,1-difluoroethane (HFC-152a).
25. The following classes of perfluorocarbon compounds:
 - a. Cyclic, branched, or linear, completely fluorinated alkanes,
 - b. Cyclic, branched, or linear, completely fluorinated ethers, with no saturations,
 - c. Cyclic, branched, or linear, completely fluorinated tertiary amines with no saturations.

- d. Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

D. FREEBOARD HEIGHT:

1. For non-vapor degreasers, freeboard height means the distance from the top of the solvent to the top of the tank.
2. For vapor degreasers, freeboard height means the distance from the solvent vapor-air interface to the top of the degreaser.
3. For conveyORIZED degreasers, freeboard height means the distance from the top of the solvent (non-vapor solvent) or the top of the vapor-air interface (vapor degreaser), to the bottom of the lowest opening where solvent vapors can escape.

E. FREEBOARD RATIO: The freeboard height divided by the smaller of the inside length or the inside width of the degreaser's evaporative surface area.

F. LEAK: Three or more drops of liquid solvent per minute.

G. LIP EXHAUST: A system which collects solvent vapors escaping from the top of a degreaser and directs them away from operating personnel.

H. LOW VOLATILITY SOLVENT: Any solvent with an initial boiling point which is greater than 248°F (120°C) and with a temperature as used, at least 100°C (180°F) below the initial boiling point as determined pursuant to Section 225.5 B.1.

I. MAKEUP SOLVENT: The solvent added to the degreaser to replace solvent lost through evaporation or other means.

J. NON-VAPOR DEGREASER: Any degreaser using solvent which, if heated, is maintained below the initial boiling point temperature of the solvent.

K. OPEN-TOP VAPOR DEGREASER: Any batch-loaded degreaser using solvent which is maintained above the initial boiling point temperature of the solvent. Degreasing occurs through the condensation of the resultant solvent vapor onto the surface of the workload.

L. OSHA: Occupational Safety and Health Administration.

- M. **REFRIGERATED FREEBOARD CHILLER:** A secondary cooling coil mounted above the primary condenser which provides a chilled air blanket above the solvent vapor-air interface to cause the condensation of additional solvent vapor, thereby increasing vapor control efficiency.
- N. **REMOTE RESERVOIR DEGREASER:** A non-vapor degreaser with a tank which is completely enclosed except for a solvent return opening no larger than 15.50 square inches (100 square centimeters) which allows used solvent to drain into it from a separate solvent sink or work area and which is not accessible for soaking workloads.
- O. **SOLVENT:** VOC-containing compounds which are used as diluents, thinners, dissolvers, viscosity reducers, or cleaning agents.
- P. **STATIONARY SOURCE:** Any building, structure, facility, or emissions unit which emits or may emit any affected pollutant directly or as a fugitive emission.
1. Building, structure, facility, or emissions unit includes all pollutant emitting activities which:
 - a. Belong to the same industrial grouping, and
 - b. Are located on one property, or two or more contiguous properties, and
 - c. Are under the same or common ownership, operation, or control, or which are owned or operated by entities which are under common control.
 2. Pollutant emitting activities shall be considered as part of the same industrial grouping if:
 - a. They belong to the same two-digit Standard Industrial Classification (SIC) code, or
 - b. They are part of a common production process, which includes industrial processes, manufacturing processes and any connected processes involving a common material.
- Q. **VOLATILE ORGANIC COMPOUNDS (VOC):** Compounds containing at least one atom of carbon, except for the compounds listed in Section 225.2 C.
- R. **VOLATILE SOLVENT:** Any solvent which is not defined as a low volatility solvent pursuant to Section 225.2 H.

- S. **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.
- T. **WORKLOAD:** The objects put in a degreaser for the purpose of removing oil, grease, soil, coating, dirt or other undesirable matter from the surface of the objects.

225.3 STANDARDS

- A. **GENERAL EQUIPMENT REQUIREMENTS:** Any person who uses a degreaser shall utilize the following equipment:
 - 1. An apparatus or cover which prevents the solvent from evaporating when not processing work in the degreaser.
 - a. For non-vapor degreasers using volatile solvent, or solvent that is agitated, the cover should be a sliding, rolling or guillotine (bi-parting) type which can be opened and closed easily with one hand.
 - b. For open-top vapor degreasers, the cover should be a sliding, rolling or guillotine (bi-parting) type which can be opened and closed easily without disturbing the vapor zone.
 - c. For conveyORIZED degreasers, a cover shall be provided for closing off the entrance and exit during shutdown hours.
 - 2. A facility for draining cleaned parts such that the drained solvent is returned to the container.
 - 3. A permanent, conspicuous label which summarizes operating requirements contained in Sections 225.3 D., through 225.3 F., of this rule.
- B. **NON-VAPOR DEGREASERS; EQUIPMENT REQUIREMENTS:** A person shall operate non-vapor degreasers, including remote reservoirs (except as noted in Section 225.1 B.2.), using one of the following control devices:
 - 1. Non-vapor degreasers shall operate with a freeboard ratio equal to or greater than 0.75 if using solvents which are:

- a. Agitated, or
 - b. Heated above 122°F (50°C), or
 - c. Volatile.
2. Non-vapor degreasers using only low volatility solvents which are not agitated shall operate with a freeboard height of at least 6 inches.
 3. A water cover may be used as an acceptable alternative to Sections 225.3 B.1., and 225.3 B.2., if the solvent is insoluble in water and has a specific gravity greater than 1.
- C. **VAPOR DEGREASERS; EQUIPMENT REQUIREMENTS:** A person shall operate vapor degreasers using the following control devices:
1. A freeboard ratio greater than or equal to 0.75.
 2. A refrigerated freeboard chiller for which the chilled air blanket temperature (°F) at the coldest point on the vertical axis in the center of the air-vapor interface shall be no greater than 30% of the initial boiling point (°F) of the fresh solvent used or no greater than 40°F. If the chiller operates below the freezing temperature of water, it shall be equipped with an automatic defrost.
 3. A carbon adsorption system which ventilates the air-vapor interface at a minimum rate of 15 m³/min/m², but not greater than 20 m³/min/m², unless necessary to meet Federal and State OSHA requirements, with a solvent vapor concentration exiting the exhaust duct of the carbon adsorber of less than 25 ppm solvent averaged over one complete adsorption cycle.
 4. A primary condenser.
- D. **VAPOR DEGREASERS; SAFETY SWITCHES:** If a vapor degreaser is used, then the following equipment shall be utilized:
1. A device which shuts off the sump heater if the condenser coolant stops circulating or becomes warmer than specified.
 2. For degreasers of the spray type, a device which prevents spray pump operation unless the solvent vapor level is at the designed operating level.

3. A device (of the manual reset type) which shuts off the sump heater if the solvent vapor level rises above the designed operating level.

E. **CONVEYORIZED DEGREASERS:** In addition to the requirements of Sections 225.3 B., and 225.3 C., a person shall not operate a conveyORIZED degreaser unless it is equipped with the following control devices:

1. Either a drying tunnel or other means such as a rotating basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor.
2. Minimized opening: entrances and exits should silhouette workloads so that the average clearance between parts and the edge of the degreaser opening is either less than 4 inches (10 cm) or less than 10 percent of the width of the opening.
3. A primary condenser.
4. A vapor level control thermostat.
5. A condenser flow switch.
6. A spray safety switch.
7. A freeboard ratio greater than or equal to 0.75 which is physically verifiable, or a refrigerated freeboard chiller for which the chilled air blanket temperature (°F) at the coldest point on the vertical axis in the center of the air-vapor interface shall be no greater than 30 percent of the initial boiling point (°F) of the solvent used or no greater than 40° F. If the chiller operates below the freezing temperature of water, it shall be equipped with an automatic defrost.

F. **GENERAL OPERATING REQUIREMENTS:** Any person who uses a degreaser must conform to the following operating requirements:

1. Operate and maintain the degreaser and emission control equipment in proper working order.
2. Do not allow any solvent to leak from any portion of the degreaser.

3. All solvent, including waste solvent and waste solvent residues, shall be stored in closed containers at all times. The containers shall have a label indicating the name of the solvent/material they contain.
4. If distillation recovery of waste solvent is performed, solvent residues shall not contain more than 10 percent solvent by volume after distillation.
5. Do not remove or open any device designed to cover the solvent unless processing work in the degreaser or performing maintenance on the degreaser.
6. Drain cleaned parts after cleaning until dripping ceases (non-vapor degreaser only).
7. If using a solvent flow, use only a continuous, fluid stream (not a fine, atomized, or shower type spray) at a pressure which does not cause liquid solvent to splash outside of the degreaser.
8. Perform solvent agitation, where necessary, by means other than air agitation.
9. Do not degrease porous or absorbent materials such as cloth, leather, wood, or rope.
10. For vapor degreasers:
 - a. Workloads shall not occupy more than half of the degreaser's evaporative surface area.
 - b. Solvent spray shall be kept at least 4 inches below the air-vapor interface.
 - c. When starting the degreaser, the cooling system shall be turned on before, or simultaneously with, the sump heater.
 - d. When shutting down the degreaser, the sump heater shall be turned off before, or simultaneously with, the cooling system.
 - e. The degreaser shall be covered whenever the cooling system is off.
11. A person shall minimize solvent carry-out by the following measures, as applicable:

- a. Rack workload to facilitate drainage;
 - b. Move workload in and out of the degreaser at less than 3.3 m/min (11 ft/min);
 - c. Degrease the workload in the vapor zone until condensation ceases;
 - d. Allow workload to dry within the degreaser until visually dry;
 - e. For manual operation, tip out any pools of solvent remaining on the workload before removing it from the degreaser.
12. A cleaner shall not be located where drafts are directed across the cleaner.
13. For those cleaners equipped with water separators, no solvent shall be visually detectable in the water exiting the water separator.
- G. **LIP EXHAUST:** Effective **(DATE OF RULE ADOPTION)**, a lip exhaust system shall not be added to any degreaser, unless it is vented to an emission control system, pursuant to Section 225.3 H. The lip exhaust shall be turned off when the degreaser is covered.
- H. **EMISSION CONTROL SYSTEM REQUIREMENTS:** Any person or stationary source subject to this rule may use an emissions control system as an alternative to Sections 225.3 B., 225.3 C.1., or 225.3 C.2., provided that the system has an overall control efficiency (the collection efficiency multiplied by the control efficiency) of at least 85 percent on a mass basis, as determined pursuant to Sections 225.5 B.2., and 225.5 B.3. The emission collection system shall have a ventilation rate not greater than 20 cubic meters per minute per square meter over the total area of the degreaser's evaporative surface area, unless the rate must be changed to meet Federal and State OSHA requirements.

225.4 ADMINISTRATIVE REQUIREMENTS

- A. **COMPLIANCE SCHEDULE:** Any person or stationary source subject to this rule, including previously exempt sources, shall be in compliance with Sections 225.3 B.2., 225.3 C.2., and 225.5 A., by **(SIX MONTHS AFTER DATE OF RULE ADOPTION)**.

- B. **CALCULATION FOR DETERMINATION OF VOC CONTENT PER VOLUME OF SOLVENT:** The volume of solvent is defined as the volume of the original solvent, plus any VOC-containing material added to the original solvent. The weight of VOC per volume of solvent shall be calculated by the following equation:

$$(W_v - W_w - W_{cc}) / (V_s)$$

Where: W_v = weight of all volatile compounds.
 W_w = weight of water.
 W_{cc} = weight of compounds listed as exempt in Section 225.2 C. from the definition of VOC.
 V_s = volume of solvent.

- C. **OPERATION AND MAINTENANCE PLAN:** Any person using an approved emission control device pursuant to Section 225.3 H., as a means of complying with this rule, as provided in Sections 225.3 B., 225.3 C.1., or 225.3 C.2., must submit, with the application for Authority to Construct, pursuant to Rule 501, General Permit Requirements, an Operation and Maintenance Plan for the emission control device to the Air Pollution Control Officer for approval. Plans for emission control devices installed as of **(DATE OF RULE ADOPTION)**, if not previously submitted, must be submitted by **(SIX MONTHS AFTER DATE OF RULE ADOPTION)** and receive approval of the Air Pollution Control Officer. The Plan shall specify operation and maintenance procedures which will demonstrate continuous operation of the emission control device during periods of emissions-producing operations. The Plan shall also specify which records must be kept to document these operation and maintenance procedures. These records shall comply with the requirements of Sections 225.5 A.2., and 225.5 A.3. The Plan shall be implemented upon approval of the Air Pollution Control Officer.

225.5 MONITORING AND RECORDS

- A. **USAGE RECORDS:** In addition to any existing permit conditions issued pursuant to Rule 501, effective **(DATE OF RULE ADOPTION)** any person subject to this rule shall comply with the following requirements:

1. **USAGE AMOUNTS:** The person shall record on a monthly basis the type and total volume for the stationary source of makeup solvent used for all cleaners subject to this rule. Records shall be kept for each time waste solvent or waste residue is removed from the facility for disposal.
2. **CONTROL EQUIPMENT:** Any person using an emission control system pursuant to Section 225.3 H., as a means of complying with this rule shall maintain such records as required by the Operation and Maintenance Plan in Section 225.4 C., on a daily basis.
3. **DURATION OF RECORDS:** Such records shall be maintained on-site for two years and made available for review by the Air Pollution Control Officer upon request.

B. TEST METHODS

1. **DETERMINATION OF BOILING POINT:** The initial boiling point of solvents shall be determined in accordance with ASTM D 1078-86.
2. **DETERMINATION OF CONTROL EFFICIENCY:** Control efficiency of control equipment shall be determined in accordance with EPA Method 25.
3. **DETERMINATION OF COLLECTION EFFICIENCY:** Collection efficiency of the collection system shall be determined in accordance with EPA Guidelines for Developing Capture Efficiency Protocols, 55 Federal Register 26865, June 29, 1990.
4. **DETERMINATION OF VOLUMETRIC FLOWRATE:** Volumetric flowrate shall be determined in accordance with EPA Methods 2, 2A, 2C, and 2D.
5. **DETERMINATION OF VOC CONTENT:** VOC content of solvents shall be determined in accordance with EPA Method 24 and Sections 225.4 B., and 225.5 B.6., of this rule.

6. **DETERMINATION OF COMPOUNDS EXEMPT FROM VOC DEFINITION:** Compounds exempted from the VOC definition, as listed in Section 203 of this rule, shall be determined in accordance with ASTM D 4457-85 or ARB Method 432. If any of the perfluorocarbons are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the EPA-approved test method used to make the determination of these compounds.

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ADOPTION DATE:

RESCINDED DATE:

ADOPTION DATE:

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10/27/83

Rule 225227 Existing Sources. In any case where Regulation 11 imposes standards different than the standards applicable to an existing source of emission (on day before adoption of new Regulation 1974), and the source of emissions was in compliance, under variance, or authority to construct, with the less restrictive standards applicable on such date, then the source shall remain in compliance with such Rule, until modified or until July 1, 1984, whichever occurs first. In no event is any modification to cause an increase in emissions over that being emitted prior to such modification. (See Attachment "A" for 2974 Regulation).

10/27/83

Rule 226.228 Compliance Tests. Except as otherwise provided in these Rules and Regulations, performance tests undertaken to determine compliance of sources with Regulation II shall comply with the provisions of CFR 40, Part 60, Appendix A except that Method 5 shall be modified to include the impinger train.

5/23/01

RULE 229 INDUSTRIAL, INSTITUTIONAL, AND COMMERCIAL BOILERS,
STEAM GENERATORS, AND PROCESS HEATERS

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**INDUSTRIAL, INSTITUTIONAL, AND COMMERCIAL BOILERS,
STEAM GENERATORS, AND PROCESS HEATERS**

229.1 GENERAL

- A. **PURPOSE:** To provide a control measure to limit emissions of NOx from industrial, institutional, and commercial boilers, steam generators and process heaters in conformance with BARCT determinations approved by the California Air Resources Board to meet the requirements of the California Clean Air Act.
- B. **APPLICABILITY:** This rule applies to boilers, steam generators, and process heaters with rated heat inputs of greater than or equal to 5 million BTU per hour, used in all industrial, institutional, and commercial operations.
- C. **EXEMPTION, NONGASEOUS FUELS:** Units subject to the requirements of Section 229.3 A. of this rule which normally burn only gas shall comply with a 150 ppmv, or 0.215 pound per million BTU of heat input, NOx emission when burning nongaseous fuel, if gas is unavailable for purchase. This exemption is limited to not more than 168 hours of operation per calendar year, excluding equipment and emission testing time not exceeding 48 hours per calendar year.
- D. **EXEMPTION, ELECTRIC UTILITY BOILERS:** The provisions of this rule does not apply to boilers used by electric utilities to generate electricity.
- E. **EXEMPTION: WASTE HEAT RECOVERY BOILERS:** The provisions of this rule do not apply to waste heat recovery boilers that are used to recover sensible heat from the exhaust of combustion turbines.
- F. **EXEMPTION, DRYERS:** The provisions of this rule do not apply to dryers in which the material being dried is in direct contact with the products of combustion.
- G. **EXEMPTION, CEMENT AND LIME KILNS, GLASS MELTING FURNACES, AND SMELTERS:** The provisions of this rule do not apply to cement and lime kilns, glass melting furnaces and smelters.
- H. **EXEMPTION, BIOMASS BOILERS:** The provisions of this rule do not apply to boilers subject to Rule 232, Biomass

Boilers.

229.2 DEFINITIONS

- A. **ANNUAL HEAT INPUT:** The total heat input of fuels burned by a unit in a calendar year, as determined from the HHV and cumulative annual usage of each fuel.
- B. **BARCT:** "Best Available Retrofit Control Technology" as defined in section 40406 of the California Health and Safety Code as "an emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source".
- C. **BOILER OR STEAM GENERATOR:** Any combustion equipment fired with any fuel and used to produce steam that is not used exclusively to produce electricity for sale. This definition does not include any waste heat recovery boiler that is used to recover sensible heat from the exhaust of a combustion turbine.
- D. **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.
- E. **GAS:** Any fuel which is a gas at standard conditions
- F. **HEAT INPUT:** The chemical heat released due to fuel combustion in a unit, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.
- G. **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. HHV shall be determined by one of the following test methods:
 - 1. ASTM D 2015-85 for solid fuels; or
 - 2. ASTM D 240-87 or ASTM D 2382-82 for liquid hydrocarbon fuels; or
 - 3. ASTM D 1826-88 or ASTM D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels.

- H. **NO_x EMISSIONS (NO_x):** The sum of nitric oxides and nitrogen dioxide in the flue gas.
- I. **NONGASEOUS FUEL:** Any fuel which is not a gas at standard conditions.
- J. **PARTS PER MILLION (BY VOLUME) (ppmv):** The ratio of the number of gas molecules of a given species, or group, to the number of millions of total gas molecules.
- K. **PROCESS HEATER:** Any combustion equipment fired with any fuel, and which transfers heat from combustion gases to water or process streams. This definition does not include any dryers in which the material being dried is in direct contact with the products of combustion, cement or lime kilns, glass melting furnaces, or smelters.
- L. **RATED HEAT INPUT:** The heat input capacity, in million BTU per hour, specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than the heat input capacity specified on the nameplate, the maximum heat input shall be considered as the rated heat input.
- M. **STANDARD CONDITIONS:** A gas temperature of 68°F and one atmosphere and a gas pressure of 14.7 pounds per square inch absolute.
- N. **THERM:** One hundred thousand (100,000) BTU.
- O. **THREE PREVIOUS CALENDAR YEARS:** The three consecutive years immediately preceding the year in which final compliance is required by this rule, or the three consecutive years immediately preceding each calendar year of compliance thereafter.
- P. **UNIT:** Any boiler, steam generator or process heater as defined in Sections 229.2 C. and 229.2 K. of this rule.

229.3 **STANDARDS**

- A. **ANNUAL HEAT INPUTS \geq 90,000 THERMS:** For units with rated heat inputs of greater than or equal to 5 million BTU per

hour and annual heat inputs of greater than or equal to 90,000 therms for any of the three previous calendar years, NOx emissions shall not exceed the following levels:

1. 30 parts per million by volume (ppmv), or 0.036 pound per million BTU of heat input when operated on gas; or
2. 40 parts per million by volume (ppmv), or 0.052 pound per million BTU of heat input, when operated on nongaseous fuel; or
3. the heat-input weighted average of the limits specified in 229.3 A.1. and 229.3 A.2., above, when operated on combinations of gas and nongaseous fuels.

Emissions from units subject to this Section shall not exceed a carbon monoxide concentration of 400 parts per million by volume (ppmv).

B. ANNUAL HEAT INPUTS < 90,000 THERMS: Units with rated heat inputs of greater than or equal to 5 million BTU per hour and annual heat inputs of less than 90,000 therms for each of the three previous calendar years or units with rated heat inputs of greater than or equal to 5 million BTU per hour and not subject to the provisions of Section 229.3 A., shall:

1. Be operated in a manner that maintains stack-gas oxygen concentrations at less than or equal to 3.00 percent by volume on a dry basis; or
2. Be operated with a stack-gas oxygen trim system set at 3.00 percent by volume oxygen. The tolerance of this setting shall be plus or minus () five percent (i.e. 2.85 to 3.15 per cent by volume oxygen); or
3. Be tuned at least once per year by a technician that is qualified, to the satisfaction of the Air Pollution Control Officer, to perform a tune-up in accordance with Section 229.6 of this rule; or
4. Be operated in compliance with the applicable emission levels specified in Section 229.3 A. of this rule.

C. **EQUIPMENT REQUIREMENTS**

1. Owners or operators of units which simultaneously fire combinations of different fuels, and are subject to the requirements of Section 229.3 A., shall install non-resettable totalizing mass flow rate meters in each fuel line. Alternatively, non-resettable totalizing volumetric flow rate meters may be installed in conjunction with temperature and pressure meters in each fuel line.
2. Owners or operators of units which employ flue-gas NOx reducing technology and subject to the requirements of Section 229.3 A. of this rule, shall install meters, as applicable, to allow instantaneous monitoring of the operational characteristics of the NOx reduction equipment.

229.4 **ADMINISTRATIVE REQUIREMENTS**

A. **COMPLIANCE SCHEDULE:** The owner or operator of units subject to this rule shall fulfill the following increments of progress:

1. Submit, by **September 27, 1996**, a plan containing the following:
 - a. A list of all units with their rated heat inputs and anticipated annual heat inputs.
 - b. For owners or operators of units subject to section 229.3 A., for each unit listed, the selected method of achieving the applicable standard or standards of Section 229.3 A.
 - c. For owners or operators of units subject to Section 229.3 B., for each unit listed, a selection of one of the four options specified in Section 229.3 B. to achieve compliance with this rule.
2. All owners or operators subject to the provisions of this rule shall submit an application for Authority to Construct for any modifications required to achieve compliance with the requirements of this

rule no later than September 27, 1996.

3. By September 27, 1998, demonstrate final compliance with all applicable standards and requirements of this rule.

B. COMPLIANCE DETERMINATION:

1. An owner or operator of any unit(s) shall have the option of complying with either the pounds-per-million-BTU emission rates or the parts-per-million-by-volume emission limits specified in Section 229.3 A.
2. All emission determinations shall be made in the as-found operating condition, except that emission determinations shall include at a minimum at least one source test conducted at the maximum firing rate allowed by the District permit, and no compliance determination shall be established within two hours after a continuous period in which fuel flow to the unit is zero, or shut off, for thirty minutes or longer.
3. All ppmv emission limits specified in Sections 229.1 C. and 229.3 A. are referenced at dry stack-gas conditions and 3.00 percent by volume stack-gas oxygen. Emission concentrations shall be corrected to 3.00 percent oxygen as follows:

$$[\text{ppm NOx}]_{\text{corrected}} = \frac{20.95\% - 3.00\%}{20.95\% - [\% \text{O}_2]_{\text{measured}}} * [\text{ppm NOx}]_{\text{measured}}$$

$$[\text{ppm CO}]_{\text{corrected}} = \frac{20.95\% - 3.00\%}{20.95\% - [\% \text{O}_2]_{\text{measured}}} * [\text{ppm CO}]_{\text{measured}}$$

4. All pounds-per-million-BTU emission rates shall be calculated as pounds of nitrogen dioxide (NO₂) per million BTU of heat input.
5. All emission concentrations and emission rates shall be based on 15-consecutive-minute averages. These averages shall be calculated from no less than five data sets, recorded from samplings on intervals of no greater than three minutes.

6. All units covered under Sections 229.3 A. and 229.3 B. shall conduct source tests to demonstrate initial compliance with the requirements of these Sections. Additional source testing shall be required at least once every 12 month period to ensure compliance with the standards set forth in Sections 229.3 A. and 229.3 B. of this rule. Units covered under Section 229.3 B.3. shall be tuned not less than once every 12 months.
 7. A violation of the plan under Section 229.4 A.1. shall constitute a violation of this rule.
 8. The cumulative annual usage of each fuel shall be monitored from utility service meters, purchase, or tank fill records, or by any other acceptable methods approved by the Air Pollution Control Officer.
- C. **TEST REPORTS:** The owners or operators of units subject to Section 229.3 of this rule shall submit compliance test reports on each unit for each fuel burned, including any fuels which may be burned in accordance with Section 229.1 C., not less than once every twelve months; except that tune-up verification reports shall be submitted not less than once every twelve months for each unit complying with Section 229.3 B.3. for each fuel burned. Test reports shall include the operational characteristics of all flue-gas NOx reduction equipment. The first test or tune-up report, for each unit subject to Section 229.3 of this rule shall be submitted by September 27, 1998.

229.5 MONITORING AND RECORDS

- A. **FUEL USAGE AND OPERATING HOURS:** The owners or operators of units subject to Section 229.3 of this rule shall monitor and record for each unit the HHV and cumulative annual usage of each fuel. The owners and operators of units exempt from Section 229.3 A. in accordance with Section 229.1 C. shall monitor and record for each unit the cumulative hours of operation on each nongaseous fuel. The records shall be updated weekly and made available to the District upon request. Historical annual data for the three previous calendar years shall be kept and made available by the owners and operators.
- B. **TEST METHODS:**

1. Compliance with NOx emission requirements and the stack-gas carbon monoxide and oxygen requirements of Section 229.3 shall be determined using the following test methods:
 - a. Oxides of Nitrogen - ARB Method 100.
 - b. Carbon Monoxide - ARB Method 100.
 - c. Stack-Gas Oxygen - ARB Method 100.
 - d. NOx Emission Rate (Heat Input Basis) - EPA Method 19.
2. Integrated sampling methods for oxides of nitrogen, stack-gas oxygen, and stack-gas carbon monoxide, as approved by the Air Pollution Control Officer, California Air Resources Board and the United States Environmental Protection Agency, may be acceptable for determination of compliance with NOx emission concentration or rate limits.

229.6 TUNING PROCEDURE

- A. **GENERAL:** Nothing in this tuning procedure¹ shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurers, National Fire Prevention Association, the California Department of Industrial Relations (Occupational Safety and Health Division), the Federal Occupational Safety and Health Administration, or other relevant regulations and requirements.
- B. **PROCEDURES:**
 1. Operate the unit at the firing rate most typical of normal operation. If the unit experiences significant load variations during normal operations, operate the unit at its average firing rate.
 2. At the firing rate established in Section 229.6 B.1., record stack-gas temperatures, oxygen concentration, and CO concentration (for gaseous fuels) or smoke-spot number² (for liquid fuels), and

observe flame conditions after unit operation stabilizes at the selected firing rate. If the excess oxygen in the stack-gas is at the lower range of typical minimum values³, and if CO emissions are low and there is no smoke, the unit is probably operating at near optimum efficiency - at this particular firing rate. However, complete the remaining portion of this procedure to determine whether still lower oxygen levels are practical.

3. Increase combustion air flow until the stack-gas oxygen levels increase by one or two percent over the level measured in Section 229.6 B.2. As in Section 229.6 B.2., record the stack-gas temperature, CO concentration (for gaseous fuels) or smoke-spot number (for liquid fuels), and observe flame conditions for these higher oxygen levels after unit operation stabilizes.
4. Decrease combustion air flow until the stack-gas oxygen is at the level measured in Section 229.6 B.2. From this level gradually reduce the combustion air flow, in small increments. After each increment, record the stack-gas temperature, oxygen concentration, CO concentration (for gaseous fuels), and smoke-spot number (for liquid fuels). Also, observe the flame and record any changes in its condition.
5. Continue to reduce combustion air flow stepwise, until one of the following limits is reached:
 - a. Unacceptable flame conditions - such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability;
 - b. Stack-gas CO concentrations greater than 400 ppm;
 - c. Smoking at stack;
 - d. Equipment-related limitations - such as low windbox/furnace pressure differential, built-in air-flow limits, etc.
6. Develop an O₂/CO curve (for gaseous fuels) or O₂/smoke curve (for liquid fuels) similar to those

shown in Figures 1 and 2 using the excess oxygen and CO or smoke-spot number data obtained at each combustion air flow setting.

7. From the curves prepared in Section 229.6 B.6., find the stack-gas oxygen levels where the CO emissions or smoke-spot number equal the following values:

Fuel	Measurement	Value
Gaseous	CO Emissions	400 PPM
#1 & #2 Oils	Smoke Spot Number	Number 1
#4 Oil	Smoke Spot Number	Number 2
#5 Oil	Smoke Spot Number	Number 3
Other Oils	Smoke Spot Number	Number 4

The above conditions are referred to as the CO or smoke-spot thresholds, or as the minimum excess oxygen levels. Compare this minimum value of excess oxygen to the expected value provided by the combustion unit manufacturer. If the minimum level found is substantially higher than the value provided by the manufacturer, burner adjustments can probably be made to improve fuel and air mix, thereby allowing operations with less air.

8. Add 0.5 to 2.0 percent to the minimum excess oxygen level found in Section 229.6 B.7. and reset burner controls to operate automatically at this higher stack-gas oxygen level. This margin above the minimum oxygen level accounts for fuel variations, variations in atmospheric conditions, load changes, and nonrepeatability or play in automatic controls.
9. If the load of the combustion unit varies significantly during normal operation, repeat Sections 229.6 B.1. - 229.6 B.8. for the firing rates that represent the upper and lower limits of the range of the load. Because control adjustments at one firing rate may affect conditions at other

firing rates, it may not be possible to establish the optimum excess oxygen level at all firing rates. If this is the case, choose the burner control settings that give the best performance over the range of the firing rates. If one firing rate predominates, the setting should optimize the conditions at the rate.

10. Verify that the new settings can accommodate the sudden load changes that may occur in daily operation without adverse effects. Do this by increasing and decreasing load rapidly while observing the flame and stack. If any of the conditions in Section 229.6 B.5. result, reset the combustion controls to provide a slightly higher level of excess oxygen at the affected firing rates. Next, verify these new settings in a similar fashion. Then make sure that the final control settings are recorded at steady-state operating conditions for future reference.

-
1. THIS TUNING PROCEDURE IS BASED ON A TUNE-UP PROCEDURE DEVELOPED BY KVB, INC. FOR THE EPA.
 2. THE SMOKE-SPOT NUMBER CAN BE DETERMINED WITH ASTM TEST METHOD D-2156 OR WITH THE BACHARACH METHOD. THE BACHARACH METHOD IS INCLUDED IN A TUNE-UP KIT THAT CAN BE PURCHASED FROM THE BACHARACH COMPANY.
 3. TYPICAL MINIMUM OXYGEN LEVELS FOR UNITS AT HIGH FIRING RATES ARE:
 - A. FOR NATURAL GAS: 0.5 - 3%
 - B. FOR LIQUID FUELS: 2 - 4%.

Figure 1

Oxygen/CO Characteristic Curve

Figure 2

Oxygen/Smoke Characteristic Curve

SOURCE: KVB INC.

Figure 1

Oxygen/CO Characteristic Curve

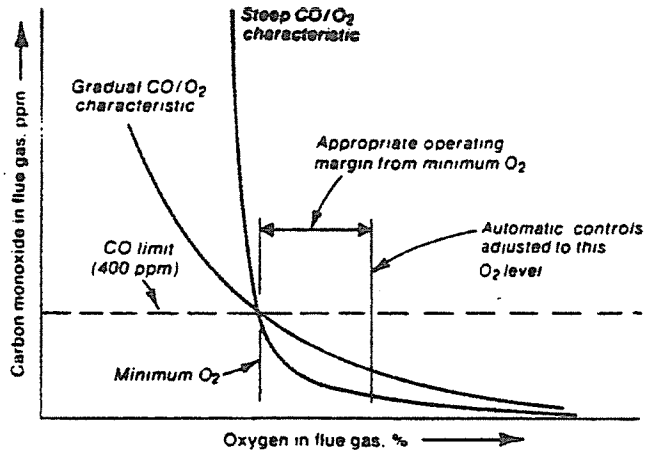
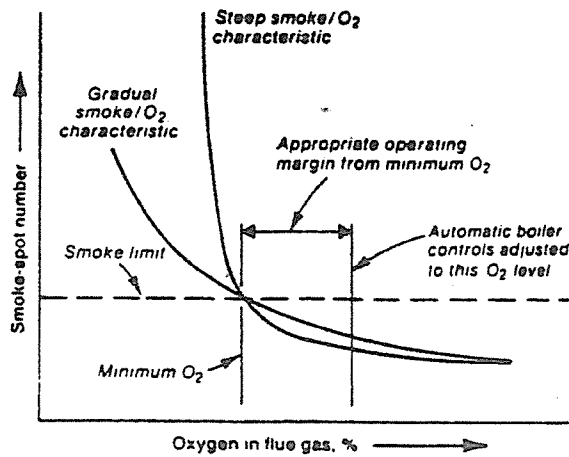


Figure 2

Oxygen/Smoke Characteristic Curve



Source: KVB Inc.

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ADOPTED: September 27, 1994

AMENDED: January 23, 2001

RESCINDED:

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RULE 230 AUTOMOTIVE REFINISHING OPERATIONS

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11/30/94

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RULE 230

AUTOMOTIVE REFINISHING OPERATIONS

230.1 GENERAL

- A. **PURPOSE:** To limit the emission of volatile organic compounds from finishing or refinishing of Group I and Group II Vehicles and Equipment as defined in this rule.
- B. **EXEMPTION, TOUCH-UP:** The provisions of this rule shall not apply to touch-up operations.
- C. **EXEMPTION, GRAPHIC DESIGN APPLICATIONS:** The provisions of this rule shall not apply to graphic design applications.
- D. **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.
- E. **EXEMPTION, RADIATORS:** The provisions of this rule shall not apply to the coating of radiators and engine parts.
- F. **EXEMPTION, AEROSOL PAINT PRODUCTS:** The provisions of this rule shall not apply to the application of aerosol paint products.
- G. **LIMITED EXEMPTION, SELF-CONTAINED COATING APPLICATION:** The provisions of Section 230.3 B., 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.

230.2 DEFINITIONS

- A. **ANTI GLARE/SAFETY COATING:** A coating which minimizes light reflection for safety purposes.
- B. **CAMOUFLAGE COATING:** A coating applied on motor vehicles to conceal such vehicles from detection.
- C. **CATALYST:** A substance whose presence initiates the reaction between chemical compounds.
- D. **COLOR MATCH:** The ability of a repair coating to blend into an existing coating so that color difference is not visible.

E. **ELECTROSTATIC APPLICATION:** The application of charged atomized paint droplets which are deposited by electrostatic attraction.

F. **EXEMPT COMPOUNDS:** The following compounds are exempt from the definition of VOC in Section 230.2 HH.:

1. Methane
2. Carbon Dioxide
3. Carbon Monoxide
4. Carbonic Acid
5. Metallic Carbides or Carbonates
6. Ammonium Carbonate
7. 1,1,1-Trichloroethane
8. Methylene Chloride
9. Dichlorotrifluoroethane (HCFC-123)
10. 2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
11. Trichlorofluoromethane (CFC-11)
12. Dichlorodifluoromethane (CFC-12)
13. Trichlorotrifluoroethane (CFC-113)
14. Dichlorotetrafluoroethane (CFC-114)
15. Chloropentafluoroethane (CFC-115)
16. Pentafluoroethane (HFC-125)
17. 1,1,2,2-Tetrafluoroethane (HFC-134)
18. Tetrafluoroethane (HFC-134a)
19. Dichlorofluoroethane (HCFC-141b)
20. Chlorodifluoroethane (HCFC-142b)
21. 1,1,1-Trifluoroethane (HFC-143a)
22. Chlorodifluoromethane (HCFC-22)
23. Trifluoromethane (HFC-23)
24. 1,1-Difluoroethane (HFC-152a)
25. The following four classes of perfluorocarbon compounds:
 - a. Cyclic, branched, or linear, completely fluorinated alkanes.
 - b. Cyclic, branched, or linear, completely fluorinated ethers, with no saturations.
 - c. Cyclic, branched, or linear, completely fluorinated tertiary amines, with no saturations.
 - d. Sulfur-containing perfluorocarbons with no saturations and with sulfur bonds only to carbon and fluorine.

Perfluorocarbon compounds shall be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific compounds and the amounts present in the product or process and provides a validated test method which can be used to quantify identified compounds.

- G. **FINISHING:** The coating of incomplete vehicles, their parts and components, or mobile equipment for which the original coating was not applied from an Original Equipment Manufacturing (OEM) plant coating assembly line.
- H. **FINAL STAGE MANUFACTURE:** 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.
- I. **GRAMS OF VOC PER LITER OF COATING LESS WATER AND LESS EXEMPT SOLVENT:** The weight of VOC per combined volume of VOC and coating solids as calculated by the following equation:

$$G_{\text{voc}} = \frac{(W_s - W_w - W_{\text{cs}})}{(V_m - V_w - V_{\text{cs}})}$$

- where:
- G_{voc} = Grams VOC per liter of coating less water and exempt compounds.
 - W_s = weight of volatile compounds in grams.
 - W_w = weight of water in grams.
 - W_{cs} = weight of exempt compounds in grams.
 - V_m = volume of material in liters.
 - V_w = volume of water in liters.
 - V_{cs} = volume of exempt compounds (as defined in Section 230.2 F., of this rule) in liters.

- J. **GRAPHIC DESIGN APPLICATION:** The application of logos, letters, numbers and graphics to a painted surface, with or without the use of a template.
- K. **GROUND SUPPORT:** Vehicles used in support of aircraft activities at airports.
- L. **GROUP I VEHICLES:** Passenger cars, large/heavy duty truck cabs and chassis, light and medium duty trucks and vans, and motorcycles.
- M. **GROUP II VEHICLES:** Public transit buses and mobile equipment.
- N. **HIGH VOLUME, LOW PRESSURE (HVLP) 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 atomized pressure measured dynamically at the center of the air cap and at the air horns.

- O. **LACQUER:** A coating that dries primarily by solvent evaporation and is resolvable in its original solvent.
- P. **LARGE/HEAVY DUTY TRUCKS:** Any truck having a manufacturer's gross vehicle weight rating of over 30,000 pounds.
- Q. **LIGHT AND MEDIUM DUTY TRUCKS AND VANS:** Any truck or van having a manufacturer's gross vehicle weight rating of 30,000 pounds or less.
- R. **METALLIC COATING TOPCOAT:** Any coating which contains more than 5 g/l (0.042 lb/gal) of metal particles, as applied, where such particles are visible in the dried film.
- S. **MOBIL 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.
- T. **MULTI STAGE TOPCOAT SYSTEM:** A topcoat system composed of either a basecoat/clearcoat, a basecoat/midcoat/clearcoat, or a groundcoat/basecoat/midcoat/clearcoat.

The VOC content of a basecoat/clearcoat coating system shall be calculated according to the following formula:

$$VOC_{Total} = \frac{VOC_{bc} + 2VOC_{cc}}{3}$$

The VOC content of a 3 Stage coating system shall be calculated according to the following formula:

$$VOC_{Total} = \frac{VOC_{bc} + VOC_{mc} + 2VOC_{cc}}{4}$$

The VOC content of a 4 Stage coating system shall be calculated according to the following formula:

$$VOC_{Total} = \frac{VOC_{gc} + VOC_{bc} + VOC_{mc} + 2VOC_{cc}}{5}$$

Where:

VOC_{Total} = The sum of the VOC content, as applied and used to determine compliance with Section 230.3 A.

VOC_{gc} = The VOC content, as applied, of a pigmented groundcoat or tinted primer sealer.

VOC_{bc} = The VOC content, as applied, of a pigmented basecoat.

VOC_{mc} = The VOC content, as applied, of a translucent midcoat.

2VOC_{cc} = Two times the VOC content, as applied, of a transparent clearcoat.

- U. **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 **June 1, 1995**, a precoat shall be a two component coating that dries by oxidation or chemical polymerization.
- V. **PRETREATMENT WASH PRIMER:** Any coating which contains a minimum of 0.5 percent acid by weight, is necessary to provide surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.
- W. **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 a primer when applied to Group II vehicles.
- X. **PRIMER SEALER:** Any coating applied for the purpose of sealing the underlying metal or coating system prior to the application of a topcoat.
- Y. **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.
- Z. **REDUCER:** The solvent used to thin enamel.
- AA. **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.

- BB. **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.
- CC. **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 applications.
- DD. **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, solid color and metallic topcoats are single stage applications, the VOC_{Total} of a multi stage topcoat system will determine compliance with VOC standards in Section 230.3 A.
- EE. **TOUCH-UP COATING:** A coating applied by brush, air brush, or hand held, non-refillable aerosol cans to repair minor surface damage and imperfections less than four square feet.
- FF. **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.
- GG. **UTILITY BODY:** A special purpose service compartment or unit that will be bolted, welded, or affixed onto an existing cab and chassis. The compartment may serve as storage for equipment or parts.
- HH. **VOLATILE ORGANIC COMPOUNDS (VOC):** Any chemical compound containing at least one atom of carbon except exempt compounds specified in Section 230.2 F.

230.3 STANDARDS

- A. **LIMITS:** Any person who applies coatings to Group I or II vehicles, mobile equipment, their parts and components, shall comply with Sections 230.3 A.1., or 230.3 A.2., of this rule.
 - 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 compounds (as defined Section 230.2 F., of this rule), unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an overall control efficiency (capture and control) of at least 85 percent and which has been approved in writing by the Air Pollution Control Officer.

COATING	(DATE OF ADOPTION) VOC	JUNE 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 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)

2. **Group II Vehicles and Mobile Equipment:** A person shall not finish or refinish Group II vehicles and equipment or their parts and components where color match is not required, 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 compounds (as defined in Section 230.2 F., of this rule), unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an overall control efficiency (capture and control) of at least 85 percent and which has been approved in writing by the Air Pollution Control Officer.

COATING	(DATE OF ADOPTION) VOC	JUNE 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)
Topcoat	420 g/l (3.5 lbs/gal)	420 g/l (3.5 lbs/gal)
Metallic Topcoat	420 g/l (3.5 lbs/gal)	420 g/l (3.5 lbs/gal)

COATING	(DATE OF ADOPTION) VOC	JUNE 1, 1995 VOC
Camouflage	420 g/l (3.5 lbs/gal)	420 g/l (3.5 lbs/gal)

B. **TRANSFER EFFICIENCY:** Effective **(SIX MONTHS FROM DATE OF ADOPTION)** for all coatings, 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:

1. Electrostatic application equipment, operated in accordance with the manufacturer's recommendations;
2. High Volume Low Pressure (HVLP) spray equipment, operated in accordance with the manufacturer's recommendations;
3. Any other coating application method which has been demonstrated to have a transfer efficiency of 65% or greater according to the requirements of Section 230.5 C., Determination of Transfer Efficiency.

C. **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:

1. Shall use closed, nonabsorbent containers for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup.
2. Shall store fresh or spent solvent, coating, catalyst, thinner, or reducer in closed containers when not in use.
3. Shall not use organic compounds for the cleanup of spray equipment including paint lines unless an enclosed system or other system that has been approved in writing for use by the Air Pollution Control Officer and submitted to and approved by ARB and U.S. EPA, is used for cleanup. The system must enclose spray guns, cups, nozzles, bowls and other parts during washing, rinsing and draining procedures. Equipment used shall minimize the evaporation of organic compounds to the atmosphere.

4. Effective **June 1, 1995**, the VOC content of surface preparation solvent shall not exceed 72 g/l (0.6 lb/gal). The VOC content of surface preparation solvent used to clean plastic parts shall not exceed 780 g/l (6.5 lbs/gal).
- D. **SMALL PRODUCTION/UTILITY BODIES:** A person shall not coat utility bodies where the coating must match that of the vehicles upon which there will be mounted using any coating with a VOC content in excess of the standards set forth in Section 230.3 A.1., provided production is less than 20 vehicles per day. Daily records shall be maintained on the number of utility bodies coated each day and such records shall be retained for the previous five (5) year period and be available at the time of inspection.
- E. **SPECIALTY COATINGS:** A person shall not use any specialty coating with a VOC content in excess of 840 g/l (7.0 pounds per gallon), excluding water and exempt compounds. Use of all specialty coatings except antiglare/safety coatings shall not exceed 5.0 percent of all coatings applied, on a daily basis. The application of topcoats with a specialty coating used as an additive shall be subject to the topcoat limits in Sections 230.3 A.1., and 230.3 A.2., of this rule.
- F. **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.
- G. **PRECOAT LIMITATION:** A person shall not use precoat in excess of 25%, by volume, of the amount of primer surfacer used.
- H. **HVLP MARKING:** Effective (**SIX MONTHS FROM DATE OF ADOPTION**) 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 230.2 N.

230.4 ADMINISTRATIVE REQUIREMENTS

- A. **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 will 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.

- B. **PROHIBITION OF SALE:** A person shall not offer for sale or sell within 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 jurisdiction of the local air pollution control agencies. This requirement shall not apply to the application of coatings where emissions to the atmosphere are controlled to an equivalent level of this rule by air pollution abatement equipment with an overall efficiency (capture and control) of at least 85 percent and which has been approved in writing by the Air Pollution Control Officer.

- C. **COMPLIANCE STATEMENT REQUIREMENT:** The manufacturer of coatings subject to this rule shall include a designation of VOC (as defined Section 230.2 HH., of this rule) as supplied, including coating components, expressed in grams per liter (or pounds per gallon), excluding water and exempt compounds, on data sheets.

230.5 MONITORING AND RECORDS

- A. **ANALYSIS OF SAMPLES:** Samples of volatile organic compounds as specified in Sections 230.3 A.1., and 230.3 A.2., of this rule shall be analyzed as prescribed by EPA Reference Method 24.

- B. **DETERMINATION OF EMISSIONS:** Emissions of volatile organic compounds as specified in Section 230.3 A.1., and 230.3 A.2., of this rule shall be measured as prescribed by EPA Reference Method 25.

- C. **DETERMINATION OF TRANSFER EFFICIENCY:** Transfer efficiency as required by Section 230.3 B., of this rule shall be determined in accordance with the South Coast Air Quality Management District (SCAQMD) test method for determining transfer efficiency entitled, "Spray Equipment Transfer Efficiency (TE) Test Procedure for Equipment User, May 24, 1989," or other equivalent method which has been approved in writing by the Air Pollution Control Officer and submitted to and approved by U.S. EPA.

- D. **DETERMINATION OF CAPTURE EFFICIENCY:** Capture efficiency as required by Section 230.3 A.1., and 230.3 A.2., of this rule shall be determined by and reported in accordance with 40 CFR 52.741, Appendix B, "VOM Measurement Techniques for Capture Efficiency".

- E. **DETERMINATION OF METALLIC PARTICLES IN METALLIC COATING TOPCOAT:** Metallic particles in metallic coating topcoat as defined, in Section 230.2 R., of this rule shall be determined by the South Coast Air Quality Management District (SCAQMD) Method 311 Analysis of Percent Metal in Metallic Coatings by Spectrographic Method contained in the SCAQMD "Laboratory Method of Analysis for Enforcement Samples" manual.
- F. **DETERMINATION OF ACID CONCENTRATION IN PRETREATMENT WASH PRIMER:** Acid concentration in pretreatment wash primer as defined in Section 230.2 V., of this rule shall be determined by ASTM Test Method D-1613-85 (modified).
- G. **COATING RECORDS:** Any person subject to Sections 230.3 A., and 230.3 C., of this rule shall comply with the following requirements:
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.
 2. The person shall maintain records on a daily basis including the following information:
 - (a) coating and mix ratio of components in the coating used.
 - (b) quantity of each coating applied.
 - (c) type and amount of solvent used for cleanup and surface preparation.
 3. The person shall maintain and have available during an inspection, a list showing the category of each of the coatings used and the type of vehicle or equipment to which each coating was applied.
 4. Such records shall be retained and available for inspection by the District for the previous five (5) year period.
- H. **PRECOAT LIMITATION RECORDS:** Any person using precoat shall retain purchase invoices to verify compliance with Section 230.3 G. Such records shall be retained for the previous five (5) year period and made available for inspection upon request.

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ADOPTED: MONTH, DAY, 1994

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RULE 231 GRAPHIC ARTS OPERATIONS

ADOPTION DATE: SEPTEMBER 27, 1994

231.1 GENERAL

- A. **PURPOSE:** To limit the emission of volatile organic compounds from graphic arts operations.
- B. **EXEMPTIONS:**
1. This rule, with the exception of Section 231.5 A., shall not apply to any graphic arts facility which emits less than 660 pounds of volatile organic compounds per calendar month from all graphic arts operations, including surface preparation and cleanup solvents, and excluding graphic arts operations addressed in Section 231.1 B.2. Records required by Section 231.5 A., shall be maintained by all facilities to demonstrate their exemption status.
 2. This rule, with the exception of Section 231.5 A., shall not apply to graphic arts operations used exclusively for research, laboratory analysis or determination of product quality and commercial acceptance, such as proof presses or other proofing systems, provided that total VOC emissions from all such equipment do not exceed 300 pounds per calendar month per facility. Records required by Section 231.5 A., shall be maintained by these facilities to demonstrate their exemption status.

231.2 DEFINITIONS

- A. **APPROVED EMISSION CONTROL SYSTEM REQUIREMENTS:** A system for reducing emissions of volatile organic compounds, approved by the Air Pollution Control Officer
- B. **COATING:** The application of a uniform layer of material across the entire width of a substrate. Those machines which have both coating and printing units are considered to be performing a graphic arts operation.
- C. **CONTROL DEVICE:** Equipment such as an incinerator or adsorber used to prevent air pollutants from reaching the ambient air.
- D. **CONVERTING OPERATION:** Coating, waxing, laminating, extrusion coating and printing, for fabrication of base materials. The base materials are then used to produce wraps, bags, and other preformed packages.
- E. **DOCTOR BLADE:** A steel blade used to scrape excess ink from a printing plate.
- F. **DRYING OVEN:** An oven used to hasten the process of drying printed or coated material.
- G. **FLEXIBLE PACKAGING INDUSTRY:** Establishments that convert materials consisting of light gauge papers, plastic films, cellulosic films such as cellophane, thin gauge metal sheets such as aluminum foil or steel foil, and combinations thereof into a variety of product packages.
- H. **FLEXOGRAPHIC PRINTING:** A printing operation in which words, designs, or pictures are applied to a substrate by means of a roll printing technique in which a raised pattern is applied to an image carrier made of rubber or other elastomeric materials mounted on a steel matting cylinder. The image is then printed directly from the raised pattern to the substrate.
- I. **FOUNTAIN SOLUTION:** The solution applied to the image plate to maintain the hydrophilic properties of the nonimage areas and to keep the nonimage area free from ink.
- J. **GRAPHIC ARTS OPERATIONS:** Publication gravure, packaging gravure, web-feed wallpaper screen printing, specialty gravure, flexographic printing operations, lithographic printing operations, letterpress printing operations, or any coating or laminating operation that manufactures flexible packaging material for the packaging industry. Coating operations which are performed by a machine having only coating units and no printing units are not graphic arts operations.
- K. **GRAVURE PRINTING:** An intaglio printing operation in which the ink is transferred from minute etched wells which comprise the image on a plate to the substrate which is supported by an impression roller, with excess ink removed from the plate by a doctor blade.
- L. **INTAGLIO PRINTING:** A printing operation done from a plate in which the image is etched or engraved into

the surface.

- M. **LAMINATING OPERATIONS:** A process of composing two or more layers of material to form a single multiple-layer sheet by using adhesive as the bonding agent.
- N. **LETTERPRESS PRINTING:** A printing operation in which the image area is raised relative to the nonimage area and the ink is transferred to the paper directly from the image surface.
- O. **LINE:** The minimum equipment which is required for the application and/or curing of inks and/or coatings on a substrate, including the ink and/or coating applicators and heating oven(s) and associated ink and coating mixing equipment.
- P. **LITHOGRAPHIC PRINTING:** A printing operation in which the image and nonimage areas exist in the same plane. The nonimage area is treated chemically so that only the image areas will be printed onto the substrate.
- Q. **NONHEATSET INK:** An ink which dries primarily by oxidation and absorption into the substrate without the use of heat from dryers or ovens, used primarily in lithographic and letterpress printing.
- R. **NONPOROUS SUBSTRATE:** Any substrate other than paper or paperboard, including but not limited to foil, polyethylene, polypropylene, cellophane, metalized polyester, nylon and polyethylene terephthalate (mylar), but not including wood, metal, or ceramic materials.
- S. **OFFSET PRINTING:** A lithographic printing operation in which the image area is transferred, or offset, to another surface, and then printed onto the substrate.
- T. **PACKAGING GRAVURE PRINTING:** A gravure printing operation on paper, paperboard, foil, film or other substrates which are to be used to produce containers or packages.
- U. **POROUS SUBSTRATE:** Paper or paperboard.
- V. **PRODUCTION UNIT:** A ream of paper, consisting of 500 sheets of paper.
- W. **PUBLICATION GRAVURE PRINTING:** A gravure printing operation on paper which is subsequently formed into books, magazines, catalogs, brochures, directories, newspaper supplements or other publication material.
- X. **SCREEN PRINTING:** A printing operation in which the printing ink passes through a refined form of stencil to a web or fabric. The stencil openings determine the form and dimension of the imprint.
- Y. **SPECIALTY GRAVURE PRINTING:** A gravure printing operation for production of wall and floor covering, decorated household paper products such as towels and tissues, cigarette filter tips, vinyl upholstery, gift wrap, and woodgrains.
- Z. **VOLATILE ORGANIC COMPOUNDS (VOC):** Compounds which contain at least one atom of carbon, except for the following compounds considered exempt from the definition of VOC, whose presence shall be determined in accordance with Section 231.5 B.:
 1. methane (CH₄)
 2. carbon dioxide (CO₂)
 3. carbon monoxide (CO)
 4. carbonic acid ((CO(OH)₂)
 5. metallic carbides (M-C) or carbonates (M-CO₃)
 6. ammonium carbonate ((NH₄)HCO₃(NH₄)CO₂NH₂)
 7. 1,1,1-trichloroethane (methyl chloroform)
 8. methylene chloride (dichloromethane)
 9. trichlorofluoromethane (CFC-11)
 10. dichlorodifluoromethane (CFC-12)
 11. chlorodifluoromethane (HCFC-22)
 12. trifluoromethane (HFC-23)
 13. 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)
 14. 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
 15. chloropentafluoroethane (CFC-115)
 16. 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)
 17. 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
 18. pentafluoroethane (HFC-125)
 19. 1,1,2,2-tetrafluoroethane (HFC-134)
 20. 1,1,1,2-tetrafluoroethane (HFC-134a)
 21. 1-dichloro-1-fluoroethane (HCFC-141b)
 22. 1-chloro-1,1-difluoroethane (HCFC-142b)

23. 1,1,1-trifluoroethane (HFC-143a)
 24. 1,1-difluoroethane (HFC-152a)
 25. The following classes of perfluorocarbon compounds:
 - a. Cyclic, branched, or linear, completely fluorinated alkanes,
 - b. Cyclic, branched, or linear, completely fluorinated ethers, with no unsaturations,
 - c. Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations.
 - d. Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine. Perfluorocarbon compounds will be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present on the product or process and provides an EPA approved test method which can be used to quantify the specific compounds.
- AA. **WEB:** A continuous sheet of substrate that is printed on web-fed printing presses.
- AB. **WEB-FEED:** An automatic system on a printing press which supplies a web substrate to the printing unit.

231.3 STANDARDS

- A. Any person operating equipment for packaging gravure printing, specialty gravure printing, wall-paper screen printing, flexographic printing, lithographic printing, letterpress printing, and any related coating or laminating operations on porous or nonporous substrates, including detergent packages, shall comply with one of the following requirements:
 1. Use only low-VOC inks, coatings, adhesives, and fountain solutions as specified in Section 231.3 B., of this rule, or
 2. Install and operate on the line, an approved emission control system pursuant to Section 231.3 C., with a control device efficiency of at least 95 percent on a mass basis and an emission collection efficiency of at least 70% on a mass basis, or
- B. **LOW-VOC INK, COATING, ADHESIVE, AND FOUNTAIN SOLUTION REQUIREMENTS:** Any person choosing to comply with this rule through the use of low-VOC inks, coatings, adhesives, or fountain solutions shall comply with the following requirements:
 1. Use only inks, coatings, or adhesives, which contain, on an as-applied basis, 300 grams or less of VOC per liter of material (2.5 pounds per gallon), less water and compounds exempt from the definition of VOC. VOC content for inks, coatings, and adhesives shall be determined using the appropriate test method pursuant to Section 231.5 B., and the following equation:

$$(W_m - W_w - W_{ex}) / (V_m - V_w - V_{ex})$$

Where:

W_m = weight of all volatile compounds in grams or pounds

W_w = weight of water in grams or pounds

W_{ex} = weight of compounds exempt from the definition of VOC, in grams or pounds

V_m = volume of material in liters or gallons

V_w = volume of water in liters or gallons

V_{ex} = volume of compounds exempt from the definition of VOC, in liters or gallons

2. Use only fountain solutions which contain, on an as-applied basis, 116 grams or less of VOC per liter of material. VOC content for fountain solutions, as well as makeup solvents and surface preparation and cleanup solvents, shall be determined using the appropriate test method pursuant to Section 231.5 B., and the following equation:

$$(W_m - W_w - W_{ex}) / (V_m)$$

Where:

W_m = weight of all volatile compounds in grams or pounds

W_w = weight of water in grams or pounds

W_{ex} = weight of compounds exempt from the definition of VOC, in grams or pounds

V_m = volume of material in liters or gallons

- C. **APPROVED EMISSION CONTROL SYSTEM REQUIREMENTS:** A system for reducing emissions of volatile organic compounds, approved by the Air Pollution Control Officer, and which satisfies the following conditions:
1. It includes a control device and collection system designed and operated to achieve the efficiencies specified in Section 231.3 A.2., at all times during normal operation of the line being controlled; and
 2. It includes a collection system which vents all drying oven exhaust to the control device.
- D. **SURFACE PREPARATION AND CLEANUP SOLVENTS:** Any person using surface preparation and cleanup solvents for graphic arts operations shall comply with the following requirements:
1. Do not use open containers for the storage or disposal of VOC containing cloth or paper. All Volatile Organic Compound (VOC) containing materials are required to be stored in closed containers.
 2. Do not store unused or waste volatile organic compounds in open containers. All Volatile Organic Compounds (VOC) containing materials are required to be stored in closed containers.

231.4 ADMINISTRATIVE REQUIREMENTS

- A. **COMPLIANCE SCHEDULE, LITHOGRAPHIC (INCLUDING OFFSET) AND LETTERPRESS PRINTING OPERATIONS:** Any person using lithographic or letterpress printing operations shall be in compliance with the requirements of this rule by **MARCH 27, 1995**.
- B. **OPERATION AND MAINTENANCE PLAN:** Any person using an approved emission control device pursuant to Section 231.3 C., as a means of complying with this rule, as provided in Section 231.3 A., must submit, with the application for Authority to Construct, pursuant to Rule 501, General Permit Requirements, an Operation and Maintenance Plan for the emission control device to the Air Pollution Control Officer for approval. Plans for emission control devices installed as of **SEPTEMBER 27, 1994**, if not previously submitted, must be submitted by **MARCH 27, 1995** and receive approval of the Air Pollution Control Officer. The Plan shall specify operation and maintenance procedures which will demonstrate continuous operation of the emission control device during periods of emissions-producing operations. The Plan shall also specify which records must be kept to document these operation and maintenance procedures. These records shall comply with the requirements of Sections 231.5 A.3., and 231.5 A.4. The Plan shall be implemented upon approval of the Air Pollution Control Officer.
- C. **COMPLIANCE STATEMENT REQUIREMENT:** The manufacturer or distributor of all inks, coatings, adhesives, fountain solutions, makeup solvents, and surface preparation and cleanup solvents which are sold for use in graphic arts operations within the District shall include on product data sheets a designation of both the as-supplied VOC content (prior to any recommended dilution) and the as-applied VOC content (based on any recommended dilution) of each material. The VOC content of inks, coatings, and adhesives shall be given pursuant to Section 231.3 B.1. The VOC content of fountain solutions, makeup solvents, and surface preparation and cleanup solvents shall be given pursuant to Section 231.3 B.2.

231.5 MONITORING AND RECORDS

- A. **USAGE RECORDS:** Effective **MARCH 27, 1995**, any person subject to this rule, including facilities claiming exemption under Sections 231.1 B.1., and 231.1 B.2., shall comply with the following requirements:
1. The person shall maintain a current list of inks, coatings, adhesives, fountain solutions, makeup solvents (reducers, thinners), and surface preparation and cleanup solvents which states the VOC content of each, on an as-applied (press-ready) basis. The VOC content of inks, coatings, and adhesives shall be given pursuant to Section 231.3 B.1. The VOC content of fountain solutions, makeup solvents, and surface preparation and cleanup solvents shall be given pursuant to Section 231.3 B.2. For persons using graphic arts materials exceeding the VOC limits specified in Section 231.3 B., and using a control system pursuant to Section 231.3 C., daily records shall be maintained of the type and volume of graphic arts materials used.
 2. For persons using graphic arts materials which comply with the VOC limits specified in Section 231.3 B., records shall be maintained on a monthly basis, showing the type and volume of inks, coatings, adhesives,

fountain solutions, and makeup solvents used, and solvents or other materials used for surface preparation, cleanup, or ink, coating, or adhesive removal.

3. Such records shall be maintained on-site for two years and made available for review by the Air Pollution Control Officer upon request.
4. Records as required by the Operation and Maintenance Plan in Section 231.4 B., shall be maintained by the source on a daily basis.
5. Any person using Section 231.3 A.3., as a means of complying with this rule shall maintain the records stipulated in Section 231.5 A.2., on a daily basis, instead of monthly. In addition, the person shall maintain daily records of the number of production units produced per day.

B. TEST METHODS

1. **ANALYSIS OF SAMPLES:** Measurement of the volatile content in adhesives, coatings, fountain solutions, makeup solvents, surface preparation and cleanup solvents, and all inks (except as provided for in Section 231.5 B.2.) shall be made in accordance with EPA Method 24. EPA Method 24A shall be used for testing publication rotogravure inks.
2. **ANALYSIS OF SAMPLES, NONHEATSET POLYMERIZING LITHOGRAPHIC OR LETTERPRESS INKS:** Measurement of the volatile content shall be made in accordance with EPA Method 24. All components of the sample must be weighed in the proper proportion into the analysis container and mixed together, with the mixture then being allowed to stand for at least one hour, but no more than 24 hours, prior to being oven-dried at 110 degrees C for 1 hour.
3. **DETERMINATION OF EXEMPT COMPOUNDS:** Exempt compounds, as listed in Section 231.2 Y., shall be determined in accordance with ASTM D 4457-85 or ARB Method 432. If any of the perfluorocarbons are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the EPA-approved test method used to make the determination of these compounds.
4. **DETERMINATION OF CONTROL DEVICE EFFICIENCY:** Control efficiency of control equipment shall be determined in accordance with EPA Method 25.
5. **DETERMINATION OF COLLECTION SYSTEM EFFICIENCY:** Collection efficiency of the collection system shall be determined in accordance with EPA Guidelines for Developing Capture Efficiency Protocols, 55 Federal Register 26865, June 29, 1990.

EL DORADO COUNTY
AIR POLLUTION CONTROL DISTRICT
CLEAN AMENDED RULE 232
BIOMASS BOILERS

RULE 232 BIOMASS BOILERS

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RULE 232

BIOMASS BOILERS

232.1 GENERAL

- A. **APPLICABILITY:** This rule applies to boilers and steam generators with rated heat inputs of greater than or equal to 5 million BTU per hour and which have a primary energy source of biomass consisting of a minimum of 75 percent of the total annual heat input.
- B. **FEDERAL REGULATIONS:** Compliance with this rule shall not exempt a person from complying with any federal regulation promulgated pursuant to the Clean Air Act (42 U.S.C. Section 7401 et seq.).
- C. **EXEMPTION, BOILERS, STEAM GENERATORS, AND PROCESS HEATERS:** This rule shall not apply to boilers, steam generators, and process heaters subject to Rule 229 INDUSTRIAL, INSTITUTIONAL, AND COMMERCIAL BOILERS, STEAM GENERATORS, AND PROCESS HEATERS.
- D. **EXEMPTION, MUNICIPAL SOLID WASTE:** This rule shall not apply to combustion units whose primary purpose is to burn municipal solid waste, as defined in Section 232.2 F.
- E. **EXEMPTION, WASTE HEAT RECOVERY BOILERS:** The provisions of this rule do not apply to waste heat recovery boilers used to recover sensible heat from the exhaust of combustion turbines or unfired waste heat recovery boilers used to recover sensible heat from the exhaust of any combustion equipment.

232.2 DEFINITIONS

- A. **BIOMASS:** Any organic material not derived from fossil fuels, such as agricultural crop residues, bark, lawn, yard and garden clippings, leaves, silvicultural residue, tree and brush pruning, wood and wood chips, and wood waste, including these materials when separated from other waste streams. Biomass does not include material containing sewage sludge, industrial sludge, medical waste, hazardous waste, or radioactive waste.
- B. **BIOMASS BOILER OR STEAM GENERATOR:** Any combustion equipment used in any industrial, institutional, or commercial operation designed to burn biomass to produce steam, heat water or other fluids, and/or produce electricity.
- C. **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.

- D. **HEAT INPUT:** The chemical heat released due to fuel combustion in a boiler, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.
- E. **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. HHV shall be determined by one of the following test methods:
1. ASTM D 2015-85 for solid fuels; or
 2. ASTM D 240-87 or ASTM D 2382-82 for liquid hydrocarbon fuels; or
 3. ASTM D 1826-88 or ASTM D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels.
- F. **MUNICIPAL SOLID WASTE:** Household, commercial/retail, and/or institutional waste. Household waste includes material discarded by single or multiple residential dwellings, hotels, motels, and other similar permanent or temporary housing establishments or facilities. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes material discarded by schools, hospitals, prisons, and government facilities and other similar establishments or facilities.
- G. **NO_x EMISSIONS:** The sum of nitric oxides and nitrogen dioxide in the flue gas, collectively expressed as nitrogen dioxide (NO₂).
- H. **PARTS PER MILLION BY VOLUME (PPMV):** The ratio of the number of gas molecules of a given species, or group, to the number of millions of total gas molecules.
- I. **RATED HEAT INPUT CAPACITY:** The heat input capacity, in million BTU per hour, specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than the input capacity specified on the nameplate, and this alteration or modification has been approved in writing by the Air Pollution Control Officer, then the new maximum heat input shall be considered as the rated heat input capacity.
- J. **RESPONSIBLE OFFICIAL:** An individual with the authority to certify that a source complies with all applicable requirements, including the conditions of permits issued to sources in accordance with Regulation V PERMITS. A "responsible official" means one of the following:
1. For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible

for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

- a. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - b. The delegation of authority to such representative is approved in advance by the Air Pollution Control Officer;
2. For a partnership or sole proprietorship, a general partner or the proprietor, respectively; or
 3. For a municipality, state, federal, or other public agency, either a principal executive officer or a ranking elected official; or
 4. For an acid rain unit subject to Title IV (Acid Deposition Control) of the Clean Air Act, the "responsible official" is the designated representative of that unit for any purposes under Title IV and Rule 522 FEDERAL OPERATING PERMIT PROGRAM.
- K. **SHUTDOWN:** The period of time a unit is cooled from its normal operating temperature to cold or ambient temperature.
- L. **STARTUP:** The period of time a unit is heated from cold or ambient temperature to its normal operating temperature as specified by the manufacturer.
- M. **UNIT:** Any biomass boiler or steam generator as defined in Section 232.2 B.
- N. **WOOD:** Wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

232.3 STANDARDS

A. LIMITATIONS

1. No person shall allow the discharge of NO_x emissions into the atmosphere from a biomass boiler or steam generator in excess of the following standards, whichever is less stringent:
 - a. An exhaust concentration of 115 parts per million (ppmv) corrected to 12 percent by volume stack gas carbon dioxide (CO₂) on a rolling three-hour average dry basis.

- b. 50 percent of the uncontrolled NO_x emission concentration in the exhaust gas stream. A corresponding controlled concentration limit, expressed in ppmv corrected to 12 percent by volume stack gas CO₂ on a rolling three-hour average dry basis, shall be established in a Permit to Operate for the purpose of demonstrating continuous compliance with the 50 percent emission reduction.
2. A person operating a biomass boiler or steam generator subject to this rule shall establish a carbon monoxide (CO) emission limitation that represents good operating and combustion practices. No person shall allow the discharge of CO into the atmosphere in excess of historical actual averages or 120 percent of the CO exhaust concentration established by an initial compliance test conducted in accordance with Section 232.5 C. The CO concentration in ppmv shall be corrected to 12 percent by volume stack gas CO₂ on a rolling 3-hour average dry basis.

232.4 ADMINISTRATIVE REQUIREMENTS

A. COMPLIANCE SCHEDULE

1. Any person operating a unit subject to this rule that does not need to be retrofitted or have new control equipment installed to comply with the emission limitations of Section 232.3, shall demonstrate full compliance by **May 15, 1995**.
2. Any person operating a unit subject to this rule shall demonstrate compliance with the emissions monitoring requirements of Section 232.5 B., in accordance with the following schedule:
 - a. By **April 18, 1995**, submit plans and specifications for the Emissions Monitoring System, including milestones for installation and certification of the proposed system.
 - b. By **October 18, 1996**, achieve full compliance with all requirements of Section 232.5 B. Full compliance shall be achieved no later than 60 days after installation of the Emissions Monitoring System.
3. Any person operating a unit that is required to install emission control equipment to achieve compliance, Section 232.3, shall achieve final compliance with emission limitations by no later than two (2) years after the determination is made that emission control equipment is required.

- B. **OPERATION AND MAINTENANCE PLAN:** Any person using an emission control device as a means of complying with the emission limitations of Section 232.3 A., shall submit an Operation and Maintenance Plan with the application for Authority to Construct for the emission control device.

1. The Operation and Maintenance Plan shall specify:
 - a. Operation and maintenance procedures that will demonstrate continuous operation of the emission control device during emission-producing operations; and
 - b. Records that must be kept to document the operation and maintenance procedures.
 2. The records must comply with Sections 232.5 A., 232.5 B., and 232.5 C.
 3. The Operation and Maintenance Plan shall be implemented upon approval by the Air Pollution Control Officer.
 4. After completing the construction of the emission control device, the Operation and Maintenance Plan shall be resubmitted annually for approval.
- C. **COMPLIANCE COSTS:** A person operating a unit subject to this rule shall bear all expenses associated with compliance with the monitoring and reporting provisions of this rule.
- D. **CERTIFICATION:** All reports submitted in accordance with this rule shall be signed by a responsible official who shall certify the truth, accuracy, and completeness of the report.

232.5 MONITORING AND RECORDS

- A. **RECORDKEEPING:** A person operating a unit subject to this rule shall keep the following records for each unit:
1. Calendar date of record.
 2. Number of hours the unit is operated during each day.
 3. Boiler load.
 4. Fuel types, including supplementary gaseous or liquid fuels.
 5. Duration of startups and shutdowns.
 6. Type and duration of maintenance and repairs.
 7. Results of compliance tests.
 8. Rolling three-hour average NO_x emission concentration (expressed as NO₂ and corrected to 12 percent by volume stack gas CO₂).

9. Rolling three-hour average CO emission concentration (corrected to 12 percent by volume stack gas CO₂).
10. Identification of time periods during which NO_x and CO emission limitations are exceeded, the reason for the exceedance, and a description of corrective action taken.
11. Identification of time periods during which operating condition and pollutant emission data were not obtained, the reason for not obtaining this information, and a description of corrective action taken.

B. EMISSIONS MONITORING

1. By the applicable compliance date in Section 232.4 A.2.b., a person operating a unit subject to this rule shall install, calibrate, operate, and maintain a Continuous Emissions Monitoring System (CEMS) in accordance with applicable requirements of Appendices B and F of Title 40 Code of Federal Regulations Part 60 (40 CFR 60), unless an Alternative Emissions Monitoring Plan (AEMP) has been approved by the Air Pollution Control District. Before approving an AEMP, the District shall request approval from the United States Environmental Protection Agency and the California Air Resources Board.
2. The CEMS shall include equipment that measures and records the following on a continuous basis, exhaust gas NO_x and CO concentrations corrected to 12 percent by volume stack gas CO₂ dry basis.
3. An AEMP shall include equipment that measures and records the average NO_x and CO concentrations calculated on a rolling three-hour average basis.
4. A person operating a CEMS shall submit an excess emissions and monitoring systems performance report to the Air Pollution Control Officer within 30 days after the end of each calendar quarter in accordance with 40 CFR 60, Section 60.7(c) and (d) and Section 60.13.

C. INITIAL COMPLIANCE TEST

1. A person who elects to comply with the limitation specified in Section 232.3 A.1.a., shall conduct an initial compliance test no later than the applicable final compliance date in Section 232.4 A.1. The source test shall also be used to establish the CO limitation in accordance with Section 232.3 A.2.
 - a. Each emission test run shall be conducted while the unit is operated at maximum operating capacity. No emission test shall be conducted during startup, shutdown, or under breakdown conditions for the purpose of the initial compliance test.

- b. The initial compliance test shall be conducted for NO_x and CO using the test methods specified in Section 232.5 D.
 - 2. A person who chooses to comply with the limitation specified in Section 232.3 A.1.b., shall conduct an initial compliance test no later than the applicable final compliance date in Section 232.4 A.1. The source test shall also be used to establish the CO limitation in accordance with Section 232.3 A.2.
 - a. Each emission test run shall be conducted while the unit is operated at maximum operating capacity. No emission test shall be conducted during startup, shutdown, or under breakdown conditions for the purpose of the initial compliance test.
 - b. The initial compliance test shall be conducted for NO_x and CO using the test methods specified in Section 232.5 D.
 - c. The 50 percent NO_x emission reduction specified in Section 232.3 A.1.b., shall be calculated based on the pre- and post-controlled NO_x concentration corrected to 12 percent by volume stack gas CO₂. The pre-controlled concentration to be used in demonstrating the 50 percent reduction shall be obtained using the test methods specified in Section 232.5 D. The pre-controlled concentration shall be submitted to the Air Pollution Control Officer in the application for Authority to Construct specified in Section 232.4 A.2., or in a previously submitted application for Authority to Construct for an existing unit.
 - 3. At least sixty (60) days prior to the initial compliance test, a written test plan detailing the test methods and procedures to be used shall be submitted for approval by the Air Pollution Control Officer. The plan shall cite the test methods to be used for the determination of compliance with the emission limitations of this rule. The plan shall provide the proposed procedures for the characterization of the representative biomass materials to be burned during testing.
- D. **TEST METHODS:** A person conducting source tests in accordance with Section 232.5 C., shall use the following test methods:
- 1. Nitrogen Oxides (NO_x) - ARB Test Method 100, Title 17, CCR, Section 94114, Procedures for Continuous Emission Stack Sampling, or EPA Test Method 7E, 40 CFR 60, Appendix A. A violation determined by any of these test methods shall constitute a violation of this rule.
 - 2. Carbon Monoxide (CO) - ARB Test Method 10, Title 17, CCR, Section 94109, Determination of Carbon Monoxide Emissions from Stationary Sources, or ARB Test Method 100, or EPA Test Method 10, 40 CFR 60, Appendix A. A violation determined by any of these test methods shall constitute a violation of this rule.

3. Carbon Dioxide (CO₂) - ARB Test Method 100, Title 17, CCR, Section 94114, Procedures for Continuous Emission Stack Sampling, or EPA Test Method 3A, 40 CFR 60, Appendix A. A violation determined by any of these test methods shall constitute a violation of this rule.

E. **DURATION OF RECORDS:** All records maintained pursuant to this rule shall be retained for at least five years from date of entry. Records shall be made available for inspection by the Air Pollution Control Officer upon request.

ADOPTED: October 18, 1994

RESCINDED:

AMENDED: January 23, 2001, September 25, 2001

072401R232BiomassBoilerAmend3Clean

RULE 233 STATIONARY INTERNAL COMBUSTION ENGINES

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RULE 233

STATIONARY INTERNAL COMBUSTION ENGINES

233.1 GENERAL

- A. **PURPOSE:** The purpose of this rule is to limit the emission of oxides of nitrogen (NO_x) and carbon monoxide (CO) from stationary internal combustion engines.
- B. **APPLICABILITY:** This rule applies to any stationary internal combustion engine rated at more than 50 brake horsepower, operated on any gaseous fuel or liquid fuel, including liquid petroleum gas (LPG), gasoline, or diesel fuel. This rule shall not apply to engines used directly and exclusively for agricultural operations necessary for the growing of crops or the raising of fowl and animals.
- C. **EXEMPTIONS:** The provisions of this rule, except for Section 233.5 C., and 233.5 D., shall not apply to the operation of stationary internal combustion engines used under the following conditions:
1. Engines rated 50 brake horsepower or less, or
 2. Engines operated less than 200 hours per calendar year, or
 3. Emergency standby engines operated either during an emergency or maintenance operation. Maintenance operation is limited to 50 hours per calendar year, or
 4. Engines used in research or teaching programs, or
 5. Engine test stands used for evaluating engine performance, or
 6. Diesel engines with a permitted capacity factor of 15 percent or less, or
 7. Diesel engines used to power cranes and welding equipment.

233.2 DEFINITIONS

- A. **BASELINE EMISSION RATES:** Emissions under normal operating conditions, prior to control, as determined by a source test conducted in accordance with Section 233.5 B., of this rule.
- B. **DIESEL ENGINE:** A compression ignited two or four-stroke engine in which liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition.
- C. **EMERGENCY STANDBY ENGINE:** An internal combustion engine used only as follows:
1. When normal power line or natural gas service fails.
 2. For the emergency pumping of water for either fire protection or flood relief.
- An emergency standby engine may not be operated to supplement a primary power source when the load capacity or rating of the primary power source has either been reached or exceeded.
- D. **ENGINE RATING:** The output of an engine as determined by the engine manufacturer and listed on the nameplate of the engine, regardless of any derating.
- E. **LEAN-BURN ENGINE:** Any two or four-stroke spark-ignited engine that is not a rich-burn engine.
- F. **MAINTENANCE OPERATION:** The use of an emergency standby engine and fuel system during testing, repair and routine maintenance to verify its readiness for emergency standby use.
- G. **OUTPUT:** The shaft work output from an engine plus the energy reclaimed by any useful heat recovery system.
- H. **PERMITTED CAPACITY FACTOR:** The annual permitted fuel use divided by the manufacturer's specified maximum hourly fuel consumption times 8760 hours per year.

- I. **RICH-BURN ENGINE:** A two or four-stroke spark-ignited engine where the manufacturer's original recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio is less than or equal to 1.1. Engines using passive emission control technology (such as the use of pre-combustion chambers), and are listed as lean-burn engines on their Permit to Operate, shall be considered lean-burn engines.
- J. **PEAK LOAD:** Maximum instantaneous operating load.
- K. **STATIONARY INTERNAL COMBUSTION ENGINE:** Any internal combustion engine of the reciprocating type that is operated at a site for more than one year or is attached to a foundation, not including engines used for self-propulsion.
- L. **STOICHIOMETRIC AIR/FUEL RATIO:** The chemically correct air/fuel ratio where all fuel and all oxygen in the air/fuel mixture will be consumed.
- M. **WASTE GAS:** Fuel gas produced at either waste water/sewage treatment facilities or landfills containing no more than 25 percent by volume supplemental gas.

233.3 STANDARDS

- A. **LIMITS:**
 - 1. After the applicable compliance date specified in Section 233.4 A.1., of this rule, the owner or operator of an existing stationary internal combustion engine to which this rule is applicable and who does not need to retrofit the unit or install new control equipment to comply with the provisions of this rule, shall limit the emissions from that engine to no more than the following:
 - a. Rich-burn stationary internal combustion engine NO_x emissions shall not exceed 50 ppmv and CO emissions shall not exceed 2,000 ppmv.
 - b. Lean-burn stationary internal combustion engine NO_x emissions shall not exceed 125 ppmv and CO emissions shall not exceed 2,000 ppmv.

- c. Diesel fired stationary internal combustion engine NO_x emissions shall not exceed 700 ppmv and CO emissions shall not exceed 2,000 ppmv.

where: ppmv = parts per million volume at 15% oxygen on a dry basis
NO_x = oxides of nitrogen
CO = carbon monoxide

- 2. After the applicable compliance date specified in Section 233.4 A.2., of this rule, the owner or operator of an existing stationary internal combustion engine to which this rule is applicable and who must retrofit the unit to comply with the provisions of this rule, shall limit the emissions from that engine to no more than the following:

- a. Rich-burn stationary internal combustion engine NO_x emissions shall not exceed 50 ppmv and CO emissions shall not exceed 2,000 ppmv.
- b. Lean-burn stationary internal combustion engine NO_x emissions shall not exceed 125 ppmv and CO emissions shall not exceed 2,000 ppmv.
- c. Diesel fired stationary internal combustion engine NO_x emissions shall not exceed 600 ppmv and CO emissions shall not exceed 2,000 ppmv.

where: ppmv = parts per million volume at 15% oxygen on a dry basis
NO_x = oxides of nitrogen
CO = carbon monoxide

- 3. The owner or operator of any new or replacement stationary combustion engine shall limit the emissions from that engine to those levels established in Section 233.3 A.5 or 233.3 A.6.
- 4. In lieu of the emission limits specified in Sections 233.3 A.1., or 233.3 A.2., of this rule, an owner or operator of an internal combustion engine may elect to replace the unit with an electric motor or permanently remove the engine from service in accordance with the applicable compliance schedule specified in Section 233.4 A.8., of this rule.

5. After the applicable compliance date specified in Section 233.4 A.5., of this Rule, the owner or operator of a stationary internal combustion engine which does not require retrofit or installation of new control equipment in order to comply with the provisions of this rule shall limit the emissions from that engine to no more than the following:
- a. Rich-burn stationary internal combustion engine NO_x emissions shall not exceed 25 ppmv or shall attain a 96 percent NO_x reduction and CO emissions shall not exceed 2,000 ppmv.
 - b. Lean-burn stationary internal combustion engine NO_x emissions shall not exceed 65 ppmv or shall attain a 90 percent NO_x reduction and CO emissions shall not exceed 2,000 ppmv.
 - c. Diesel fired stationary internal combustion engine NO_x emissions shall not exceed 700 ppmv and CO emissions shall not exceed 2,000 ppmv.

where: ppmv = parts per million volume at 15% oxygen on a dry basis
NO_x = oxides of nitrogen
CO = carbon monoxide

6. After the applicable compliance date specified in Section 233.4 A.6., of this rule, the owner or operator of an existing stationary internal combustion engine to which this rule is applicable and who must retrofit the unit to comply with the provisions of this rule, shall limit the emissions from that engine to no more than the following:
- a. Rich-burn stationary internal combustion engine NO_x emissions shall not exceed 25 ppmv or shall attain a 96 percent NO_x reduction and CO emissions shall not exceed 2,000 ppmv.
 - b. Lean-burn stationary internal combustion engine NO_x emissions shall not exceed 65 ppmv or shall attain a 90 percent NO_x reduction and CO emissions shall not exceed 2,000 ppmv.

- c. Diesel fired stationary internal combustion engine NO_x emissions shall not exceed 600 ppmv and CO emissions shall not exceed 2,000 ppmv.

where: ppmv = parts per million volume at 15% oxygen on a dry basis
NO_x = oxides of nitrogen
CO = carbon monoxide

- 7. In lieu of the emission limits specified in Sections 233.3 A.5., or 233.3 A.6., of this rule, an owner or operator of an internal combustion engine may elect to replace the unit with an electric motor or permanently remove the engine from service in accordance with the applicable compliance schedule specified in Section 233.4 A.8., of this rule.

B. ENGINE OPERATOR INSPECTION PLAN: The operator of an engine subject to the provisions of Sections 233.3 A., of this rule shall submit to the Air Pollution Control Officer an Engine Operator Inspection Plan. The plan shall be approved by the Air Pollution Control Officer in writing. The plan shall be updated after any change in operation. For new engines and modifications to existing engines, the plan shall be submitted to and approved by the Air Pollution Control Officer prior to issuance of the Permit to Operate. The operator may request a change to the plan at any time. The plan shall include the following:

- 1. The manufacturer, model number, rated horsepower, and combustion method (i.e., rich-burn, lean-burn, or diesel) of the engine.
- 2. A description of the NO_x control system installed on the engine (if any), including type (e.g., nonselective catalyst, "clean-burn" combustion) and manufacturer, as well as a description of any ancillary equipment related to the control of emissions (e.g., automatic air/fuel ratio controller, fuel valves).
- 3. The company identification and location of the engine by a schematic of the affected facilities.

4. A specific emission inspection procedure to assure that the engine is operated in continual compliance with the provisions of this rule. The procedure shall include an inspection schedule. Inspections shall be conducted every quarter or after every 2,000 hours of engine operation. In no event shall the frequency of inspection be less than once per year. Testing results from individual engines in terms of rate brake horsepower, operational conditions, fuel used, and control method may satisfy these inspection requirements. Prior to implementation of testing, test plans shall be submitted to and approved in writing by the Air Pollution Control Officer.
5. Each preventative or corrective maintenance procedure or practice that will be used to maintain the engine and NO_x control system in continual compliance with the provisions of this rule.

233.4 ADMINISTRATIVE REQUIREMENTS

A. COMPLIANCE SCHEDULE:

1. Owners or operators of existing engines shall comply with the applicable provisions of Section 233.3 A.1., of this rule in accordance with the following schedule:
 - a. No later than **April 18, 1995**, submit to the Air Pollution Control Officer:
 1. An Engine Operator Inspection Plan pursuant to Section 233.3 B., of this rule and a complete application for an Authority to Construct, as necessary, or
 2. Support documentation for each exempt engine, pursuant to Section 233.5 C., of this rule.
 - b. Demonstrate full compliance with all provisions of this rule no later than **May 15, 1995**.
2. Owners or operators of existing engines shall comply with the applicable provisions of Section 233.3 A.2., of this rule in accordance with the following schedule:

- a. No later than **April 18, 1995**, submit to the Air Pollution Control Officer:
 1. An Engine Operator Inspection Plan pursuant to Section 233.3 B., of this rule, or
 2. Support documentation for each exempt engine, pursuant to section 233.5 C., of this rule.
 - b. Submit a complete application for an Authority to Construct for all modifications no later than **May 15, 1995**.
 - c. By **January 1, 1997**, commence construction of all retrofits and/or additions of new control equipment, as approved by the Air Pollution Control Officer.
 - d. Demonstrate full compliance with the applicable provisions of this rule no later than **May 15, 1997**.
3. Any owner or operator of a new or replacement unit that is constructed on or after **October 18, 1994**, shall complete an application for an Authority to Construct prior to beginning construction of the unit. The owner or operator shall demonstrate that the unit will be operated in compliance with all applicable provisions of this rule within 60 days after the date of initial startup of the unit.
 4. An owner or operator that elects to replace a stationary internal combustion engine with an electric motor as specified in Section 233.3 A.4., of this rule or permanently removes the engine from service shall demonstrate compliance with all the applicable requirements of this rule no later than **May 15, 1999**. The owner or operator shall submit a complete application for an Authority to Construct for conversion to electric power no later than **January 1, 1997**, and shall commence conversion of the unit no later than **January 1, 1999**, or permanently remove the engine from service by **May 15, 1999**.

5. Owners or operators of new or existing engines which do not require retrofit or installation of new control equipment in order to comply with the provisions of this rule shall comply with the applicable provisions of Section 233.3 A.5., of this Rule in accordance with the following schedule:
 - a. No later than **October 22, 2002**, submit to the Air Pollution Control Officer:
 1. An Engine Operator Inspection Plan pursuant to Section 233.3 B., of this rule and a complete application for an Authority to Construct, as necessary, or
 2. Support documentation for each exempt engine, pursuant to Section 233.5 C., of this rule.
 - b. Demonstrate full compliance with all provisions of this rule no later than **October 22, 2002**.

6. Owners or operators of new or existing engines which require retrofit or installation of new control equipment in order to comply with the provisions of this rule shall comply with the applicable provisions of Section 233.3 A.6., of this rule in accordance with the following schedule:
 - a. No later than **October 22, 2002**, submit to the Air Pollution Control Officer:
 1. An Engine Operator Inspection Plan pursuant to Section 233.3 B., of this rule, or
 2. Support documentation for each exempt engine, pursuant to section 233.5 C., of this rule.

- b. Submit a complete application for an Authority to Construct for all modifications no later than **October 22, 2002**.
 - c. By **July 1, 2004**, commence construction of all retrofits and/or additions of new control equipment, as approved by the Air Pollution Control Officer.
 - d. Demonstrate full compliance with the applicable provisions of this rule no later than **December 1, 2004**.
7. Any owner or operator of a new or replacement unit that is constructed on or after **June 11, 2002**, shall complete an application for an Authority to Construct prior to beginning construction of the unit. The owner or operator shall demonstrate that the unit will be operated in compliance with all applicable provisions of this rule within 60 days after the date of initial startup of the unit.
8. An owner or operator that elects to replace a stationary internal combustion engine with an electric motor as specified in Section 233.3 A.7., of this rule or permanently removes the engine from service shall demonstrate compliance with all the applicable requirements of this rule no later than **December 1, 2005**. The owner or operator shall submit a complete application for an Authority to Construct for conversion to electric power no later than **December 1, 2003**, and shall commence conversion of the unit no later than **May 1, 2005**, or permanently remove the engine from service by **December 1, 2005**.
- B. REPORTING REQUIREMENTS:** Prior to renewal of any Permit to Operate, each operator subject to the provisions of this rule shall provide the Air Pollution Control Officer with data specifying the actual annual usage (e.g., fuel consumption, actual operating hours) of each affected engine. The data shall also include the engine manufacturer, model number, Permit number, and location of each affected engine, a summary of the maintenance and testing reports required in Section 233.3 B., of this rule, and an annual emissions report.

C. SOURCE TESTING FREQUENCY:

1. If applicable to this rule, conduct screening analysis with the use of a portable NOx analyzer
 - a. During any quarter in which a source test is not performed, a portable NOx analyzer shall be used to take NOx emission readings to verify compliance with the emission limits or percent control specified in section 233.3 A.
 - b. All emission readings shall be taken at an engine's actual peak load and under the engine's typical duty cycle.
 - c. The analyzer shall be calibrated, maintained and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the Air Pollution Control Officer.
 - d. In conducting quarterly screenings with a portable analyzer, an instrument reading in excess of the emission compliance values shall not be considered a violation, so long as the engine is brought into compliance within 15 days of the initial out of compliance reading. All NOx readings shall be reported to the Air Pollution Control Officer (APCO) or the APCO's designee in a manner specified by the Air Pollution Control Officer.
2. If applicable, emission source testing for Stationary Internal Combustion Engines.
 - a) The owner of operator shall arrange for and assure that an emissions source test is performed on each stationary internal combustion engine at least once every 24 months.
 - b) All emission readings shall be taken at an engine's actual peak load and under the engine's typical duty cycle.
 - c) Prior to any source test required by this rule, a source test protocol shall be prepared and submitted to the Air Pollution Control Officer. In addition to other information, the source test protocol shall describe which critical parameters will be established and incorporated into the Engine Operator Inspection Plan described in section 233.3 B. The source test protocol shall be approved by the Air Pollution Control Officer prior to any testing. NOx and CO concentrations shall be reported in ppmv, corrected to 15 percent oxygen. For engines using exhaust controls, NOx shall also be

reported as a percent reduction across the control device. All source test reports shall be submitted to the Air Pollution Control Officer or his designee.

D. VIOLATIONS:

1. Failure to comply with any provisions of this rule shall constitute a violation of this rule.
2. It is the responsibility of the engine operator to demonstrate to the satisfaction of the Air Pollution Control Officer that an engine subject to the provisions of this rule is being operated in continuous compliance with all applicable provisions of this rule.
3. An engine shall be in violation if it is operated out of compliance with the operating parameters of an approved Engine Operator Inspection Plan. However, if data from a source test of the engine operating under identical conditions indicates that the engine is in compliance with the requirements of this rule, then a violation will not have occurred. The source test shall be conducted at the engine operator's expense. The Engine Operator Inspection Plan shall be amended to reflect the information from this source test.

233.5 MONITORING AND RECORDS

A. **RECORDS:** The operator of any engine subject to the provisions of Section 233.3 A., of this rule shall maintain an inspection log containing at a minimum, the following data:

1. Identification and location of each engine subject to the provisions of this rule;
2. Date and results of each emission inspection;
3. A summary of any corrective emissions maintenance taken to ensure compliance with the emissions limits or reductions specified in Sections 233.3 A.1., or 233.3 A.2., of this rule; and

4. Any additional information required in the Engine Operator Inspection Plan.

The operator shall maintain the inspection log for a period of two years after the date of each entry. The log shall be available for inspection by the Air Pollution Control Officer upon request.

B. TEST METHODS:

1. Oxides of nitrogen emissions for compliance source tests shall be determined in accordance with EPA Method 7E or CARB Method 100.
2. Carbon Monoxide emissions for compliance source tests shall be determined in accordance with EPA Method 10 or CARB Method 100.
3. Oxygen content for compliance source tests shall be determined in accordance with EPA Method 3A or CARB Method 100.
4. Screening analyses shall be performed by using a portable analyzer approved in writing by the Air Pollution Control Officer.
5. NO_x emission limitations specified in Sections 233.3 A.1., 233.3 A.2., 233.3 A.5., and 233.3 A.6., of this rule shall be expressed as nitrogen dioxide. All ppmv emission limitations are referenced at 15 percent volume stack gas oxygen measured on a dry basis. Source test data point intervals shall be no greater than 5 minutes and data points shall be averaged over 15 consecutive minutes.
6. The heating value of fuel oil shall be determined in accordance with ASTM Method D240-87. The heating value of gaseous fuels shall be determined in accordance with ASTM Method D1826-77.

C. EXEMPTION RECORDS:

1. Any owner or operator claiming an exemption under Section 233.1 C., of this rule shall submit support documentation identifying reasons for the exemption. Such documentation shall contain a list that provides the following for each engine:
 - a. Permit to Operate number;
 - b. Engine manufacturer;
 - c. Model designation;
 - d. Rated brake horsepower;
 - e. Type of fuel and type of ignition.
2. In addition to the requirements specified in Section 233.5 C.1., of this rule, an owner or operator claiming an exemption under Sections 233.1 C.2., and 233.1 C.3., of this rule shall maintain a log of operating hours for each engine.
3. Exemption records specified in Sections 233.5 C.1., and 233.5 C.2., of this rule shall be retained for two years and be made available to the Air Pollution Control Officer upon request.

D. NONRESETTABLE METERS

1. Fuel Meter

All engines subject to this rule, emergency standby engines, and engines operated less than 200 hours per calendar year shall have installed a nonresettable fuel meter.

2. Elapsed Operating Time Meter

All engines subject to this rule, emergency standby engines, and engines operated less than 200 hours per calendar year shall have installed a nonresettable elapsed operating time meter.

ADOPTED: October 18, 1994

AMENDED: September 25, 2001, June 11, 2002

RESCINDED:

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RULE 234 VOC RACT RULE - SIERRA PACIFIC INDUSTRIES

ADOPTED: April 25, 1995

234.1 GENERAL

- A. **APPLICABILITY:** The provisions of this determination (rule) shall apply to the Sierra Pacific Industries or any subsequent owner or operator of the Sierra Pacific Industries facility located at 3970 Carson Road, Camino, California. All provisions are RACT and the emissions standards only apply to the main wood waste-fired boiler (Boiler #3) at the facility.

234.2 DEFINITIONS

- A. **AIR POLLUTION CONTROL OFFICER (APCO):** The Air Pollution Control Officer of the El Dorado County Air Pollution Control District, or his or her designee.
- B. **BOILER:** Any external combustion equipment fired with any fuel used to produce heat or steam.
- C. **EXEMPT COMPOUNDS:** Means any of the following compounds:
1. methane (CH₄)
 2. carbon dioxide (CO₂)
 3. carbon monoxide (CO)
 4. carbonic acid (CO(OH)₂)
 5. metallic carbides (M-C) or carbonates (M-CO₃)
 6. ammonium carbonate ((NH₄)HCO₃(NH₄)CO₂NH₂)
 7. 1,1,1-trichloroethane (methyl chloroform)
 8. methylene chloride (dichloromethane)
 9. trichlorofluoromethane (CFC-11)
 10. dichlorodifluoromethane (CFC-12)
 11. chlorodifluoromethane (HCFC-22)
 12. trifluoromethane (HFC-23)
 13. 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)
 14. 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
 15. chloropentafluoroethane (CFC-115)
 16. 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)
 17. 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
 18. pentafluoroethane (HCFC-125)
 19. 1,1,2,2-tetrafluoroethane (HCFC-134)
 20. 1,1,1,2-tetra fluoroethane (HCFC-134a)
 21. 1,1-dichloro-1-fluoroethane (HCFC-141b)
 22. 1-chloro-1,1-difluoroethane (HCFC-142b)
 23. 1,1,1-trifluoroethane (HFC-143a)
 24. 1,1-difluoroethane (HFC-152a)
 25. parachlorobenzotrifluoride (PCBTF)
 26. volatile cyclic and linear methyl siloxanes (VMS)
 27. The following classes of perfluorocarbon (PFC) compounds:
 - a. cyclic, branched, or linear, completely fluorinated alkanes,
 - b. cyclic, branched, or linear, completely fluorinated ethers with no unsaturations,

- c. cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations, and
 - d. sulphur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine. Perfluorocarbons shall be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides an EPA approved test method which can be used to quantify the specific compounds.
- D. **PPMV:** Is the concentration of pollutant in units of parts per million, by volume.
- E. **PRODUCTION RATE:** Is the total steam output of a boiler in pounds of steam per hour (lbs-steam/hour) of boiler operation.
- F. **REASONABLE AVAILABLE CONTROL TECHNOLOGY (RACT):** For the purposes of this determination (rule), means the lowest emission limitation that a particular boiler is capable of meeting by using measures that are reasonably available in terms of technological and economic feasibility. Such measures may include either control system(s) or improved combustion conditions, or both.
- G. **TOTAL ORGANIC GASES:** Any compounds that contain at least one carbon atom.
- H. **VOLATILE ORGANIC COMPOUND (VOC):** Any compound containing at least one atom of carbon, except exempt compounds as defined above.
- I. **WOOD WASTES:** Include bark, sawdust, shavings, hogged wood, and other wood refuse generated during processing operations.

234.3 STANDARDS

Emission limits in this section are referenced to dry stack gas conditions, all VOC ppmv concentrations shall be corrected to twelve percent (12%) by volume stack gas carbon dioxide (CO₂), and VOCs are reported as methane (CH₄).

- A. **EMISSION LIMITS (ppmv):** VOC emissions from wood waste boiler operations at a production rate exceeding an annual (calendar year) average of 50,000 lbs-steam per hour as defined in Section 234.2 of this rule must meet the emission limit of 150 ppmv of VOC in the stack exhaust stream.
- B. **EMISSION LIMIT MAINTENANCE:** The VOC emission limit presented in Section 234.3 A., shall be maintained through any one or more of the following provisions:
 - 1. Use of fuel with a maximum moisture content of 50%,
 - 2. Operation of the boiler at optimal combustion conditions,
 - 3. Proper operation and maintenance of pollution control equipment, and
 - 4. Periodic inspection, maintenance, and repairs on the boiler and other equipment.

234.4 ADMINISTRATIVE REQUIREMENTS

- A. **COMPLIANCE SCHEDULE:** The VOC emission limit defined in Section 234.3 A., shall be achieved on or before 1 February 1996.
- B. **EMISSIONS TESTING AND RECORDS:** The facility subject to the standards of Section 234.3 of this rule shall, at a minimum, conduct sample analysis for VOC pollutants at least once each year or at the discretion of the Air Pollution Control Officer (APCO). The Air Pollution Control Officer shall be provided with adequate advance notification at least 2 weeks before any scheduled emissions tests. The analysis results must be submitted to the APCO within 60 days of the emissions test.
- C. **EMISSION CONTROL RECORDS:** Any facility complying with the provisions of Section 234.3 A., of this rule through the provisions of Section 234.3 B., of this rule with air pollution control equipment shall maintain applicable records of system operating parameters, including temperatures, pressures, fuel flow rate, and steam production rate, repair, fuel moisture, and all VOC control measures.
- D. **REPORTING:** The Air Pollution Control Officer shall be notified within 48 hours of any event or incident that results in a known exceedance of this standard.
- E. **RETENTION OF RECORDS:** All records maintained pursuant to this section shall be retained and available for inspection by the APCO or his or her designee for the previous five-year period.

234.5 TEST METHODS AND CALCULATIONS

- A. **DETERMINATION OF VOC CONTENT OF EXHAUST STREAM:** The VOC content of the exhaust gas stream subject to the provisions of this determination (rule), excluding exempt compounds, shall be analyzed as prescribed by U.S. EPA Reference Methods 25 or 25A. If Method 25A is utilized, instruments shall be calibrated with propane and VOC concentrations shall be converted to ppmv methane on a carbon equivalence. Emissions found to exceed limits by either method constitute a violation of this rule.
- B. **DETERMINATION OF EXEMPT COMPOUNDS:** Measurement of exempt compounds shall be conducted and reported in accordance with EPA Method 18.
- C. **DETERMINATION OF TEST METHODS FOR QUANTIFYING CO₂ CORRECTION OF VOC CONCENTRATIONS:** Either ARB Method 100 or EPA Method 3A shall be used for quantifying CO₂ to support correction of VOC concentrations to a standard basis independent of the amount of dilution air in the stack.

RULE 235 SURFACE PREPARATION AND CLEANUP

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10/13/95

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RULE 235

SURFACE PREPARATION AND CLEANUP

235.1 GENERAL

- A. **PURPOSE:** The purpose of this rule is to limit the emission of volatile organic compounds (VOC) from solvent cleaning operations, and from the storage and disposal of materials used in solvent cleaning operations.
- B. **APPLICABILITY:** This rule applies to any owner or operator of any facility that uses VOC-containing materials in the production, repair, maintenance, or servicing of parts, products, tools, machinery, equipment, or general work areas or that stores and/or disposes of VOC-containing materials used in solvent cleaning operations.
- C. **EXEMPTION, SMALL USER:** The provisions of Section 235.3 A. of this rule shall not apply to facilities that use 10 gallons or less of solvents, as defined in Section 235.2 Z. of this rule in any one calendar year provided that daily use does not exceed one liter.
- D. **EXEMPTION, SOLVENT CLEANING OPERATIONS:** Cleaning carried out in batch-loaded cold cleaners, open-top vapor degreasers, conveyORIZED degreasers, or film cleaning machines which are subject to Rule 225 ORGANIC SOLVENT CLEANING AND DEGREASING OPERATIONS, are not subject to the provisions of Section 235.3 of this rule.
- E. **EXEMPTION, DRY CLEANING OPERATIONS:** Dry cleaning operations subject to Rule 218 PERCHLOROETHYLENE DRY CLEANING OPERATIONS, are not subject to the provisions of Section 235.3 of this rule.
- F. **EXEMPTION, WIPE CLEANING:** Wipe cleaning is not subject to the provisions of Section 235.3 A. when carried out for any of the applications listed below.
 - 1. Cleaning of solar cells, laser hardware, and high precision optics.

2. Cleaning for: conducting performance laboratory tests on coatings, adhesives, or inks; research and development programs; and laboratory tests in quality assurance laboratories.
 3. Cleaning of polycarbonate plastics.
- G. **EXEMPTION, AUTOMATED SPRAY EQUIPMENT SYSTEMS:** Internal cleaning of the tips of automated spray equipment systems, except for robotic systems, and cleaning with spray bottles or containers described in Section 235.3 B.2. of this rule, are not subject to the provisions of Section 235.3 E.1. of this rule.
- H. **EXEMPTION, AEROSOL PRODUCTS:** Cleaning with aerosol products shall not be subject to the provisions of Sections 235.3 A. and 235.3 E.1. of this rule if 160 fluid ounces or less per day per facility of aerosol products are used.
- I. **EXEMPTION, HIGH-PRECISION OPTICS:** Cleaning of cotton swabs to remove cottonseed oil before cleaning of high-precision optics shall not be subject to the provisions of Section 235.3 A. of this rule.
- J. **EXEMPTION, JANITORIAL CLEANING:** Janitorial cleaning is not subject to the provisions of Section 235.3 of this rule.
- K. **EXEMPTION, CURED COATINGS:** The stripping of cured coatings, cured adhesives, and cured inks is not subject to the provisions of Section 235.3 of this rule.
- L. **EXEMPTION, PROHIBITORY RULES:** Any process which is regulated by the District under Rule 230 Automotive Refinishing Operations or Rule 237 Wood Products Coatings is not subject to the requirements of this rule.

235.2 DEFINITIONS

- A. **AEROSOL PRODUCT:** A hand-held, non-refillable container which expels pressurized product by means of a propellant-induced force.

- B. **APPURTENANCES:** Accessories to an architectural structure, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down-spouts, window screens, lamp-posts, heating and air conditioning equipment, other mechanical equipment, large fixed stationary tools and concrete forms.
- C. **CURED COATINGS, CURED INKS, AND CURED ADHESIVES:** Coatings, inks, and adhesives which are dry to the touch.
- D. **ELECTRONIC ASSEMBLY:** All portions of an assembly, including circuit board assemblies, printed wire assemblies, printing wiring boards, soldered joints, ground wires, bus bars, and other electrical fixtures, except for the actual cabinet in which the assembly is housed.
- E. **EXEMPT COMPOUNDS:** The following compounds are exempt from the definition of VOC in Section 235.2 HH:
1. Methane
 2. Carbon Dioxide
 3. Carbon Monoxide
 4. Carbonic Acid
 5. Metallic Carbides or Carbonates
 6. Ammonium Carbonate
 7. 1,1,1-Trichloroethane
 8. Methylene Chloride
 9. Dichlorotrifluoroethane (HCFC-123)
 10. 2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
 11. Trichlorofluoromethane (CFC-11)
 12. Dichlorodifluoromethane (CFC-12)
 13. Trichlorotrifluoroethane (CFC-113)
 14. Dichlorotetrafluoroethane (CFC-114)
 15. Chloropentafluoroethane (CFC-115)
 16. Pentafluoroethane (HFC-125)
 17. 1,1,2,2-Tetrafluoroethane (HFC-134)
 18. Tetrafluoroethane (HFC-134a)
 19. Dichlorofluoroethane (HCFC-141b)
 20. Chlorodifluoroethane (HCFC-142b)
 21. 1,1,1-Trifluoroethane (HFC-143a)
 22. Chlorodifluoromethane (HCFC-22)
 23. Trifluoromethane (HFC-23)

24. 1,1-Difluoroethane (HFC-152a)
25. Parachlorobenzotrifouride (PCBTF)
26. Volatile cyclic and linear methyl siloxanes (VMS)
27. The following four classes of perfluorocarbon compounds:
 - a. Cyclic, branched, or linear, completely fluorinated alkanes.
 - b. Cyclic, branched, or linear, completely fluorinated ethers, with no unsaturations.
 - c. Cyclic, branched, or linear, completely fluorinated tertiary amines, with no unsaturations.
 - d. Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Perfluorocarbon compounds shall be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific compounds and the amounts present in the product or process and provides a validated test method which can be used to quantify the identified compounds.

- F. **FACILITY:** A business or businesses engaged in solvent cleaning operations which are owned or operated by the same person or persons and are located on the same or contiguous parcels.
- G. **FLEXOGRAPHIC PRINTING:** The method in which the image area is raised relative to the non-image area and utilizes flexible rubber or other elastomeric plate and rapid drying liquid inks.
- H. **GRAMS OF VOC PER LITER OF MATERIAL:** The weight of VOC per volume of material and can be calculated by the following equation:

$$D_{\text{voc}} = (W_s - W_w - W_{\text{ES}}) / V_M$$

where: D_{VOC} = Grams of VOC per liter of material
 W_s = Weight of volatile compounds in grams
 W_w = Weight of water in grams
 W_{ES} = Weight of exempt compounds in grams
 V_M = Volume of material in liters

- I. **GRAPHIC ARTS:** All screen, gravure, letterpress, flexographic, and lithographic printing processes.
- J. **GRAVURE PRINTING:** An intaglio process in which the ink is carried in minute etched or engraved wells on a roll or cylinder. The excess ink is removed from the surface by a doctor blade.
- K. **JANITORIAL CLEANING:** The cleaning of building or facility components, such as the floor, ceiling, walls, windows, doors, stairs, bathrooms, etc.
- L. **LETTERPRESS PRINTING:** The method in which the image area is raised relative to the nonimage area and the ink is transferred to the paper directly from the image surface.
- M. **LITHOGRAPHIC PRINTING:** A plane-o-graphic method in which the image and nonimage areas are on the same plane.
- N. **LIQUID LEAK:** A visible liquid solvent leak from a container at a rate of more than three (3) drops per minute, or a visible liquid mist.
- O. **MAINTENANCE CLEANING:** A solvent cleaning operation carried out to keep parts, products, tools, machinery, equipment excluding application equipment, or general work areas in clean and good operational condition.
- P. **MANUFACTURING PROCESS:** The process of making goods or articles by hand or by machinery.
- Q. **NON-ABSORBENT CONTAINERS:** Containers made of nonporous material which do not allow the migration of the liquid solvent through them.

- R. **NON-ATOMIZED SOLVENT FLOW:** The use of a solvent in the form of a liquid stream without atomization to remove uncured adhesives, uncured inks, uncured coatings, and contaminants from an article.
- S. **NON-LEAKING CONTAINERS:** Containers without liquid leaks.
- T. **PERSON:** Any individual, firm, association, organization, partnership, business, trust, corporation, company, contractor, supplier, installer, user or owner, or any state or local governmental agency or public district or any other officer or employee thereof. PERSON also means the United States or its agencies to the extent authorized by Federal law.
- U. **PRINTING:** Any operation in the graphic arts that imparts color, design, alphabet, or numerals on a substrate.
- V. **REMOTE RESERVOIR COLD CLEANER:** A cleaning device in which liquid solvent is pumped from a solvent container to a sink-like work area and the solvent from the sink-like area drains into an enclosed solvent container while parts are being cleaned.
- W. **REPAIR CLEANING:** A solvent cleaning operation or activity carried out during a repair process.
- X. **REPAIR PROCESS:** The process of returning a damaged object or an object not operating properly to good condition.
- Y. **SCREEN PRINTING:** A process in which the printing ink passes through a web or fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.
- Z. **SOLVENT:** A VOC-containing liquid used to perform solvent cleaning operations.
- AA. **SOLVENT CLEANING:** The removal of loosely held uncured adhesives, uncured inks, uncured coatings, and contaminants which include, but are not limited to, dirt, soil, and grease from parts, products, tools, machinery, equipment, and general work areas. Each distinct method

of cleaning in a cleaning process which consists of a series of cleaning methods shall constitute a separate solvent cleaning operation.

- BB. **SOLVENT CONTAINER:** That part of a cleaning device that holds the solvent.
- CC. **SOLVENT FLUSHING:** The use of solvent to remove uncured adhesives, uncured inks, uncured coatings, or contaminants from the internal surfaces and passages of the equipment by flushing solvent through the equipment.
- DD. **STRIPPING:** The removal of cured inks, cured adhesives, and cured coatings.
- EE. **SURFACE PREPARATION:** The removal of contaminants such as dust, soil, oil, grease, etc., prior to coating, adhesive, or ink applications.
- FF. **ULTRAVIOLET INKS:** Inks which dry by polymerization reaction induced by ultraviolet radiation.
- GG. **VOC COMPOSITE PARTIAL PRESSURE:** The sum of the partial pressures of the compounds defined as VOCs. VOC composite partial pressure is calculated as follows:

$$PP_c = \sum_{i=1}^n \frac{(W_i)(VP_i) / MW_i}{\frac{W_w}{MW_w} + \frac{W_E}{MW_E} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

- where:
- PP_c = VOC composite partial pressure at 20°C, in mm Hg
 - VP_i = Vapor pressure of the "i"th VOC compound at 20°C, in mm Hg
 - W_i = Weight of the "i"th VOC compound, in grams
 - W_w = Weight of water, in grams
 - W_E = Weight of exempt compound, in grams
 - MW_i = Molecular weight of the "i"th VOC compound, in g/(g-mole)

MW_w = Molecular weight of water, in g/(g-mole)
MW_e = Molecular weight of exempt compound, in g/(g-mole)

HH. **VOLATILE ORGANIC COMPOUND (VOC):** Any chemical compound containing at least one atom of carbon, excluding exempt compounds.

II. **WIPE CLEANING:** The method of cleaning a surface by physically rubbing it with a material such as a rag, paper, or a cotton swab moistened with a solvent.

235.3 STANDARDS

A. **SOLVENT REQUIREMENTS:** A person shall not use a solvent to perform solvent cleaning operations, including the use of cleaning devices or methods, unless the solvent complies with the applicable requirements set forth below:

1. On or after January 1, 1996, the solvents used on substrates during the manufacturing process or for surface preparation prior to coating, adhesive, or ink applications shall have a VOC content of 70 grams or less of VOC per liter of material.
2. On and after January 1, 1996, the solvents used for maintenance and repair cleaning shall have a VOC content of 900 grams or less of VOC per liter of material and a VOC composite partial pressure of 20 mm Hg or less at 20°C (68°F).
3. On and after January 1, 1996, the solvents used for cleaning coatings or adhesives application equipment shall have a VOC content of 950 grams or less of VOC per liter of material and a VOC composite partial pressure of 35 mm Hg or less at 20°C (68°F).
4. On and after January 1, 1996, the solvents used for cleaning polyester resin application equipment shall comply with one of the limits specified below:

- a. The solvent shall have a VOC content of 200 grams or less of VOC per liter of material; or
 - b. The solvent shall have a VOC content of 1100 grams or less of VOC per liter and a VOC composite partial pressure of 1.0 mm Hg or less at 20°C (68°F); or
 - c. A solvent reclamation system shall be used if the solvent exceeds the limits of Sections 235.3 A.4.a. and 235.3 A.4.b., and the solvent usage at the facility exceeds four gallons on any one day. The reclamation system shall operate at least at 80 percent efficiency, on a mass basis. The solvent residues for on-site reclamation systems shall not contain more than 20 percent VOC, by weight.
5. On and after January 1, 1996, the solvent used for cleaning of ink application equipment in graphic arts shall meet the limits specified below:
- a. The solvents used in screen printing shall have a VOC content of 1070 grams or less of VOC per liter of material and a VOC composite partial pressure of 5 mm Hg or less at 20°C (68°F).
 - b. The solvents used in lithographic and letterpress printing not subject to the provisions of Section 235.3 A.5.d shall have a VOC content of 900 grams or less of VOC per liter of material and a VOC composite partial pressure of 25 mm Hg or less at 20°C (68°F).
 - c. The solvents used in graphic arts printing operations not subject to the provisions of Sections 235.3 A.5.a., 235.3 A.5.b., or 235.3 A.5.d. shall have a VOC content of 100 grams or less of VOC per liter of material and a VOC composite partial pressure of 3 mm Hg or less at 20°C (68°F).
 - d. The solvents used in graphic arts printing operations, except screen printing to remove ultraviolet inks from application equipment, shall have a VOC content of 800 grams or less of VOC per liter of material and a VOC

composite partial pressure of 33 mm Hg or less at 20°C (68°F).

6. On and after January 1, 1996, the solvents used for manufacturing or maintenance cleaning of electronic assemblies shall have a VOC content of 900 grams or less of VOC per liter of material and a VOC composite partial pressure of 33 mm Hg or less at 20°C (68°F).

B. **CLEANING DEVICES AND METHODS REQUIREMENTS:** On or after January 1, 1996, a person shall not perform solvent cleaning operations unless one of the following cleaning devices or methods is used:

1. Wipe cleaning;
2. Spray bottles or containers with a maximum capacity of 16 fluid ounces from which solvents are applied without a propellant-induced force;
3. Cleaning equipment which has a solvent container that can be, and is, closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during nonoperation with the exception of maintenance and repair to the cleaning equipment itself;
4. Non-atomized solvent flow method where the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or,
5. Solvent flushing method where the cleaning solvent is discharged into a container which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The

solvent may be flushed through the system by air or hydraulic pressure, or by pumping.

C. **STORAGE AND DISPOSAL:** All VOC-containing materials used in solvent cleaning operations, regardless of their VOC-content, such as solvents, and cloth and paper moistened with solvents, shall be stored in non-absorbent, non-leaking containers which shall be kept closed at all times except when filling or emptying.

D. **CONTROL EQUIPMENT:** In lieu of complying with the requirements in Sections 235.3 A., 235.3 B., or 235.3 E.1. of this rule, a person may comply by using collection and control systems in association with the solvent cleaning operation subject to this rule provided:

1. The collection system collects at least 90 percent, by weight, of the emissions generated by the solvent cleaning operation; and the control system reduces VOC emissions from the emission collection system by at least 95 percent, by weight; or
2. The collection system collects at least 90 percent, by weight, of the emissions generated by the solvent cleaning operation; and, the output of the control system is less than 50 parts per million weight (ppmw), calculated as carbon with no dilution.

E. **GENERAL PROHIBITIONS:**

1. On or after January 1, 1996, a person shall not atomize any solvent into open air.
2. On or after January 1, 1996, a person shall not specify or require any person to use solvent or equipment subject to the provisions of this rule that do not meet the requirements of this rule.

235.4 MONITORING AND RECORDS

A. **RECORDS:** Records shall be maintained pursuant to this Section, for all applications subject to this rule,

including those exempted under Sections 235.1 C. through 235.1 L. of this rule, except for cleaning operations performed with a solvent which has a water content of 98 percent or more, by weight, or a VOC composite partial pressure of 0.1 mm Hg or less at 20°C (68°F). Each owner or operator of a facility subject to the provisions of this rule shall collect and record all information necessary to demonstrate daily compliance with the requirements of Section 235.3 of this rule or with the exemption conditions of Sections 235.1 C. through 235.1 L. of this rule, and shall maintain this information at the facility for a period of five years. The information shall be collected and recorded monthly, and shall be made available to the Air Pollution Control Officer upon request. The information shall include, but not limited to, the following:

1. Identification of each solvent cleaning operation and other process at the facility subject to this rule. The identification shall include location, permit number (if applicable), description of activity, and substrate type;
2. The amount and type of each VOC-containing material used at each operation and process, including exempt compounds. Use of amounts of one pint per week or less may be recorded on a monthly basis;
3. The VOC content of each VOC-containing material;
4. The vapor pressure of each VOC-containing material; and,
5. Any person using an emission control system pursuant to the provisions of Section 235.3 E. as a means of complying with this rule, shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities. Key system operating parameters are those necessary to ensure compliance with the requirements of Section 235.3 A.

- B. **TEST METHODS:** For the purpose of this rule, the following test methods shall be used. Other test methods determined to be equivalent and approved in writing by the District, Air Resources Board, and the US Environmental Protection Agency may also be used. VOC emissions or other parameters determined to exceed any limits established by this rule through the use of any of the following test methods shall constitute a violation of this rule.
1. The VOC content of materials subject to the provisions of this Rule shall be determined by EPA Reference Test Method 24 (40 CFR 60, Appendix A).
 2. The efficiency of the emissions collection system shall be determined by the EPA method described at 40 CFR 52.741(a)(4)(iii).
 3. The efficiency of the control device shall be determined by the EPA method described at 40 CFR 52.741(a)(4)(iv). The VOC content measured and calculated as carbon in the control device shall be determined by EPA Reference Test Method 25 or 25A (40 CFR 60, Appendix A).
 4. The identity of components in solvents shall be determined by ASTM method E168-67, E169-87, or E260-85; or, by using manufacturer's reported solvent composition, upon approval of the Air Pollution Control Officer.
 5. Vapor pressure of a VOC shall be determined by ASTM Test Method D 2879-86 or may be obtained from a published source such as: Boublik, T., V. Freid and E. Hala, *"The Vapor Pressure of Pure Substances"*, Elsevier Scientific Publishing Co., New York (1973), *Perry's Chemical Engineer's Handbook*, McGraw-Hill Book Company (1984), *CRC Handbook of Chemistry and Physics*, Chemical Rubber Publishing Company (1986-87), and *Lange's Handbook of Chemistry*, John A. Dean, editor, McGraw-Hill Book Company (1985).

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ADOPTED: June 27, 1995

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RULE 236 ADHESIVES

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RULE 236

ADHESIVES

236.1 GENERAL

- A. **PURPOSE:** To limit emissions of volatile organic compounds from the use of commercial and industrial adhesives.
- B. **APPLICABILITY:** The rule is applicable to any person who supplies, sells, offers for sale, manufactures, solicits the application of, or uses adhesives and/or adhesive primers. This rule does not apply to household adhesives that are subject to Article 2, Consumer Products, Sections 94507-94517, Title 17, California Code of Regulations.
- C. **EXEMPTION, LOW USAGE OF NONCOMPLIANT ADHESIVES:**
 - 1. The provisions of Sections 236.3 A. and 236.3 B. shall not apply to adhesives, adhesive primers, and adhesive bonding primers with separate formulations that are used in volumes of less than 10 gallons each per facility per year.
 - 2. The provisions of this rule shall not apply to any facility that uses less than one pint of adhesives in any one day.
- D. **EXEMPTION, CONTAINERS:** The provisions of Section 236.3 A. of this rule shall not apply to adhesives which are sold or supplied by the manufacturers or suppliers in the following containers:
 - 1. Tubes that have a capacity of eight liquid ounces or less; or
 - 2. Any other container, except aerosol spray cans, that has a capacity of 5 liquid ounces or less.
 - 3. The provisions of Section 236.3 E. shall not apply to adhesives and primers dispensed from aerosol cans.

E. **EXEMPTION, SPECIFIC OPERATIONS AND ADHESIVES:** The requirements of this rule shall not apply to the following:

1. The provisions of Sections 236.3 A., 236.3 B.1., and 236.3 B.2. shall not apply to the following:
 - a. Adhesives used in tire repair; or
 - b. Adhesives and/or adhesive application processes in compliance with Rule 231 GRAPHIC ARTS OPERATIONS.
2. The provisions of Sections 236.3 E. and 236.5 A. shall not be apply to adhesives that contain less than 20 g/l of VOC per liter of adhesives, less water and exempt compounds.
3. Section 236.3 shall not apply to research and development programs and quality assurance labs, provided that the following records are retained in accordance with Section 236.5 A. of this rule:
 - a. The date when the adhesives are used, and the type of application(s).
 - b. The amount of adhesives used and the VOC content of such adhesives.
 - c. The amount of solvents used and VOC content of such solvents.
4. Section 236.3 shall not apply to solvent welding operations used in the manufacturing of medical devices, such as, but not limited to, catheters, heart valves, blood cardioplegia machines, tracheotomy tubes, blood oxygenators, and cardiatory reservoirs.

236.2 DEFINITIONS

- A. **ACRYLONITRILE-BUTADIENE-STYRENE (ABS):** A plastic made by reacting monomers of acrylonitrile, butadiene, and styrene and normally identified with an ABS marking.

- B. **ADHESIVE:** Any substance that is used to bond one surface to another surface by attachment.
- C. **ADHESIVE BONDING PRIMER:** An adhesive applied to a surface to improve the bond of subsequent adhesives and sometimes to inhibit corrosion.
- D. **ADHESIVE PRIMER:** A coating applied to a substrate, prior to the application of an adhesive, to provide a bonding surface.
- E. **ADHESIVE PRIMER FOR PLASTIC:** A material applied to a plastic substrate before applying an adhesive in order to obtain better adhesion.
- F. **ADHESIVE PROMOTER:** A coating applied to a substrate in a monomolecular thickness to promote wetting and form a chemical bond with the subsequently applied material.
- G. **ADHESIVE SOLID:** The nonvolatile portion of an adhesive that remains after heating a sample of the material at 110°C for one hour.
- H. **AEROSOL ADHESIVE:** A mixture of rubber, resins, and liquid and gaseous solvents and propellants packaged in a disposable container for hand-held application.
- I. **AEROSOL SPRAY CAN:** A hand-held, pressurized, non-refillable container which expels adhesives from the container in a finely divided spray when a valve on the container is depressed.
- J. **AEROSPACE COMPONENT:** The fabricated part, assembly of parts, or completed unit of any aircraft or space vehicle, excluding tires, and including models, mock-ups, prototypes, and test coupons.
- K. **AIR-ASSISTED AIRLESS SPRAY:** Paint spray application system using fluid pressure to atomize the paint and lower air pressure to adjust the shape of the fan pattern.

- L. **AIRCRAFT:** Any machine designed to travel through the air, without leaving the earth's atmosphere, whether heavier or lighter than air, including airplanes, balloons, dirigibles, helicopters, and missiles.
- M. **AIRCRAFT TIRE REPAIR:** The repair and retreading of worn/damaged tires used on aircraft. This includes the repair of damage to the tire casing, removal of old tread rubber and tread reinforcing materials, and application of new tread and tread reinforcing materials.
- N. **ANY OTHER PRIMER:** A coating or adhesive applied to a substrate to improve adhesion of subsequently applied adhesive, except adhesive primer and adhesive bonding primer.
- O. **CARPET PAD INSTALLATION:** The installation of carpet pad or cushion, used beneath a carpet, onto a floor or comparable surface.
- P. **CERAMIC TILE INSTALLATION:** The installation of ceramic tile products.
- Q. **CERAMIC TILES:** A ceramic surfacing unit made from clay or a mixture of clay and other materials.
- R. **CHLORINATED POLYVINYL CHLORIDE (CPVC):** A plastic which is a polymer of the chlorinated polyvinyl monomer that contains 67% chlorine and is normally identified with a CPVC marking.
- S. **COATING SOLID:** The nonvolatile portion of a coating that remains after heating a sample of the material at 110°C for one hour.
- T. **COMPUTER DISKETTE MANUFACTURING:** The process where the fold-over flaps are glued to the body of a vinyl jacket.
- U. **COVE BASE INSTALLATION:** The installation of cove base (or wall base), generally made of vinyl or rubber, onto a wall or vertical surface at floor level.
- V. **DRY WALL INSTALLATION:** The installation of gypsum dry wall to studs or solid surfaces.

W. EXEMPT COMPOUNDS: The following compounds are exempt from the definition of VOC in Section 236.2 AB.

1. methane
2. carbon dioxide
3. carbon monoxide
4. carbonic acid
5. metallic carbides or carbonates
6. ammonium carbonate
7. 1,1,1-trichloroethane
8. methylene chloride
9. trichlorofluoromethane (CFC-11)
10. dichlorodifluoromethane (CFC-12)
11. chlorodifluoromethane (HCFC-22)
12. trifluoromethane (HFC-23)
13. trichlorotrifluoroethane (CFC-113)
14. dichlorotetrafluoroethane (CFC-114)
15. chloropentafluoroethane (CFC-115)
16. dichlorotrifluoroethane (HCFC-123)
17. 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
18. pentafluoroethane (HFC-125)
19. 1,1,2,2-tetrafluoroethane (HFC-134)
20. tetrafluoroethane (HFC-134a)
21. dichlorofluoroethane (HCFC-141b)
22. chlorodifluoroethane (HCFC-142b)
23. 1,1,1-trifluoroethane (HFC-143a)
24. 1,1-difluoroethane (HFC-152a)
25. Parachlorobenzotrifluoride (PCBTF)
26. Volatile cyclic and linear methyl siloxanes (VMS)
27. The following four classes of perfluorocarbon compounds:
 - a. Cyclic, branched, or linear, completely fluorinated alkanes.
 - b. Cyclic, branched, or linear, completely fluorinated ethers, with no saturations.
 - c. Cyclic, branched, or linear, completely fluorinated tertiary amines with no saturations.
 - d. Sulfur-containing perfluorocarbons with no saturations and with sulfur bonds only to carbon and fluorine.

- X. **FACILITY:** Any permit unit or grouping of permit units or other air contaminant-emitting activities which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control). Such above-described groupings, if not contiguous, but connected only by land carrying a pipeline, shall not be considered one facility.
- Y. **FIBERGLASS:** Fine filaments of glass.
- Z. **FOAM:** A rigid or spongy cellular mass with gas bubbles dispersed throughout.
- AA. **GLUE:** A hard gelatin obtained from hides, tendons, cartilage, bones, etc., of animals. Through general use, the term "glue" is synonymous with the term "adhesive."
- BB. **HAND APPLICATION METHODS:** The application of adhesive by manually held equipment. Such equipment includes paint brush, hand roller, trowel, spatula, dauber, rag, sponges, and mechanically- and/or pneumatic-driven syringes without atomization of the materials.
- CC. **HIGH-VOLUME, LOW-PRESSURE (HVLP) SPRAY:** Equipment used to spray a coating by means of a gun that operates between 0.1 and 10 pounds per square inch gauge (psig) air pressure.
- DD. **INDOOR CARPET INSTALLATION:** The installation of a carpet that is in an enclosure and is not exposed to ambient weather conditions during normal use.
- EE. **LOW-SOLIDS ADHESIVE:** An adhesive which has less than one pound of solids per gallon of material.
- FF. **LOW-SOLIDS ADHESIVE PRIMER:** An adhesive primer which has less than one pound of solids per gallon of material.
- GG. **OUTDOOR CARPET INSTALLATION:** The installation of carpet that is not in an enclosure and is exposed to ambient weather conditions during normal use.

- HH. **PANEL INSTALLATION:** The installation of plywood, pre-decorated hardboard (or tileboard), fiberglass reinforced plastic, and similar predecorated or non-decorated panels to studs or solid surfaces.
- II. **PERSON:** Any individual, firm, association, organization, partnership, business, trust, corporation, company, contractor, supplier, installer, user or owner, or any state or local governmental agency or public district or any other officer or employee thereof. PERSON also means the United States or its agencies to the extent authorized by Federal law.
- JJ. **PLASTIC CEMENT WELDING:** The use of adhesives made of resins and solvents which are used to dissolve the surfaces of plastic, except ABS, CPVC, and PVC plastic, to form a bond between mating surfaces.
- KK. **PLASTIC FOAM:** A foam constructed of plastics.
- LL. **PLASTICS:** Various synthetic materials chemically formed by the polymerization of organic (carbon-based) substances. Plastics are usually compounded with modifiers, extenders, and/or reinforcers. They are used to produce pipe, solid sheet, film, or bulk products.
- MM. **POLYURETHANE FOAMS:** Plastic foams, as defined in "Whittington's Dictionary of Plastics," and may be either rigid or flexible.
- NN. **POLYVINYL CHLORIDE (PVC):** Plastic which is a polymer of the chlorinated vinyl monomer that contains 57 percent chlorine and is normally identified with a PVC marking.
- OO. **POROUS MATERIAL:** A substance which has tiny openings, often microscopic, in which fluids may be absorbed or discharged.
- PP. **PROPELLANT:** A fluid under pressure which expels the contents of a container when a valve is opened.

- QQ. ROLL COATER: A series of mechanical rollers that form a thin coating or adhesive film on the surface roller, which is applied to a substrate by moving the substrate underneath the roller.
- RR. RUBBER FLOORING INSTALLATION: The installation of flooring material in which both the back and the top surface are made of synthetic rubber, and which may be in sheet or tile form.
- SS. RUBBER FOAM: A foam constructed of natural or synthetic rubber.
- TT. SOLVENT WELDING: The softening of the surfaces of two substrates by wetting them with solvents and/or adhesives, and joining them together with a chemical and/or physical reaction(s) to form a fused union.
- UU. SPACE VEHICLE: A vehicle designed to travel beyond Earth's atmosphere.
- VV. SUBFLOOR INSTALLATION: The installation of subflooring material over floor joists; and includes the construction of any load bearing joints in joists or trusses.
- WW. THIN METAL LAMINATING: A 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 mil.
- XX. TIRE REPAIR: The expanding of a hole, tear, fissure, or blemish in a tire casing by grinding or gouging; applying adhesive; and, filling the hole or crevice with rubber.
- YY. VCT: Vinyl composition tile.
- ZZ. VISCOSITY: The property of a fluid or semifluid that enables it to develop and maintain an amount of shearing stress dependent upon the velocity of flow and then to offer continued resistance to flow.

AB. VOLATILE ORGANIC COMPOUNDS (VOC): Compounds containing at least one atom of carbon, except for the exempt compounds listed in Section 236.2 W.

AC. WOOD FLOORING INSTALLATION: The installation of a wood floor surface, which may be in the form of parquet tiles, planks, or strip-wood.

AD. WOOD PARQUET FLOORING: Wood flooring in tile form constructed of smaller pieces of wood which have been joined together in a pattern to form the tile.

AE. WOOD PLANK FLOORING: Solid or laminated wood in plank form.

236.3 STANDARDS

A. GENERAL ADHESIVE REQUIREMENTS: Effective January 1, 1996, a person shall not apply adhesives, adhesive bonding primers, adhesive primers, or any other primer which have a VOC content in excess of 250 grams of volatile organic compounds per liter of coating (less water and exempt compounds), or manufacture, blend or repackage such coating for use within the District, unless otherwise specified in Section 236.3 B.

B. SPECIALTY ADHESIVE REQUIREMENTS: A person shall not apply adhesives, adhesive bonding primers, adhesive primers, or any other primer which have a VOC content in excess of the limits specified below:

1. For adhesives, adhesive bonding primers, adhesive primers, or any other primer used in the following welding or installation operations:

Operation

Grams of VOC per liter of adhesive (less water and exempt compounds)

OPERATION	EFFECTIVE DATE	EFFECTIVE DATE
Non-Vinyl Backed Indoor Carpet Installation	January 1, 1996 150	January 1, 1998

Effective Dates

SUBSTRATE	GRAMS OF VOC PER LITER OF ADHESIVE (less water and exempt compounds)	
	January 1, 1996	January 1, 1998
Carpet Pad Installation	150	
Wood Floor Installation	150	
Ceramic Tile Installation	130	
Dry Wall and Panel Installation	200	
Subfloor Installation	200	
Rubber Floor Installation	150	
VCT and Asphalt Tile Installation	150	
PVC Welding	450	250
CPVC Welding	450	250
ABS Welding	350	
Plastic Cement Welding	350	250
Cove Base Installation	150	
Adhesive Primer for Plastic	650	250
Computer Disk Manufacturing	350	

See above

2. For adhesives, adhesive bonding primers, or any other primer not regulated by Section 236.3 B.1. and applied to the following substrates, the following limits shall apply. If an adhesive is used to bond dissimilar substrates together the adhesive with the highest VOC content shall be allowed.

Substrate	Grams of VOC per liter of adhesive (less water and exempt compounds)	
	January 1, 1996	January 1, 1998
Metal to Metal	30	
Plastic Forms	120	
Porous Material (except wood)	120	

and exempt compounds
Effective Dates

TERMINATION OF USE OF SOLIDS IN ADHESIVES		
See above		
SUBSTRATE	PERCENTAGE VOC	PERCENTAGE SOLIDS
Wood	30	
Fiberglass	200	

3. For low-solids adhesives and low-solids adhesive primers, the appropriate limits in Sections 236.3 B.1. and 236.3 B.2. shall be expressed in Grams of VOC per Liter of Material.
4. A person shall not apply adhesives from aerosol spray cans unless the VOC content, including the propellant, does not exceed the limits specified below:

Percentage VOC by Weight

Effective July 1, 1996	Effective July 1, 1999
75%	25%

C. **CONTROL EQUIPMENT REQUIREMENTS:** As an alternative to Sections 236.3 A. and 236.3 B., a person may use collection and control systems in association with the adhesive operations regulated by this rule provided that:

1. The collection system collects at least 90 percent, by weight, of the emissions generated by the adhesive operations, pursuant to Section 236.5 B.4., and
2. The control system reduces VOC emissions from the emission collection system by at least 95 percent, by weight, pursuant to Sections 236.4 D. and 236.5 B.3.

- D. **STORAGE AND DISPOSAL:** Regardless of their VOC content, all VOC-containing materials used in adhesives application (such as solvents, and cloth and paper moistened with solvents) shall be stored in non-absorbent, non-leaking containers which shall be kept closed at all times except when filling or emptying.
- E. **APPLICATION EQUIPMENT REQUIREMENTS:** A person or stationary source shall not apply any adhesive unless one, or more, of the following application methods is used:
1. Hand application,
 2. Dip coat,
 3. Flow coat,
 4. Brush or roll coat,
 5. Electrodeposition,
 6. Electrostatic spray,
 7. High-volume low-pressure (HVLP) spray,
 8. Low-volume low-pressure (LVLP) spray, or
 9. Air-assisted airless spray.

236.4 ADMINISTRATIVE REQUIREMENTS

A. **OPERATION AND MAINTENANCE PLAN:** Any person choosing to use an emission control device pursuant to Section 236.3 C. must submit an Operation and Maintenance Plan for the emission control device to the Air Pollution Control Officer for approval. The Plan shall specify operation and maintenance procedures which will demonstrate continuous operation of the emission control device, pursuant to Section 236.3 C., during periods of emission-producing operations. The Plan shall also specify which daily records must be kept to document these operation and maintenance procedures. These records shall comply with the requirements of Section 236.5 A. The Plan shall be implemented upon approval by the Air Pollution Control Officer.

B. **PROCEDURE FOR PROCESSING OPERATION AND MAINTENANCE PLAN:**

1. **APPROVAL OF PLAN:** The Air Pollution Control Officer shall determine whether the Operation and Maintenance Plan meets the requirements of Section

236.4 A. not later than 30 days after receipt of the Plan, or within a longer period of time agreed upon by all parties. The Air Pollution Control Officer shall approve an Operation and Maintenance Plan unless it fails to demonstrate continuous operation of the emission control device during periods of emission producing operations, according to the standards set forth in Section 236.3 A., and/or it fails to specify which daily records, in accordance with the requirements of Sections 236.5 A.2. and 236.5 A.3., are kept to document the operation and maintenance procedures set forth in the Plan.

2. **REVISION OF PLAN:** If the Air Pollution Control Officer does not approve an Operation and Maintenance Plan, the source shall receive written notice of the deficiency, and shall have an additional 30 days from the date of the notification of the deficiency to correct and resubmit the Operation and Maintenance Plan. The decision of the Air Pollution Control Officer regarding the resubmitted Operation and Maintenance Plan shall be final. Failure to correct the deficiency in an Operation and Maintenance Plan upon resubmittal shall constitute a violation of this rule that is subject to the penalties set forth in Health and Safety Code section 42400 et seq.

C. COMPLIANCE SCHEDULE:

1. Operation and Maintenance Plans for emissions control devices installed as of June 27, 1995, if not previously submitted, must be submitted by December 27, 1995 and receive approval by the Air Pollution Control Officer.

- D. CALCULATION FOR VOC MASS EMISSION RATE AND PERCENT CONTROL EFFICIENCY:** The VOC mass emission rate shall be calculated both upstream and downstream of the emissions control device based on the respective VOC mass concentration and volumetric flowrate, pursuant to Section 236.5 B.1. and the following equation:

$$M = (Q)(C)(60 \text{ min/hr})$$

Where: M = VOC mass emission rate, in lb/hr.
Q = the volumetric flowrate of the exhaust stack, in scfm.
C = the VOC mass concentration, in lb/scf, as measured by EPA Method 25 or 25A.

The percent control efficiency is calculated as follows:

$$\% \text{ CE} = (MU - MD) \div MU$$

Where: CE = control efficiency.
MU = the upstream VOC mass emission rate, in lb/hr.
MD = the downstream VOC mass emission rate, in lb/hr.

E. CALCULATION FOR DETERMINATION OF VOC CONTENT PER VOLUME OF MATERIAL: The volume of material is defined as the volume of the original material, plus any VOC-containing material added to the original material. The original material is the material before any VOC-containing material such as solvent is added for purposes of mixing or thinning. The VOC content shall exclude any colorant added to the tint bases. The weight of VOC per combined volume of VOC and material solids, shall be calculated by the following equation:

$$(W_v - W_w - W_{ec}) / (V_m - V_w - V_{ec})$$

Where: W_v = weight of all volatile compounds, in grams.
 W_w = weight of water, in grams.
 W_{ec} = weight of compounds listed as exempt in Section 236.2 I. from the definition of VOC, in grams.
 V_m = volume of coating material, in liters.
 V_w = volume of water, in liters.
 V_{ec} = volume of compounds listed as exempt in Section 236.2 I., in liters.

236.5 MONITORING AND RECORDS

A. **USAGE RECORDS:** In addition to any existing permit conditions issued pursuant to Rule 501 GENERAL PERMIT REQUIREMENTS, effective December 27, 1995, any person subject to this rule, including operations claiming exemption under Sections 236.1 C., 236.1 D., and 236.1 E. shall comply with the following requirements:

1. **LIST OF MATERIALS:** A current list of adhesives in use shall be maintained which includes all of the following items:

a. The product name/code and type of adhesive.

b. The VOC content of the adhesive, as determined pursuant to Section 236.5 B.1.

2. **USAGE AMOUNTS:**

a. For persons using materials which comply with the standards specified in Sections 236.3 A. and 236.3 B., or using materials pursuant to Sections 236.1 C., 236.1 D., and 236.1 E., records shall be maintained on a monthly basis, showing the type and volume of adhesives used.

b. For persons using materials exceeding the VOC limits specified in Sections 236.3 A. and 236.3 B., and using an emission control system pursuant to Section 236.3 C., records shall be maintained on a daily basis, showing the type and volume of adhesives used.

3. **CONTROL EQUIPMENT:** Any person using an emission control system pursuant to Section 236.3 C. shall maintain such records as required by the Operation and Maintenance Plan in Section 236.4 A. on a daily basis.

4. **DURATION OF RECORDS:** Such records shall be maintained on-site for a continuous two-year period and made available to the Air Pollution Control Officer upon request.

B. TEST METHODS

1. **DETERMINATION OF VOC CONTENT:** VOC content of adhesives shall be determined in accordance with EPA Method 24 and Sections 236.4 E. and 236.5 B.2. of this rule.
2. **DETERMINATION OF COMPOUNDS EXEMPT FROM VOC DEFINITION:** Compounds exempted from the VOC definition, as listed in Section 236.2 V. of this rule, shall be determined in accordance with ASTM D 4457-85 or ARB Method 432. If any of the perfluorocarbons are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the EPA-approved test method used to make the determination of these compounds.
3. **DETERMINATION OF CONTROL EFFICIENCY:** Control efficiency of the emission control device shall be determined by using one or more of the following: EPA Methods 18, 25, 25A, 2, 2C; and, Section 236.4 D. EPA Methods 2 and 2C are alternative methods for measurement of flow rate. EPA Methods 25 and 25A are alternative methods for measuring emission concentrations. EPA Method 18 is an alternative to Methods 25 and 25A, but is usually only for quantification of exempt compounds.
4. **DETERMINATION OF COLLECTION EFFICIENCY:** Collection efficiency of the collection system shall be determined in accordance with EPA Guidelines for Developing Capture Efficiency Protocols, 55 Federal Register 26865, June 29, 1990.

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ADOPTED: June 27, 1995

AMENDED:

RESCINDED:

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EDC APCD RULE 236

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RULE 237 WOOD PRODUCTS COATINGS

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RULE 237

WOOD PRODUCTS COATINGS

237.1 GENERAL

- A. **PURPOSE:** To limit the emission of volatile organic compounds from wood products coatings operations.
- B. **APPLICABILITY:** This rule applies to all sources applying 75.7 liters (20 gallons) or more, per month (singly or in any combination) of coatings, inks, stains, and/or strippers in wood product coating operations for the purpose of manufacture of wood products, including furniture and other coated objects made of solid wood and/or wood composition, and/or simulated wood material.
- C. **EXEMPTION - GENERAL:** The provisions of this rule shall not apply to:
1. Businesses using less than 75.7 liters (20 gallons) per month (singly or in any combination) of wood product coatings and/or strippers.
 2. Noncommercial operations as defined in Section 237.2 X. of this rule.
 3. Wood products coatings that are sold in non-refillable aerosol-spray containers.
 4. Coating operations for the purpose of manufacturing a finished wood panel intended for attachment to the inside walls of buildings, including, but not limited to, homes and office buildings, mobile homes, trailers, prefabricated buildings and similar structures; or a finished exterior wood siding intended for use in construction.
 5. Coating of architectural components or structures, not coated in a shop environment.

237.2 DEFINITIONS

- A. **AEROSOL-SPRAY CONTAINER:** Any hand-held, pressurized, non-refillable container of 1 liter (1.1 quarts) or less, where the contents are released when a valve on the container is depressed.
- B. **AIR-ASSISTED AIRLESS SPRAY:** Paint spray application system using fluid pressure to atomize the paint and lower air pressure to adjust the shape of the fan pattern.
- C. **BINDERS:** Non-volatile polymeric organic materials (resins) which form the surface film in coating applications.
- D. **CLEAR TOPCOAT:** A final coating which contains binders, but not opaque pigments, and is specifically formulated to form a transparent or translucent solid protective film.
- E. **CLOSED CONTAINER:** A container which has a cover, and where the cover meets with the main body of the container without any gaps between the cover and the main body of the container.
- F. **COATING:** A material which is applied to a surface and which forms a film in order to beautify and/or protect such surface. "Coating" includes, but is not limited to materials such as topcoats, stains, sealers, fillers, multicolored coating, moldseal coating, washcoat, and toner.
- G. **CONVERSION VARNISH:** A coating comprised of a homogeneous, transparent or translucent (alkyd-amino resin) liquid which, when acid catalyzed and applied, hardens upon exposure to air or heat, by evaporation and polymerization to form a continuous film that imparts protective or decorative properties to wood surfaces.
- H. **DIP COAT:** A coating which is applied by dipping an object into a vat of coating material and allowing any excess coating material to drain off.

I. **ELECTROSTATIC APPLICATION:** The electrical charging of atomized coating droplets for deposition by electrostatic attraction.

J. **ENCLOSED GUN CLEANER:**

1. A device that is used for the cleaning of spray guns, pots and hoses, that has an enclosed solvent container, is not open to the ambient air when in use, and has a mechanism to force the cleanup material through the gun while the cleaner is in operation; or
2. A device that is used for the cleaning of spray guns, pots and hoses, that has an enclosed solvent container, uses non-atomized solvent flow to flush the spray equipment and collects and returns the discharged solvent to the enclosed container.

K. **EXEMPT COMPOUNDS:** The following compounds are exempt from the definition of VOC in Section 237.2 LL:

1. Methane,
2. Carbon dioxide,
3. Carbon monoxide,
4. Carbonic acid,
5. Metallic carbides or carbonates,
6. Ammonium carbonate,
7. 1,1,1-trichloroethane,
8. Methylene chloride,
9. Trichlorofluoromethane (CFC 11),
10. Dichlorodifluoromethane (CFC 12),
11. Chlorodifluoromethane (HCFC 22),
12. Trifluoromethane (CFC 23),
13. Trichlorotrifluoroethane (CFC 113),
14. Dichlorotetrafluoroethane (CFC 114),
15. Chloropentafluoroethane (CFC 115),
16. Dichlorotrifluoroethane (HCFC-123),
17. Chlorotetrafluoroethane (HCFC-124),
18. Pentafluoroethane (HFC-125),
19. 1,1,2,2-tetrafluoroethane (HFC 134),
20. 1,1,1,2-tetrafluoroethane (HFC 134a),
21. Dichlorofluoroethane (HCFC-141b),

22. Chlorodifluoroethane (HCFC-142b),
23. Trifluoroethane (HFC-143a),
24. Difluoroethane (HFC-152a),
25. Parachlorobenzotrifluoride (PCBTF)
26. Volatile cyclic and linear methyl siloxanes (VMS)
27. The following four classes of perfluorocarbon compounds:
 - a. Cyclic, branched or linear, completely fluorinated alkanes.
 - b. Cyclic, branched, or linear, completely fluorinated ethers, with no unsaturations.
 - c. Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations.
 - d. Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

- L. **FILLER:** A preparation used to fill in cracks, grains, etc., of wood before applying a coating.
- M. **FLOW COAT:** A coating which is applied by flowing a stream of coating over an object and allowing any excess coating material to drain off.
- N. **GRAMS OF VOC PER VOLUME OF COATING LESS WATER AND EXEMPT COMPOUNDS:** The weight of VOC per combined volume of VOC and coating solids, shall be calculated by the following equation:

$$G_1 = \frac{W_v - W_w - W_{ec}}{V_v - V_w - V_{ec}}$$

- Where:
- G_1 = Weight of VOC per volume of coating, less water and exempt compounds.
 - W_v = Weight of volatile compounds, in grams.
 - W_w = Weight of water, in grams.
 - W_{ec} = Weight of exempt compounds, in grams.
 - V_m = Volume of coating material, in liters.
 - V_w = Volume of water, in liters.
 - V_{ec} = Volume of exempt compounds, in liters.

- O. **GRAMS OF VOC PER VOLUME OF MATERIAL:** The volume of material is defined as the volume of the original material, plus any VOC-containing material added to the original material. The original material is the material before any VOC-containing material such as solvent is added for purposes of mixing or thinning. The VOC content shall exclude any colorant added to a tint base. The weight of VOC per total volume of material shall be calculated by the following equation:

$$\frac{(W_v - W_w - W_{ec})}{V_m}$$

Where: W_v = Weight of all volatile compounds.
 W_w = Weight of water.
 W_{ec} = Weight of exempt compounds, in grams.
 V_m = Volume of material.

- P. **HAND APPLICATION METHODS:** The application of coatings by nonmechanical hand-held equipment, including but not limited to, paint brushes, hand-rollers, trowels, spatulas, rags and sponges.
- Q. **HIGH-SOLIDS STAIN:** Stains containing more than 454 grams (1 pound) of solids per 3.785 liters (1 gallon), by weight, and including wiping stains, glazes, and opaque stains.
- R. **HIGH-VOLUME, LOW-PRESSURE (HVLP):** Spray coating application equipment with air pressure between 0.1 and 10.0 pounds per square inch gauge (psig) and air volume greater than 15.5 cfm per spray gun and which operates at a maximum fluid delivery pressure of 60 psig.
- S. **INK:** A fluid that contains dyes and/or colorants and is used to make markings, but not to protect surfaces.
- T. **LOW-SOLIDS STAINS:** Stains containing 454 grams (1 pound) of solids per 3.785 liters (1 gallon) or less, by weight.

- U. **MOLD-SEAL COATING:** The initial coating applied to a new mold or repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.
- V. **MULTI-COLORED COATING:** A coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat.
- W. **NEW WOOD PRODUCT:** A wood product or simulated wood product which has not been previously coated and from which cured coatings have not been removed. A wood product or simulated wood product from which uncured coatings have been removed to repair flaws in initial coatings applications is a new wood product.
- X. **NONCOMMERCIAL OPERATION:** Any business or public agency which is not a major stationary source of emissions as defined in Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, and in which the coating of wood products is clearly incidental to the main business or public agency operation.
- Y. **PIGMENTED COATINGS:** Opaque coatings which contain binders and colored pigments which are formulated to hide the wood surface, either as an undercoat or topcoat.
- Z. **RATE PER CALENDAR YEAR:** The amount of coating applied between 12:00 a.m. January 1 and 11:59 p.m. December 31, of the same calendar year.
- AA. **RATE PER DAY:** The amount of coating applied between 12:00 a.m. and 11:59 p.m. on the same calendar day.
- BB. **REFINISHING OPERATION:** The steps necessary to remove cured coatings and to repair, preserve, or restore a wood product.
- CC. **REPAIR COATING:** A coating used to recoat portions of a product which has sustained mechanical damage to the coating following normal coating operations.

- DD. **ROLL COATER:** A series of mechanical rollers that forms a thin coating film on the surface of the roller, which is applied to a substrate by moving the substrate underneath the roller.
- EE. **SEALER:** A coating, containing binders, which seals the wood prior to application of subsequent coatings.
- FF. **SIMULATED WOOD MATERIALS:** Materials such as plastic, glass, metal, etc., that are made to give a wood-like appearance or are processed like a wood product.
- GG. **STATIONARY SOURCE:** Any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission.
1. "Building, structure, facility, or installation" includes all pollutant emitting sources activities which:
 - a. Belong to the same industrial grouping; and
 - b. Are located on one property or two or more contiguous properties; and
 - c. Are under the same common ownership, operation, or control, or which are owned or operated by entities which are under common control.
 2. Pollutant emitting activities shall be considered as part of the same industrial grouping if:
 - a. They belong to the same two-digit standard industrial classification code; or
 - b. They are part of a common production process. (Common production process includes industrial processes, manufacturing processes, and any connected processes involving a common material).
- HH. **STENCIL COATING:** An ink or a pigmented coating which is rolled or brushed onto a template or stamp in order to add identifying letters and/or numbers to wood products.

- II. **STRIPPER:** A liquid used to remove cured coatings, cured inks, and/or cured adhesives.
- JJ. **TONER:** A wash coat which contains binders and dyes or pigments to add tint to a coated surface.
- KK. **TOUCH-UP COATING:** A coating used to cover minor coating imperfections appearing after the main coating operation.
- LL. **VOLATILE ORGANIC COMPOUND (VOC):** Compounds which contain at least one atom of carbon, except for the compounds listed in Section 237.2 K.
- MM. **VOLATILE ORGANIC COMPOUND COMPOSITE PARTIAL VAPOR PRESSURE:** The sum of the partial pressures of compounds defined as VOCs. VOC composite partial vapor pressure for determination of compliance with Section 237.3 D. shall be calculated by the following equation:

$$PP_c = \frac{\sum_{i=1}^n (W_i) (VP_i) / MW_i}{\frac{W_w}{MW_w} + \frac{W_e}{MW_e} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

- Where: PP_c = VOC composite partial pressure at 20°C, in mm Hg.
- W_i = Weight of the "i"_{th} VOC compound, in grams.
- W_w = Weight of water, in grams.
- W_e = Weight of exempt compounds, in grams.
- MW_i = Molecular weight of the "i"_{th} VOC compound, in (g/g-mole).
- MW_w = Molecular weight of water, in (g/g-mole).
- MW_e = Molecular weight of exempt compound, in (g/g-mole).
- VP_i = Vapor pressure of the "i"_{th} VOC compound at 20°C, in mm Hg.

- NN. **WASH COAT:** A coating that is used to seal wood surfaces, preventing undesired staining and control penetration. For the purpose of this rule, wash coats shall be considered low-solids coatings and shall contain less than 454 grams (1 pound) of solids per 3.785 liters (1 gallon), by weight.

Wash coats with greater than 454 grams (1 pound) of solids per 3.785 liters (1 gallon), by weight, shall be considered sanding sealers.

- OO. **WOOD PANEL:** Any piece of wood, wood composition, or simulated wood, which is solid or laminated, and which is larger than 10 square feet in size, and which is not subsequently cut into smaller pieces.
- PP. **WOOD PRODUCTS:** Surface-coated products which include cabinets (kitchen, bath, and vanity), tables, chairs, beds, sofas, shutters, art objects, and any other coated objects made of solid wood, and/or wood composition, and/or made of simulated wood material used in combination with solid wood or wood composition.
- QQ. **WOOD PRODUCT COATING APPLICATION OPERATIONS:** A combination of coating application steps which may include use of spray guns, flash-off areas, spray booths, ovens, conveyors, and/or other equipment operated for the purpose of applying coating materials.

237.3 STANDARDS

- A. **APPLICATION EQUIPMENT REQUIREMENTS:** A person or facility shall not apply coatings to wood products subject to the provisions of this rule, unless the coating is applied with properly operating equipment, according to manufacture's specifications, and by use of one, or more, of the following methods:
 - 1. Electrostatic application;
 - 2. Flow coat;
 - 3. Dip coat;
 - 4. HVLP spray;
 - 5. Hand application methods;
 - 6. Roll coater; or,

7. Air-assisted airless spray, for touch-up and repair.

B. VOC CONTENT OF COATINGS FOR NEW WOOD PRODUCTS

1. Except as provided in Section 237.1 C., no person or facility shall apply any coating, on a new wood product, which has a volatile organic compound (VOC) content, as applied, exceeding the applicable limits specified below. The VOC content of the coating shall be determined in accordance with Section 237.5 C.1.

COATING	VOC LIMITS (GRAMS PER LITER OF COATING) Less Water and Exempt Compounds	
	ON AND AFTER 1-31-96	ON AND AFTER 7-1-97
Clear Topcoats	275 g/L	275 g/L
Conversion Varnish	550 g/L	550 g/L
Filler	500 g/L	275 g/L
High-Solid Stain	550 g/L	240 g/L
Inks	500 g/L	500 g/L
Mold-Seal Coating	750 g/L	750 g/L
Multi-Colored	275 g/L	275 g/L
Pigmented Coating	275 g/L	275 g/L
Sealer	680 g/L	275 g/L

COATING	VOC LIMITS (GRAMS PER LITER OF COATING)	
	ON AND AFTER 1-31-96	ON AND AFTER 7-1-97
Low Solid Stains, Toners, Washcoats	480 g/L	120 g/L

2. No person shall supply, sell, solicit, offer for sale for use within the District any wood products coating that exceeds the VOC limits for new wood products set forth in Section 237.3 B.1.

3. In addition, no person shall manufacture, blend, or repackage any wood products coating for use within the District, on new wood products, that exceeds the VOC limits set forth in Section 237.3 B.1.

C. VOC CONTENT OF COATINGS FOR REFINISHING, REPAIRING, PRESERVING, OR RESTORING WOOD PRODUCTS

1. Except as provided in Section 237.1 C., no person or facility shall apply any coating, to refinish, repair, preserve, or restore a wood product, which has a volatile organic compound (VOC) content, as applied, exceeding the applicable limits specified below. The VOC content of the coating shall be determined in accordance with Section 237.5 C.1.

VOC LIMITS (GRAMS PER LITER OF COATING) Less Water and Exempt Compounds	
COATING	ON AND AFTER 7-1-97
Clear Topcoats	680 g/L
Conversion Varnish	550 g/L
Filler	500 g/L
High-Solid Stains	700 g/L
Inks	500 g/L
Mold-Seal Coating	750 g/L
Multi-Colored Coating	680 g/L
Pigment Coating	600 g/L
Sealer	680 g/L

VOC LIMITS (GRAMS PER LITER OF COATING)	
COATING	ON AND AFTER 7-1-97
Low-Solid Stains, Toners, Washcoats	480 g/L

2. No person shall supply, sell, solicit, offer for sale for use within the District any wood products

coating for refinishing, repairing, preserving, or restoring wood products that exceeds the VOC limits set forth in Section 237.3 C.1.

3. In addition, no person shall manufacture, blend, or repackage any wood products coating, for use within the District, for refinishing, repairing, preserving, or restoring wood products, that exceeds the VOC limits set forth in Section 237.3 C.1.

D. VOC CONTENT FOR STRIPPERS:

1. Except as provided in Section 237.1 C., no person or facility shall apply any stripper which has a volatile organic compound (VOC) content, as applied less water and exempt compounds, of 350 grams/L or more, or has a composite partial vapor pressure of 2 mm Hg (0.04 psia) or more at 20°C (68°F), as calculated pursuant to Section 237.2 MM.
2. No person shall supply, sell, solicit, offer for sale for use within the District, or apply any wood products stripper that exceeds the VOC limits set forth in Section 237.3 D.1.
3. In addition, no person shall manufacture, blend, or repackage any wood products stripper, for use within the District that exceeds the VOC limits set forth in Section 237.3 D.1.

E. EMISSION CONTROL SYSTEM REQUIREMENTS: In lieu of the applicable requirements of Sections 237.3 B., 237.3 C., and 237.3 D., emissions of VOC (excluding emissions from cleanup operations) may be controlled by an emission capture and control system which reduces VOC emissions to the atmosphere, provided that the system complies with the following:

1. During any period of operation, the collection and control system shall have a collection efficiency of 90% and a control efficiency of 95% or greater, by weight;

2. The collection system shall vent all drying oven exhaust to the control device and shall have one or more inlets for collection of fugitive emissions;
3. During any period of operation of a thermal incinerator, combustion temperature shall be continuously monitored;
4. During any period of operation of a catalytic incinerator, exhaust gas temperature shall be continuously monitored; and,
5. Written approval for the use of such equipment is obtained from the Air Pollution Control Officer, prior to installation or use of the equipment.

F. REQUIREMENTS FOR SURFACE PREPARATION AND CLEANUP MATERIALS: Any person using surface preparation and cleanup materials containing VOCs for wood products coating operations shall comply with all of the following requirements:

1. Closed containers shall be used for the disposal of cloth or paper used for surface preparation, cleanup, and coating removal.
2. A person shall not use VOC-containing materials for the cleanup of spray equipment used in wood products coating application operations, unless the spray equipment is cleaned in an enclosed system.
3. VOC-containing materials shall be stored in containers, which are closed when not in use, and shall be disposed of in a manner that the VOCs are not emitted into the atmosphere.
4. A person shall not perform surface preparation or cleanup with a material containing VOC in excess of 200 grams per liter (1.67 pounds per gallon).

G. PROHIBITION OF SPECIFICATIONS: No person shall specify the use in the District of any coating, stripper, or surface preparation and cleanup material, to be applied to any wood products that are subject to the provisions of this rule,

that does not meet the limits and requirements of this rule.

237.4 ADMINISTRATIVE REQUIREMENTS

A. **OPERATION AND MAINTENANCE PLAN:** Any person using an approved emission control device pursuant to Section 237.3 E. as a means of complying with this rule shall submit, with the application for Authority to Construct, pursuant to Rule 501 - GENERAL PERMIT REQUIREMENTS, an Operation and Maintenance Plan for the emission control device to the Air Pollution Control Officer for approval. The Plan shall specify operation and maintenance procedures which will demonstrate continuous operation of the emission control device during periods of emissions-producing operations. The Plan shall also specify which records must be kept to document these operations and maintenance procedures. These records shall comply with the requirements of Section 237.5 A. The Plan shall be implemented upon approval of the Air Pollution Control Officer.

B. **LABELING REQUIREMENTS: VOC CONTENT:** Each container of any coating subject to this rule and manufactured on or after January 31, 1996 shall display the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt solvent, and excluding any colorant added to tint bases). VOC content displayed may be calculated using product formulation data, or may be determined using the test method in Section 237.5 C.1.

237.5 MONITORING AND RECORDS:

A. USAGE RECORDS:

1. Any source within the District that is subject to this rule shall provide all of the data necessary to evaluate compliance including, but not be limited to the following information, as applicable:

- a. A data sheet, material list, or invoice giving material name, manufacturer identification, material application, and VOC content; and
 - b. Any catalysts, reducers, or other components used, and the mix ratio; and
 - c. The applicable VOC limit from Section 237.3 B.1. or 237.3 C.1., and the actual VOC content of the wood product coating as applied.
2.
 - a. For persons using materials which comply with the VOC limits specified in Sections 237.3 B., 237.3 C., and 237.3 D., or using materials pursuant to Sections 237.1 C.1. and 237.1 C.3., records shall be maintained on a daily or monthly basis, showing the type and volume of coatings and solvents used.
 - b. For persons using materials exceeding the VOC limits specified in Sections 237.3 B., 237.3 C., and 237.3 D., and using a collection and control system pursuant to Section 237.3 E., records shall be maintained on a daily or monthly basis, showing the type and volume of coatings and solvents used.
 3. Any person using an emission control system pursuant to the provisions of Section 237.3 E., as a means of compliance with this rule, shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of emission-producing activities. Key system operating parameters are those necessary to ensure compliance with the requirements of Section 237.3 E.
- B. RETENTION OF RECORDS:** All records required by this rule shall be maintained for at least five years, and shall be made available to the Air Pollution Control Officer upon request.

C. TEST METHODS

1. **DETERMINATION OF VOC CONTENT:** The VOC content of wood product coatings subject to this rule shall be determined using EPA Reference Method 24.
2. **DETERMINATION OF COMPOUNDS EXEMPT FROM VOC DEFINITION:** Compounds exempted from VOC definition, as listed in Section 237.2 K., shall be determined in accordance with ASTM D-4457-85, or ARB Method 432. If any of the perfluorocarbons are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the EPA-approved test method used to make the determination of these compounds.
3. **DETERMINATION OF COLLECTION EFFICIENCY:** Collection efficiency shall be determined according to EPA's technical document, "Guidelines for Determining Capture Efficiency," dated January 9, 1995.
4. **DETERMINATION OF CONTROL EFFICIENCY:** Efficiency of control equipment shall be determined using EPA Method 25.

ADOPTED: June 27, 1995

AMENDED:

RESCINDED:

R237WDR.ED5

RULE 238 GASOLINE TRANSFER AND DISPENSING

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RULE 238 GASOLINE TRANSFER AND DISPENSING

238.1 GENERAL

- A. **APPLICABILITY:** This rule applies to the transfer of gasoline from any tank truck, trailer, or railroad tank car into any stationary storage tank or mobile fueler; and, from any stationary storage tank or mobile fueler into any mobile fueler or motor vehicle fuel tank.
- B. **EXEMPTION, AGRICULTURE:** Transfer of gasoline into or from any stationary storage tank or mobile fueler, with a capacity of 550 gallons or less, if 75 percent or more of its monthly throughput is used for the fueling of implements of husbandry, such as vehicles defined in Division 16 (Section 36000, et seq.) of the California Vehicle Code, is exempt from Phase I and Phase II vapor recovery requirements, provided such tank is equipped with a submerged fill tube.
- C. **EXEMPTION, TESTING:** Transfer of gasoline to and from testing equipment is exempt from the requirements of this rule when equipment is being used to verify the efficiency of the vapor recovery system by the CARB, the District, or testing contractors; the accuracy of the gasoline dispensing equipment by the Department of Weight and Measures; and, the fire safety standards by the Fire Department.
- D. **EXEMPTION, 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.

238.2 DEFINITIONS

- A. **ALTERED FACILITY** is a Gasoline Transfer and Dispensing Facility with any of the following:
 - 1. The removal or addition of storage tank(s), or changes in the number of fueling positions.
 - 2. The replacement of storage tank(s), dispensing nozzle(s) or other equipment with different characteristics or descriptions from those specified on the existing permit.
- B. **BACKFILLING** is the covering of the underground storage tank, piping or any associated components with soil, aggregate or other materials prior to laying the finished surface.
- C. **BELLOWS-LESS NOZZLE** is any nozzle that incorporates an aspirator or vacuum assist system and a gasoline vapor capture mechanism at the motor vehicle filler neck, such that vapors are collected at the vehicle filler neck without the need for an interfacing flexible bellows.
- D. **BREAKAWAY COUPLING** is a component attached to the coaxial hose, which allows the safe separation of the hose from the dispenser or the hose from the nozzle in the event of a forced removal such as in the case of a "driveoff."
- E. **CARB CERTIFIED** or certified by CARB means a Phase I or Phase II vapor recovery system, equipment, or any component thereof, for which the California Air Resources Board (CARB) has evaluated its performance and issued a valid Executive Order pursuant to Health and Safety Code Section 41954. Each component of a system is a separate CARB certified item and cannot be replaced with a non-certified item or other items that are not certified for use with the particular system. Except for qualified repairs, a CARB certified component shall be as supplied by the qualified manufacturer. A rebuilt component shall not be deemed as CARB certified, unless the person who rebuilds the component is authorized by CARB to rebuild the designated CARB certified component.
- F. **CLEARLY AND PERMANENTLY MARKED** means an identification of the qualified manufacturer's name, model number, and other required information on a vapor recovery system

component that is legible, and the identification is either directly stamped on or attached to the component using methods or materials that would endure constant long term use.

- G. **COAXIAL FILL TUBE** is a submerged fill tube that contains two passages, one within the other. The center passage transfers gasoline liquid to the storage tank and the outer passage carries the gasoline vapors to the tank truck, trailer or railroad tank car.
- H. **COAXIAL HOSE** is a hose that contains two passages, one within the other. One of the passages dispenses the liquid gasoline into the vehicle fuel tank while the other passage carries the gasoline vapors from the vehicle fuel tank to the storage tank.
- I. **DISPENSER** is a gasoline dispensing unit used for housing the above ground gasoline and vapor recovery piping, the gasoline meters, and to hang gasoline-dispensing nozzles when they are not being used for fueling.
- J. **DRY BREAK** or poppetted dry break is a Phase I vapor recovery component that opens only by connection to a mating device to ensure that no gasoline vapors escape from the underground storage tank before the vapor return line is connected and sealed.
- K. **DUAL-POINT DESIGN** is a type of Phase I vapor recovery system that delivers gasoline liquid into storage tanks and recovers the displaced vapors through two separate openings on the tank.
- L. **FUELING POSITION** is a fuel dispensing unit consisting of nozzle(s) and meter(s) with the capability to deliver only one fuel product at one time
- M. **GASOLINE** is any petroleum distillate or petroleum distillate/alcohol blend having a True Vapor Pressure greater than 200 mm Hg (3.9 psi) and less than 760 mm Hg (14.7 psi) at 100 degrees F as determined by ASTM Method D323-89.
- N. **GASOLINE TRANSFER AND DISPENSING FACILITY** is a mobile system or a stationary facility, consisting of one or more storage tanks and associated equipment, which receive, store, and dispense gasoline.
- O. **GASOLINE VAPORS** are the organic compounds in vapor form displaced during gasoline transfer and dispensing operations, and includes entrained liquid gasoline.
- P. **INSERTION INTERLOCK MECHANISM** is any CARB certified mechanism that ensures a tight fit at the nozzle fill pipe interface and prohibits the dispensing of gasoline unless the bellows is compressed.
- Q. **LIQUID REMOVAL DEVICE** is a device designed specifically to remove trapped liquid from the vapor passages of a coaxial hose.
- R. **LIQUID TIGHT** is a liquid leak rate not exceeding three drops per minute.
- S. **MAJOR DEFECT** is a defect in the vapor recovery system or its component, as listed in California Code of Regulations, Title 17, Part III, Chapter 1, Subchapter 8, Section 94006 and as summarized in Attachment A of this rule.
- T. **MINOR DEFECT** is a defect in any gasoline transfer and dispensing equipment, which renders the equipment out of good working order, but does not constitute a major defect.
- U. **MOBILE FUELER** is any tank truck or trailer that is used to transport and dispense gasoline from an onboard storage tank into any motor vehicle fuel tank.
- V. **MOTOR VEHICLE** is any self-propelled vehicle as defined in Section 415 of the California

Vehicle Code.

- W. **OWNER/OPERATOR** is any person who owns, leases, or operates a gasoline transfer and dispensing facility.
- X. **PRESSURE/VACUUM RELIEF VALVE** is a valve that is installed on the vent pipes of the gasoline storage tanks to relieve pressure and vacuum build-up at preset values of pressure and vacuum.
- Y. **QUALIFIED MANUFACTURER** is the original equipment manufacturer of the CARB certified vapor recovery system or component, or a rebuilder who is authorized by CARB to rebuild the designated CARB certified component.
- Z. **QUALIFIED REPAIR** is a repair or maintenance of the gasoline transfer and dispensing equipment or vapor recovery system component that would restore the function or performance of such equipment/component following the qualified manufacturer's instructions and using only the applicable CARB certified parts supplied by the qualified manufacturer. Unless otherwise authorized by CARB, a repair or maintenance shall not be considered a qualified repair if the action changes the size, shape or materials of construction of any gasoline vapor passage, or if it may otherwise obstruct, hinder, or reduce the recovery of gasoline vapors during operation.
- AA. **REBUILD** is an action that repairs, replaces, or reconstructs any part of a component of a vapor recovery system that forms the gasoline vapor passage of the component, or that comes in contact with the recovered gasoline vapors in the component. Rebuild does not include the replacement of a complete component with another CARB certified complete component; nor does it include the replacement of a spout, bellows, or vapor guard of a CARB certified nozzle. The new part shall be CARB certified and as supplied by the qualified manufacturer specifically for the CARB certified nozzle.
- BB. **RETAIL GASOLINE TRANSFER AND DISPENSING FACILITY** is any gasoline transfer and dispensing facility subject to the payment of California sales tax for the sale of gasoline to the public.
- CC. **SPILL BOX** is an enclosed container around a Phase I fill pipe that is designed to collect gasoline spillage resulting from disconnection between the liquid gasoline delivery hose and the fill pipe.
- DD. **SUBMERGED FILL TUBE** is any storage tank fill tube with the highest level of the discharge opening entirely submerged, when the liquid level is 6 inches above the bottom of the tank.
- EE. **VAPOR CHECK VALVE** is a valve that opens and closes the vapor passage to the storage tank to prevent gasoline vapors from escaping when the nozzle is not in use.
- FF. **VAPOR RECOVERY SYSTEM** is a system installed at a gasoline transfer and dispensing facility for collection and recovery of gasoline vapors displaced or emitted from the stationary storage tanks or mobile fuelers (Phase I) and during refueling of vehicle fuel tanks (Phase II). A Phase II vapor recovery system may be a balance system, which operates on the principle of vapor displacement, a vacuum-assist system, which uses a mechanical vacuum-producing device to create a vacuum, or an aspirator-assist system, which uses an aspirator or eductor to create a vacuum during gasoline dispensing to capture gasoline vapors.
- GG. **VAPOR TIGHT** means the detection of less than 10,000 ppm hydrocarbon concentration, as determined by EPA Method 21, using an appropriate analyzer calibrated with methane.

238.3 STANDARDS

- A. **GASOLINE TRANSFER INTO STATIONARY STORAGE TANKS AND MOBILE**

FUELERS (PHASE I): A person shall not transfer, allow the transfer or provide equipment for the transfer of gasoline from any tank truck or trailer into any stationary storage tank with a capacity of 250 gallons or more, or any mobile fueler tank of greater than 120 gallons capacity unless all of the following conditions are met:

1. Such stationary storage tank or mobile fueler tank is equipped with a "CARB certified" submerged fill tube.
2. Such stationary storage tank or mobile fueler tank is equipped with a "CARB certified" vapor recovery system capable of recovering or processing displaced gasoline vapors by at least 95%, or having a minimum volumetric efficiency of 98% and an emission factor not exceeding 0.15 pounds per 1,000 gallons, as applicable. The vapor recovery system shall be maintained and operated according to the manufacturer's specifications and the applicable CARB Executive Orders.
3. All vapor return lines are connected between the tank truck, trailer, or railroad tank car and the stationary storage tank or mobile fueler. In addition, all associated hoses, fittings, and couplings are maintained in a liquid-tight and vapor-tight condition.
4. The hatch on any tank truck, trailer, or mobile fueler shall be equipped with a vapor tight cover during gasoline transfer and pumping. The hatch shall not be opened except for visual inspection, which may be performed after at least three minutes following the completion of the gasoline transfer or pumping. Except otherwise specified by CARB, visual inspection shall be completed in three minutes or less.
5. The fuel delivery lines shall be maintained liquid tight, vapor tight, and free of air ingestion. A fuel delivery that is free of air ingestion is determined by observing the fuel stream as clear and free of air bubbles through the sight windows on the delivery system, except during the initial and final 60 seconds of fuel transferring.
6. The following equipment shall be installed, operated and maintained as specified below:
 - a. All fill tubes are equipped with vapor tight caps;
 - b. All dry breaks are equipped with vapor tight seals and vapor tight caps;
 - c. All CARB certified coaxial fill tubes are spring-loaded and operated so that the vapor passage from the stationary storage tank or the mobile fueler back to the tank truck or trailer is not obstructed;
 - d. The fill tube assembly, including fill tube, fittings and gaskets, is maintained to prevent vapor leakage from any portion of the vapor recovery system;
 - e. All stationary storage tank or mobile fueler vapor return lines without dry breaks are equipped with vapor tight caps;
 - f. Each vapor tight cap is in a closed position except when the fill tube or dry break it serves is actively in use; and,
 - g. Each gasoline delivery elbow is equipped with sight windows.
7. When an underground stationary storage tank is installed or replaced at any gasoline transfer and dispensing facility, a "CARB certified" spill box shall be installed. The spill box shall be maintained free of standing liquid, debris and other foreign matter, and be equipped with an integral drain valve or other devices that are certified by CARB to return spilled gasoline to the underground stationary storage tank. The drain valve shall

be maintained closed and free of vapor emissions at all times except when the valve is actively in use.

8. No coaxial Phase I systems certified by CARB prior to January 1, 1994, may be installed on new or modified tanks, except specified otherwise in the applicable CARB Executive Order.
9. All new Phase I systems must be equipped with a CARB-certified anti-rotational coupler or swivel adapter.

B. GASOLINE TRANSFER INTO VEHICLE FUEL TANKS (PHASE II): A person shall not transfer, allow the transfer of, or provide equipment for the transfer of gasoline from a stationary storage tank, with a capacity of 250 gallons or greater, or a mobile fueler, with a capacity of 120 gallons or greater, into any mobile fueler with a capacity of 120 gallons or greater or any motor vehicle fuel tank with a capacity of 5 gallons or greater unless all of the following conditions are met:

1. The dispensing unit used to transfer the gasoline is equipped with a CARB certified vapor recovery system capable of recovering or processing displaced gasoline vapors by at least 95%, or having an emission factor not exceeding 0.38 pounds per 1,000 gallons, as applicable.
2. The vapor recovery system and associated components are operated and maintained in accordance with the manufacturer's specifications and the applicable CARB certification. The system and associated components shall be vapor tight and liquid tight at all times.
3. Equipment subject to this rule is operated and maintained without any major defects.
4. Each balance-system nozzle is equipped with a CARB certified insertion interlock mechanism and a CARB certified vapor check valve located in the nozzle.
5. Each gasoline-dispensing nozzle is equipped with a CARB certified coaxial hose.
6. Unless otherwise specified in the applicable CARB Executive Order, all liquid removal devices installed for any gasoline-dispensing nozzle shall be CARB certified with a minimum liquid removal rate of five milliliters per gallon transferred.
7. The breakaway coupling is CARB certified. Any breakaway coupling that is installed after April 21, 2001, shall be equipped with a poppet valve, which shall close and maintain the gasoline vapor and liquid lines both vapor tight and liquid tight when the coupling is separated. In the event of a separation due to a "driveoff", the owner/operator shall complete one of the following and document the activities pursuant to Section 238.5 G.
 - a. Conduct a visual inspection of the effected equipment and perform qualified repairs on any damaged components before placing any effected equipment back in service. In addition, the applicable reverification tests pursuant to Section 238.5 B.1., or equivalent test methods as approved in writing by the APCO and CARB, shall be conducted and successfully passed within 24 hours after the effected equipment is placed back in service; or
 - b. Conduct a visual inspection of the effected equipment and replace the effected nozzles, coaxial hoses, breakaway couplings, and any other damaged components with new or CARB certified rebuilt components, before placing any of the effected equipment back in service.

8. A person shall not install or operate a vapor recovery nozzle unless it is equipped with a coaxial hose.
9. A person shall not 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.
10. No person shall install a vacuum assist Phase II vapor recovery system unless it has been certified by CARB to be compatible with ORVR.
11. 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.
12. 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.

C. ADDITIONAL REQUIREMENTS

1. A person shall not supply, offer for sale, sell, install, or allow the installation of any vapor recovery system or any of its components, unless the system and components are CARB certified. Each vapor recovery system and its components shall be clearly and permanently marked with the qualified manufacturer's name and model number as certified by CARB. In addition, the qualified manufacturer's unique serial number for each component shall also be clearly and permanently marked for the dispensing nozzles. Any qualified manufacturer who rebuilds a component shall also clearly and permanently mark the corresponding information on the component.
2. For a breakdown (as defined in Rule 101) of a central vapor incineration or processing unit, the provisions of Rule 516 shall apply.
3. A person shall not perform or allow the "pump-out" (bulk transfer) of gasoline from a storage tank subject to Section 238.3 A. unless such bulk transfer is performed using a vapor collection and transfer system capable of returning the displaced vapors to the stationary storage tank.
4. The owner/operator shall conspicuously post the District-required signs specified in Attachment B of this rule in the immediate gasoline dispensing area.
5. For a dispenser that is not to be used to fuel motor vehicles, the owner/operator shall have a sign posted on it stating such, and shall not allow for it to be used to fuel motor vehicles.
6. A person shall not store, or allow the storage of, gasoline in any stationary storage tank with a capacity of 250 gallons or more, or any mobile fueler with a capacity of 120 gallons or more, unless the vent pipe of the tank complies with all of the following:
 - a. The vent pipe opening is equipped with a CARB certified pressure/vacuum relief valve.
 - b. The vent pipe opening for a stationary storage tank is at least 12 feet above the driveway level used for tank truck filling operations.
 - c. Unless otherwise specified in the applicable CARB Executive Order, the pressure/vacuum relief valve for an underground storage tank vent shall be set for pressure relief at 3.0 plus or minus 0.5 inches water column and vacuum

relief at 8.0 plus or minus 2.0 inches water column. The valves for vents on aboveground tanks and mobile fuelers shall meet the specifications in the applicable CARB Executive Order.

- d. Effective January 1, 2002, pressure/vacuum relief valves for stationary storage tanks, as supplied and installed, shall be color-coded or otherwise clearly marked to identify the pressure and vacuum settings. The color codes or marks shall be legible to ground-level observers.
 - e. For the purpose of this requirement, vent pipes of gasoline storage tanks may be manifolded to a single valve, when the stationary storage tanks are manifolded according to the applicable CARB Executive Order.
7. A person shall not store gasoline in open container(s) of any size or handle gasoline in any manner (spillage, spraying, etc.) that allows gasoline liquid or gasoline vapors to enter the atmosphere, contaminate the ground or groundwater, or the enter the sewer system.
 8. The failure of an owner/operator to meet any requirements of Section 238.3 of this rule shall constitute a violation. Such non-compliant equipment shall be tagged "Out of Order".
 9. Except during active repair activity, the "Out of Order" tag specified in Section 238.3 C.8. shall not be removed and the non-compliant equipment shall not be used, allowed to be used, or provided for use unless all of the following conditions are satisfied:
 - a. The non-compliant equipment has been repaired, replaced, or adjusted, as necessary; and,
 - b. The non-compliant equipment has been reinspected and/or authorized for use by the APCO or his designee.
 10. The owner/operator shall repair or replace any vapor recovery component having minor defects within seven days, pursuant to Section 41960.2(e) of the California Health and Safety Codes.
 11. The owner/operator shall have all underground storage tank installation and associated piping configuration inspected by the APCO or his designee prior to backfilling, to verify that all underground equipment is properly installed in accordance with the requirements specified in the applicable CARB Executive Order. The owner/operator shall notify the District by telephone or other District approved method, and obtain a confirmation number at least three business days prior to the backfilling. All piping shall be supported with pea gravel up to the midpoint of the pipe.
 12. No later than December 31, 2001, the owner/operator of a gasoline transfer and dispensing facility shall implement a maintenance program and document the program in an operation and maintenance (O&M) manual for the vapor recovery system. The O&M manual shall be kept at the facility and made available to any person who operates, inspects, maintains, repairs, or tests the equipment at the facility as well as the District personnel upon request. The O&M manual shall contain detailed instructions that ensure proper operation and maintenance of the vapor recovery system and its components in compliance with all applicable rules and regulations. The manual shall, at a minimum, include the following information:
 - a. All applicable CARB Executive Orders, Approval Letters, and District Permits.

- b. The manufacturer's specifications and instructions for installation, operation, repair and maintenance required pursuant to CARB Certification Procedure CP-201, and any additional instructions provided by the manufacturer.
 - c. System and/or component testing requirements, including test schedules and passing criteria for each of the standard tests listed under Section 238.5 I. The owner/operator may include any non-CARB required diagnostic and other tests as part of the testing requirements.
 - d. Additional O&M instructions, if any, that are designed to ensure compliance with the applicable rules, regulations, CARB Executive Orders and District permit conditions, including replacement schedules for failure or wear prone components.
- D. **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.
- E. **CONTINGENT VAPOR RECOVERY REQUIREMENT:** Facilities that are equipped with Phase II vapor recovery must also be equipped with Phase I vapor recovery.
- F. **REQUIREMENTS FOR NEW OR MODIFIED PHASE II INSTALLATIONS:** Effective as prescribed by California Code of Regulations Title 17, Section 94011, 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:
- 1. The total emission rate for organic compounds from the nozzle/fill pipe interface, storage tank vent pipes, and pressure-related fugitives shall not exceed 0.42 pounds per 1,000 gallons of gasoline dispensed.
 - 2. The emission rate for organic compounds from spillage shall not exceed 0.42 pounds per 1,000 gallons of gasoline dispensed.
 - 3. The emission rate for organic compounds from liquid retain and spitting shall not exceed 0.42 pounds per 1,000 gallons of gasoline dispensed.
- G. **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.

238.4 ADMINISTRATIVE REQUIREMENTS

- A. **SELF-COMPLIANCE PROGRAM REQUIREMENTS:** The owner/operator of any retail gasoline transfer and dispensing facility shall implement a District-approved self-compliance program as follows:
- 1. The self-compliance program shall include the following elements:
 - a. Daily maintenance inspections shall be conducted in accordance with the protocol specified in Attachment C to ensure proper operating conditions of all

components of the vapor recovery systems.

- b. Periodic compliance inspections shall be conducted at least once every twelve months and in accordance with the protocol specified in Attachment D to verify the compliance with all applicable District rules and regulations, as well as all permit conditions.
2. Any equipment with major defect(s) which are identified during the daily maintenance inspections or periodic compliance inspections shall be removed from service, repaired, brought into compliance, and duly entered into the repair logs required under Section 238.5 G. before being returned to service.
 3. Defects discovered during self-inspection and repaired shall not constitute a violation.
 4. Any new self-compliance program or revisions to the existing self-compliance program as specified in Section 238.4 A.1 shall be submitted in writing to the District for approval before implementation.
 5. Training and Certification
 - a. Beginning September 1, 2001, a person shall not conduct daily maintenance inspections specified in Section 238.4 A.1.a. unless such person has satisfactorily completed an appropriate District-approved training program.
 - b. Beginning September 1, 2001, a person shall not conduct periodic compliance inspections specified in Section 238.4 A.1.b. unless such person has satisfactorily completed an appropriate District-approved training program in the inspection and maintenance of vapor recovery systems.

238.5 MONITORING AND RECORDS

- A. **NEW INSTALLATION:** Within 30 calendar days of the initial operation of a new or altered gasoline transfer and dispensing facility, the owner/operator shall conduct and successfully pass the performance tests required by the applicable CARB Executive Orders and District Permit, in accordance with the test methods specified in Section 238.5 I. to verify the proper installation and operation of Phase I and Phase II vapor recovery systems.
- B. **REVERIFICATION:** The owner/operator shall conduct and successfully pass the applicable reverification tests in accordance with the test methods specified in Section 238.5 I. to verify the proper operation of the vapor recovery system as follows:
 1. Except as specified in the applicable CARB Executive Orders, the reverification tests shall include the following, as applicable:
 - a. Static pressure (leak decay) test (Phase I and Phase II systems).
 - b. Air-to-liquid (A/L) ratio test (facility with bellows-less nozzles).
 - c. Dynamic pressure (back-pressure) test (All Phase II systems).
 - d. Liquid removal test (systems with a liquid removal device required by CARB Executive Orders).
 2. The reverification tests at retail gasoline transfer and dispensing facilities shall be conducted no less frequently than as scheduled below, based on the facility's maximum monthly gasoline throughput during the 12-month period immediately preceding the

required test:

- a. The owner/operator of a facility with a maximum monthly throughput of 100,000 gallons or greater shall complete and pass the reverification tests no less frequently than every six months, with the first test being no later than June 1, 2001
 - b. The owner/operator of a facility with a maximum monthly throughput less than 100,000 gallons shall complete and pass the reverification tests no less frequently than every 12 months, with the first test being no later than August 1, 2001.
3. The owner/operator of a non-retail gasoline transfer and dispensing facility shall complete and pass the reverification tests no less frequently than every 12 months, with the first test being no later than October 1, 2001.
- C. **TESTERS:** A person who conducts performance or reverification tests shall comply with all of the following:
1. Conduct performance or reverification tests in accordance with the applicable test methods listed in Section 238.5 I. and other CARB testing procedures. Tests shall be conducted using calibrated equipment meeting the calibration range and calibration intervals specified by the manufacturer.
 2. Notify the District by telephone or other District approved methods and obtain a confirmation number at least ten business days prior to testing, except as specified in Section 238.5 D. Notwithstanding, the ten-day notice may not be required for reverification tests conducted after a driveoff pursuant to Section 238.3 B.7.a., provided that the person conducting the tests complies with all other applicable provisions of the rule.
 3. Conduct the tests during business hours Monday through Friday, unless written approval to deviate from normal testing hours is received from the APCO in advance of the testing.
 4. Submit a copy of the test report in a District approved format to the APCO within 48 hours after each test is conducted. The test report shall include all the required records of tests, test data, a statement whether the system or component tested meets or fails to meet the required standards, and the name and signature of the person responsible for conducting the tests and the company the tester is employed by. The person responsible for conducting the tests shall have completed a District approved class for testing and any subsequent refresher classes as required.
- D. **RETESTING:** Notwithstanding Section 238.5 C.2., the owner/operator of a gasoline transfer and dispensing facility that has failed a reverification test or any portion thereof may retest the facility prior to resuming operation provided that the person conducting the tests has complied with one of the following:
1. Notify the District by telephone or other District approved methods and obtain a confirmation number at least 24 hours prior to retesting (at least nine of the hours shall be regular District business hours); or
 2. If repairs are performed during the same day the facility failed any reverification tests, the owner/operator may retest the facility on the same day without re-notification, provided that the reasons for the test failure and any repairs performed are documented in the test reports and the repair logs, pursuant to Sections 238.5 G.2. and 238.5 G.3.

- E. **PARTIAL CLOSURE:** The owner/operator shall not operate or resume operation of a gasoline transfer and dispensing facility, unless the facility has successfully passed the applicable performance or reverification tests. Notwithstanding the above, when a dispenser, associated with any equipment that has failed a reverification test, is isolated and shut down, the owner/operator may continue operation or resume operation of the remaining equipment at the facility, provided the remaining equipment passed the reverification tests and is unaffected by the shut down equipment. All test results and the method of isolating the defective equipment shall be documented in the test reports to be submitted to the APCO pursuant to Section 238.5 G.3.
- F. **THROUGHPUT SUBMISSION:** The owner/operator shall submit the facility's monthly gasoline throughput data to the APCO in conjunction with the reverification test report for each testing and reporting period.
- G. **RECORDKEEPING:** A person who performs self-compliance inspections, repairs, or testing at any gasoline transfer and dispensing facility (including, but not limited to, the activities for normal operation and maintenance, performance testing, reverification testing, and those following a driveoff) shall provide to the owner/operator all records listed below, as applicable, at the end of each day when the service is provided. The owner/operator shall maintain all records listed below and any other test results or maintenance records that are required to demonstrate compliance on site for a period of at least five years. Notwithstanding, records for non-retail gasoline dispensing facilities that are unmanned may be kept at other locations approved by the APCO. All records shall be made available to the District personnel upon request both on site during inspections and offsite as specified.
1. Records of all defective components identified or repaired during self-compliance inspections.
 2. Repair logs, which shall include:
 - a. Date and time of each repair.
 - b. The name of the person(s) who performed the repair, and, if applicable, the name, address, and telephone number of the person's employer.
 - c. Description of service performed.
 - d. Each component that was repaired, serviced, or removed, including the required component identification information pursuant to Section 238.3 C.1.
 - e. Each component that was installed as replacement, if applicable, including the required component identification information pursuant to Section 238.3 C.1.
 - f. Receipts for parts used in the repair and, if applicable, work orders, which shall include the name and signature of the person responsible for performing the repairs.
 3. Records of tests, which shall include:
 - a. Date and time of each test.
 - b. District confirmation number of each notification.
 - c. Name, affiliation, address, and telephone number of the person(s) who performed the test.
 - d. Test data and calibration data for all equipment used.

- e. Date and time each test is completed and the facility owner/operator is notified of the results. For a test that fails, a description of the reasons for the test failure shall also be included.
 - f. For a retest following a failed performance or reverification test, description of repairs performed pursuant to Section 238.5 G.2.
 - g. Copies of test reports in a District approved format.
4. Monthly gasoline throughput records.
- H. **BURDEN OF PROOF:** The burden of proof of eligibility for exemption from any section of this rule is on the owner/operator. Anyone seeking an exemption shall maintain records necessary to support such exemption and furnish them to District personnel upon request.
- I. **TEST METHODS:** The performance and reverification tests shall be conducted in accordance with the following test methods. All test methods referenced in this section shall be the most recently CARB approved version or as stated in the applicable CARB Executive Orders.
- 1. The static pressure performance of a Phase I or Phase II vapor recovery system for underground and above ground tanks shall be determined by the CARB Test Procedure TP-201.3 and TP-201.3B, as applicable.
 - 2. The dynamic pressure performance of a Phase II vapor recovery system shall be determined by the CARB Test Procedure TP-201.4.
 - 3. The air-to-liquid volume ratio of a Phase II vapor recovery system shall be determined by the CARB Test Procedure TP-201.5.
 - 4. The liquid removal rate of a Phase II vapor recovery system shall be determined by the CARB Test Procedure TP-201.6.
 - 5. Any other test methods approved by the USEPA, CARB, and the District for underground tanks, aboveground tanks, and mobile fuelers.

Amended:

Rescinded:

ATTACHMENT A

CALIFORNIA CODE OF REGULATIONS, SECTION 94006
SUBCHAPTER 8, CHAPTER 1, PART III OF TITLE 17

94006. Defects Substantially Impairing the Effectiveness of Vapor Recovery Systems Used in Motor Vehicle Fueling Operations.

For the purposes of Section 41960.2 of the Health and Safety Code, the following constitute equipment defects in systems for the control of gasoline vapors resulting from motor vehicle fueling operations which substantially impair the effectiveness of the systems in reducing air contaminants:

- a. Absence or disconnection of any component required to be used in the Executive Order(s) that certified the system.
- b. A vapor hose which is crimped or flattened such that the vapor passage is blocked, or the pressure drop through the vapor hose exceeds by a factor of two or more the requirements in the system certified in the CARB Executive Order(s) applicable to the system.
- c. A nozzle bellows which is torn in one or more of the following manner:
 1. triangular-shaped or similar tear 1/2 inch or more to a side, or hole 1/2 inch or more in diameter or,
 2. Slit 1 inch or more in length.
- d. Faceplate or flexible cone which is damaged in the following manner:
 1. For balance nozzles and for nozzles for aspirator and educator-assist type systems, damage shall be such that the capability to achieve a seal with a fill pipe interface is affected for 1/4 of the circumference of the faceplate (accumulated).
 2. For nozzles for vacuum assist-type systems, more than 1/4 of the flexible cone missing.
- e. Nozzle shutoff mechanisms which malfunction in any manner.
- f. Vapor return lines, including such components as swivels, anti-recirculation valves and underground piping, which malfunction or are blocked, or restricted such that the pressure drop through the lines exceeds by factor of two or more requirements specified in the Executive Order(s) that certified the system.
- g. Vapor processing unit which is inoperative.
- h. Vacuum producing device which is inoperative.
- i. Pressure/vacuum relief valves, vapor check valves, or dry breaks which are inoperative.
- j. Any equipment defect which is identified in an Executive Order certifying a system pursuant to the Certification Procedures incorporated in Section 94001 of Title 17, California Code of Regulations, as substantially impairing the effectiveness of the system in reducing air contaminants.

All nozzles affected by the above defects are to be considered defective.

NOTE: Authority Cited: Sections 39600, 39601, 41960.2, Health and Safety Code.

ATTACHMENT B

DISTRICT REQUIRED SIGNS

- A. The operator shall post nozzle operating instructions and the following signs:
1. ARB toll-free telephone number:

"If you have nozzle problems, please call the Air District at the toll-free number (800) 952-5588"
or equivalent information approved if in writing by the APCO; and
 2. A "warning" stating:

"TOXIC RISK - FOR YOUR OWN PROTECTION
DO NOT BREATHE FUMES
DO NOT TOP TANKS"
- B. All required signs shall conform to all of the following:
1. For decal signs:
 - a. Each sign shall be visible from all fueling positions it serves; and,
 - b. Sign shall be readable from a distance of 3 feet.
 2. All other signs:
 - a. For pump toppers, one double-back sign per island;
 - b. For permanent (non-decal) signs, two single-sided or one double-sided sign(s) per two (2) dispensers; and,
 - c. Be readable from a distance of at least 6 feet.

ATTACHMENT C

DAILY MAINTENANCE INSPECTION PROTOCOL

The owner/operator of a retail gasoline transfer and dispensing facility shall at minimum verify the following during the daily maintenance inspections:

A. PHASE I VAPOR RECOVERY SYSTEM INSPECTION

1. The spill container is clean and does not contain gasoline. The spill containment drain valve shall be vapor-tight.
2. The fill caps are not missing, damaged or loose.
3. If applicable:
 - a. the spring-loaded submerged fill tube seals properly against the coaxial fitting
 - b. the dry break (poppet valve) is not missing or damaged.
4. The submerged fill tube is not missing or damaged.

B. PHASE II VAPOR RECOVERY SYSTEM INSPECTION

1. The fueling instructions are clearly displayed with the appropriate toll-free complaint phone number and toxic warning signs.
2. The following nozzle components are in place and in good condition, as specified in CARB Executive Orders:
 - a. faceplate/facecone; vapor splash guard/fill guard/efficiency compliance device (ECD)/VEG
 - b. bellows
 - c. latching device spring
 - d. vapor check valve
 - e. spout (proper diameter/vapor collection holes)
 - f. insertion interlock mechanism
 - g. automatic shut-off mechanism
 - h. hold open latch
3. The hoses are not torn, flattened or crimped.
4. For vacuum-assist systems, the vapor processing unit and burner are functioning properly.

C. RECORDS OF DEFECTIVE COMPONENTS

ATTACHMENT D

PERIODIC COMPLIANCE INSPECTION PROTOCOL

The owner/operator of a retail gasoline transfer and dispensing facility shall at minimum verify the following during the periodic compliance inspections:

A. GENERAL INSPECTION

1. The District permit is current.
2. The equipment and District permit description match.
3. The facility complies with all permit conditions.
4. The required sign is properly posted and the sign contains all the necessary information. (I.e. toll-free compliant phone number, toxic warning sign, etc.)

B. PHASE I VAPOR RECOVERY SYSTEM INSPECTION

1. The spill container is clean and does not contain gasoline.
2. The fill caps are not missing, damaged or loose.
3. If applicable:
 - a. the spring-loaded submerged fill tube seals properly against the coaxial fitting
 - b. the dry break (poppet valve) is not missing or damaged.
4. The submerged fill tube is not missing or damaged.
5. The distance between the highest level of the discharge opening of the submerged fill tube and the bottom of the stationary storage tank does not exceed six inches (6").
6. The Phase I vapor recovery system complies with required CARB certification and is properly installed.
7. The spill box complies with required CARB certification and is properly installed.
8. The vent pipes are equipped with required pressure/vacuum relief valves.

C. PHASE II VAPOR RECOVERY SYSTEM INSPECTION

1. The fueling instructions are clearly displayed.
2. Each nozzle is the current CARB-certified model.
3. Each nozzle is installed in accordance with the applicable CARB Executive Orders.
4. The following nozzle components are in place and in good condition, as specified in CARB Executive Orders or Attachment A or Health and Safety Code Section 41960.2 (e):
 - a. faceplate/facecone; vapor splash guard/fill guard/efficiency compliance device (ECD)
 - b. bellows
 - c. latching device spring
 - d. vapor check valve
 - e. spout (proper diameter/vapor collection holes)
 - f. insertion interlock mechanism
 - g. automatic shut-off mechanism
 - h. hold open latch
5. The hoses are not torn, flattened or crimped.
6. The vapor recovery hoses are the required size and length.
7. The hoses with retractors are adjusted to maintain a proper loop, and the bottom of the loop is within the distance from the island surface certified by the CARB Executive Order for that particular dispenser configuration.
8. The vapor recovery nozzles are equipped with required hoses.
9. The bellows-equipped vapor recovery nozzles are equipped with CARB certified insertion interlock mechanisms.
10. If required, the flow limiter is not missing and is installed properly.
11. The swivels are not missing, defective, or leaking, and the dispenser-end swivels, if applicable, are Fire-Marshall approved with 90-degree stops.

12. If required, the liquid removal devices comply with required CARB certifications and are properly installed.
13. For bellows-less nozzles, the hoses are inverted coaxial type except for Hirt systems, and the vapor collection holes are not obstructed.
14. For vacuum-assist systems, the vapor processing unit and burner are functioning properly.
15. For aspirator-assist systems, the major components (i.e. aspirator or jet pump, modulating valve, and vapor check valve) are present inside each dispenser.
16. For aspirator-assist systems with certification-required calibration stickers, the current calibration sticker is present.

RULE 239 NATURAL GAS-FIRED RESIDENTIAL WATER HEATERS

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RULE 239

NATURAL GAS-FIRED RESIDENTIAL WATER HEATERS

239.1 GENERAL

- A. **PURPOSE:** To limit emission of nitrogen oxides (NO_x) from natural gas-fired residential water heaters.
- B. **APPLICABILITY:**
1. **GEOGRAPHIC:** The provisions of this rule apply to all of El Dorado County.
 2. **GENERAL:** This rule shall apply to any person who manufactures, distributes, offers for sale, sells, or installs any natural gas-fired residential water heater with a rated heat input capacity less than 75,000 British thermal units per hour (Btu/hr), for use in this District.
- C. **EXEMPTION, LARGE NATURAL GAS-FIRED WATER HEATERS:** Water heaters with a rated heat input of 75,000 Btu/hr or greater are exempt from all provisions of this rule.
- D. **EXEMPTION, RECREATIONAL VEHICLES:** Natural gas-fired water heaters used exclusively in recreational vehicles are exempt from all provisions of this rule.
- E. **EXEMPTION, SWIMMING POOLS AND HOT TUBS:** Natural gas-fired water heaters used exclusively to heat swimming pools and hot tubs are exempt from all provisions of this rule.
- F. **EXEMPTION, OTHER FUELS:** Water heaters using any fuel other than natural gas are exempt from all provisions of this rule.

239.2 DEFINITIONS

- A. **BRITISH THERMAL UNIT (Btu):** The amount of heat energy required to raise the temperature of one pound of water from 59 °F to 60 °F at one atmosphere pressure.
- B. **HEAT INPUT:** The actual amount of heat energy released by natural gas burned in a natural gas-fired water heater. It is calculated during certification testing in accordance with the test method referenced in Section 239.5 A.

- C. **HEAT OUTPUT:** The amount of heat energy, H_o , in British thermal units (Btu), absorbed by the water being heated during the process of natural gas-fired water heater testing in accordance with the protocol referenced in Section 239.5 A.
- D. **MOBILE HOME:** A residential dwelling, designed and manufactured to be movable from site to site as desired by the owner/occupant, and that is not a Recreational Vehicle as defined in Section 239.2 I.
- E. **MOBILE HOME WATER HEATER:** A natural gas-fired water heater manufactured exclusively for mobile home use.
- F. **NATURAL GAS:** A mixture of gaseous hydrocarbons containing at least 80 percent methane by volume as determined according to American Standard Test Method (ASTM) D1945-64.
- G. **NATURAL GAS-FIRED WATER HEATER:** A closed vessel in which water is heated by the combustion of natural gas and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210°F (99 °C).
- H. **RATED HEAT INPUT CAPACITY:** The heat input capacity specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than the heat input capacity specified on the nameplate, the actual heat input capacity as certified by the Manufacturer or Certified technician, shall be considered as the rated heat input capacity.
- I. **RECREATIONAL VEHICLE:** A motor home, travel trailer, truck camper, or camping trailer, with or without motive power, designed for human habitation for recreational, emergency, or other occupancy, which meets all of the following criteria: 1) contains less than 320 square feet of internal living room area, excluding built-in equipment, including, but not limited to wardrobe, closets, cabinets, kitchen units or fixtures, and bath or toilet rooms; 2) it contains 400 square feet or less of gross area measured at maximum horizontal projections; 3) it is built on a single chassis; and 4) it is either self propelled, truck mounted, or permanently towable on the highways without a permit.
- J. **SWIMMING POOLS AND HOT TUBS:** Residential only, single-family dwellings, recreational and personal therapeutic equipment, including in-ground swimming pools, above-ground swimming pools, spas and hot tubs.

239.3

STANDARDS:

NITROGEN OXIDES EMISSION LIMIT: No person shall distribute, offer for sale, sell, or install any natural gas-fired residential water heater within the District which does not comply with the following:

1. A natural gas-fired residential water heater that emits less than or equal to 40 nanograms of nitrogen oxides (calculated as NO₂) per joule (93 pounds per billion Btu) of heat output; and is certified in accordance with Section 239.4 B.
2. A mobile home natural gas-fired water heater that emits less than or equal to 50 nanograms of nitrogen oxides (calculated as NO₂) per joules (116 pounds per billion Btu) of heat output; and is certified in accordance with Section 239.4 B.

239.4

ADMINISTRATIVE REQUIREMENTS:

A. **COMPLIANCE SCHEDULE:** Effective December 1, 1998, no person shall distribute, offer for sale, sell, or install any natural gas-fired residential water heater which does not comply with the requirements of Section 239.3 STANDARDS.

B. **CERTIFICATION REQUIREMENT:**

1. A manufacturer of any natural gas-fired residential water heater subject to Section 239.3 STANDARDS, shall submit to the Air Pollution Control Officer (APCO) at least 30 days prior to sale, a statement obtained from an independent testing laboratory, certifying that the laboratory tested the unit in accordance with the method in Section 239.5 MONITORING AND RECORDKEEPING of this rule, and that it is in compliance with the provisions of Section 239.3 STANDARDS. The statement shall be signed, dated, and shall attest to the accuracy of all information. The statement shall include the brand name, model number, the heat input capacity rating as it appears on the water heater rating plate, and test results in accordance with Section 239.5 MONITORING AND RECORDKEEPING; or
2. A manufacturer shall submit to this District an approved South Coast Air Quality Management District certification. Any model of natural gas-fired water heater certified as complying with the South Coast Air Quality Management District's Rule 1121 prior to July 1, 1995, need not be recertified to the test protocol specified in Section 239.5 MONITORING AND RECORDKEEPING until such time as required by the South Coast Air Quality Management District.

- C. **MANUFACTURER'S LABELING REQUIREMENT:** A manufacturer shall display the model number of the water heater complying with Section 239.3 STANDARDS on the shipping carton and on the rating plate of each water heater unit. The manufacturer shall also display the certification status on the shipping carton and on the water heater.
- D. **CALCULATION FOR DETERMINATION OF HEAT OUTPUT:** The amount of heat energy, H_o , in British thermal units (Btu), absorbed by the water being heated during the process of natural gas-fired water heater testing in accordance with the protocol referenced in Section 239.5 A.. It is calculated using the following equation:

$$H_o = MC_{pi} (T_{del} - T_{in}) + V_{st} D_n C_{p2} (T_{max} - T_o)$$

- Where: H_o = heat output, in Btu
 M = mass of the water withdrawn, in pounds
 C_{pi} = specific heat of water at the average temperature $[(T_{del} + T_{in}) / 2]$, Btu per pound per °F
 T_{del} = average delivery temperature, °F
 T_{in} = average inlet temperature, °F
 V_{st} = storage tank capacity, in gallons, as determined in Section 239.2
 D_n = density of water at the average temperature $[(T_{max} + T_o) / 2]$, pounds per gallon
 C_{p2} = specific heat of water at the average temperature, $[(T_{max} + T_o) / 2]$, Btu per pound per °F
 T_{max} = maximum mean tank temperature recorded after cutout following the test draw, °F
 T_o = maximum mean tank temperature recorded prior to the test draw, °F

- E. **CALCULATION FOR DETERMINATION OF STORAGE TANK CAPACITY:** The capacity of the natural gas-fired water heater in gallons. It is calculated using the following equation:

$$V_{st} = (W_f - W_t) / D_s$$

- Where: V_{st} = storage capacity of the water heater, in gallons
 W_f = weight of the water heater completely filled with water, in pounds
 W_t = weight of the empty water heater, in pounds
 D_s = density of water at the test temperature, in pounds per gallon

239.5

MONITORING AND RECORDKEEPING

- A. **TESTING PROCEDURE:** Any natural gas-fired water heater distributed, offered for sale, sold, or installed within the District shall be tested in accordance with the South Coast Air Quality Management District Protocol: Nitrogen Oxides Emission Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers, January 1995.

- B. **DURATION OF RECORDS:** A manufacturer shall keep test reports and certification records for as long as the water heater model is offered for sale or sold in the District, or for three calendar years after manufacture, whichever is longer. These records shall be made available to the Air Pollution Control Officer upon request.

ADOPTED: March 24, 1998

AMENDED:

RESCINDED:

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RULE 240 POLYESTER RESIN OPERATIONS

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RULE 240

POLYESTER RESIN OPERATIONS

420.1 GENERAL

- A. **PURPOSE:** The purpose of this rule is to reduce emissions of volatile organic compounds from polyester resin operations.
- B. **APPLICABILITY:** This rule applies to any person who supplies, sells, offers for sale, applies, or solicits the application of any gel coat or polyester resin material, or who manufactures any gel coat or polyester resin in the District.
- C. **EXEMPTION-LOW USAGE:** The provisions of this rule, other than the record keeping requirements of Section 240.5 A., shall not apply to any person operating a polyester resin operation where the volume of polyester resin materials used is less than 20 gallons per month.
- D. **SEVERABILITY:** If any section, subsection, sentence, clause, phrase, or portion of this rule is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

240.2 DEFINITIONS

- A. **AIRLESS SPRAY EQUIPMENT:** Equipment for applying materials by use of fluid pressure without atomizing air, including heated airless spray.
- B. **AIR-ASSISTED AIRLESS SPRAY EQUIPMENT:** Equipment for applying materials by use of fluid pressure to atomize coating and air pressure between 0.1 and 10 pounds per square inch gauge (psig) to adjust spray pattern.
- C. **CATALYST:** A substance added to resin to initiate or promote polymerization.

- D. **CLEANING MATERIAL:** Any material containing a volatile organic compound (VOC) and used to clean hands, work areas, tools, molds, application equipment, and any other equipment related to a polyester resin operation.
- E. **CLOSED MOLD SYSTEM:** A method of forming objects from polyester resin material by placing the polyester resin material in a confining mold cavity and applying pressure and/or heat.
- F. **CONTROL SYSTEM:** A device used to reduce emissions of VOC and its associated collection system.
- G. **CORROSION-RESISTANT MATERIALS:** Materials that include halogenated, furan, bisphenol A, vinyl ester, or isophthalic resins and are used to make products for corrosive or fire retardant applications.
- H. **CROSS-LINKING:** The process of chemically bonding two or more polymer chains together.
- I. **CURE:** To polymerize, i.e. to transform from a liquid to a solid or semi-solid state to achieve desired product physical properties, including hardness.
- J. **ELECTROSTATIC AIR SPRAY EQUIPMENT:** Equipment used to apply materials by charging atomized particles that are deposited by electrostatic attraction.
- K. **ENCLOSED GUN CLEANER:**
1. A device that is used for the cleaning of spray guns, pots and hoses, that has an enclosed solvent container, is not open to the ambient air when in use, and has a mechanism to force the cleanup material through the gun while the cleaner is in operation; or
 2. A device that is used for the cleaning of spray guns, pots and hoses, that has an enclosed solvent container, uses non-atomized solvent flow to flush the spray equipment and collects and returns the discharged solvent to the enclosed container.

- L. **FIBERGLASS:** A fiber similar in appearance to wool or cotton fiber but made from glass.
- M. **GEL COAT:** A polyester resin topcoat that enhances appearance and improves resistance to degradation from exposure to the environment. A gel coat may be pigmented or may be clear.
- N. **HIGH-VOLUME LOW-PRESSURE (HVLP) APPLICATION EQUIPMENT:** Equipment used to apply coatings by means of a gun which is designed to be and is operated between 0.1 and 10.0 pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns.
- O. **INHIBITOR:** A substance used to slow down or prevent a chemical reaction.
- P. **LOW-VOLUME LOW-PRESSURE (LVLP) APPLICATION EQUIPMENT:** Spray coating application equipment with air pressure between 0.1 and 10.0 pounds per square inch gauge (psig) and air volume less than 15.5 cfm per spray gun and which operates at a maximum fluid delivery pressure of 50 psig.
- Q. **MONOMER:** An organic compound that combines with itself, or other similar compounds, to become a cured thermosetting resin.
- R. **POLYESTER:** A complex polymeric ester containing difunctional acids and alcohols dissolved in a monomer.
- S. **POLYESTER RESIN MATERIALS:** Unsaturated polyester resin 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 comprising a resin made from polyester. Inert filler and cleaning material are excluded from this definition.

- T. **POLYESTER RESIN OPERATIONS:** The production or rework of products by mixing, pouring, hand lay-up, impregnating, injecting, forming, winding, spraying, and/or curing unsaturated polyester resin materials with fiberglass, fillers, or any other reinforcement materials, and associated cleanup.
- U. **POLYMER:** A chemical compound comprised of a large number of chemical units, which is formed by the chemical linking of monomers.
- V. **POLYMERIZATION:** To transform from a liquid to a solid or semi-solid state to achieve desired product physical properties, including hardness.
- W. **REPAIR:** The part of the fabrication process that requires the addition of polyester resin material to portions of a previously fabricated product in order to mend structural damage.
- X. **RESIN:** Any of a class of organic polymers of natural or synthetic origin used in reinforced products to surround and hold fibers or filler particles, and is solid or semisolid in the cured state.
- Y. **SPECIALTY RESIN:** Any halogenated, furan, bisphenol-A, vinyl-ester, or isophthalic resin used to make products for exposure to one or more of the following extreme environmental conditions: acute or chronic exposure to corrosive agents, caustic agents, acidic agents, or flame.
- Z. **TOUCH-UP:** The portion of the fabrication process that is used to cover minor imperfections.
- AA. **VAPOR SUPPRESSANT:** A substance added to resin to minimize the diffusion of monomer vapor into the atmosphere.
- BB. **WASTE MATERIAL:** Includes, but is not limited to, scraps resulting from cutting and grinding operations, any paper or cloth used for cleaning operations, waste resins, or any spent cleaning materials.

240.3 = STANDARDS

A. PROCESS AND CONTROL REQUIREMENTS:

1. Each polyester resin operation shall comply with one of the following process or control requirements:
 - a. Use low-VOC polyester resins with the following monomer content:
 1. Resins, except for specialty resins and gel coats, which contain no more than 35% by weight as applied, as determined by Section 240.5 D.3.
 2. Pigmented gel coats which contain no more than 45% by weight as applied, as determined by Section 240.5 D.3.
 3. Specialty resins and clear gel coats which contain no more than 50% by weight as applied, as determined by Section 240.5 D.3.
 - b. A polyester resin material containing a vapor suppressant, such that weight loss from VOC emissions does not exceed 60 grams per square meter of exposed surface area during resin polymerization, as determined by Section 240.5 D.1.
 - c. Use of a closed-mold system.
2. As an alternative to Section 240.3 A.1, a source may install and operate an emissions control system that:
 - a. Has been permitted by the Air Pollution Control Officer, pursuant to Rule 501 General Permit Requirements.
 - b. Has an overall capture and control efficiency of 85% or greater on a mass basis, as

determined by Section 240.4 D.

c. Complies with the requirements of Section 240.4 E.

B. **SPRAY APPLICATION REQUIREMENTS:** Spray application of polyester resin materials shall only be performed using one or more of the following application methods:

1. airless,
2. air-assisted airless,
3. high-volume low-pressure (HVLP),
4. low-volume low-pressure (LVLP),
5. electrostatic spray equipment or
6. any other equivalent method which has been approved in writing by the Air Pollution Control Officer, the U.S. Environmental Protection Agency and the California Air Resources Board.

C. **CLEANING MATERIAL REQUIREMENTS:** A person shall not use cleaning materials containing more than 1.7 pounds of VOC per gallon (204 gm/l) as applied and as determined by Section 240.5 D.2., unless the material is used in an enclosed gun cleaner.

D. **STORAGE AND DISPOSAL REQUIREMENTS:**

1. Each polyester resin operation shall use closed containers to store all polyester resin materials, cleaning materials, and any VOC-containing materials, except when accessed for use.
2. Each polyester resin operation shall use closed containers for the disposal of all uncured polyester resin materials, cleaning materials, waste materials, and any VOC-containing materials.

240.4 ADMINISTRATIVE REQUIREMENTS.

- A. CALCULATION FOR DETERMINING VOC WEIGHT PER VOLUME OF MATERIAL: The weight of VOC per volume of material shall be calculated by the following equation:

$$\text{Grams VOC per liter of material} = (W_s - W_w - W_{ec}) / V_m$$

Where:

W_s	=	weight of all volatile compounds in grams
W_w	=	weight of water in grams
W_{ec}	=	weight of exempt compounds in grams
V_m	=	volume of the material in liters

- B. CALCULATION FOR DETERMINING PERCENT MONOMER (STYRENE) CONTENT AS APPLIED: The percent monomer content of a resin as applied shall be calculated by the following equations. Batch weight and styrene weight calculations shall be completed to provide inputs into percent monomer equation.

$$\text{Batch Weight} = R + F + P + O$$

Where;

R	=	Resin Weight
F	=	Filler Weight
P	=	Pigment Weight
O	=	Other Additives Weight

$$\text{Styrene Weight} = R \times \frac{SP}{100}$$

Where;

R	=	Resin Weight
SP	=	% Styrene in Resin (from Manufacturer)

$$\text{Percent Monomer} = \frac{\text{Styrene Weight}}{\text{Batch Weight}} \times 100$$

- C. CALCULATION FOR DETERMINING PERCENT CONTROL EFFICIENCY AND VOC MASS EMISSION RATE: The VOC mass emission rate shall be calculated both upstream and downstream of the emissions control device based on the respective VOC

= mass concentration and volumetric flow rate, pursuant to Section 240.5 D.6., and the following equation:

$$M = (Q)(C)(60 \text{ min/hr}) \quad [\text{Calculated upstream and downstream}]$$

Where: M = VOC mass emission rate (upstream/downstream), in lb/hr.
Q = the volumetric flowrate at the inlet (upstream) or exhaust stack outlet (downstream), in scfm.
C = the VOC mass concentration at the inlet (upstream) or outlet (downstream), in lb/scf, as measured pursuant to Section 240.5 D.6.

The percent control efficiency is calculated as follows:

$$\% \text{ CE} = [(M_u - M_d) / M_u] \times 100$$

Where: CE = control efficiency.
M_u = the upstream VOC mass emission rate, in lb/hr.
M_d = the downstream VOC mass emission rate, in lb/hr.

D. **CALCULATION FOR DETERMINING OVERALL SYSTEM EFFICIENCY:**
To verify compliance with Section 240.3 A.2., the overall system efficiency is calculated as follows:

$$\% \text{ SE} = [\% \text{ CLE} \times \% \text{ CE}] \times 100$$

Where: SE = system efficiency.
CLE = collection efficiency, as determined by Section 240.5 D.5.
CE = control efficiency, as determined by Sections 240.4 C., and 240.5 D.6.

E. **OPERATION AND MAINTENANCE PLAN:** Any person using emission control equipment pursuant to Section 240.3 A.2., shall submit an Operation and Maintenance Plan for the emission control equipment to the Air Pollution Control Officer for approval. The Plan shall specify operation and maintenance procedures which will demonstrate continuous operation and compliance of the emission control equipment during periods of emission-producing operations. The Plan shall also specify which daily records must be kept to document the operation and maintenance procedures. These records shall comply with the requirements of Section 240.5. The Plan shall be implemented upon approval by the Air Pollution Control Officer.

F. **PROCEDURE FOR PROCESSING OPERATION AND MAINTENANCE PLAN:**

1. **APPROVAL OF PLAN:** The Air Pollution Control Officer shall determine whether the Operation and Maintenance Plan meets the requirements of Section 240.4 E., not later than 30 days after receipt of the Plan, or within a longer period of time agreed upon by the parties. The Air Pollution Control Officer shall approve an Operation and Maintenance Plan unless it fails to demonstrate continuous operation of the emission control equipment during periods of emission producing operations, according to the standards set forth in Section 240.3 A.2., or it fails to specify which daily records, in accordance with the requirements of Section 240.5, are to be kept to document the operation and maintenance procedures set forth in the Plan.
2. **REVISION OF PLAN:** If the Air Pollution Control Officer does not approve an Operation and Maintenance Plan, the source shall receive written notice of the deficiency, and shall have an additional 30 days from the date of the notification of the deficiency to correct and resubmit the Operation and Maintenance Plan. The decision of the Air Pollution Control Officer regarding the resubmitted Operation and

Maintenance Plan shall be final. Failure to correct the deficiency in an Operation and Maintenance Plan upon resubmittal shall constitute a violation of this rule that is subject to the penalties set forth in Health and Safety Code section 42400 et seq.

G. COMPLIANCE SCHEDULE:

1. A polyester resin operation which is subject to the requirements of this rule shall be in compliance no later than six (6) months from the date of adoption of this rule, except for facilities electing to comply with Section 240.3 A.2.
2. Facilities operating prior to the date of adoption of this rule which elect to install and operate an emission control system pursuant to the requirements of Section 240.3 A.2., shall have the control system installed and operating by no later than twelve (12) months from the date of adoption.

240.5 MONITORING AND RECORDKEEPING

A. RECORD KEEPING: In addition to any applicable record keeping requirements of either Rule 523 NEW SOURCE REVIEW, Rule 522 Title V - FEDERAL OPERATING PERMIT PROGRAM, and Rule 521 LIMIT POTENTIAL TO EMIT, or any other District rule which may be applicable, any person subject to this rule shall maintain the following records in order to evaluate compliance:

1. Records of the type and quantity of all resins, catalysts, and cleaning materials used.
2. Records of the type and quantity of all filler material, pigment materials, and all additional additives used in resins as applied.
3. Records of the monomer content, in weight percent, of all resin materials used or stored at the facility.

4. Records of the VOC content of all VOC containing cleaning materials used and stored at the facility, calculated pursuant to Section 240.4 A.
5. Records showing the weight loss per square meter during resin polymerization for each vapor-suppressed resin, and amount of such resin used.
6. Records of hours of operation and key operating parameters, pursuant to Section 240.4 E, for any add-on control equipment used to comply with Section 240.3 A.2.

B. FREQUENCY OF RECORD KEEPING

1. For sources which have total facility VOC emissions greater than 5 tons per year, records shall be maintained on a monthly basis.
2. For sources which have total facility VOC emissions less than or equal to 5 tons per year, records shall be maintained on an annual basis.
3. If at any time during a reporting period under Sections 240.5 B.1. or 240.5 B.2., a source uses a coating which does not comply with the standards set forth in Section 240.3 A., the source shall keep daily records regarding the use, including the lack of use, of that non-compliant resin during the applicable reporting period.

C. DURATION OF RECORDS: Records required by this section shall be maintained on-site for a continuous five year period and made available to the Air Pollution Control Officer upon request.

D. TESTING METHODS: The analysis of polyester resin materials, cleaning materials, and collection/control efficiency shall be conducted using the following testing procedures:

1. **RESIN VOC WEIGHT LOSS:** "Static Method for Determination of Volatile Emissions from Polyester and Vinyl Ester Resins" (RACT/BARCT Guidance,

1991) shall be used for determining VOC emissions from polyester and vinyl ester resins as received from the manufacturer.

2. **DETERMINATION OF VOC CONTENT:** VOC content of coatings shall be determined in accordance with EPA Method 24 and Section 240.4 A., of this rule as applicable.
3. **DETERMINATION OF PERCENT MONOMER CONTENT OF RESINS AS APPLIED:** Percent monomer content as applied shall be determined in accordance with Section 240.4 B.
4. **DETERMINATION OF COMPOUNDS EXEMPT FROM VOC DEFINITION:** Compounds exempted from the VOC definition, as listed in Rule 102, shall be determined in accordance with ASTM D 4457-85 or ARB Method 432. If any of the perfluorocarbons or volatile cyclic and linear methyl siloxanes are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the EPA-approved test method to be used to make the determination of these compounds.
5. **DETERMINATION OF COLLECTION EFFICIENCY:** Efficiency of the collection system shall be determined using:
 - a. Applicable U.S. EPA Methods 204, 204A, 204B, 204C, 204D, 204E, and/or 204F; or
 - b. Any other method approved by the U.S. EPA, the California Air Resources Board, and the Air Pollution Control Officer.
6. **DETERMINATION OF CONTROL EFFICIENCY:** Efficiency of control equipment shall be determined in accordance with EPA Method 18, 25, 25A, EPA Method 2 or 2C (whichever is applicable), and Section 240.4 C.

240.6 VIOLATIONS:

Failure to comply with any provision of this rule shall constitute a violation of this rule.

Adopted: February 15, 2000

Rescinded:

Amended:

h:\apcd\rules\Rule 240\021500Rule240PolyesterResinOperationsAdopted

EL DORADO COUNTY
AIR POLLUTION CONTROL DISTRICT
CLEAN AMENDED RULE 244
ORGANIC LIQUID LOADING AND TRANSPORT VESSELS

RULE 244 ORGANIC LIQUID LOADING AND TRANSPORT VESSELS

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RULE 244 ORGANIC LIQUID LOADING AND TRANSPORT VESSELS

244.1 GENERAL

- A. **PURPOSE:** This rule is intended to control emissions of volatile organic compounds (VOC) from facilities that load organic liquids with a vapor pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions into any tank truck, trailer, or railroad tank car.
- B. **APPLICABILITY:** The provisions of this rule shall apply to all organic liquid loading facilities.
- C. **EXEMPTION:** Section 244.3 A.5. shall not apply to components found in violation of facility vapor leaks or liquid leaks, if such is detected and recorded originally by the owner or operator, provided the repair or replacement of applicable equipment is completed within the specified period as given in Section 244.5 A.

244.2 DEFINITIONS

- A. **BACKGROUND** is the ambient concentration of organic vapors in the air measured according to the EPA Method 21 subsection 4.3.2.
- B. **BULK TERMINAL** is a FACILITY as defined below that receives organic liquids or gasoline by pipeline.
- C. **FACILITY** is an organic liquid or gasoline loading rack or set of such racks that load organic liquid or gasoline into tank trucks, trailers, or railroad cars, which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person or persons under common control.
- D. **FACILITY VAPOR LEAK** is an escape of organic vapors from a source other than a tank truck, trailer or railroad tank car in excess of 3,000 ppm as methane above background when measured according to EPA Method 21. A facility vapor leak source does not include liquid spillage or condensate resulting from "liquid leaks".
- E. **GASOLINE** is any petroleum distillate or petroleum distillate/alcohol blend or alcohol, except any liquefied petroleum gas (LPG), which has a vapor pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions and is used as a fuel for internal combustion engines.
- F. **LIQUID LEAK** is a dripping of liquid organic compounds at a rate in excess of three drops per minute from any single leak source other than the liquid fill line and vapor line of disconnect operations.
- G. **LIQUID LEAK FROM DISCONNECT OPERATIONS** is defined as: (a) more than two milliliters of liquid drainage per disconnect from a top loading operation; or (b) more than ten milliliters of liquid drainage per disconnect from a bottom loading operation. Such liquid drainage shall be determined by computing the average drainage from three consecutive disconnects at any one loading arm.

- H. **ORGANIC LIQUID** is any liquid compound containing the element carbon that has a vapor pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions excluding liquefied petroleum gases (LPG), methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds.
- I. **SUBMERGED FILL LOADING** is a type of organic liquid loading operation where the discharge opening is completely submerged when the liquid level above the bottom of the vessel is eight centimeters (3.2 inches) or higher.
- J. **SWITCH LOADING** is a transfer of organic liquids with a vapor pressure of less than 1.5 psia (77.5 mm Hg) under actual loading condition into any tank truck, trailer or railroad tank car that was loaded with an organic liquid with a vapor pressure of 1.5 psia (77.5 mm Hg) or greater immediately preceding the transfer.
- K. **TRANSFER EQUIPMENT** shall consist of all the components of the liquid loading line between the liquid pump and the transporting vessel, and the vapor return line from the transporting vessel to the storage tank, or to and including the vapor recovery system.
- L. **TRANSPORT VESSEL** is a tank truck, trailer or railroad tank car that is equipped to receive and transport organic liquid.
- M. **TRANSPORT VESSEL VAPOR LEAK** is an escape of organic vapors from a transport vessel in excess of 100 percent of the LEL when monitored according to the CARB Vapor Recovery Test Procedure TP-204.3 – Determination of Leak(s).
- N. **VAPOR DISPOSAL SYSTEM** is a control equipment designed and operated to reduce VOC emissions into the atmosphere.
- O. **VAPOR RECOVERY SYSTEM** is a vapor gathering system which is capable of collecting and returning discharged hydrocarbon vapors and gases during loading of organic liquids into transport vessels, back to a stationary storage container, or into an enclosed process system.
- P. **VOLATILE ORGANIC COMPOUND (VOC)** is as defined in Rule 101.

244.3 STANDARDS

- A. **GASOLINE LOADING FACILITIES:** Each facility which loads gasoline into a truck tank, trailer, or railroad car shall have a vapor recovery system which meets the following standards:
 - 1. The system is either
 - a. a CARB certified vapor recovery and/or disposal system; or;
 - b. a District-approved vapor recovery and/or disposal system only when such system does not require CARB certification.
 - 2. Such system shall be designed and operated to recover at least 99 percent of the displaced non-methane vapors or to have a vapor emission rate to the atmosphere

not exceeding 0.08 pounds of non-methane vapor per 1,000 gallons of organic liquid transferred.

3. The pressure in the vapor recovery system shall not exceed 18 inches of water column pressure.
4. The facility shall be designed for bottom loading only.
5. The transfer equipment shall be operated and maintained so that there are no overfills, facility vapor leaks, liquid leaks, or liquid leaks from disconnect operations.

B. **SWITCH LOADING:** Uncontrolled switch loading is prohibited.

C. **TRANSPORT VESSELS**

1. No person shall allow loading or unloading of organic liquid or other use or operation of any transport vessel unless the vessel has a valid certification of vapor integrity as defined by the applicable Air Resources Board Certification and Test Procedures, pursuant to Health and Safety Code Section 41962(g).
2. Transport vessel vapor leaks from dome covers, pressure vacuum vents or other sources shall be determined in accordance with the CARB Vapor Recovery Test Procedure TP-204.3 – Determination of Leak(s).
3. The transport vessel shall be operated so that there are no vapor leaks or liquid leaks.
4. Transport vessels shall not have a pressure exceeding 18 inches water column nor vacuum exceeding 6 inches water column at any time.
5. There shall be no liquid leaks upon disconnect.

D. **NON-GASOLINE LOADING FACILITIES**

1. Each facility shall be equipped and operated for submerged fill loading or bottom fill loading. All gasoline or equivalent vapor pressure organic liquids shall be transferred in this manner.
2. The transfer equipment shall be operated and maintained so that there are no overfills, liquid leaks, or liquid leak from disconnect operations.

244.4 ADMINISTRATIVE REQUIREMENTS

A. **DISTRIBUTION OF RESPONSIBILITIES**

1. The owner and operator of any facility shall be responsible and liable for complying with the provisions of Sections 244.3 A., 244.3 D., 244.4 A., 244.5 A., and 244.5 C., and for maintaining the equipment at the facility in such condition that it can comply with the requirements of this rule if properly operated. If employees of the owner or operator of the facility supervise or affect the transfer operation, the owner or operator of the facility shall be responsible

- for ensuring the transfer operation complies with all requirements of this rule and the transfer equipment is properly operated.
- 2. The owner, operator, and driver of a transport vessel shall be responsible and liable for complying with Sections 244.3 B. and 244.3 C.

244.5 MONITORING AND RECORDS

A. LEAK INSPECTION REQUIREMENTS

- 1. The owner and operator of any facility shall be required to perform an inspection of the vapor collection system, the vapor disposal system, and each loading rack handling organic liquids, for facility vapor leaks or liquid leaks of volatile organic compounds on one of the following schedules:
 - a. monthly if sight, sound, and smell are used as detection methods.
 - b. quarterly if an organic vapor analyzer (OVA) is used to monitor for facility vapor leaks.
- 2. Each detection of a leak shall be repaired or replaced within 72 hours. The repaired or replacement component shall be reinspected the first time the component is in operation after the repair or replacement.

B. COMPLIANCE DETERMINATION/TEST METHODS

- 1. Compliance with the vapor recovery efficiency as specified in Section 244.3 A.2. shall be determined according to the CARB Vapor Recovery Certification Procedure CP-202 – Certification Procedure for Vapor Recovery Systems of Bulk Plants.
- 2. Determinations of facility vapor leaks shall be conducted according to EPA Method 21.
- 3. Any other alternative test method approved in writing by the District, CARB, and EPA may be used only when none of the test methods identified in this subdivision are applicable.
- 4. When more than one test method or set of test methods are specified for any testing, a violation of any requirements of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule.

C. RECORDKEEPING

- 1. The owner and operator of any facility shall maintain a daily log of the throughput and a summary of the throughput for the calendar year to date, of the liquid organic compounds subject to the provisions of this rule.
- 2. The owner and operator of any facility shall maintain records for verification of compliance with the requirements in Section 244.5 A. The records shall include,

- but are not limited to, inspection dates, description of leaks detected, repair/replacement dates, and reinspection dates.
- 3. All records shall be maintained at the facility for at least five years and shall be available to District staff upon request.

Adopted: March 27, 2001

Amended: September 25, 2001

Rescinded:

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5/23/01

RULE 245 VALVES AND FLANGES

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RULE 245 VALVES AND FLANGES

245.1 GENERAL

- A. **APPLICABILITY, LIQUID LEAKS:** The provisions of this rule prohibiting liquid leaks are applicable to all valves and flanges in reactive organic compound service.
- B. **APPLICABILITY, GASEOUS LEAKS:** The provisions of this rule requiring periodic inspection with a portable leak detection device and subsequent repair of valves and flanges in reactive organic compound service are applicable to petroleum refineries, chemical plants, and oil production fields.
- C. **EXEMPTIONS, GENERAL:** The provisions of this rule shall not apply to:
 - 1. Valves or flanges handling only commercial natural gas.
 - 2. All valves or flanges which are located in areas which make inspection infeasible or unsafe for personnel provided that prior concurrence of the APCO has been obtained in writing.
 - 3. Valves or flanges exclusively handling fluids with a reactive organic compound concentration of ten percent or less by weight, or if the liquids' reactive organic compound weight percent evaporated is ten percent or less at 150°C.
 - 4. Oil production field fluid media having an API gravity of 20 or less.
 - 5. Valves or flanges handling liquids or gases with a water content of 80 percent or greater.
- D. **EXEMPTION, GASEOUS LEAKS:** The provision of Section 245.3 B. of this rule shall not apply to:

Valves or flanges incorporated in lines operating under negative pressure.

245.2 DEFINITIONS

- A. **BACKGROUND** is defined as the ambient concentration of reactive organic compounds determined at least three (3) meters upwind from the valve or flange to be inspected.
- B. **CHEMICAL PLANT** is any plant producing inorganic/organic chemicals and/or manufacturing products by inorganic/organic chemical processes.
- C. **COMMERCIAL NATURAL GAS** is a mixture of gaseous hydrocarbons, chiefly methane, of pipeline quality such as that obtained from a company licensed to dispense such gases.
- D. **FLANGE** is defined as a projecting rim on a pipe or piping component used to attach it to another piping detail.
- E. **GASEOUS LEAK** is defined as the detection of organic compounds at a concentration over 10,000 ppm as methane on a carbon equivalency basis.

- F. **LIQUID LEAK** is either the dripping of liquid reactive organic compounds at a rate of more than three drops per minute; or, a visible liquid mist.
- G. **OIL PRODUCTION FIELD** means those properties on which crude petroleum and natural gas production is conducted and as defined in the "Standard Industrial Classification Manual", prepared by the Statistical Policy Division of the Executive Office of the President's Office of Budget and Management, 1972.
- H. **REACTIVE ORGANIC COMPOUND** is defined in Rule 101.
- I. **REACTIVE ORGANIC COMPOUND SERVICE** is the use of systems or components to process, transport, react, modify, store, or dispense reactive organic compounds.
- J. **REFINERY** is an establishment that processes petroleum into various products and as defined in the "Standard Industrial Classification Manual", prepared by the Statistical Policy Division of the Executive Office of the President's Office of Budget and Management, 1972.
- K. **VALVE** is defined as any device that regulates the flow of fluid in a piping system by means of an external actuator acting to permit or block passage of fluid including the attached flange and the flange seal.
- L. **WORKING DAY** is any day except Saturdays, Sundays, and employee holidays.

245.3 STANDARDS

- A. **LIQUID LEAK CONTROL:** A person shall not use valves or flanges in reactive organic compound service unless such valves and flanges are maintained so that there shall not be a liquid leak.
- B. **GASEOUS LEAK CONTROL**
 - 1. Each owner/operator shall, no later than 90 days after the date of adoption of this rule, submit a management plan detailing the valve inspection schedule for the inspection program to be conducted at the refinery, chemical plant, or oil production field.
 - 2. Each valve or flange in a petroleum refinery, chemical plant, or oil production field handling reactive organic compounds shall be repaired in accordance with Section 245.5 A. Any such valve or flange found to leak shall be repaired in accordance with Section 245.3 C.
 - 3. Each valve located at the end of a pipe or line containing reactive organic compounds, shall be sealed with a blind flange, plug, or cap when not in use, except:
 - a. A valve on a product sampling line;
 - b. A safety pressure relief valve; or,
 - c. A bleeder valve in a double block and bleeder valve system.

4. Each valve found to have a gaseous leak shall be affixed with a record of inspections for the succeeding twelve-month period. Alternative methods of recordkeeping may be used, including the maintenance of records in a centralized location, provided that prior approval of the APCO has been obtained in writing.
5. A leak in more than one valve or flange per day per facility, discovered by District personnel within five days after the scheduled inspection required by Section 245.3 B.1, shall constitute a violation of this rule.

C. REPAIRS

1. Leaks, other than in oil production fields, shall be repaired within two working days of detection.
2. Leaks in oil production fields shall be repaired within five working days of detection.
3. If, after repairs are completed, the detectable gaseous reactive organic compounds are 10,000 ppm or greater when measured at a distance of 1 centimeter from the source, one of the following actions shall be taken:
 - a. Emergency repairs shall be made to reduce the emission rate to comply; or
 - b. The emissions from the leak shall be vented into an approved air pollution control device.
4. The persons complying with the provisions of the rule shall be exempt from the provisions of Rule 516 insofar as the provisions of Rule 516 would apply to leaking valves or flanges.

245.4 ADMINISTRATIVE REQUIREMENTS

- A. **EFFECTIVE DATE:** The owner or operator of any valve or flange in reactive organic compound service shall comply with this rule no later than July 1, 2001.

245.5 MONITORING AND RECORDS

A. INSPECTION

1. Valves and flanges handling reactive organic compounds shall be inspected on a quarterly basis with an option to change to annual inspections if operators can document that the facility has been successfully operated and maintained with no liquid or gas leak for five consecutive quarters.
2. Inspections for gaseous leaks shall be conducted with a portable leak detection device or an alternate method having the prior approval of the APCO, in writing.
3. In addition to the quarterly inspection, each valve and/or flange found to leak shall be reinspected after 30 days but before 90 days after repair of such leak. Valves and flanges found to be leaking after the reinspection shall be repaired

and reinspected at intervals of one-half the prior interval, except no valve or flange need be inspected more frequently than once per day.

4. Continuous monitoring flammable gas detection devices which send a visual or audible signal when a leak occurs, may, with the written approval of the APCO, be substituted for periodic inspections using leak detection equipment in applicable facilities or parts of facilities.

B. MEASUREMENT REQUIREMENTS

1. Gaseous leaks shall be determined by EPA Method 21 or CARB Method 21. Detection instruments shall be calibrated using a hexane calibration mixture (6ppm methane = 1 ppm hexane on a carbon equivalency basis) or another gas mixture approved in writing by the District for the specific situation.
2. Actual measurement of gaseous leakage rates shall be made at a distance of one centimeter from the source.

C. RECORDKEEPING: Persons subject to this rule shall comply with all of the following

1. Maintain records of inspections of valves performed pursuant to Section 245.5 A. for five years.
 - A. With the approval of the APCO, inspection records by operational system or plant area will be adequate to demonstrate compliance with annual inspection requirements.
 - B. Annual inspection records for the continuous monitoring equipment described in Section 245.5 A.4. shall not be required, provided that records are maintained for out-of-tolerance conditions as indicated by the monitoring equipment.
2. Make inspection records available for the review by District staff upon request.
3. Recordkeeping requirements shall not apply to the routine periodic inspection of flanges.

Adopted: March 27, 2001

Amended:

Rescinded:

REGULATION

IV

PERMIT SYSTEM CONDITIONS

4/10/75

RULE 401 Responsibility

— The fact that an authorization to construct or modify,
— or a permit to operate an article, machine, equipment
— or other contrivance described therein shall have been
— issued by the Air Pollution Control Officer shall not
— be an endorsement of such article, machine, or other
— contrivance neither shall it be deemed or construed to
— be a warranty, guarantee or representation on the part
— of the Air Pollution Control Officer that emission
— standards would not be exceeded by such article, ma-
— chine, equipment or other contrivance. In every instance
— the person, firm or corporation to whom such authoriza-
— tion or permit is issued shall be and remain responsible
— under these regulations for each and every instance
— wherein emission standards are exceeded by the article,
— machine, equipment or other contrivance described in
— the permit, and the fact of issuance or authorization
— shall not be a defense to or mitigation of any charge
— of violation.

RULE 501 GENERAL PERMIT REQUIREMENTS

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RULE 501

GENERAL PERMIT REQUIREMENTS

501.1 GENERAL

- A. **PURPOSE:** To provide an orderly procedure for the review of new sources of air pollution and the orderly review of the modification and operation of existing sources through the issuance of permits. Procedures for issuing, modifying, or renewing Title V permits to operate for stationary sources which are subject to Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, shall also be consistent with the procedures specified in that rule.
- B. **EXEMPTION, GENERAL:** The exemptions contained in this rule shall not apply to an otherwise exempt piece of equipment which is part of a process that requires a permit. An Authority to Construct and Permit to Operate shall not be required for the equipment listed in Sections 501.1 C. to 501.1 N., unless an emissions unit, is:
1. Subject to New Source Performance Standards; or
 2. Subject to National Emission Standards for Hazardous Air Pollutants; or
 3. Subject to the requirements of Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM; or
 4. Emits, in levels deemed appropriate for review by the Air Pollution Control Officer (APCO), substances identified as a toxic air contaminant or which are under review pursuant to Health and Safety Code Section 39650 et. seq.; or
 5. The Air Pollution Control Officer makes a determination that the emission unit may not operate in compliance with the District Rules and Regulations; or
 6. An emissions unit or stationary source for which emission reduction credits have been requested or granted in accordance with Rule 524 EMISSION REDUCTION CREDITS.
- C. **EXEMPTION, VEHICLES:**
1. Vehicles used to transport passengers or freight, but not including any article, machine, equipment or other contrivance mounted on such a vehicle that

would otherwise require a permit under the provisions of these rules and regulations.

2. Locomotives, airplanes and watercraft used to transport passengers or freight. This exemption shall not apply to equipment used for dredging of waterways or equipment used in pile driving adjacent to or in waterways.

D. EXEMPTION, COMBUSTION AND HEAT TRANSFER EQUIPMENT:

1. Internal combustion engines with a manufacturer's maximum continuous rating of 50 brake horsepower or less or gas turbine engines with a maximum heat input rate of 3,000,000 British Thermal Units (Btu) per hour or less at ISO standard day conditions (288 degrees Kelvin, 60 percent relative humidity, and 101.3 kilopascals pressure). The ratings of all engines or turbines used in the same process will be accumulated to determine whether this exemption applies.
2. Any combustion equipment that has a maximum heat input of less than 1,000,000 Btu per hour (gross) and is equipped to be fired exclusively with purchased quality natural gas, liquefied petroleum gas or any combination thereof. The ratings of all combustion equipment used in the same process will be accumulated to determine whether this exemption applies.

E. EXEMPTION, RESIDENTIAL STRUCTURES: Equipment utilized exclusively in connection with any structure, when the structure is designed for and used exclusively as a dwelling for not more than four families.

F. EXEMPTION, AGRICULTURAL OPERATIONS: Equipment used exclusively in the growing of agricultural crops, or in the commercial raising of fowl or other animals.

G. EXEMPTION, COOLING SYSTEMS AND VACUUM CLEANING: Water cooling towers that have a circulation rate of less than 10,000 gallons per minute and which are not used for cooling of process water, water from barometric jets or water from barometric condensers.

Refrigeration, air conditioning, ventilating, or vacuum cleaning systems not designed to remove air contaminants generated by equipment which would require a permit under these rules and regulations.

- H. **EXEMPTION, PLASTICS AND CERAMICS PROCESSING:** Ovens, kilns, or furnaces fired by electricity used exclusively for the heating, curing, softening, or annealing of plastics or ceramics, and not emitting more than 5 pounds of Volatile Organic Compound (VOC) emissions in any one day. This Section shall not apply to ovens used for heating or curing of fiberglass reinforced plastics.
- I. **EXEMPTION, STORAGE AND TRANSFER:** Tanks, reservoirs, vessels or other containers and their associated dispensing, pumping and compression systems used exclusively for the storage of:
1. Liquefied or compressed gases.
 2. Unheated organic materials with an initial boiling point of 150 degrees Celsius (302 degrees Fahrenheit) or greater, as determined by the testing procedure specified in Section 501.2, or with an organic vapor pressure of 5 mm Hg (0.1 psia) or less at 20°C, as determined by the testing procedure specified in Section 501.3.
 3. Organic liquids with a vapor pressure of 77.5 mm Hg (1.5 psia) or less at 20°C, as determined by the testing procedure specified in Section 501.3, having a capacity of 23,000 liters (6076 gallons or less). Equipment used exclusively for the transfer of organic liquids with a vapor pressure of 77.5 mm Hg (1.5 psia) at 20°C to or from storage.
 4. Unheated solvent dispensing containers of 380 liters (100 gallons) capacity or less.
- J. **EXEMPTION, SURFACE COATING AND PREPARATION:**
1. Water solution for surface preparation, cleaning, stripping, etching (other than chemical milling) or the electrolytic plating with electrolytic polishing of, or the electrolytic stripping of brass, bronze, cadmium, copper, iron lead, nickel, tin, zinc, and precious metals.
 2. Surface coating operations using a combined total of one gallon per day or less of coating material and solvent.
 3. Unheated non-conveyorized solvent rinsing containers or unheated non-conveyorized coating dip tanks of 380 liters (100 gallons) capacity or less.

- K. **EXEMPTION, FOOD PROCESSING:** The following processing equipment for food or other human consumables and exhaust systems or collectors serving exclusively such equipment:
1. Used in eating establishments for the purpose of preparing food for human consumption.
 2. Smokehouses in which the maximum horizontal inside cross sectional area does not exceed 2 square meters (21.5 square feet).
 3. Mixers and blenders used in bakeries.
 4. Confection cookers.
 5. Used exclusively to grind, blend or package tea, cocoa, spices, or roasted coffee.
- L. **EXEMPTION, LABORATORY EQUIPMENT:** Laboratory equipment used exclusively for chemical or physical analysis and bench scale tests, including associated vacuum-producing equipment.
- M. **EXEMPTION, REPAIRS AND MAINTENANCE:** Repairs or maintenance not involving changes to any equipment for which a permit has been granted under Section 501.3 A., of this rule.
- N. **EXEMPTION, OTHER EQUIPMENT:** Unless subject to the requirements of Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, other equipment authorized for exemption by the Air Pollution Control Officer and which would emit less than 2 pounds in any 24 hour period of any pollutants without the benefit of air pollution control devices.

501.2 DEFINITIONS: Unless otherwise defined below, the terms used in this rule are defined in Rule 523 NEW SOURCE REVIEW; Rule 524 EMISSIONS REDUCTION CREDITS; and Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM.

- A. **ADMINISTRATIVE PERMIT AMENDMENT** - An amendment to a permit to operate which:
1. Corrects a typographical error; or
 2. Identifies a minor administrative change at the stationary source; for example, a change in the name, address, or phone number of any person identified in the permit; or

3. Requires more frequent monitoring or reporting by a responsible official of the stationary source; or
 4. Transfers ownership or operational control of a stationary source, provided that, prior to the transfer, the Air Pollution Control Officer receives a written agreement which specifies a date for the transfer of permit responsibility, coverage, and liability from the current to the prospective permittee.
- B. **AFFECTED POLLUTANTS** - Reactive organic compounds (ROC), nitrogen oxides (NOx), sulfur oxides (SOx), PM10, carbon monoxide (CO), lead, vinyl chloride, sulfuric acid mist, hydrogen sulfide, total reduced sulfur, and reduced sulfur compounds, or any other pollutant or precursor for which an ambient air quality standard has been established by the U.S. Environmental Protection Agency or the California Air Resources Board.
- C. **ANNIVERSARY DATE** - The day and month of issuance of a permit to operate and that same day and month of each succeeding year.
- D. **APPLICABLE REQUIREMENTS** - Air quality requirements which a facility must comply pursuant to the District's regulations, codes of California statutory law, the Federal Clean Air Act as amended in 1990 and implementing regulations, other provisions of the United States Code, and the Code of Federal Regulations.
- E. **AUTHORITY TO CONSTRUCT** - A preconstruction permit authorizing construction prior to the starting of construction and conforming to the requirements of Rule 523 NEW SOURCE REVIEW, and Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM.
- F. **COMMENCE** - As applied to construction, means that the owner or operator has all of the necessary permits or approvals required under State and Federal air quality control laws, District Rules and Regulations, and those air quality control laws and regulations which are part of the California State Implementation Plan, and has:
1. Begun, or caused to begin, a continuous program of on-site construction of the source, to be completed in a reasonable time; or
 2. Entered into binding agreements or contractual obligations which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of

the source to be completed within a reasonable time.

- G. **CONTIGUOUS PROPERTY** - Two or more parcels of land with a common boundary or separated solely by a public roadway or other public right-of-way.
- H. **EMISSIONS UNIT** - An identifiable operation or piece of process equipment such as an article, machine, or other contrivance which controls, emits, may emit, or results in the emissions of any affected air pollutant, regulated air pollutant or Hazardous Air Pollutant (HAP), directly or as fugitive emissions. An emissions unit shall not include the open burning of agricultural biomass.
- I. **RESPONSIBLE OFFICIAL** - An individual with the authority to certify that a source complies with all applicable requirements, including the conditions of permits issued to sources in accordance with Regulation V PERMITS TO OPERATE. A "responsible official" means one of the following:
 - 1. For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - a. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - b. The delegation of authority to such representative is approved in advance by the Air Pollution Control Officer;
 - 2. For a partnership or sole proprietorship, a general partner or the proprietor, respectively; or
 - 3. For a municipality, state, federal, or other public agency, either a principal executive officer or a ranking elected official; or
 - 4. For an acid rain unit subject to Title IV (Acid Deposition Control) of the Clean Air Act, the "responsible official" is the designated

representative of that unit for any purposes under Title IV and Rule 522 TITLE V - FEDERAL OPERATING PERMITS PROGRAM.

J. **STARTUP** - means the setting in operation of a stationary source or emission unit for any purpose.

K. **STATIONARY SOURCE (SOURCE OR FACILITY)** - Any building, structure, facility, or emissions unit which emits or may emit any affected pollutant directly or as fugitive emissions.

1. Building, structure, facility, or emissions unit includes all pollutant emitting activities which:

- a. belong to the same industrial grouping; and
- b. are located on one property or on two or more contiguous properties; and
- c. are under the same or common ownership, operation, or control or which are owned or operated by entities which are under common control.

2. Pollutant emitting activities shall be considered as part of the same industrial grouping if:

- a. they belong to the same two-digit standard industrial classification code under the system described in the 1987 Standard Industrial Classification Manual; or
- b. they are part of a common production process. (Common production process includes industrial processes, manufacturing processes and any connected processes involving a common material.)

3. The emissions within District boundaries of cargo carriers associated with the stationary source shall be considered emissions from the stationary source to the extent that emission reductions from cargo carriers are proposed as offsets.

L. **TITLE V PERMITS** - A permit issued, denied, renewed, amended, or reopened pursuant to Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, and the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.), and Part 70 Code of Federal Regulations, "State Operating Permit Programs".

- A. **AUTHORITY TO CONSTRUCT:** Any person building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants, shall first obtain authorization for such construction from the Air Pollution Control Officer (APCO) as specified in Section 501.4 C., of this rule. An authority to construct shall remain in effect until a permit to operate the equipment is granted or denied or the application is cancelled. With the exception of Authority to Construct permit(s) for stationary sources or equipment units subject to the requirements of Title V of the Federal Clean Air Act as amended in 1990, and pursuant to Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, the emissions unit(s) shall not commence operation until the Air Pollution Control Officer takes final action to approve the permit. A stationary source or emission unit subject to Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, requirements may commence operation subject to the limitations and restrictions of Rule 522 upon such operation.
1. An authority to construct, unless extended or application for a Title V operating permit is submitted, shall expire no later than one year following the construction completion date given by the applicant, or no later than two years following the date of permit issuance, whichever occurs first.
 2. If a written request to extend the authority to construct is received by the Air Pollution Control Officer prior to the expiration of the authority to construct, an extension may be granted for up to two years if the Air Pollution Control Officer determines that: (1) commencement of construction has occurred, and a good faith effort to complete the project has been made; and (2) the parameters of the project remain the same as in the initial application.
 3. The Air Pollution Control Officer shall be notified of the anticipated date of initial startup or operation of any permitted article, machine, equipment or other contrivance. Such notice shall be made no less than 30 days prior to the startup date.

4. The Air Pollution Control Officer shall be notified of the actual date of initial startup within 5 days after such date.
- B. **PERMIT TO OPERATE:** Any person operating an article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants, shall first obtain a written permit from the Air Pollution Control Officer. Stationary sources subject to the requirements of Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, must also obtain a Title V permit pursuant to the requirements and procedures of that rule.
- C. **STANDARDS FOR GRANTING APPLICATIONS:**
1. The Air Pollution Control Officer shall deny an authority to construct or permit to operate, except as provided in Rule 523 NEW SOURCE REVIEW, if the applicant does not show that every article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants, is so designed, controlled, equipped, and operated with such air pollution control equipment that it may be shown to operate without emitting or without causing to be emitted air contaminants in violation of these rules and regulations or of such state or federal statutes as may be enforceable by the Air Pollution Control Officer on the date the application is deemed complete. Permits to operate, and permit amendments, for sources subject to the requirements of Title V of the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.), and Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, must comply with all applicable federal requirements. In addition, the Air Pollution Control Officer shall require the applicant, as a condition of the authority to construct, to comply with the requirements of California Health and Safety Code Part 6, (Section 44300 et. seq.), Air Toxics "Hot Spots" Information and Assessment Act.
 2. No permit to operate shall be granted, either by the Air Pollution Control Officer or the Hearing Board, for any article, machine, equipment or contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants, which has been constructed or installed without authorization as required by Section 501.3 A., of this rule, until:

- a. The information necessary to enable the Air Pollution Control Officer to make the determination required by Section 501.3 C., of this rule, Rule 523 NEW SOURCE REVIEW, and Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, for those sources subject to that rule, is presented to the Air Pollution Control Officer; and
 - b. Such article, machine, equipment or contrivance, is altered, if necessary, and made to conform to the standards set forth in Section 501.3 C., of this rule, elsewhere in these rules and regulations, and in the California Health and Safety Code.
3. In acting upon a permit to operate, if the Air Pollution Control Officer finds that the article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, has not been constructed in accordance with the authority to construct, he or she shall deny the permit to operate. The Air Pollution Control Officer shall not accept any further application for a permit to operate the article, machine, equipment, or other contrivance so constructed until he or she finds that the article, machine, equipment or other contrivance has been reconstructed in accordance with the authority to construct.
4. The Air Pollution Control Officer shall require enforceable emission limitations as permit conditions in authorities to construct and permits to operate to assure the permanence of surplus actual emissions reductions applied for use as internal reductions or emission reduction credits in accordance with Rule 523, NEW SOURCE REVIEW; Rule 524, EMISSION REDUCTION CREDITS; and Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM.
5. The Air Pollution Control Officer shall determine that an applicant for a permit to construct or modify a potential source of air contaminants located within 1,000 feet from the outer boundary of a school has complied with the applicable requirements of California Health and Safety Code Section 42301.6, preparation and distribution of a public notice, prior to approving an application for an authority to construct permit.

6. Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable requirements, including applicable provisions of the California State Implementation Plan, District Rules and Regulations, or State or Federal law.
7. No permit to operate shall be issued, modified, or renewed for stationary sources which are subject to Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, unless the permit contains conditions consistent with those specified in that rule.

D. **PROVISION OF SAMPLING AND TESTING FACILITIES:** In addition to the monitoring and testing required to comply with State or Federal laws or regulations, the Air Pollution Control Officer may, upon reasonable written notice or before an authority to construct or permit to operate is granted, require the applicant or the owner or operator of any article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants, or the use of which may eliminate, reduce, or control the issuance of air contaminants to:

1. Provide and maintain such facilities as are necessary for sampling and testing purposes in order to secure information that will disclose the nature, extent, quantity or degree of air contaminants discharged into the atmosphere from the equipment in question. In the event of such a requirement, the Air Pollution Control Officer shall notify the applicant in writing of the required size, number and location of sampling holes; the size and location of the sampling platform; the access to the sampling platform; and the utilities for operating the sampling, testing, and air monitoring equipment. Such platform and access shall be constructed in accordance with the applicable General Industry Safety Orders of the State of California.
2. Provide and maintain sampling and monitoring apparatus to measure emissions of air contaminants when the Air Pollution Control Officer has determined that such apparatus is available and should be installed.
 - a. Continuous emission monitoring systems as a minimum shall be installed when required, and to the performance specifications required, by Section 501.5 B., of this rule.

- b. A violation of emission standards of these rules, as shown by the stack-monitoring system, shall be reported by the owner or operator to the Air Pollution Control Officer within 96 hours, or such earlier time as may be required by Rule 516, UPSET AND BREAKDOWN CONDITIONS
 - c. In the event of a breakdown of monitoring equipment, the owner or operator shall notify the Air Pollution Control Officer within 48 hours and shall initiate repairs. The owner or operator shall inform the Air Pollution Control Officer of the intent to shutdown any monitoring equipment at least 24 hours prior to the event.
 - d. Compliance with Subsection (b) and (c), above, does not exempt the owner or operator from applicable provisions of Rule 516 UPSET AND BREAKDOWN CONDITIONS, the emergency provisions of Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, pursuant to 40 CFR 70.6(g), or the separate reporting requirements of other federal regulations to which the stationary source or emissions unit is subject.
3. If the Air Pollution Control Officer determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of a numerical emission standard infeasible, the Air Pollution Control Officer may instead prescribe a design, operational, or equipment standard. In such cases, the Air Pollution Control Officer may require the installation or modification of process monitoring devices such that the design characteristics or equipment will be properly maintained, or that the operational conditions will be properly performed, so as to continuously achieve the assumed degree of control. To the extent applicable, reporting requirements for process monitors shall be the same as for continuous emission monitoring systems.
4. A person operating or using a stack monitoring system shall, upon written notice from the Air Pollution Control Officer, provide a summary of the data obtained from such systems. This summary of the data shall be in the form and manner prescribed by the Air Pollution Control Officer. The summary of data shall be available for public inspection at

the office of the Air Pollution Control District. Records from the monitoring equipment shall be kept by the owner or operator for a period of two years, during which time they shall be available to the Air Pollution Control Officer in such form as he or she directs.

5. The responsible official of a source using a stack monitoring system and subject to Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, shall in addition to the requirements of Section 501.3 D.4., above, submit data summaries and retain monitoring records in accordance with the applicable federal requirements of that rule.
- E. **TRANSFER:** An authority to construct or permit to operate shall not be transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another. In the event any person contemplates or desires to make any such transfer as herein above described, said person shall make an application for authorization in accordance with Section 501.4 C., of this rule.
- F. **PERMIT RENEWAL:** Except for Title V permits, which shall be renewed in accordance with Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, every permit to operate, except as specified below, shall be renewable annually on the permit's anniversary date, commencing one year after the date of issuance.
1. Action to suspend or revoke the permit has been initiated and such action has resulted in a final determination to suspend or revoke the permit by the Air Pollution Control Officer or the Hearing Board and all appeals, or time for appeals, has been exhausted.
 2. Fees applicable to the renewal of the permit(s) to operate have not been paid, as specified in Regulation VI, FEES.
 3. The Air Pollution Control Officer shall review every permit to operate upon annual renewal, pursuant to Health and Safety Code Section 42301(c), to determine that permit conditions are adequate to ensure compliance with, and the enforceability of, District Rules and Regulations applicable to the article, machine, equipment, or contrivance for which the permit was issued. Applicable District Rules and Regulations shall include those which were in effect at the time the

permit was issued or modified, or which have subsequently been adopted and made retroactively applicable to an existing article, machine, equipment, or contrivance, by the District Air Pollution Control Board. During this annual review the Air Pollution Control Officer shall reopen the permit if cause for reopening is discovered for a permit to operate issued pursuant to Rule 522 TITLE V - FEDERAL OPERATING PERMITS PROGRAM. The Air Pollution Control Officer shall revise the conditions, if such conditions are not consistent, in accordance with all applicable District Rules and Regulations.

5. The Air Pollution Control Officer may establish an annual permit renewal date for all permits to operate held by a stationary source. Thereafter, permits to operate shall be renewable that same day and month of each succeeding year, subject to any other requirements of these Rules and Regulations and of state law, regarding validity, voiding or revocation of permits.

G. **PERFORMANCE TESTING:** Within 60 days after achieving the maximum production rate or the maximum rate of emissions to which the source is limited by enforceable conditions, but not later than 180 days after initial startup of such source, or as otherwise required by the Air Pollution Control Officer to determine continuous compliance with emission limitations or to confirm emission reductions claimed, the owner or operator of such source shall conduct performance test(s) in accordance with methods and under operating conditions as are approved by the Air Pollution Control Officer and furnish the Air Pollution Control Officer a written report of the results of such performance test(s).

1. Such test(s) shall be at the expense of the owner or operator.
2. Testing shall be conducted with the source(s) of emissions operating at maximum capacity or other rate conforming to the maximum rate of emissions to which the source(s) are limited by enforceable condition(s).
3. The Air Pollution Control Officer may monitor such test and may also conduct performance tests.
4. The owner or operator of a source shall provide the Air Pollution Control Officer 15 days prior notice of the performance test to afford the Air Pollution

Control Officer the opportunity to have an observer present.

5. The Air Pollution Control Officer may waive the requirement for performance tests if the owner or operator of a source has demonstrated by other means to the Air Pollution Control Officer's satisfaction that the source is being operated in compliance with all local, State and Federal regulations which are part of the California State Implementation Plan.

501.4 ADMINISTRATIVE REQUIREMENTS

- A. **POSTING:** A person who has been granted a permit to operate any article, machine, equipment, or other contrivance described in Section 501.3 B., of this rule shall maintain a legible copy of said permit on the premises of the subject equipment. Other information, analysis, plans or specifications which disclose the nature, extent, quantity, or degree of air contaminants which are or may be discharged from such source shall be readily available for inspection by the Air Pollution Control Officer.
- B. **ALTERING OF PERMIT:** A person shall not willfully deface, alter, forge, counterfeit, or falsify a permit to operate any article, machine, equipment, or other contrivance described in Section 501.3 B., of this rule. A permit amendment or revision requested by the owner or operator, other than an administrative permit amendment or an amendment pursuant to Subsection 501.3 F.3., shall require the filing of an application. For an administrative permit amendment, a responsible official may implement the change addressed in the written request immediately upon submittal of the request. The Air Pollution Control Officer shall take final action no later than 60 days after receiving the written request for an administrative permit amendment.
 1. After designating the permit revisions as an administrative permit amendment, the Air Pollution Control Officer may revise the permit without providing notice to the public or any affected state.
 2. The Air Pollution Control Officer shall provide a copy of the revised permit to the responsible official and for Title V permits to the U.S. Environmental Protection Agency.

3. While the Air Pollution Control Officer need not make a completeness determination on a written request, the Air Pollution Control Officer shall notify the responsible official if the Air Pollution Control Officer determines that the permit can not be revised as an administrative permit amendment.

C. **APPLICATIONS:** An application for an authority to construct, permit to operate, change of ownership, or an application for a permit amendment, permit reopening, or revision shall be filed in the manner and form prescribed by the Air Pollution Control Officer, and shall give all the information necessary to enable the Air Pollution Control Officer to make the determinations required by Section 501.3 C., of this rule, Rule 523, NEW SOURCE REVIEW; Rule 524, EMISSION REDUCTION CREDITS; and Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM.

1. A responsible official representing the owner or operator shall certify the truth, accuracy and completeness of application forms.
2. When the information submitted with the application is insufficient for the Air Pollution Control Officer to make the determination required by Section 501.3 C., of this rule, Rule 523, NEW SOURCE REVIEW, by Rule 522 TITLE V - FEDERAL OPERATING PERMITS PROGRAM, for subject sources, and any other applicable rule, regulation, or order, upon the written request of the Air Pollution Control Officer a responsible official shall supplement any complete application with additional information within the time frame specified by the Air Pollution Control Officer.
3. A responsible official shall promptly provide additional information in writing to the Air Pollution Control Officer upon discovery of submittal of any inaccurate information as part of the application or as a supplement thereto, or of any additional relevant facts previously omitted which are needed for accurate analysis of the application.
4. Intentional or negligent submittal of inaccurate information shall be reason for denial of an application.
5. An application for an authority to construct, permit to operate, or permit amendment or revision shall be accompanied by payment of the application

filing fee specified in Regulation VI, FEES.

- D. **ACTION ON APPLICATIONS:** The Air Pollution Control Officer shall notify the applicant in writing of his or her approval, conditional approval, suspension, or denial of the application for an authority to construct or permit to operate.
1. With the exception of applications of sources subject to the requirements of Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, in the event said notification or notification of application completeness pursuant to Rule 523, NEW SOURCE REVIEW, is not received by applicant within 30 days of the filing of the application, or within 30 days of providing further information as required by Section 501.4 C., the applicant may, at his or her option, deem the application to construct or permit to operate denied.
 2. Service of said notification may be made in person or by mail, and such service may be proved by the written acknowledgement of the person(s) served or affidavit of the person making the service.
 3. For sources subject to the requirements of Rule 522 TITLE V - FEDERAL OPERATING PERMITS PROGRAM, action on applications for initial operating permits, permit renewal, or permit modification shall be taken in accordance of the provisions of that rule.
- E. **CONDITIONAL APPROVAL:** The Air Pollution Control Officer may issue an authority to construct or a permit to operate subject to conditions which will bring the operation of any article, machine, equipment or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, within the standards of Section 501.3 C., of this rule. The conditions shall be specified in writing. Commencing work under such an authority to construct, or operation under such a permit to operate, shall be deemed acceptance of all the conditions so specified. The Air Pollution Control Officer shall issue an authority to construct or a permit to operate with revised conditions upon receipt of a new application, if the applicant demonstrates that the article, machine, equipment or other contrivance, the use of which may cause the issuance of air contaminants, can operate under the revised conditions within the standards of Section 501.3 C., of this rule.

- F. **DENIAL OF APPLICATION:** In the event of a denial of an authority to construct or permit to operate, the Air Pollution Control Officer shall notify the applicant in writing of the reasons therefore. Service of this notification may be made in person or by mail, and such service may be proved by the written acknowledgement of the person(s) served or affidavit of the person making the service. The Air Pollution Control Officer shall not accept a further application unless the applicant has complied with the objections specified by the Air Pollution Control Officer as his or her reasons for denial of the authority to construct or the permit to operate.
- G. **DISCLOSURE:** The Air Pollution Control Officer, at any time, may require from an applicant, or holder of, any permit provided for in these rules and regulations, such information, analyses, plans, or specifications which will disclose the nature, extent, quality, or degree of air contaminants which are, or may be, discharged by the source for which the permit was issued or applied. The Air Pollution Control Officer may require that such disclosures be certified by a professional engineer registered in the State of California. A responsible official representing the owner or operator shall certify the truth, accuracy and completeness of disclosures. Studies necessary to provide such information, shall be at the expense of the owner or operator of the source for which a permit was issued or applied.
- H. **EMISSION STATEMENT:** Upon the request of the Air Pollution Control Officer and as directed by the Air Pollution Control Officer, the owner or operator of any stationary source operation which emits or may emit oxides of nitrogen or reactive organic gas shall provide the Air Pollution Control Officer with a written statement, in accordance with Rule 1000, EMISSION STATEMENT, showing actual emissions of oxides of nitrogen and reactive organic gas from that source.
- I. **SUSPENSION:** The Air Pollution Control Officer may suspend a permit if a holder of such permit willfully fails and refuses to furnish information, analyses, plans, and specifications, within a reasonable time, as requested by the Air Pollution Control Officer pursuant to California Health and Safety Code Section 42303, District Rules and Regulations, or any other law, rule, regulation, agreement, or order enforceable by the District. The Air Pollution Control Officer shall serve notice, in writing, of such suspension and the reasons therefor. Service of said notification may be made in person or by mail, and such service may be proved by the

written acknowledgement of the persons served or affidavit of the person making the service. The permit shall be reinstated when the Air Pollution Control Officer is furnished with all requested information, analyses, plans, and specifications.

J. **CANCELLATION OF APPLICATION:** An authority to construct or permit to operate application may be cancelled by the Air Pollution Control Officer:

1. At the request of the applicant; or
2. If additional information has been requested of the applicant in accordance with Section 501.4 C., without the subsequent submittal of information within a reasonable time.

K. **CANCELLATION OF PERMIT TO OPERATE:** If, prior to the surrender of the operating permit, the Air Pollution Control Officer determines that the source or the emissions unit has been removed or fallen into an inoperable or un-maintained condition, the Air Pollution Control Officer may notify the owner of the intent to cancel the permit, providing the owner or operator with 30 days to respond. If the owner cannot demonstrate to the satisfaction of the Air Pollution Control Officer that the owner intended to operate again, or the owner does not respond within 30 days from the date a second noticing of the District's intent to cancel the permit is mailed by the District to the owner or operator, then the Air Pollution Control Officer may cancel the permit and deem the source or emissions unit shutdown as of the last known date the source or emissions unit discharged emissions.

1. The owner or operator may request an extension of time, in writing prior to the end of the 60 day period following the initial notice, from the Air Pollution Control Officer.
2. The Air Pollution Control Officer may grant an extension of time not to exceed 90 days.
3. The owner or operator may claim emissions reductions resulting from the shutdown in accordance with the provisions of Rule 524, EMISSION REDUCTION CREDITS, prior to the end of the 60 day period following the initial notice, or prior to the expiration of an extension.

4. The Air Pollution Control Officer shall advise, in writing, the owner or operator of the stationary source or emissions unit for which a permit is cancelled of the cancellation decision.
 5. The owner or operator may appeal the decision to cancel the permit pursuant to Section 501.4 M., of this rule.
- L. **TEMPORARY PERMIT:** The Air Pollution Control Officer may issue a temporary permit to operate. The temporary permit to operate shall specify a reasonable period of time during which the article, machine, equipment, or contrivance may be operated in order for the District to determine whether it will operate in accordance with the conditions specified in the permit.
- M. **APPEALS:** Within ten days after notice, by the Air Pollution Control Officer, of cancellation, suspension, denial, or conditional approval of an authority to construct, permit to operate, or emissions reduction credit application, the applicant or any other aggrieved person who participated in the permit issuance proceedings may petition the Hearing Board, in writing, for an order modifying or reversing that decision. The Hearing Board after public notice and a public hearing held within thirty days after filing the petition, may sustain or reverse the action of the Air Pollution Control Officer; such order may be made subject to specified conditions.
- N. **COMPLIANCE DATES:** Notwithstanding earlier compliance dates for sources subject to the requirements of Rule 522 TITLE V - OPERATING PERMIT PROGRAM, an application for a permit to operate shall be submitted to the Air Pollution Control Officer by **October 26, 1994**, for existing equipment constructed prior to **April 26, 1994**, except:
1. Existing internal combustion engines constructed prior to **April 26, 1994**, with a manufacturer's continuous rating of less than 150 brake horsepower and not subject to Section 501.1 D.1., shall submit an application for Permit to Operate by **April 26, 1995**.
 2. Existing boilers constructed prior to **April 26, 1994**, with a maximum heat input greater than 10,000,000 Btu per hour (gross) shall submit an application for Permit to Operate by **April 26, 1995**.

3. Existing boilers constructed prior to April 26, 1994, with a maximum heat input less than 10,000,000 Btu per hour (gross) and not subject to Section 501.1 D.2., shall submit an application for Permit to Operate by October 26, 1995.

501.5 MONITORING AND RECORDS

A. TESTING PROCEDURES:

1. GENERAL REQUIREMENTS: Except as otherwise specified in the District Rules and Regulations, the State Implementation Plan, and the applicable federal requirements of Rule 522 TITLE V - FEDERAL OPERATING PERMITS PROGRAM, testing methods for determining compliance with emission limits shall be:
 - a. The appropriate methods adopted by the California Air Resources Board and cited in Title 17, California Code of Regulations, Division 3, Subchapter 8, Compliance with Nonvehicular Emission Standards; or
 - b. The appropriate methods of 40 CFR part 50, Appendix M, Recommended Test Methods for State Implementation Plans; or
 - c. Any appropriate method of 40 CFR part 60, Appendix A, Test Methods; or
 - d. An alternative method following review and approval of that method by the California Air Resources Board and U.S. Environmental Protection Agency.
2. INITIAL BOILING POINT: ASTM D-1078-86, "Test Method for Distillation Range of Volatile Organic Liquids".
3. VAPOR PRESSURE: ASTM D-2879-86, "Vapor Pressure-Temperature Relation and Initial Decomposition Temperature of Liquids by Isoteniscope".

B. MONITORING: As applicable, each emission source subject to the requirements of Section 501.3A., and 501.3 B., shall comply with the following monitoring requirements:

1. The requirements of Title 40, Code of Federal Regulations, Part 51, Appendix P, Minimum Emission Monitoring Requirements.

2. The applicable federal requirements for monitoring of Title V of the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.).

C. RECORDKEEPING:

1. The following records shall be maintained and provided to the Air Pollution Control Officer upon request.
 - a. Emissions monitoring and process data records necessary for the determination and reporting of emissions, in accordance with applicable provisions of the District Rules and Regulations, shall be maintained. Records shall be kept for 5 years.
 - b. Other records of the nature and amounts of emissions or any other information as may be deemed necessary by the Air Pollution Control Officer to determine whether the stationary source or emissions unit is in compliance with applicable emission limitations, credited emission reductions, exemptions from rule provisions, or other requirements. The information must include emission measurements, continuous emission monitoring system performance testing measurements, performance evaluations, calibration checks and adjustments, maintenance performed on such monitoring systems, and other records and reports required by Title 40, Code of Federal Regulations, Part 51, Appendix P, Minimum Emission Monitoring Requirements.
 - c. Operation and maintenance plans shall be submitted to the District for all add-on capture and control equipment for review and approval by the Air Pollution Control Officer. Such plans shall demonstrate, through the use of specific recordkeeping requirements, continuous operation of the add-on control equipment when emission producing operations are occurring. The plan shall also specify records to be kept to document the performance of required periodic maintenance. Records shall be consistent with compliance time frames and employ the most recent US Environmental Protection Agency recordkeeping guidance.

2. The Air Pollution Control Officer may require recordkeeping to verify or maintain any exemption.

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ADOPTED: April 26, 1994

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EDC-APCD RULE 501

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RULE 502 GENERAL CONFORMITY RULE

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RULE 502

GENERAL CONFORMITY RULE

502.1 GENERAL

- A. **APPLICABILITY:** The provisions of Code of Federal Regulations (CFR), title 40, chapter I, subchapter C, parts 6 and 51, sections 51.850 through 51.860, in effect January 31, 1994, are made part of the Rules and Regulations of the El Dorado County Air Pollution Control District.

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ADOPTION DATE: November 8, 1994

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EDC APCD RULE 502

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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.
- 51.851 State implementation plan (SIP) revision.
- 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

section 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.

§51.851 State implementation plan (SIP) revision.

(a) Each State must submit to the Environmental Protection Agency (EPA) a revision to its applicable implementation plan which contains criteria and procedures for assessing the conformity of Federal actions to the applicable implementation plan, consistent with this subpart. The State must submit the conformity provisions within 12 months after November 31, 1993, or within 12 months of an area's designation to nonattainment, whichever date is later.

(b) The Federal conformity rules under this subpart and 40 CFR part 93, in addition to any existing applicable State requirements, establish the conformity criteria and procedures necessary to meet the Act requirements until such time as the required conformity SIP revision is approved by EPA. A State's conformity provisions must contain criteria and procedures that are no less stringent than the requirements described in this subpart. A State may establish more stringent conformity criteria and procedures only if they apply equally to non-Federal as well as Federal entities. Following EPA approval of the State conformity provisions (or a portion thereof) in a revision to the applicable SIP, the approved (or approved portion of the) State criteria and procedures would govern conformity determinations and the Federal conformity regulations contained in 40 CFR part 93 would apply only for the portion, if any, of the State's conformity provisions that is not approved by EPA. In addition, any previously applicable SIP requirements relating to conformity remain enforceable until the State revises its SIP to specifically remove them from the SIP and that revision is approved by EPA.

§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 of 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 NOx)	
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
NOx	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>
<u>Ozone (NO_x), SO₂, or NO₂</u>	
All Maintenance Areas	100
<u>Ozone (VOC's)</u>	
Maintenance areas inside an ozone transport region	50
Maintenance areas outside an ozone transport region	100
<u>Carbon monoxide</u>	
All maintenance areas	100
<u>PM-10</u>	
All maintenance areas	100
<u>Pb</u>	
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:
 - (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) The implementation plan revision required in section 51.851 of this subpart shall provide that written commitments to mitigation measures must be obtained prior to a positive conformity determination and that such commitments must be fulfilled.

(g) After a State revises its SIP to adopt its general conformity rules and EPA approves that SIP revision, 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.

RULE 520 ENHANCED MONITORING AND COMPLIANCE CERTIFICATION

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RULE 520

ENHANCED MONITORING AND COMPLIANCE CERTIFICATION

520.1 GENERAL

- A. **PURPOSE:** The purpose of this rule is to provide standards by which the compliance with requirements derived from the federal Clean Air Act may be determined. The requirements of this rule arise from the provisions of Sections 110(a) (2) (A), (C), and (F); Section 113; and Section 114(a) (3) of the federal Clean Air Act.
- B. **APPLICABILITY:** The provisions of this rule shall apply to sources that are subject to the provisions of Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM, or those sources that request synthetic minor source status under the provisions of Rule 519 REQUEST FOR SYNTHETIC MINOR SOURCE STATUS.

520.2 DEFINITIONS

- A. **ADMINISTRATOR:** The Administrator of the United States Environmental Protection Agency or delegate.
- B. **MAJOR SOURCE THRESHOLD:** The potential to emit a regulated air pollutant in the amounts specified in the definition of "major source" defined in Rule 522 TITLE V - FEDERAL OPERATING PERMIT PROGRAM.
- C. **OWNER OR OPERATOR:** An owner or operator is any person who owns, operates, controls, or supervises a stationary source.
- D. **SYNTHETIC MINOR SOURCE:** A stationary source which, pursuant to Rule 519 REQUEST FOR SYNTHETIC MINOR SOURCE STATUS or another mechanism, is subject to federally-enforceable conditions that limit its potential to emit to below major source thresholds.

520.3 STANDARDS

- A. **COMPLIANCE CERTIFICATION:** Notwithstanding any other provision in any plan approved by the Administrator, for the purpose of submission of compliance certification required by federal law, the owner or operator is not prohibited from using the following, in addition to any specified compliance methods:

1. An enhanced monitoring protocol approved for the source pursuant to 40 CFR Part 64.
 2. Any other monitoring method approved for the source pursuant to 40 CFR Part 70.6(a) (3) and incorporated into a federally enforceable operating permit.
- B. **CREDIBLE EVIDENCE:** Notwithstanding any other provision in the District's State Implementation Plan approved by the Administrator, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any such plan.
1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
 - a. An enhanced monitoring protocol approved for the source pursuant to 40 CFR Part 64.
 - b. A monitoring method approved for the source pursuant to 40 CFR Part 70.6(a) (3) and incorporated into a federally enforceable operating permit.
 - c. Compliance test methods specified in the District's State Implementation Plan.
 2. The following testing, monitoring, or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a. Any federally-enforceable monitoring or testing methods, including those in 40 CFR Parts 51, 60, 61, and 75.
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method specified in Sections 520.3 A.1. or 520.3 A.2. of this rule.
- C. **VIOLATIONS OF OTHER LEGAL MANDATES:** Nothing in the District Rules and Regulations is intended to permit any practice which is a violation of any statute, ordinance, rule or regulation.

520.4 ADMINISTRATIVE REQUIREMENTS

- A. EFFECTIVE DATE: This rule becomes effective on June 27, 1995.

ADOPTED: June 27, 1995

AMENDED:

RESCINDED:

R520ENMT.ED1

RULE 523 NEW SOURCE REVIEW

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RULE 523

NEW SOURCE REVIEW

523.1 GENERAL

- A. **PURPOSE:** The purpose of this rule is to provide for the review of new and modified stationary air pollution sources and to provide mechanisms, including emission offsets, by which authorities to construct for such sources may be granted without interfering with the attainment or maintenance of ambient air quality standards.
- B. **APPLICABILITY:** This rule shall apply to all new stationary sources and emissions units and all modifications to existing stationary sources and emissions units which, after construction, emit or may emit any affected pollutants or regulated pollutants to which Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, applies. This rule shall not apply to prescribed burning of forest, agriculture or range land; open burning in accordance with District Regulation III, OPEN BURNING; road construction or any non-point source common to timber harvesting or agricultural practices. Exemptions allowed in this Section shall not be used to exempt any stationary source or modification, which would be subject to review under U.S. Environmental Protection Agency (EPA) regulations or review pursuant to Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, from permit requirements. The regulations in effect at the time any application for an Authority to Construct is deemed complete shall apply.
- C. **EXEMPTION, EMERGENCY ELECTRICAL GENERATING EQUIPMENT:** Except as otherwise required for sources subject to the requirements of Title V of the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.), and pursuant to Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, the Air Pollution Control Officer shall exempt an application from the requirements of Sections 523.3 B., and 523.3 C., if the emissions unit would provide emergency electrical power or if the emissions unit would provide emergency water pumping for flood control or emergency fire fighting and is not a major source or major modification, provided the requirements of Sections 523.1 C. 1., and 523.1 C. 2., are met. This exemption shall not apply to emissions units supplying power to a serving utility for distribution on the electric transmission grid nor the operation of standby power sources due to a voluntary reduction in power by the serving utility.

1. Operation for maintenance purposes of internal combustion engines used solely as a source of emergency electrical power, not otherwise exempt, shall be limited to 100 hours per year, and such maintenance shall be scheduled in cooperation with the District so as to have no adverse air quality impact or shall mitigate by emission offsets or onsite reductions so that there is no net increase in emissions; and
 2. Operation for other than maintenance purposes shall be limited to actual interruptions of electrical power by the serving utility. Operation shall not exceed 24 hours without prior authorization by the Air Pollution Control Officer.
- D. **EXEMPTION, NOTIFICATION REQUIREMENTS:** Except as otherwise required for sources subject to the requirements of Title V of the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.), and pursuant to Rule 522, Title V - FEDERAL OPERATING PERMIT PROGRAM, the requirements of Sections 523.4 C., 523.4 D., 523.4 E., and 523.4 F.2., relating to notification, publication, and public inspection of Preliminary Decisions; and notification, publication, and public inspection of final action shall not apply if the application is for a new or modified stationary source or emissions unit which does not trigger a requirement for offsets, calculated pursuant to Sections 523.4 M., 523.4 N. or 523.4 O., as applicable.
- E. **EXEMPTION, RELOCATED EQUIPMENT:** The requirements of Sections 523.3 B. and 523.3 C. shall not apply to relocation of emission units solely within the District and within the air basin of which the District is part, and the relocation does not result in an increase in emissions. This exemption is subject to the performance of an air quality analysis pursuant to Section 523.3 F.
- F. **EXEMPTION, REPLACEMENT EQUIPMENT:** The requirements of Sections 523.3 B. and 523.3 C., shall not apply to replacement equipment, providing the replacement does not result in any emissions increase.
- G. **EXEMPTION, TEMPORARY SOURCES:** The requirements of Sections 523.3 B. and 523.3 C., shall not apply to temporary stationary emission sources, emission units, and portable equipment which will be operated on a temporary basis. This exemption is subject to the performance of an air quality analysis pursuant to Section 523.3 F.

H. **EXEMPTION, RULE COMPLIANCE:** The requirements of Sections 523.3 B. and 523.3 C., shall not apply to modifications necessary to comply with standards contained in Regulation II, PROHIBITIONS. This Section shall not apply to modifications in production rate, hours of operation, or other changes or additions to existing equipment not necessary for compliance with standards contained in Regulation II, PROHIBITIONS.

523.2 **DEFINITIONS:** Unless otherwise defined below, the terms used in this rule are defined in Rule 524, EMISSIONS REDUCTION CREDITS; and Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM.

- A. **ACTUAL EMISSIONS** - Measured or estimated emissions which most accurately represent the emissions from an emissions unit. Fugitive emissions associated with the emissions unit shall be included in the actual emissions of the emissions unit.
- B. **ACTUAL EMISSIONS REDUCTIONS** - Reductions of actual emissions from an emissions unit selected for on-site (internal) or off-site (external) emissions offsets. Actual emission reductions shall be calculated, adjusted and certified pursuant to Rule 524, EMISSION REDUCTION CREDITS, or to applicable federal requirements.
- C. **ACTUAL INTERRUPTIONS OF ELECTRICAL POWER** - When electrical service is interrupted by an unforeseeable event.
- D. **ACTUAL OPERATING DAYS** - Any day of operation which results in the emission of an affected pollutant from the emissions unit.
- E. **AFFECTED POLLUTANTS** - Reactive organic compounds (ROC), nitrogen oxides (NOx), sulfur oxides (SOx), PM10, carbon monoxide (CO), lead, vinyl chloride, sulfuric acid mist, hydrogen sulfide, total reduced sulfur, and reduced sulfur compounds, or any other pollutant or precursor for which an ambient air quality standard has been established by the U.S. Environmental Protection Agency or the California Air Resources Board.
- F. **AMBIENT AIR QUALITY STANDARDS** - State and federal ambient air quality standards for the purpose of submittal to the U.S. Environmental Protection Agency for inclusion in the California State Implementation Plan. All references in this rule to Ambient Air Quality Standards shall be interpreted as National Ambient Air Quality Standards.

G. BEST AVAILABLE CONTROL TECHNOLOGY (BACT) -

1. For any emissions unit the most stringent of:
 - a. The most effective emission control device, emission limit, or technique, singly or in combination, which has been required or used for the type of equipment comprising such an emissions unit unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that such limitations required on other sources have not been demonstrated to be achievable.
 - b. Any alternative basic equipment, fuel, process, emission control device or technique, singly or in combination, determined to be technologically feasible and cost-effective by the Air Pollution Control Officer.
 - c. For replacement equipment only, the emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source.
2. In making a BACT determination for nonattainment pollutant the Air Pollution Control Officer may consider the overall effect on other nonattainment pollutants. In some cases the lowest emission rates may be required for one or more nonattainment pollutants at the cost of not achieving the lowest emission rate for other nonattainment pollutants. The Air Pollution Control Officer shall discuss these considerations in the Preliminary Decision prepared pursuant to Section 523.4 C.
3. Under no circumstances shall BACT be determined to be less stringent than the emission control required by an applicable provision of district, state or federal laws or regulations unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that such limitations are not achievable.

H. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) - The California Environmental Quality Act, Public Resources Code, Section 21000, et seq.

- I. **CARGO CARRIERS** - Cargo carriers are trains dedicated to a specific source.
- J. **COMMENCE** - As applied to construction, means that the owner or operator has all necessary permits or approvals required under State and Federal air quality control laws, District Rules and Regulations, and those air quality control laws and regulations which are part of the California State Implementation Plan, and has:
1. Begun, or caused to begin, a continuous program of on-site construction of the source, to be completed in a reasonable time, or;
 2. Entered into binding agreements or contractual obligations which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
- K. **COMPLETE APPLICATION** - Completeness of an application for an authority to construct a new or modified emission unit shall be evaluated on the basis of a list of required information which has been adopted by the District pursuant to Article 3, Sections 65940 through 65944 of Chapter 4.5 of Division 1 of Title 7 of the California Government Code as they exist on the date on which the application is received and on payment of the appropriate fee pursuant to Regulation VI, FEES and Rule 522 Section 522.7 SUPPLEMENTAL ANNUAL FEE.
- L. **CONSTRUCTION** - Means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.
- M. **CONTIGUOUS PROPERTY** - Two or more parcels of land with a common boundary or separated solely by a public roadway or other public right-of-way.
- N. **COST-EFFECTIVE** - A cost per unit of emissions reduction which is lower than or equivalent to the maximum unit costs of the same emission reduction through the use of Best Available Control Technology, calculated in current year dollars, in accordance with methodology and criteria specified in guidelines developed by the District.
- O. **ELECTRICAL POWER PLANT** - An electrical generation facility that regularly generates electricity so the local electric utility can provide its daily energy

requirements. Emergency electrical generating equipment are not considered electrical power plants.

- P. **EMISSION DECREASE** - Any modification which would result in an emission decrease of actual emissions. The emission decrease shall be calculated by subtracting the proposed emissions from the historic actual emissions.
- Q. **EMISSIONS LIMITATION** - One or a combination of permit conditions specific to an emissions unit which restricts its maximum emissions, at or below the emissions associated with the maximum design capacity. An emissions limitation shall be:
1. Contained in the latest authority to construct and contained in or enforceable by the latest permit to operate for the emission unit, and;
 2. Enforceable on a daily basis or quarterly basis pursuant to Section 523.4 G.2., and;
 3. Established pursuant to a permitting action occurring after December 31, 1976.

Emission limitations should be stated in a manner consistent with testing procedures. Emission limitations may be expressed as enforceable design, operational, or equipment standard pursuant to Section 523.4 G.3.

- R. **EMISSIONS UNIT** - An identifiable operation or piece of process equipment such as an article, machine, or other contrivance which controls, emits, may emit, or results in the emissions of any affected air pollutant, regulated air pollutant or Hazardous Air Pollutant (HAP), directly or as fugitive emissions. An emissions unit shall not include the open burning of agricultural biomass.
- S. **FUGITIVE EMISSIONS** - Those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Fugitive hazardous air pollutant emissions shall be considered when determining whether a source is a major stationary source pursuant to Title V of the Federal Clean Air Act as amended in 1990 and Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM. The fugitive emissions of a source shall not be considered in determining whether it is a major stationary source pursuant to Title V, unless the source belongs to one of the following categories of stationary sources listed in 40 CFR 70.2, "Definitions", "Major Source" (2).

T. **HALOGENATED HYDROCARBONS** - For the purposes of this rule, halogenated hydrocarbons are the following:

1. 1,1,1-trichloroethane
2. methylene chloride
3. 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)
4. 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
5. trichlorofluoromethane (CFC-11)
6. dichlorodifluoromethane (CFC-12)
7. 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)
8. 1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114)
9. chloropentafluoroethane (CFC-115)
10. pentafluoroethane (HFC-125)
11. 1,1,2,2-tetrafluoroethane (HFC-134)
12. tetrafluoroethane (HFC-134a)
13. 1,1-dichloro-1-fluoroethane (HCFC-141b)
14. 1-chloro-1,1-difluoroethane (HCFC-142b)
15. 1,1,1-trifluoroethane (HFC-143a)
16. chlorodifluoromethane (HCFC-22)
17. trifluoromethane (HFC-23)
18. 1,1-difluoroethane (HFC-152a)
19. The following four classes of perfluorocarbon compounds:
 - a. Cyclic, branched, or linear, completely fluorinated alkanes.
 - b. Cyclic, branched, or linear, completely fluorinated ethers, with no saturations.
 - c. Cyclic, branched, or linear, completely fluorinated tertiary amines with no saturations.
 - d. Sulfur-containing perfluorocarbons with no saturations and with sulfur bonds only to carbon and fluorine.

Perfluorocarbon compounds will be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the product or process and provides a validated test method which can be used to quantify the specific compounds.

U. **HAZARDOUS AIR POLLUTANT (HAP)** - Any air pollutant listed pursuant to Section 112(b) of the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.).

V. **HISTORIC ACTUAL EMISSIONS -**

1. For applications for emissions reductions deemed complete after April 26, 1994, "historic actual emissions" are the actual emissions for the existing emissions unit averaged over the consecutive two year period immediately preceding the date of application for emission reduction credits. If the last two years are unrepresentative of normal source operations as determined by the Air Pollution Control Officer, then any two consecutive years of the last five years that represent normal source operation may be used.
2. For applications for emissions reductions deemed complete prior to April 26, 1994, "historic actual emissions" are either as calculated in Subsection 523.2 V.1., above, or, at the option of the applicant and with the approval of the Air Pollution Control Officer, are the actual emissions for the existing emissions unit averaged over the three year period immediately preceding the date of application for emission reduction credits.
3. If, at any time during the two or three year period, actual emissions exceeded allowed or permitted emission levels, then actual emissions shall be reduced to reflect emission levels that would have occurred if the unit were in compliance with all applicable limitations and rules.
4. Where an emissions unit has been in operation for less than two years, a shorter averaging period of at least one year may be used, provided that the averaging period is representative of the full operational history of the emissions unit. If less than one year has passed since the date of issuance of the permit to operate then the historic actual emissions shall be zero.

W. **HISTORIC POTENTIAL EMISSIONS -** Emissions based on the potential to emit of the emissions unit prior to modification. In determining the potential to emit, daily emissions limitations shall be treated as part of an emissions unit's design only if the limitations are representative of normal operations, or if the facility has provided offsets from previous permitting actions. If there are no enforceable limiting conditions, an emissions unit's potential to emit shall be limited to

the unit's, historical actual emissions. For a new emissions unit historic potential emissions are equal to zero. For the purposes of the above determination, "normal operations" is defined as the usual or typical daily operating of an emissions unit resulting in actual emissions which are at least 80% of the specific limits contained in the emission unit's authority to construct or permit to operate.

- X. **LAKE TAHOE AIR BASIN** - Established pursuant to Section 39606 of the Health & Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60113 (a) or 40 CFR 81.275.

This Air Basin is delineated on an official map on file at the California Air Resources Board Headquarters Office.

- Y. **MAJOR STATIONARY SOURCE** - A stationary source which emits or has the potential to emit: 50 tons per year (tpy) or more of nitrogen oxides, 50 tons per year or more of reactive organic compounds, 100 tons per year or more of carbon monoxide, 100 tons per year or more of PM10, 100 tons per year of sulfur oxides, 100 tons per year of any regulated pollutant or levels specified by the U.S. Environmental Protection Agency pursuant to the Federal Clean Air Act of 1990, Section 112(a)(1). In addition, any physical change occurring at a stationary source not otherwise qualifying as a major stationary source, which would constitute a major stationary source by itself makes the source a major stationary source. For the purposes of Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, a major stationary source also includes any source which emits or has a potential to emit 10 tpy of one HAP or 25 tpy of two or more Hazardous Air Pollutants (HAPs), as listed pursuant to Section 112(b) of the Federal Clean Air Act, or any lesser quantity threshold promulgated by the U.S. Environmental Protection Agency.
- Z. **MAJOR MODIFICATION** - Modification to a major stationary source which results in an increase in the potential to emit greater than: 25 tons per year of nitrogen oxides, 25 tons per year of reactive organic compounds, 100 tons per year of carbon monoxide, 40 tons per year of sulfur oxides, or 15 tons per year of PM10 aggregated with all other increases in potential to emit over the period of five consecutive years before the application for modification, and including the calendar year of the most recent application.

AA. **MODIFICATION** - Any physical change, change in method of operation (including change in fuel characteristics), addition to, or any change in hours of operation, or change in production rate of, which:

1. For an emissions unit:
 - a. Would necessitate a change in permit conditions, or;
 - b. Is not specifically limited by a permit condition, or;
 - c. Results in an increase, a decrease, or no change in emissions which are not subject to an emissions limitation.
2. For a stationary source: is a modification of its emissions unit, or addition of any new emissions unit.
3. The following shall not be considered a modification:
 - a. A change in ownership.
 - b. Routine maintenance and repair.
 - c. A reconstructed stationary source or emissions unit which shall be treated as a new stationary source or emissions unit, not as a modification.
 - d. The addition of a continuous emission monitoring system.

BB. **MOUNTAIN COUNTIES AIR BASIN** - Established pursuant to Section 39606 of the Health & Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60111 (i), the Mountain Counties Air Basin includes all of El Dorado County except that portion included in the Lake Tahoe Air Basin, defined by 17 CCR 60113(b), and that portion included in the Sacramento Valley Air Basin, defined by 17 CCR 60106(k).

CC. **NONATTAINMENT POLLUTANT** - Any pollutant as well as any precursors of such pollutants which has been designated "nonattainment" by the U.S. Environmental Protection Agency in the Federal Register, or which has been designated nonattainment by the California Air Resources Board pursuant to Section 39607 of the Health and Safety Code.

- DD. PM10 - Particulate matter with an aerodynamic diameter smaller than or equal to a nominal 10 microns as measured by an applicable reference test method or methods found in Article 2, Subchapter 6, Title 17, California Code of Regulations (commencing with Section 94100).
- EE. PORTABLE EQUIPMENT - Equipment which is periodically relocated and is not operated more than a total of 180 days at any one location in the District within any continuous 12 month period.
- FF. POTENTIAL TO EMIT - The maximum daily physical and operational design capacity to emit an air pollutant during each calendar quarter. Any limitation on the physical or operational design capacity, including emission control devices and restrictions on hours of operation, or on the type, or amount of material combusted, stored, or processed, may be considered as part of the design only if the limitation, or the effect it would have on emissions, is incorporated into the Authority to Construct as an enforceable permit condition as daily emissions limitations. Fugitive emissions associated with the emissions unit or stationary source shall be included in the potential to emit of the emissions unit or stationary source.
- GG. PRECURSOR - A pollutant that, when emitted into the atmosphere, may undergo either a chemical or physical change which then produces another pollutant for which an ambient air quality standard has been adopted, or whose presence in the atmosphere will contribute to the violation of one or more ambient air quality standards. The following precursor-secondary air contaminant relationships shall be used for the purposes of this rule:

<u>Precursor</u>	<u>Secondary Air Contaminant</u>
Reactive Organic Compound -----	a. Photochemical oxidants (Ozone) b. Organic fraction of PM10 -----
Nitrogen Oxides -----	a. Nitrogen dioxide b. Nitrate fraction of PM10 c. Photochemical oxidants (Ozone) -----
Sulfur Oxides -----	a. Sulfur dioxide b. Sulfates c. The sulfate fraction of PM -----

- HH. **PRIORITY RESERVE BANK** - A depository for preserving emission reduction credits pursuant to Rule 525, PRIORITY RESERVE.
- II. **PROPOSED EMISSIONS** - Emissions based on the potential to emit for the new or modified emissions unit.
- JJ. **QUARTERLY** - Calendar quarters beginning in January, April, July, and October.
- KK. **QUARTERLY EMISSIONS LIMITATION** - One or a combination of permit conditions specific to an emissions unit which restricts its maximum emissions, in pounds per quarter, at or below the emissions associated with the maximum design capacity. A quarterly emissions limitation must be:
1. Contained in the latest authority to construct and contained in or enforceable by the latest permit to operate for the emission unit, and
 2. Enforceable on a quarterly basis, and
 3. Established pursuant to a permitting action occurring after December 31, 1976.
- LL. **REACTIVE ORGANIC COMPOUND** - Any compound containing carbon except: methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonates, and halogenated hydrocarbons.
- MM. **RECONSTRUCTED SOURCE** - Any emissions unit undergoing physical modification where the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost of a comparable entirely new stationary source or emissions unit. Fixed capital cost means that capital needed to provide all the depreciable components. A reconstructed source shall be treated as a new stationary source or emissions unit.
- NN. **REDUCED SULFUR COMPOUNDS** - The sulfur compounds hydrogen sulfide, carbon disulfide and carbonyl sulfide.
- OO. **REGULATED AIR POLLUTANT** - A "regulated air pollutant" is any pollutant: 1) which is emitted into or otherwise enters the ambient air, and 2) for which the State or the US Environmental Protection Agency has adopted an emission limit, standard, or other requirement. Regulated air pollutants include:
1. Oxides of nitrogen and volatile organic compounds;

2. Any pollutant for which a national ambient air quality standard has been promulgated pursuant to Section 109 of the Federal Clean Air Act;
3. Any pollutant subject to a new source performance standard promulgated pursuant to Section 111 of the Federal Clean Air Act;
4. Any ozone depleting substance specified as a Class I (chlorofluorocarbons) or Class II (hydrofluorocarbons) substance pursuant to Title VI of the Federal Clean Air Act; and
5. Any pollutant subject to a standard or requirement promulgated pursuant to Section 112 of the Federal Clean Air Act, including:
 - a. Any pollutant listed pursuant to Section 112(r) of the Federal Clean Air Act (Prevention of Accidental Releases) shall be considered a "regulated air pollutant" upon promulgation of the list.
 - b. Any HAP subject to a standard or other requirement promulgated by the U.S. Environmental Protection Agency pursuant to Section 112(d) or adopted by the District pursuant to 112(g) and (j) of the Federal Clean Air Act shall be considered a "regulated air pollutant" for all sources or categories of sources: 1) upon promulgation of the standard or requirement, or 2) 18 months after the standard or requirement was scheduled to be promulgated pursuant to Section 112(e)(3) of the Federal Clean Air Act.
 - c. Any HAP subject to a District case-by-case emissions limitation determination for a new or modified source, prior to the U.S. Environmental Protection Agency promulgation or scheduled promulgation of an emissions limitation shall be considered a "regulated air pollutant" when the determination is made pursuant to Section 112(g)(2) of the Federal Clean Air Act. In case-by-case emissions limitation determinations, the HAP shall be considered a "regulated air pollutant" only for the individual source for which the emissions limitation determination was made.

PP. REPLACEMENT EQUIPMENT -

1. Functionally Identical Replacement: The replacement of or modification of emission units(s) where the replacement unit serves the identical function as the unit(s) being replaced, and the maximum rating and the potential to emit any pollutant will not be greater from the new or modified emissions unit(s) than the replaced unit(s), when the emissions unit(s) are operated at the same permitted conditions as if current BACT were applied. The Air Pollution Control Officer will determine, on a case-by-case basis, whether a project to replace an emissions unit in whole or part with functionally equivalent equipment is a routine repair, commonly made in the industry. Projects intended to extend the expected useful life of the unit may not be considered routine replacements.
2. Identical Replacement: The total or partial replacement of an emissions unit where the replacement is the same as the original unit in all respects except for serial number.

QQ. SACRAMENTO VALLEY AIR BASIN - Established pursuant to Section 39606 of the Health & Safety Code of the State of California and as described in Title 17, California Code of Regulations, Section 60106.

RR. STATIONARY SOURCE (SOURCE OR FACILITY) - Any building, structure, facility, or emissions unit which emits or may emit any affected pollutant directly or as fugitive emissions.

1. Building, structure, facility, or emissions unit includes all pollutant emitting activities which:
 - a. Belong to the same industrial grouping, and;
 - b. Are located on one property or on two or more contiguous properties, and;
 - c. Are under the same or common ownership, operation, or control or which are owned or operated by entities which are under common control.
2. Pollutant emitting activities shall be considered as part of the same industrial grouping if:

- a. They belong to the same two-digit standard industrial classification code under the system described in the 1987 Standard Industrial Classification Manual, or;
 - b. They are part of a common production process. (Common production process includes industrial processes, manufacturing processes and any connected processes involving a common material).
3. The emissions within District boundaries of cargo carriers associated with the stationary source shall be considered emissions from the stationary source to the extent that emission reductions from cargo carriers are proposed as offsets.

SS. **TEMPORARY SOURCE** - Temporary emission sources such as pilot plants, and portable facilities which will be terminated or located outside the District after less than a cumulative total of 90 days of operation in any 12 continuous months, and the emissions resulting from the construction phase of a new source.

TT. **TOTAL REDUCED SULFUR COMPOUNDS** - The sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide and dimethyl disulfide.

523.3 STANDARDS

A. **BEST AVAILABLE CONTROL TECHNOLOGY:** An applicant shall apply Best Available Control Technology to a new emissions unit or modification of an existing emissions unit, except cargo carriers, for each emissions change of an affected pollutant, which would have an increase in emissions, according to procedures specified in Section 523.4 J., and the potential to emit of the new or modified emissions unit which equals or exceeds the levels specified in Section 523.3 A.1. A condition which reflects BACT in a manner consistent with testing procedures, such as ppmv NOx, g/liter VOC, or lbs/hr shall be contained in the latest authority to construct and permit to operate.

1.	<u>Pollutant</u>	<u>lb/day</u>
	Reactive organic compounds	10
	Nitrogen oxides	10
	Sulfur oxides	80
	PM10	80
	Carbon monoxide	550

Lead	3.3
Vinyl chloride	5.5
Sulfuric acid mist	38
Hydrogen sulfide	55
Total reduced sulfur compounds	55
Reduced sulfur compounds	55

B. OFFSET REQUIREMENTS, GENERAL:

1. An applicant shall provide offsets for the affected pollutant, except as provided in Section 523.3 D., obtained pursuant to Rule 524, EMISSION REDUCTION CREDITS, or Rule 525, PRIORITY RESERVE, for new and modified sources where the cumulative emission changes of reactive organic compounds, nitrogen oxides, sulfur oxides, PM10 or carbon monoxide calculated pursuant to Section 523.4 K. or 523.4 L., exceed the level specified in Section 523.3 B.1.a., below. Sufficient offsets shall be provided, from the same calendar quarter as the emissions, to offset positive emissions changes of reactive organic compounds, nitrogen oxides and carbon monoxide (except as provided in Section 523.3 B.2) calculated according to procedures specified in Section 523.4 N. Sufficient offsets shall be provided, from the same calendar quarter as the emissions, to offset positive emissions changes of sulfur oxides and PM10 calculated according to procedures specified in Section 523.4 O. Facilities shall be required to curtail operations if sufficient offsets are not obtained as required by permit conditions. Except as provided for in Section 523.3 D., emission offsets used to mitigate emission increases must be of the same pollutant type. The facility is ultimately responsible for ensuring offsets:

a. <u>Pollutant</u>	<u>pounds per quarter</u>
Reactive organic compounds	7,500
Nitrogen oxides	7,500
Sulfur oxides	12,500
PM10	7,500
Carbon monoxide	7,500

2. Offsets for increases in carbon monoxide shall not be required if the applicant, using an air quality modeling analysis prepared pursuant to Section 523.4 B., demonstrates to the satisfaction of the Air Pollution Control Officer that the increase in ambient concentration does not exceed 500

micrograms per cubic meter, 8 hour average, at or beyond the property line of the stationary source.

3. In no case shall halogenated hydrocarbons be used as offsets for reactive organic compounds, nor shall exempt compounds or other compounds excluded from the definition of reactive organic compounds be used as offsets for reactive organic compounds.
4. Portable equipment shall be evaluated for offsets at the initial location only. In the event such portable equipment is shutdown, emission reduction credits shall be granted based on the emissions calculated at the initially permitted location. If operated a cumulative total of less than 90 days within a continuous 12 month period, at all locations within the District and in any air basin of which the District is a part, the portable equipment is considered a temporary source.
5. Except as allowed by Section 523.4 L.1., for sources which have provided full offsets of total suspended particulate (TSP), the PM10 emissions from an existing stationary source shall be recalculated from the TSP emission increases and decreases which have occurred since December 31, 1976, using PM10 emission factors. When PM10 emission factors do not exist assume 50% of the TSP is PM10.
6. Offsets can only come from regions with the same nonattainment classification or higher nonattainment classification than that of the emissions unit or stationary source requiring the offsets.

C. LOCATION OF OFFSETS AND OFFSET RATIOS:

1. Except as provided in Subsections 523.3 C.2., and 523.3 C.3., and Section 523.3 D., an applicant shall provide offsets for emissions from a proposed stationary source subject to the requirements of Section 523.3 B., according to the following ratios and requirements as a minimum:

Location of Offset	Offset Ratio	
	Non-Attainment Pollutants	Other Affected Pollutants
Same Source	1.0 to 1.0	1.0 to 1.0

Within 15-Mile Radius and within the District	1.2 to 1.0	1.1 to 1.0
Within 15-Mile Radius outside the District, but within the same air basin	1.3 to 1.0	1.2 to 1.0
Greater than 15-Mile but within 50-Mile Radius and within District	2.0 to 1.0	1.2 to 1.0
Greater than 15-Mile but within 50-Mile Radius and outside the District, but within the same air basin	2.1 to 1.0	1.3 to 1.0
More than 50-Mile Radius and within the same air basin	Greater than 2.1 to 1.0	Greater than 1.3 to 1.0

2. Offsets obtained from locations not satisfying the location criteria of Subsection 523.3 C.1., other than offsets obtained pursuant to Rule 525, PRIORITY RESERVE, shall be subject to an offset ratio of at least 1.2 to 1.0. An air quality analysis pursuant to Section 523.3 F., shall be performed. The Air Pollution Control Officer may impose, based on the air quality analysis, a higher offset ratio such that the new or modified stationary source will not prevent or interfere with the attainment or maintenance of any ambient air quality standard.
3. Applicants providing offsets obtained pursuant to Rule 525, PRIORITY RESERVE, shall be subject to an offset ratio of 1.0 to 1.0 for all pollutants at all distances except for major stationary sources. Major stationary sources providing offsets obtained pursuant to Rule 525, PRIORITY RESERVE, shall be subject to an offset ratio of 1.2 to 1.0 for all pollutants at all distances.
4. Offsets which are obtained pursuant to Sections 523.3 B., and 523.3 C., and pursuant to permitting actions in a district other than that in which the proposed source is located may be used only if the Air Pollution Control Officer has reviewed the permit conditions issued by the other district in which the proposed offsets are obtained and certifies that the impact of using such offsets meet the requirements of the District Rules and Regulations. Emission reduction credits used to

offset project emissions in another district shall be implemented through an interdistrict agreement to ensure their enforceability and permanence pursuant to California Health and Safety Code Section 40709.6.

D. INTERPOLLUTANT OFFSETS: The Air Pollution Control Officer may approve interpollutant offsets for precursor pollutants on a case by case basis, provided that the applicant demonstrates through the use of an air quality model that the emission increases from the new or modified source will not cause or contribute to a violation of an ambient air quality standard. In such cases, the Air Pollution Control Officer shall impose based on an air quality analysis, offset ratios greater than the requirements of Section 523.3 C. Interpollutant offsets between PM10 and PM10 precursors may be allowed only if PM10 precursors contribute significantly to the PM10 levels that exceed the PM10 ambient standards. PM10 emissions shall not be allowed to offset nitrogen oxides or reactive organic compound emissions in ozone nonattainment areas, nor be allowed to offset sulfur oxide emissions in sulfate nonattainment areas.

E. EMISSION REDUCTIONS, SHUTDOWNS AND CURTAILMENTS: Actual emission reductions from a shutdown or curtailment of permitted emission units may be credited for the purposes of banking and offsets pursuant to Rule 524, EMISSION REDUCTION CREDITS, provided:

1. Application is made for emission reduction credits, and;
2. The crediting and disbursement of emission reductions from source shutdowns and curtailments shall be in accordance with the most current U.S. Environmental Protection Agency emissions trading policy and applicable federal regulations, and;
3. Emissions decreases are ensured and documented by enforceable emission limitations contained in the permit to operate, or;
4. Emissions decreases are ensured by the permanent surrender or cancellation of the permit to operate.

F. AMBIENT AIR QUALITY STANDARDS: In no case shall emissions from the new or modified stationary source, prevent or interfere with the attainment or maintenance of any applicable ambient air quality standard, except as provided in Section 523.3 B.2. The Air Pollution Control Officer may require the use of an air quality model to

estimate the effects of a new or modified stationary source. The analysis shall estimate the effects of a new or modified stationary source, and verify that the new or modified stationary source will not prevent or interfere with the attainment or maintenance of any ambient air quality standard. In making this determination the Air Pollution Control Officer shall take into account the mitigation of emissions through offsets pursuant to this rule and the impacts of transported pollutants on downwind pollutant concentrations. The Air Pollution Control Officer may impose, based on an air quality analysis, offset ratios greater than the requirements of Section 523.3 C.

- G. **DENIAL, FAILURE TO MEET STANDARDS:** The Air Pollution Control Officer shall deny any authority to construct or permit to operate if the Air Pollution Control Officer finds that the subject of the application would not comply with the standards set forth in District, state, or federal rules or regulations. Stationary sources and emission units are required to curtail operations corresponding to the extent that required offsets are not obtained, or are not permanently maintainable. The owner or operator of the stationary source or emissions unit requiring offsets has the ultimate responsibility for ensuring offsets are real, surplus, permanent, and quantifiable.
- H. **CEQA APPLICABILITY:** 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, including, but not limited to, alternative siting and benefits analysis as specified in the Federal Clean Air Act, Section 173(A) (5).
- I. **DENIAL, FAILURE TO MEET CEQA:** The Air Pollution Control Officer shall deny any authority to construct or permit to operate if the Air Pollution Control Officer finds that the subject of the application would not comply with the standards set forth in CEQA.
- J. **CONTROL TECHNOLOGY INFORMATION:** The District shall expeditiously submit all control technology information from all authorities to construct issued per this section to the U.S. Environmental Protection Agency's RACT/BACT/LAER Clearinghouse.

523.4 ADMINISTRATIVE REQUIREMENTS

The following administrative requirements in Sections 523.4 A. - 523.4 O., shall apply to any activities

regulated by this rule, except for the review of power plants over 50 megawatts. Power plants over 50 megawatts shall be subject to the review requirements of Section 523.4 P., and applicable requirements of Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM. Stationary sources which are subject to Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, shall be permitted in accordance with the procedures specified in that rule, in addition to the requirements of this Section which are consistent with Rule 522.

- A. **COMPLETE APPLICATION:** With the exception of applications for initial permit to operate, permit renewal, or a significant modification for stationary sources subject to the requirements of Title V of the Federal Clean Air as amended in 1990 and Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, the Air Pollution Control Officer shall determine whether the application is complete no later than 30 days after receipt of the application, or after such longer time period that the applicant and the Air Pollution Control Officer have agreed in writing. If the Air Pollution Control Officer determines that the application is not complete, the applicant shall be notified in writing of the decision specifying the information required. Upon receipt of any re-submittal of the application, a new 30-day period to determine completeness shall begin. Completeness of an application or a re-submitted application shall be evaluated on the basis of the information requirements set forth in District regulations (adopted pursuant to Article 3, 65940 through 65944 of Chapter 4.5 of Division 1 of Title 7 of the California Government Code) as they exist on the date on which the application or re-submitted application was received, on the CEQA-related information which satisfies the requirements of the District's CEQA Guidelines, and the applicable requirements of Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM. The Air Pollution Control Officer may, during the processing of the application, request an applicant to clarify, amplify, correct, or otherwise supplement the information submitted in the application.
- B. **AIR QUALITY MODELS:** All air quality models used for the purposes of this rule shall be consistent with the requirements provided in the most recent edition of U.S. Environmental Protection Agency "Guidelines on Air Quality Models, OAQPS 1.2-080" unless the Air Pollution Control Officer finds that such model is inappropriate for use. After making such finding the Air Pollution Control Officer may designate an alternate model only after allowing for public comment, and only with concurrence of the U.S. Environmental Protection Agency.

Credit shall not be given for stacks higher than that dictated by good engineering practice. All modeling costs associated with the siting of a stationary source shall be borne by the applicant.

C. **PRELIMINARY DECISION:** Except as provided in Section 523.1 D., following acceptance of an application as complete, the Air Pollution Control Officer shall perform the evaluations required to determine compliance with all applicable district rules and regulations and make a preliminary written decision as to whether a permit to construct should be approved, conditionally approved, or denied. When the District is the CEQA Lead Agency for a project, the Air Pollution Control Officer shall not issue a preliminary decision until the draft Environmental Impact Report or Negative Declaration is available for public review. The decision shall be supported by a succinct written analysis.

1. The Air Pollution Control Officer shall transmit to the California Air Resources Board and the U.S. Environmental Protection Agency its preliminary written decision and analysis for sources subject to Sections 523.3 A., 523.3 B., 523.3 C., and 523.3 F., no later than the date of publication as required in Section 523.4 D. For initial permits to operate, renewal of permits, significant and minor permit modifications, and reopenings for cause of sources subject to the requirements of Title V of the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.), and pursuant to Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, the proposed decision, analysis, public notice, and draft permit if applicable, shall be sent to the U.S. Environmental Protection Agency for a 45 day review period.

D. **PUBLICATION AND PUBLIC COMMENT:** Except as provided in Section 523.1 K., within ten calendar days following a preliminary decision pursuant to Section 523.3, Standards, of this rule, the Air Pollution Control Officer shall publish in at least one newspaper of general circulation in the District a notice stating the preliminary decision of the Air Pollution Control Officer, noting how the pertinent information can be obtained, and inviting written public comment for a 30-day period following the date of publication. For initial permits to operate, renewal of permits, significant permit modifications, and reopenings for cause of sources subject to Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, public notice shall be given pursuant to the requirements of that rule.

E. PUBLIC INSPECTION: Except as provided in Section 523.1 D., the Air Pollution Control Officer shall make available for public inspection at the District's office the information submitted by the applicant and the Air Pollution Control Officer's analysis no later than the date the notice of the preliminary decision is published, pursuant to Section 523.4 D. Information submitted which contains trade secrets shall be handled in accordance with Section 6254.7 of the California Government Code and relevant sections of the California Administrative Code. Further, all such information shall be transmitted no later than the date of publication to the California Air Resources Board and the U.S. Environmental Protection Agency regional office, and to any party which requests such information. For initial permits to operate, renewal of permits, significant permit modifications, and reopenings for cause of sources subject to Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, written notice, the proposed permit, and upon request, the District's analysis, shall be provided to interested parties or agencies pursuant to the requirements of that rule.

F. AUTHORITY TO CONSTRUCT, FINAL ACTION:

1. Within 180 days after acceptance of an application as complete, the Air Pollution Control Officer shall take final action on the application after considering all written comments.
2. Notwithstanding this 180-day limit, the Air Pollution Control Officer shall not take final action for any project for which an Environmental Impact Report (EIR) or a Negative Declaration is being prepared until a final EIR for that project has been certified or a Negative Declaration for that project has been approved, and the Air Pollution Control Officer has considered the information in that final EIR or Negative Declaration. The Air Pollution Control Officer shall take final action on the application within whichever of the following periods of time is longer:
 - a. Within 180 days after the certification of the final EIR or approval of the Negative Declaration, or
 - b. Within 180 days of the date on which the application was determined complete by the Air Pollution Control Officer.

3. Except as provided in Section 523.1 D., the Air Pollution Control Officer shall provide written notice of the final action to the applicant, the U.S. Environmental Protection Agency, and the California Air Resources Board, and shall publish such notice in a newspaper of general circulation and shall make the notice and all supporting documents available for public inspection at the District's office.

G. REQUIREMENTS, AUTHORITY TO CONSTRUCT AND PERMIT TO OPERATE:

1. General Conditions: As a condition for the issuance of an authority to construct and a permit to operate, the Air Pollution Control Officer shall require that the emissions unit and stationary source, and any emissions units which provide offsets, be operated in the manner stated in the application in making the analysis required to determine compliance with this rule, and as conditioned in the authority to construct.
2. Emissions Limitations: All of the following emissions limitations shall be included on the authority to construct and permit to operate, if applicable:
 - a. The authority to construct and permit to operate shall include emission limitations which reflect Best Available Control Technology. Such condition(s) shall be expressed in a manner consistent with testing procedures, such as ppmv NOx, g/liter VOC, or lbs/hr.
 - b. A quarterly emissions limitation for each affected pollutant for which offsets are being provided pursuant to Section 523.3 B.1., shall be contained in the authority to construct and permit to operate.
 - c. A daily emission limitation shall be contained in the authority to construct and permit to operate for all affected pollutants for which offsets are not being provided pursuant to Section 523.3 B.1., or when required to be consistent with ambient air quality standards.
 - d. Electrical power plants shall also contain a quarterly emissions limitation for operation of increased power plant operation needed to

compensate for reduced operation at other power plant(s) within the District due to emergency breakdown, pursuant to Rule 516, UPSET CONDITIONS, BREAKDOWN, OR SCHEDULED MAINTENANCE, and regularly scheduled maintenance.

- e. Permits to operate for sources subject to the requirements of Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, shall contain all applicable federal requirements in addition to the applicable limitations of (a), (b), (c), and (d), above.

3. Design, Operational, or Equipment Standards: If the Air Pollution Control Officer determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of a numerical emission standard infeasible, the Air Pollution Control Officer may instead prescribe a design, operational, or equipment standard. In such cases, the District shall make its best estimate as to the emission rate that will be achieved and shall specify that rate in required submissions to the U.S. Environmental Protection Agency. Any permits issued without an enforceable numerical emission standard must contain enforceable conditions which assure that the design characteristics or equipment will be properly maintained, or that the operational conditions will be properly performed, so as to continuously achieve the assumed degree of control.

4. Offsets:

- a. Except as provided in Section 523.4 G.4.b., below, the operation of any emissions unit or stationary source which provides offsets shall be subject to enforceable permit conditions, containing specific emissions and operational limitations, to ensure that the emission reductions shall be provided in accordance with the provisions of this rule and shall continue for the reasonably expected life of the proposed emissions unit or stationary source.
- b. Where the source of offsets is not required to obtain an authority to construct or a permit

to operate pursuant to Rule 501, GENERAL PERMIT REQUIREMENTS, and Rule 524, EMISSION REDUCTION CREDITS, a written contract or a functional equivalent as determined by the Air Pollution Control Officer shall be required between the applicant and the owner or operator of such source, which contract, by its terms, shall be enforceable by the Air Pollution Control Officer. For sources subject to federal NSR requirements, in the absence of federally enforceable conditions, the execution of a source specific SIP revision is required.

- c. An internal emission offset will be considered enforceable if it is made a State Implementation Plan (SIP) requirement by inclusion as a condition of the new source permit and the permit is forwarded to the U.S. Environmental Protection Agency.
- d. Except as provided in Section 523.4 G.4.b., external offsets must be made enforceable either by revision of an offsetting source's authority to construct and permit to operate or by submittal of a SIP revision to U.S. Environmental Protection Agency prior to the operation of the emissions unit. The revised permit shall be forwarded to the U.S. Environmental Protection Agency. The SIP revision submittal shall be submitted to the California Air Resources Board to be forwarded to the U.S. Environmental Protection Agency as part of the State Implementation Plan.
- e. A violation of the emission limitation provisions of any contract pursuant to 523.4 G.4.b., above, shall be a violation of this rule by the applicant.
- f. The operation of any emissions unit or stationary source which uses offsets provided by another emissions unit or stationary source shall be subject to enforceable permit conditions, containing specific emissions and operational limits, to ensure that the emission reductions are used in accordance with the provisions of District rules and shall continue for the reasonably expected life of the proposed emissions unit or stationary source.

- g. For sources subject to federal requirements, the permanence of emissions reductions may be demonstrated by federally enforceable changes in source permits or applicable District regulations to reflect a reduced level of allowable emissions.

H. **ISSUANCE, PERMIT TO OPERATE:** The Air Pollution Control Officer shall issue a permit to operate an emissions unit subject to the requirements of this rule if it is determined that any offsets required as a condition of an authority to construct or amendment to a permit to operate will commence not later than the initial operation of the new or modified source, and that the offsets shall be maintained throughout the operation of the new or modified source which is the beneficiary of the offsets. Further, the Air Pollution Control Officer shall determine that all conditions specified in the authority to construct have been complied with or will be complied with by the dates specified on the authority to construct. Such applicable conditions shall be contained in the permit to operate. Where a new or modified stationary source is, in whole or in part, a replacement for an existing stationary source on the same property, the Air Pollution Control Officer may allow a maximum of 90 days as a startup period for simultaneous operation of the existing stationary source and the new source or replacement. For initial permits to operate, renewal of permits, significant permit modifications, and reopenings for cause of sources subject to Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, permit issuance shall comply with the requirements and procedures of that rule.

I. **REGULATIONS IN FORCE GOVERN:** An authority to construct shall be granted or denied based on Best Available Control Technology and offset requirements of Sections 523.3 A. and 523.3 B., in force on the date the application is deemed complete as defined in Section 523.2 K. In addition, the Air Pollution Control Officer shall deny an authority to construct for any new stationary source or modification, or any portion thereof, unless:

- 1. Compliance with District Rules: The new source or modification, or applicable portion thereof, complies with the provisions of this rule and all other applicable district rules and regulations; and

2. Certification of Compliance: The owner or operator of the proposed new or modified source has certified that all existing major stationary sources owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in California which are subject to emission limitations are in compliance, or on an expeditious schedule for compliance, with all applicable emission limitations and standards.
- J. **CALCULATION OF EMISSIONS - BACT**: The emissions change for a new or modified emissions unit shall be calculated by subtracting historic actual emissions from proposed emissions. Calculations shall be performed separately for each emissions unit for each calendar quarter.
- K. **CALCULATION OF EMISSIONS - OFFSETS TRIGGER FOR ROC, NOX AND CO**: The potential to emit for each calendar quarter for a stationary source shall be the sum of the potential to emit, including fugitive emissions, for all emissions units based on current permits to operate and authorities to construct where permits to operate have not been issued, the pending application and all banked emission reduction credits.
- L. **CALCULATION OF EMISSIONS - OFFSET TRIGGER FOR SOX AND PM10**: Except as provided in Sections 523.4 L.1., and 523.4 L.2., the cumulative emissions increases for each calendar quarter for a stationary source shall be the sum of emissions from Sections 523.4 L.3., 523.4 L.4., and 523.4 L.5 for each calendar quarter, expressed in terms of pounds per day.
1. An application for a modification, deemed complete after April 26, 1994, to an emissions unit or stationary source, constructed or whose application is deemed complete prior to April 26, 1994, and which had provided full offsets for total suspended particulate matter emissions occurring after December 31, 1976 but before April 26, 1994, those total suspended particulate matter emissions shall not be recalculated as PM10. However, all subsequent increases in PM10 emissions must be offset.
 2. Except as provided in Section 523.4 L.5., any emissions increase represented by an authority to construct or permit to operate which has been cancelled or has expired and any emission reduction credits surrendered to the District shall not be included in the cumulative emissions increase calculation pursuant to Section 523.4 M.

3. The potential to emit for all emissions units installed after December 31, 1976 based on current permits to operate or authorities to construct where permits to operate have not been issued, including the pending application being reviewed.
4. All emission increases from the modification to emissions units installed prior to December 31, 1976 and modified after December 31, 1976 as determined by procedures specified in Section 523.4 K. or procedures specified in Rule 523, at the time of modification.
5. Emission reduction credits obtained pursuant to Rule 524, EMISSION REDUCTION CREDITS, after December 31, 1976, from emissions units installed after December 31, 1976.

M. **CALCULATION OF EMISSIONS - OFFSETS GENERAL:** The emissions change for a new or modified emissions unit shall be calculated by subtracting historic potential emissions from proposed emissions. Calculations shall be performed separately for each pollutant and each emissions unit for each calendar quarter. Negative emissions changes shall be processed under the procedures specified in Rule 524, EMISSION REDUCTION CREDITS, and Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, for early Hazardous Air Pollutant reductions satisfying the requirements of Section 112(i)(5) of the Federal Clean Air Act as amended in 1990.

N. **CALCULATION OF EMISSIONS - OFFSETS REQUIRED FOR ROC, NOX AND CO:** The cumulative net emissions increase pursuant to Section 523.4 M., for a stationary source shall be the sum of emissions from each of the following for each calendar quarter expressed in terms of pounds per quarter.

1. The potential to emit including associated fugitive emissions, not previously offset, for all emissions units installed after April 26, 1994, based on current permits to operate and authorities to construct, where permits to operate have not been issued, and the pending application.
2. All emission increases, including associated fugitive emissions, not previously offset, from the modification to emissions units installed before April 26, 1994, but modified after April 26, 1994, as determined by procedures specified in 523.4 M., or pursuant to calculation procedures specified in

Rule 523, NEW SOURCE REVIEW, at the time of the modification.

Any emissions increase represented by an authority to construct or permit to operate which has been cancelled or has expired shall not be included in the cumulative emissions increase calculation.

O. **CALCULATION OF EMISSIONS - OFFSETS REQUIRED FOR SOX AND PM10:** The cumulative net emissions increase pursuant to Section 523.4 M., for a stationary source shall be the sum of emissions from each of the following for each calendar quarter expressed in terms of pounds per quarter.

1. The potential to emit including associated fugitive emissions, not previously offset, for all emissions units installed after April 26, 1994, based on current permits to operate or authorities to construct where permits to operate have not been issued, including the pending application being reviewed.

2. All emission increases including associated fugitive emissions, not previously offset, from the modification to emissions units installed before April 26, 1994, but modified after April 26, 1994, as determined by procedures specified in Section 523.4 M., or pursuant to calculation procedures specified in Rule 523, NEW SOURCE REVIEW, at the time of the modification. Any emissions increase represented by an authority to construct or permit to operate which has been cancelled or has expired shall not be included in the cumulative emissions increase calculation.

P. **POWER PLANTS:** This section shall apply to all power plants proposed to be constructed in the District and for which a Notice of Intention (NOI) or Application for Certification (AFC) has been accepted by the California Energy Commission.

1. Within 14 days of receipt of a Notice of Intention, the Air Pollution Control Officer shall notify the Air Resources Board and the California Energy Commission of the District's intent to participate in the Notice of Intention proceeding. If the District chooses to participate in the Notice of Intention proceeding, the Air Pollution Control Officer shall prepare and submit a report to the California Air Resources Board and the California Energy Commission prior to the conclusion of the

non-adjudicatory hearing specified in Section 25509.5 of the California Public Resources Code. That report shall include, at a minimum:

- a. A preliminary specific definition of Best Available Control Technology for the proposed facility;
- b. A preliminary discussion of whether there is substantial likelihood that the requirements of this rule and all other District regulations can be satisfied by the proposed facility;
- c. A preliminary list of conditions which the proposed facility must meet in order to comply with this rule or any other applicable district regulation.

The preliminary determinations contained in the report shall be as specific as possible within the constraints of the information contained in the Notice of Intention.

2. Upon receipt of an Application for Certification for a power plant, the Air Pollution Control Officer shall conduct a determination of compliance review. This determination shall consist of a review identical to that which would be performed if an application for a permit to construct had been received for the power plant. If the information contained in the Application for Certification does not meet the requirements of this rule, the Air Pollution Control Officer shall, within 20 calendar days of receipt of the Application for Certification, so inform the California Energy Commission, and the Application for Certification shall be considered incomplete and returned to the applicant for re-submittal.
3. The Air Pollution Control Officer shall consider the Application for Certification to be equivalent to an application for a permit to construct during the determination of compliance review, and shall apply all provisions of this rule which apply to applications for a permit to construct.
4. The Air Pollution Control Officer may request from the applicant any information necessary for the completion of the determination of compliance review. If the Air Pollution Control Officer is unable to obtain the information, the Air Pollution

Control Officer may petition the presiding Commissioner of the California Energy Commission for an order directing the applicant to supply such information.

5. Within 180 days of accepting an Application for Certification as complete, the Air Pollution Control Officer shall make a preliminary decision on:
 - a. Whether the proposed power plant meets the requirements of this rule and all other applicable district regulations, and;
 - b. In the event of compliance, what permit conditions will be required including the specific Best Available Control Technology requirements and a description of required mitigation measures.

The preliminary written decision under Section 523.4 N.5., shall be treated as a preliminary decision under Section 523.4 C., of this rule, and shall be finalized by the Air Pollution Control Officer only after being subject to the public notice and comment requirements of Sections 523.4 C., and 523.4 D. The Air Pollution Control Officer shall not issue a determination of compliance for the power plant unless all requirements of this rule are met.

6. Within 240 days of the filing date, the Air Pollution Control Officer shall issue and submit to the California Energy Commission a determination of compliance or, if such a determination cannot be issued, shall so inform the California Energy Commission. A determination of compliance shall confer the same rights and privileges as an authority to construct only when and if the California Energy Commission approves the Application for Certification, and the California Energy Commission certificate includes all conditions of the determination of compliance.
7. Any applicant receiving a certificate from the California Energy Commission pursuant to this section and in compliance with all conditions of the certificate shall be issued a permit to operate by the Air Pollution Control Officer. If subject to the requirements of Title V of the Federal Clean Air Act as amended in 1990 (42 U.S.C. Section 7401 et seq.), the applicant must comply with the

applicable requirements of Rule 522, TITLE V -
FEDERAL OPERATING PERMIT PROGRAM.

523.5 MONITORING AND RECORDS

- A. **RECORDKEEPING:** The following records shall be maintained for five years and shall be provided to the Air Pollution Control Officer upon request.
1. Emergency Electrical Generating Equipment: Records of operation for maintenance purposes, for actual interruptions of power.
 2. Portable and Temporary Equipment: Records of operating location and corresponding dates of operation.
- B. **RECORDKEEPING FOR SOURCES SUBJECT TO RULE 522:** The recordkeeping requirements for sources subject to Rule 522, TITLE V - FEDERAL OPERATING PERMIT PROGRAM, shall include all of the requirements of that rule in addition to the separate recordkeeping requirements of applicable federal requirements.

ADOPTED: April 26, 1994

c:RULES23E.D14

EDC-APCD

RULE 523

33

EL DORADO COUNTY AIR QUALITY MANAGEMENT DISTRICT

RULE 523-1 – FEDERAL NON-ATTAINMENT NEW SOURCE REVIEW

Requirements for New and Modified Major Sources in Federal Non-attainment Areas Implementing the Provisions of 40 CFR 51.165

(Adopted March 8, 2016, revised June 25, 2019, revised December 7, 2021)

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1 APPLICABILITY PROCEDURES

1.1 PRECONSTRUCTION REVIEW REQUIREMENTS

- (a) The preconstruction review requirements of this rule apply to the proposed construction of any new major stationary source or major modification in the District that is major for a nonattainment pollutant, if the stationary source or modification is located anywhere in the designated nonattainment area, except as provided in Section 9 of this rule.
- (b) Sources subject to this rule may also be subject to other District Rules and Regulations. For purposes of the implementation and enforcement of this rule, the provisions and requirements of this rule, including but not limited to the requirements for obtaining an Authority to Construct, application submittal and content, conditional approval, public participation, and granting an Authority to Construct, shall take precedence over any other such provisions and requirements in other District Rules and Regulations, including but not limited to Rule 523 (New Source Review). To the extent that other District Rules or Regulations may affect the stringency or applicability of this rule, such other Rules and Regulations shall not apply for purposes of the implementation or enforcement of this rule.

1.2 AUTHORITY TO CONSTRUCT REQUIREMENT

No new major stationary source or major modification to which the requirements of this rule apply shall begin actual construction without first obtaining an Authority to Construct from the reviewing authority, pursuant to this rule.

1.3 EMISSION CALCULATION REQUIREMENTS TO DETERMINE NSR APPLICABILITY

1.3.1 New Major Stationary Sources

The definition of *Major Stationary Source* in Section 2.1 shall be used to determine if a new or modified stationary source is a new major stationary source. Different pollutants, including individual precursors, are not summed to determine applicability of a major stationary source.

1.3.2 Major Modifications

The provisions set out in paragraphs (a) through (e) below shall be used to determine if a proposed project will result in a major modification. Different pollutants, including individual precursors, are not summed to determine applicability of a major modification. These provisions shall not be used to determine the quantity of offsets required for a project subject to the requirements of this rule.

- (a) Except as otherwise provided in Section 1.4, a project is a major modification for a nonattainment pollutant if it causes two types of emissions increases: a significant emissions increase and a significant net emissions increase. The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

- (b) The procedure for calculating (before beginning actual construction) whether a significant emissions increase will occur depends upon the type of emissions units being added or modified as part of the project, according to paragraphs (c) through (e) of this Section. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source is contained in the definition of *Net Emissions Increase*. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.
- (c) **Actual-to-Projected-Actual Applicability Test for Projects that Only Involve Existing Emissions Units.** A significant emissions increase of a nonattainment pollutant is projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions, for each existing emissions unit, equals or exceeds the significant amount for that pollutant.
- (d) **Actual-to-Potential Test for Projects that Only Involve Construction of a New Emissions Unit(s).** A significant emissions increase of a nonattainment pollutant is projected to occur if the sum of the difference between the potential to emit from each new emissions unit following completion of the project and the baseline actual emissions of these units before the project equals or exceeds the significant amount for that pollutant.
- (e) **Hybrid Test for Projects that Involve Multiple Types of Emissions Units.** A significant emissions increase of a nonattainment pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in paragraphs (c) or (d) of this Section, as applicable, with respect to each emissions unit, equals or exceeds the significant amount for that pollutant.

1.4 MAJOR SOURCES WITH PLANT-WIDE APPLICABILITY LIMITATIONS (PAL)

For any major stationary source with a PAL Permit for a nonattainment pollutant, the major stationary source shall comply with the requirements in Section 9 of this rule.

1.5 PROJECTS THAT RELY ON A PROJECTED ACTUAL EMISSIONS TEST

Except as otherwise provided in paragraph (g)(iii) of this Section, the provisions of this Section shall apply with respect to any nonattainment pollutant that is emitted from projects at existing emissions units located at a major stationary source, other than a source with a PAL Permit, when there is a reasonable possibility, within the meaning of paragraph (g) of this Section, that a project that is not a part of a major modification may result in a significant emissions increase of such pollutant, and the owner or operator elects to use the method specified in paragraphs (a)(i) through (a)(iv) of the definition of *Projected Actual Emissions* to calculate projected actual emissions.

- (a) Before beginning actual construction of the project the owner or operator shall document and maintain a record of the following information:
 - (i) A description of the project;

- (ii) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
 - (iii) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (a)(iv) of the definition of *Projected Actual Emissions* and an explanation for why such amount was excluded, and any netting calculations, if applicable.
- (b) If the emissions unit is an existing emissions unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in paragraph (a) of this Section to the APCO. Nothing in this paragraph shall be construed to require the owner or operator of such a unit to obtain any determination from the APCO concerning compliance with Rule 523-1 before beginning actual construction. However, such owner or operator may be subject to the requirements of District Regulation II, Prohibitions or other applicable requirements.
- (c) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that are emitted by any emissions unit identified in paragraph (a)(ii) of this Section; and calculate and maintain a record of the annual emissions, in tpy, on a calendar year basis for a period of five years following resumption of regular operations after the change, or for a period of ten years following resumption of regular operations after the change if the project increases the design capacity or potential to emit that regulated NSR pollutant at such emissions unit.
- (d) If the emissions unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the APCO within sixty days after the end of each calendar year during which records must be generated under paragraph (c) of this Section, setting out the unit's annual emissions during the calendar year that preceded submission of the report.
- (e) If the emissions unit is an existing emissions unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the APCO if the annual emissions, in tpy, from the project identified in paragraph (a) of this Section exceed the baseline actual emissions by a significant amount for that regulated NSR pollutant, and if such emissions differ from the projected actual emissions (prior to exclusion of the amount of emissions specified under paragraph (a)(iv) of the definition of *Projected Actual Emissions*) as documented and maintained pursuant to paragraph (a)(iii) of this Section. Such report shall be submitted to the APCO within sixty days after the end of such year. The report shall contain the following:
- (i) The name, address, and telephone number of the major stationary source;
 - (ii) The annual emissions, as calculated pursuant to paragraph (c) of this Section; and

- (iii) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).
- (f) The owner or operator of the source shall make the information required to be documented and maintained pursuant to this Section available for review upon a request for inspection by the APCO or the general public pursuant to the requirements contained in 40 CFR 70.4(b)(3)(viii).
- (g) A “reasonable possibility” under this Section occurs when the owner or operator calculates the project to result in either:
 - (i) A projected actual emissions increase of at least 50 percent of the amount that is a “significant emissions increase,” as defined in this rule (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant; or
 - (ii) A projected actual emissions increase that, added to the amount of emissions excluded under paragraph (a)(iv) of the definition of *Projected Actual Emissions*, sums to at least 50 percent of the amount that is a “significant emissions increase,” as defined in this rule (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant.
 - (iii) For a project in which a reasonable possibility occurs only within the meaning of paragraph (g)(ii), and not also within the meaning of (g)(i), the provisions of paragraphs (b) through (e) of this Section do not apply to the project.

1.6 SECONDARY EMISSIONS

Secondary emissions shall not be considered in determining whether a stationary source would qualify as a major stationary source. If a stationary source is subject to this rule on the basis of direct emissions from the stationary source, the requirements of Section 4 must also be met for secondary emissions.

1.7 STATIONARY SOURCES

For purposes of this rule, the term stationary source does not refer to the source of emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in Section 216 of the Clean Air Act (42 U.S.C. §7550 Definitions).

1.8 ENVIRONMENTAL PROTECTION AGENCY DETERMINATION

Notwithstanding any other requirements of this rule governing the issuance of an Authority to Construct, the APCO shall not issue an Authority to Construct to a new major stationary source or major modification subject to the requirements of this rule if the federal Environmental Protection Agency has determined that the SIP is not being adequately implemented for the nonattainment area in which the proposed source is to be constructed or modified in accordance with the requirements of Title I, Part D of the Clean Air Act.

2 DEFINITIONS

For the purposes of this rule, the definitions provided below apply to the terms used in this rule. In the event of any discrepancy between the definitions specified below, the definition in the Section that is listed first below shall control.

2.1 40 CFR 51.165(a)(1) AND GENERAL DEFINITIONS

“Actual emissions” means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with this definition. This definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under Section 9. Instead, projected actual emissions and baseline actual emissions shall apply for those purposes.

- (a) In general, actual emissions as of a particular date shall equal the average rate, in tpy, at which the emissions unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The APCO shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit’s actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- (b) The APCO may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- (c) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the PTE of the unit on that date.

“Air Pollution Control Officer (APCO)” means the Air Pollution Control Officer of the Air Quality Management District of El Dorado County.

“Allowable emissions” means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, hours of operation, or both) and the most stringent of the following:

- (a) Any applicable standards set forth in these Rules and Regulations and 40 CFR Parts 60, 61, or 63;
- (b) Any applicable emission limitation in the District portion of the State SIP, including those with a future compliance date; or
- (c) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

“Baseline actual emissions” means the rate of emissions, in tpy, of a regulated NSR pollutant, as determined in accordance with paragraphs (a) through (d) of this definition.

- (a) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tpy, at which the unit actually emitted the pollutant

during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The APCO shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

- (i) The average rate shall include fugitive emissions, to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
 - (ii) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.
 - (iii) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.
 - (iv) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tpy, and for adjusting this amount if required by section (a)(ii) of this definition.
- (b) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tpy, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the APCO for a permit required under these Rules and Regulations, whichever is earlier.
- (i) The average rate shall include fugitive emissions to the extent quantifiable.
 - (ii) The average rate shall include emissions associated with startups, shutdowns, and malfunctions.
 - (iii) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.
 - (iv) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under 40 CFR Part 63, the baseline actual emissions need only be adjusted if the District has taken credit for such emissions reductions in an attainment

demonstration or maintenance plan, consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G).

- (v) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.
- (vi) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tpy, and for adjusting this amount if required by sections (b)(iii) and (iv) of this definition.
- (c) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's PTE.
- (d) For a PAL for a major stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in paragraph (a) of this definition; for other existing emissions units, in accordance with the procedures contained in paragraph (b) of this definition; and for a new emissions unit, in accordance with the procedures contained in paragraph (c) of this definition.

“Begin actual construction” means in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operating, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

“Best Available Control Technology (BACT)” means an emission limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the APCO, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Part 60, 61 or 63. If the APCO determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof may be prescribed instead to satisfy the requirement for the application of BACT.

Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice, or operation, and shall provide for compliance by means which achieve equivalent results.

“Building, structure, facility, or installation” means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same *Major Group* (i.e., which have the same two-digit code) as described in either the *Standard Industrial Classification (SIC) manual*, 1972, as amended by the 1977 Supplement, or the *North American Industry Classification System (NAICS) manual*.

“Categorical stationary source” means any stationary source of air pollutants that belongs to one of the following categories of stationary sources:

- Coal cleaning plants (with thermal dryers);
- Kraft pulp mills;
- Portland cement plants;
- Primary zinc smelters;
- Iron and steel mills;
- Primary aluminum ore reduction plants;
- Primary copper smelters;
- Municipal incinerators capable of charging more than 50 tons of refuse per day;
- Hydrofluoric, sulfuric, or nitric acid plants;
- Petroleum refineries;
- Lime plants;
- Phosphate rock processing plants;
- Coke oven batteries;
- Sulfur recovery plants;
- Carbon black plants (furnace process);
- Primary lead smelters;
- Fuel conversion plants;
- Sintering plants;
- Secondary metal production plants;
- Chemical process plants-The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
- Fossil-fuel boilers (or combination thereof) totaling more than 250 million Btu per hour heat input;
- Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- Taconite ore processing plants;
- Glass fiber processing plants;

Charcoal production plants;
Fossil fuel-fired steam electric plants of more than 250 million Btu per hour heat input; and
Any other stationary source category, which as of August 7, 1980 is being regulated under Section 111 or 112 of the Act.

“Class I area” means any area listed as Class I in 40 CFR Part 81 Subpart D, including Section 81.405, or an area otherwise specified as Class I in the legislation that creates a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, or a national lakeshore or seashore.

“Clean Air Act (CAA)” means the federal Clean Air Act, 42 U.S.C. 7401 *et seq.*, as amended.

“Clean coal technology” means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

“Clean Coal Technology Demonstration Project” means a project using funds appropriated under the heading “Department of Energy-Clean Coal Technology,” up to a total amount of \$2.5 billion for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the EPA. The federal contribution for a qualifying project shall be at least twenty percent of the total cost of the demonstration project.

“Commence” as applied to construction of a major stationary source or major modification, means that the owner or operator has all necessary preconstruction approvals or permits, including an Authority to Construct, and either has:

- (a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- (b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source, to be completed within a reasonable time.

“Complete” means, in reference to an application, that the application contains all of the information necessary for processing the application.

“Construction” means any physical change, or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit), that would result in a change in emissions.

“Continuous Emissions Monitoring System (CEMS)” means all of the equipment that may be required to meet the data acquisition and availability requirements of this rule, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

“Continuous Emissions Rate Monitoring System (CERMS)” means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

“Continuous Parameter Monitoring System (CPMS)” means all of the equipment necessary to meet the data acquisition and availability requirements of this rule, to monitor process and control device operational parameters and other information (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations) and to record average operational parameter value(s) on a continuous basis.

“District” means the El Dorado County Air Quality Management District.

“Electric Utility Steam Generating Unit” means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity, and more than 25 MW of electrical output, to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

“Emission Reduction Credit (ERC)” means reductions of actual emissions from emissions units that are certified by a California air district in accordance with applicable district rules and issued by the air district in the form of ERC certificates.

“Emissions Unit” means any part of a stationary source that emits or would have the potential to emit, any regulated NSR pollutant and includes an electric utility steam generating unit. For purposes of this rule, there are two types of emissions units as described in paragraphs (a) and (b) of this definition:

- (a) A “new emissions unit” is any emissions unit which is (or will be) newly constructed and which has existed for less than two years from the date such emissions unit first operated.
- (b) An “existing emissions unit” is any emissions unit that does not meet the requirements in paragraph (a) of this definition. A replacement unit is an existing emissions unit.

“Federally Enforceable” means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR parts 60, 61, and 63, requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-

approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.

“Federal Land Manager” means, with respect to any lands in the United States, the Secretary of the Department with authority over such lands.

“Fugitive Emissions” means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

“Internal emission reductions” means emission reductions which have occurred or will occur at the same major stationary source where the proposed emissions increase will occur.

“Lowest Achievable Emission Rate (LAER)” means, for any source, the more stringent rate of emissions based on the following:

- (a) The most stringent emission limitation which is contained in the implementation plan of any State for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or
- (b) The most stringent emission limitation which is achieved in practice by such class or category of stationary source. This limitation, when applied to a major modification, means the LAER for the new or modified emissions units within the stationary source. In no event shall the application of the term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

For purposes of this definition only, the term “any State” means a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa, and includes the Commonwealth of the Northern Mariana Islands.

“Major Modification” means any physical change in or change in the method of operation of, a major stationary source that would result in a significant emissions increase of a regulated NSR pollutant and a significant net emissions increase of that pollutant from the major stationary source. Notwithstanding the definition of *Net Emissions Increase*, for purposes of determining whether a project at a major stationary source located in an area that has been designated as nonattainment for ozone per 40 CFR 81.305 would result in a significant net emissions increase, for volatile organic compounds or nitrogen oxides, the net emissions increase from the project shall be aggregated with all other net emissions increases from the stationary source that occurred during the last 5 consecutive calendar years, including the calendar year in which such increase occurred.

- (a) Any significant emissions increase from any emissions units or net emissions increase at a major stationary source that is significant for volatile organic compounds or nitrogen oxides shall be considered significant for ozone.
- (b) A physical change or change in the method of operation shall not include:

- (i) Routine maintenance, repair, and replacement;
- (ii) Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (iii) Use of an alternative fuel by reason of an order or rule under Section 125 of the Act;
- (iv) Use of an alternative fuel at a steam generating unit, to the extent that the fuel is generated from municipal solid waste;
- (v) Use of an alternative fuel or raw material by a stationary source which:
 - A. The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 12, 1976 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I; or
 - B. The source is approved to use under any permit issued under regulations approved pursuant to 40 CFR 51.165.
- (vi) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21 or regulations approved pursuant to 40 CFR part 51 subpart I;
- (vii) Any change in ownership at a stationary source;
- (viii) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:
 - A. The State Implementation Plan for the State in which the project is located, and
 - B. Other requirements necessary to attain and maintain the national ambient air quality standard during the project and after it is terminated.
- (c) This definition shall not apply with respect to a particular regulated NSR pollutant when the Major Stationary Source is complying with the requirements under Section 9 for a PAL for that regulated NSR pollutant. Instead, the definition of *PAL major modification* shall apply.

“Major Stationary Source” means:

- (a) Any stationary source of air pollutants which emits, or has the potential to emit, 100 tpy or more of any regulated NSR pollutant or a precursor, except if a lower emission threshold listed below is applicable:

- (i) For an area designated nonattainment for ozone, a source which emits, or has the potential to emit, VOC or NO_x in the following amounts shall be considered a major stationary source:
 - A ≥100 tpy in areas classified as “marginal” or “moderate”;
 - B ≥50 tpy in areas classified as “serious”;
 - C ≥25 tpy in areas classified as “severe”.
- (ii) For an area designated nonattainment for PM_{2.5} and classified as “serious,” a major stationary source is a stationary source which emits, or has the potential to emit, 70 tpy or more of PM_{2.5}.
- (iii) For an area designated nonattainment for PM_{2.5} and classified as “serious,” a major stationary source is a stationary source which emits, or has the potential to emit, 70 tpy or more of any individual precursor of PM_{2.5} (as identified in the definition of *Regulated NSR Pollutant*).
- (b) Any physical change that would occur at a stationary source not qualifying as a major stationary source under paragraph (a) of this definition, if the change would constitute a major stationary source by itself under paragraph (a).
- (c) A major stationary source that is major for volatile organic compounds or nitrogen oxides shall be considered major for ozone.
- (d) The fugitive emissions of a stationary source shall not be included in determining whether it is a major stationary source, unless the source is a categorical stationary source.

“Necessary preconstruction approvals or permits” means those permits or approvals required under air quality control laws and regulations that are part of the SIP or federal air quality control laws and regulations, including any permits issued pursuant to this rule.

“Net Emissions Increase” means, with respect to any regulated NSR pollutant emitted by a major stationary source, the following:

- (a) The amount by which the sum of the following exceeds zero:
 - (i) The increase in emissions from a particular physical change, or change in the method of operation, at a stationary source as calculated pursuant to Section 1.3; and
 - (ii) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. For the purposes of this paragraph, baseline actual emissions for calculating increases and decreases shall be determined as provided in the definition of *Baseline Actual Emissions*, except that paragraphs (a)(iii) and (b)(v) of that definition shall not apply.
- (b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

- (i) The date five years before construction on the particular change commences; and
 - (ii) The date that the increase from the particular change occurs.
- (c) An increase or decrease in actual emissions is creditable only if it is contemporaneous and the APCO has not relied on it in issuing a permit for the source under this rule, or any other regulation approved by the Administrator pursuant to 40 CFR 51.165, which permit is in effect when the increase in actual emissions from the particular change occurs.
- (d) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- (e) A decrease in actual emissions is creditable only to the extent that:
- (i) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
 - (ii) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins;
 - (iii) The APCO has not relied on it in issuing any permit under any other regulations approved pursuant to 40 CFR Part 51, Subpart I, nor has the District relied on it in demonstrating attainment or reasonable further progress; and
 - (iv) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- (f) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- (g) Paragraph (a) of the definition of *Actual Emissions* shall not apply for determining creditable increases and decreases or after a change.

“Nonattainment Major New Source Review (NSR) Program” means a major source preconstruction permit program that has been approved by the Administrator and incorporated into the District portion of the California SIP, or a program that implements 40 CFR Part 51, Appendix S, Sections I through VI. Any permit issued under such a program is a major NSR permit.

“Nonattainment pollutant” means any regulated NSR pollutant for which the District, or portion of the District, has been designated as nonattainment, as codified in 40 CFR 81.305, as well as any precursor of such regulated NSR pollutant identified in the definition of *Regulated NSR Pollutant*.

“PM_{2.5}” means particulate matter with an aerodynamic diameter smaller than or equal to a nominal 2.5 microns. Gaseous emissions which condense to form PM_{2.5} shall also be counted as PM_{2.5}.

“Permanent” means an emission reduction which is federally enforceable for the life of a corresponding increase in emissions.

“Potential to Emit (PTE)” means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the types or amounts of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the PTE of a stationary source.

“Predictive Emissions Monitoring System (PEMS)” means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate on a continuous basis.

“Prevention of Significant Deterioration (PSD) Permit” means any permit that is issued under a major source preconstruction permit program that has been approved by the Administrator to implement the requirements of 40 CFR 51.166 or 40 CFR 52.21. Any permit issued under such a program is a major NSR permit.

“Project” means a physical change in, or change in the method of operation of, an existing major stationary source.

“Projected Actual Emissions” means the maximum annual rate, in tpy, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the five years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the ten years following that date, if the project involves increasing the design capacity or PTE of any emissions unit for that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.

- (a) In determining the projected actual emissions (before beginning actual construction), the owner or operator of the major stationary source:
- (i) Shall consider all relevant information, including, but not limited to, historical operational data, the company’s own representations, the company’s expected business activity and the company’s highest projections of business activity, the company’s filings with the county, state or federal regulatory authorities, and compliance plans under the SIP; and
 - (ii) Shall include fugitive emissions to the extent quantifiable; and
 - (iii) Shall include emissions associated with startups, shutdowns, and malfunctions; and
 - (iv) Shall exclude, only for calculating any increase in emissions that results from the particular project, that portion of the unit’s emissions following the

project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or

- (v) In lieu of using the method set out in paragraphs (a)(i) through (a)(iv) of this definition, the owner or operator of the major stationary source may elect to use the emissions unit's PTE in tpy.

“Real” means, as it pertains to emission reductions, emissions that were actually emitted.

“Regulated NSR Pollutant” means:

- (a) Any pollutant for which a National Ambient Air Quality Standard has been promulgated and any constituents or precursors identified by the Administrator provided that such constituent or precursor pollutant may only be regulated under NSR as part of regulation of the general pollutant. Precursors identified by the Administrator for purposes of NSR are the following:
 - (i) Volatile organic compounds and nitrogen oxides are precursors to ozone in all ozone nonattainment areas.
 - (ii) Sulfur dioxide, volatile organic compounds, nitrogen oxides, and ammonia are precursors to PM_{2.5} in all PM_{2.5} nonattainment areas.
- (b) PM_{2.5} emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. Such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{2.5} in nonattainment major NSR permits. Compliance with emissions limitations for PM_{2.5} issued prior to January 1, 2011 shall not be based on condensable particulate matter unless required by the terms and conditions of the permit or the applicable SIP. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this section unless the SIP required condensable particulate matter to be included.

“Replacement Unit” means an emissions unit for which all the criteria listed in paragraphs (a) through (d) of this definition are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

- (a) The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.
- (b) The emissions unit is identical to, or functionally equivalent to, the replaced emissions unit.
- (c) The replacement does not alter the basic design parameters of the process unit.

- (d) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

“Reviewing authority” means the Air Pollution Control Officer (APCO).

“Secondary Emissions” means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

“Shutdown” means the cessation of operation of any air pollution control equipment or process equipment for any purpose.

“Significant” means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Nitrogen oxides: 40 tpy.

Ozone: 40 tpy of VOCs or nitrogen oxides in areas classified as “marginal” or “moderate”; or

25 tpy of VOCs or nitrogen oxides in areas classified as “serious” or “severe”.

PM_{2.5}: 10 tpy of direct PM_{2.5} emissions;

40 tpy of sulfur dioxide emissions;

40 tpy of nitrogen oxide emissions;

40 tpy of volatile organic compound emissions; or

40 tpy of ammonia emissions.

“Significant Emissions Increase” means, for a regulated NSR pollutant, an increase in emissions that is significant for that pollutant.

“Startup” means the setting into operation of any air pollution control equipment or process equipment for any purpose except routine phasing in of process equipment.

“State Implementation Plan (SIP)” means the State Implementation Plan approved or promulgated for the State of California under section 110 or 172 of the CAA.

“Stationary Source” means any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.

“Surplus” means the amount of emission reductions that are, at the time of generation and at time of use of an Emissions Reduction Credit (ERC), not otherwise required by federal, state, or local law, not required by any legal settlement or consent decree, and not relied upon to meet any requirement related to the California State Implementation Plan (SIP). However, emission reductions required by a state statute that provides that the subject emission reductions shall be considered surplus may be considered surplus for purposes of this Rule if those reductions meet all other applicable requirements. Examples of federal, state, and local laws, and of SIP-related requirements, include, but are not limited to, the following:

- (a) The federally-approved California SIP;
- (b) Other adopted state air quality laws and regulations not in the SIP, including but not limited to, any requirement, regulation, or measure that: (1) the District or the state has included on a legally-required and publicly-available list of measures that are scheduled for adoption by the District or the State in the future; or (2) is the subject of a public notice distributed by the District or the State regarding an intent to adopt such revision;
- (c) Any other source- or source-category specific regulatory or permitting requirement, including, but not limited to, Reasonably Available Control Technology (RACT), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Best Available Control Measures (BACM), Best Available Control Technology (BACT), and the Lowest Achievable Emission Rate (LAER); and
- (d) Any regulation or supporting documentation that is required by the federal CAA but is not contained or referenced in 40 CFR Part 52, including but not limited to: assumptions used in attainment and maintenance demonstrations (including Reasonable Further Progress demonstrations and milestone demonstrations), including any proposed control measure identified as potentially contributing to an enforceable near-term emissions reduction commitment; assumptions used in conformity demonstrations; and assumptions used in emissions inventories.

“Temporary source” means an emission source such as a pilot plant or a portable facility which will be located outside the nonattainment area after less than a cumulative total of 90 days of operation in any 12 continuous months.

“Temporary clean coal technology demonstration project” means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State Implementation Plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

“Title V” means title V of the Clean Air Act.

“Title V operating permit” means an operating permit issued by the APCO pursuant to Rule 522 to implement the requirements of title V of the Clean Air Act.

“Tons per year (tpy)” means annual emissions in tons.

2.2 40 CFR 51.100 DEFINITIONS

The definitions contained in 40 CFR 51.100 shall apply, and are hereby incorporated by reference.

2.3 40 CFR 51.301 DEFINITIONS

The definitions contained in 40 CFR 51.301 shall apply, and are hereby incorporated by reference.

3 APPLICATION REQUIREMENTS

3.1 APPLICATION SUBMITTAL

The owner or operator of any proposed new major stationary source or major modification required to obtain an Authority to Construct pursuant to this rule shall submit a complete application to obtain an Authority to Construct on forms provided by the APCO and include in the application submittal the information listed in Section 3.2 as well as the demonstrations listed in Sections 3.3-3.6. Designating an application complete for purposes of permit processing does not preclude the APCO from requesting or accepting any additional information.

3.2 APPLICATION CONTENT

At a minimum, an application for an Authority to Construct shall contain the following information related to the proposed new major stationary source or major modification:

- (a) Identification of the applicant, including contact information.
- (b) Identification of address and location of the new or modified source.
- (c) An identification and description of all emission points, including information regarding all regulated NSR pollutants emitted by all emissions units included in the new source or modification.
- (d) A process description of all activities, including design capacity, which may generate emissions of regulated NSR pollutants in sufficient detail to establish the basis for the applicability of standards and fees.
- (e) A projected schedule for commencing construction and operation for all emissions units included in the new source or modification.
- (f) A projected operating schedule for each emissions unit included in the new source or modification.
- (g) A determination as to whether the new source or modification will result in any secondary emissions.
- (h) The emission rates of all regulated NSR pollutants, including fugitive and secondary emission rates, if applicable. The emission rates must be described in tpy

and for such shorter term rates as are necessary to establish compliance using the applicable standard reference test method or other methodology specified (i.e., grams/liter, ppmv or ppmw, lbs/MMBtu).

- (i) The calculations on which the emission rate information is based, including fuel specifications, if applicable and any other assumptions used in determining the emission rates (e.g., HHV, sulfur content of natural gas).
- (j) The calculations, pursuant to Section 1.3, used to determine applicability of this rule, including the emission calculations (increases or decreases) for each project that occurred during the contemporaneous period.
- (k) The calculations, pursuant to Section 4.3 (offset), used to determine the quantity of offsets required for the new source or modification.
- (l) Identification of existing emission reduction credits or identification of internal emission reductions, including related emission calculations and proposed permit modifications required to ensure emission reductions meet the offset integrity criteria of being real, surplus, quantifiable, permanent and federally enforceable or enforceable as a practical matter.
- (m) If applicable, a description of how performance testing will be conducted, including test methods and a general description of testing protocols.

3.3 LOWEST ACHIEVABLE EMISSION RATE (LAER)

The applicant shall submit an analysis demonstrating that LAER has been proposed for each emissions unit included in the new major stationary source or major modification that emits a nonattainment pollutant for which the new stationary source or modification is classified as major.

3.4 STATEWIDE COMPLIANCE

The applicant shall submit a certification that each existing major stationary source owned or operated by the applicant (or any entity controlling, controlled by, or under common control with the applicant) in the State is in compliance with all applicable emission limitations and standards under the CAA or is in compliance with an expeditious compliance schedule which is federally enforceable.

3.5 ANALYSIS OF ALTERNATIVES

The applicant shall submit an analysis of alternative sites, sizes, production processes, and environmental control techniques for the proposed source that demonstrates the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

3.6 SOURCES IMPACTING CLASS I AREAS

The applicant for a proposed new major source or major modification that may affect visibility of any Mandatory Class I Federal Area shall provide the APCO with an analysis of impairment to visibility that would occur as a result of the source or modification and

general commercial, residential, industrial, and other growth associated with the source or modification, as required by 40 CFR Section 51.307(b)(2).

3.7 APPLICATION FEES

The applicant shall pay the applicable fees specified in District Regulation VI FEES.

4 EMISSIONS OFFSETS

4.1 OFFSET REQUIREMENTS

- (a) The emission increases of a nonattainment pollutant for which the new stationary source or modification is classified as major, shall be offset with federally enforceable ERCs or with internal emission reductions.
- (b) ERCs from one or more sources may be used, alone or in combination with internal emission reductions, in order to satisfy offset requirements.
- (c) Emissions reductions achieved by shutting down an existing emissions unit or curtailing production or operating hours may only be credited for offsets if such reductions are surplus, permanent, quantifiable, and federally enforceable; and
- (d) The shutdown or curtailment occurred after the last day of the base year for the attainment plan for the specific pollutant; or
- (e) The projected emissions inventory used to develop the attainment plan explicitly includes the emissions from such previously shutdown or curtailed emissions units. However, in no event may credit be given for shutdowns that occurred before August 7, 1977.

4.2 TIMING

- (a) Internal emission reductions used to satisfy an offset requirement must be federally enforceable prior to the issuance of the Authority to Construct, which relies on the emission reductions.
- (b) Except as provided by paragraph (c) of this Section, the decrease in actual emissions used to generate ERCs or internal emission reductions must occur no later than the commencement of operation of the new or modified major stationary source.
- (c) Where the new emissions unit is a replacement for an emissions unit that is being shut down in order to provide the necessary offsets, the APCO may allow up to one hundred eighty (180) calendar days for shakedown or commissioning of the new emissions unit before the existing emissions unit is required to cease operation.

4.3 QUANTITY

The quantity of ERCs or internal emission reductions required to satisfy offset requirements shall be determined in accordance with the following:

- (a) The unit of measure for offsets, ERCs, and internal emission reductions shall be tpy. All calculations and transactions shall use emission rate values rounded to the nearest one one-hundredth (0.01) tpy.
- (b) The quantity of ERCs or internal emission reductions required shall be calculated as the product of the amount of increased emissions, as determined in accordance with paragraph (c) of this Section, and the offset ratio, as determined in accordance with paragraph (d) of this Section.
- (c) The amount of increased emissions shall be determined as follows:
 - (i) When the offset requirement is triggered by the construction of a new major stationary source, the amount of increased emissions shall be the sum of the potential to emit of all emissions units.
 - (ii) When the offset requirement is triggered by a major modification of an existing major stationary source, the amount of increased emissions shall be the sum of the differences between the allowable emissions after the modification and the actual emissions before the modification for each emissions unit.
 - (iii) The amount of increased emissions includes fugitive emissions.
- (d) The ratios listed in Table 1 shall be applied based on the area's highest classification for each pollutant, as applicable. The offset ratio is expressed as a ratio of emissions increases to emission reductions.

Table 1. Federal Offset Ratio Requirements by Area Classification and Pollutant

Area Designation	Pollutant	Offset Ratio
Marginal Ozone Nonattainment Area	NO _x or VOC	1:1.1
Moderate Ozone Nonattainment Area	NO _x or VOC	1:1.15
Serious Ozone Nonattainment Area	NO _x or VOC	1:1.2
Severe Ozone Nonattainment Area	NO _x or VOC	1:1.3
PM _{2.5} Nonattainment Area	PM _{2.5} , SO ₂ , NO _x , VOC, or Ammonia	1:1

4.4 EMISSION REDUCTION REQUIREMENTS

- (a) Internal emission reductions or ERCs used to satisfy an offset requirement shall be:
 - (i) Real, surplus, permanent, quantifiable, and federally enforceable; and
 - (ii) Surplus at the time of issuance of the Authority to Construct containing the offset requirements.
- (b) Permitted sources whose emission reductions are used to satisfy offset requirements must appropriately amend or cancel their Authority to Construct or Permit to Operate to reflect their newly reduced potential to emit, including practicably enforceable conditions to limit their potential to emit.

- (c) Emission reductions must be obtained from the same nonattainment area, however, the APCO may allow emission reductions from another nonattainment area if the following conditions are met:
 - (i) The other area has an equal or higher nonattainment classification than the area in which the source is located; and
 - (ii) Emissions from such other area contribute to a violation of the national ambient air quality standard in the nonattainment area in which the source is located.
- (d) The use of ERCs shall not provide:
 - (i) Authority for, or the recognition of, any pre-existing vested right to emit any regulated NSR pollutant;
 - (ii) Authority for, or the recognition of, any rights that would be contrary to applicable law; or
 - (iii) An exemption to a stationary source from any emission limitations established in accordance with federal, state, or county laws, rules, and regulations.

4.5 RESTRICTIONS ON TRADING POLLUTANTS

- (a) The emission offsets obtained shall be for the same regulated NSR pollutant except as specified below.
- (b) In no case, shall the compounds excluded from the definition of *Volatile Organic Compounds* be used as offsets for Volatile Organic Compounds.
- (c) Interpollutant offsets between PM_{2.5} and PM_{2.5} precursors are not allowed unless modeling has been used to demonstrate appropriate PM_{2.5} interpollutant offset ratios as approved in a PM_{2.5} Attainment Plan.

5 ADMINISTRATIVE REQUIREMENTS

5.1 VISIBILITY

- (a) The APCO shall provide written notice and conduct any necessary review and consultation with the Federal Land Manager regarding any proposed major stationary source or major modification that may impact visibility in any Mandatory Class I Federal Area, in accordance with the applicable requirements of 40 CFR 51.307.
- (b) The APCO may require monitoring of visibility in any Federal Class I area near the proposed new stationary source or major modification for such purposes and by such means as the APCO deems necessary and appropriate.

5.2 AMBIENT AIR QUALITY STANDARDS

The APCO may require the use of an air quality model to estimate the effects of a new or modified stationary source. The analysis shall estimate the effects of the new or modified stationary source, and verify that the new or modified stationary source will not prevent or interfere with the attainment or maintenance of any ambient air quality standard. In making this determination, the APCO shall take into account the mitigation of emissions through offsets pursuant to this rule, and the impacts of transported pollutants on downwind pollutant concentrations. The APCO may impose, based on an air quality analysis, offset ratios greater than the requirements of paragraph (d) of Section 4.3.

5.3 AIR QUALITY MODELS

All estimates of ambient concentrations required, pursuant to this rule, shall be based on applicable air quality models, databases, and other requirements specified in 40 CFR Part 51, Appendix W (“Guideline on Air Quality Models”). Where an air quality model specified is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis. Written approval from the EPA must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to public notification and the opportunity for public comment given.

5.4 STACK HEIGHT PROCEDURES

The degree of emission limitation required of any source for control of any air pollutant must not be affected by so much of any source's stack height that exceeds good engineering practice or by any other dispersion technique, except as provided in 40 CFR 51.118(b). For the purposes of this Section, the definitions in 40 CFR 51.100 shall apply.

- (a) Before the APCO issues an Authority to Construct under this rule to a source with a stack height that exceeds good engineering practice (GEP) stack height, the APCO shall notify the public of the availability of the demonstration study and provide opportunity for a public hearing.
- (b) Any field study or fluid model used to demonstrate GEP stack height and any determination concerning excessive concentration must be approved by the EPA and the APCO prior to any emission limit being established.
- (c) The provisions of Section 5.4 do not restrict, in any manner, the actual stack height of any stationary source or facility.

6 AUTHORITY TO CONSTRUCT – DECISION

6.1 PRELIMINARY DECISION

Following acceptance of an application as complete, the APCO shall perform the evaluations required to determine if the proposed new major stationary source or major modification will comply with all applicable District, state and federal rules, regulations, or statutes, including but not limited to the requirements under Section 3 of this rule, and shall make a preliminary written decision as to whether an Authority to Construct should

be approved, conditionally approved, or denied. The decision shall be supported by a succinct written analysis. The decision shall be based on the requirements in force on the date the application is deemed complete, except when a new federal requirement, not yet incorporated into this rule, applies to the new or modified source.

6.2 AUTHORITY TO CONSTRUCT – PRELIMINARY DECISION REQUIREMENTS

- (a) Prior to issuance of a preliminary written decision to issue an Authority to Construct for a new major stationary source or major modification, the APCO shall determine:
- (i) That each emissions unit(s) that constitutes the new source or modification will not violate any applicable requirement of the District’s portion of the California State Implementation Plan (SIP); and
 - (ii) That the emissions from the new or modified stationary source will not interfere with the attainment or maintenance of any applicable national ambient air quality standard; and
 - (iii) That the emission limitation for each emissions unit that constitutes the new source or modification specifies LAER for such units.

If the APCO determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an enforceable numerical emission standard infeasible, the APCO may instead prescribe a design, operational or equipment standard. In such cases, the APCO shall make its best estimate as to the emission rate that will be achieved and must specify that rate in the application review documents. Any Authority to Construct issued without an enforceable numerical emission standard must contain enforceable conditions which assure that the design characteristics or equipment will be properly maintained or that the operational conditions will be properly performed to continuously achieve the assumed degree of control. Such conditions shall be enforceable as emission limitations by private parties under section 304 of the CAA. The term “emission limitation” shall also include such design, operational, or equipment standards; and

- (iv) The quantity of ERCs or internal emission reductions required to offset the new source or modification, pursuant to Section 4.3; and
- (v) That all ERCs or internal emission reductions required for the new source or modification have been identified and have been made federally enforceable or legally and practicably enforceable; and
- (vi) That the quantity of ERCs or internal emission reductions determined under paragraph (b) of Section 4.3 will be surrendered prior to commencing operation.

- (b) Temporary sources and emissions resulting from the construction phase of a new source are exempt from paragraphs (iv), (v) and (vi) of paragraph (a) of this Section.

6.3 AUTHORITY TO CONSTRUCT CONTENTS

- (a) An Authority to Construct for a new major stationary source or major modification shall contain terms and conditions:
 - (i) which ensure compliance with all applicable requirements and which are enforceable as a legal and practical matter.
 - (ii) sufficient to ensure that the major stationary source or major modification will achieve LAER in accordance with paragraphs (b) and (c) of this Section.
- (b) A new major stationary source shall achieve LAER for each nonattainment pollutant for which the source is classified as major.
- (c) A major modification shall achieve LAER for each nonattainment pollutant for which the modification would result in a significant net emissions increase. This requirement applies to each proposed emissions unit at which a net emissions increase in the nonattainment pollutant would occur as a result of a physical change, or change in the method of operation of the emissions unit.

6.4 AUTHORITY TO CONSTRUCT – FINAL DECISION

- (a) Prior to making a final decision to issue an Authority to Construct for a new major stationary source or major modification, the APCO shall consider all written comments that are submitted within 30 days of public notification and all comments received at any public hearing(s) in making a final determination on the approvability of the application and the appropriate Authority to Construct conditions. The District shall make all comments available, including the District's response to the comments, for public inspection in the same locations where the District made preconstruction information relating to the proposed source or modification available.
- (b) The APCO shall deny any application for an Authority to Construct if the APCO finds the new source or modification would not comply with the standards and requirements set forth in District, state, or federal rules or regulations.
- (c) The APCO shall make a final decision whether to issue or deny the Authority to Construct after determining that the Authority to Construct will or will not ensure compliance with all applicable emission standards and requirements.
- (d) The APCO shall notify the applicant in writing of the final decision and make such notification available for public inspection at the same location where the District made preconstruction information and public comments relating to the source available.

6.5 PERMIT TO OPERATE

The applicable terms and conditions of an issued Authority to Construct shall be included in any Permit to Operate subsequently issued by the APCO for the same emissions units.

7 SOURCE OBLIGATIONS

7.1 ENFORCEMENT

Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this rule, any changes to the application as required by the APCO, or the terms of its Authority to Construct or Permit to Operate, shall be subject to enforcement action.

7.2 TERMINATION

Approval to construct shall terminate if construction is not commenced within eighteen months after receipt of such approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The APCO may extend the 18-month period once upon a satisfactory showing of good cause why an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen months of the projected and approved commencement date.

7.3 COMPLIANCE

Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state, or federal law.

7.4 RELAXATION IN ENFORCEABLE LIMITATIONS

At such time that a particular stationary source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the stationary source or modification to emit a pollutant, then the requirements of this rule shall apply to the stationary source or modification as though construction had not yet commenced on the stationary source or modification.

8 PUBLIC PARTICIPATION

After the APCO has made a preliminary written decision to issue an Authority to Construct for a new major stationary source or major modification, as specified in Sections 6.1 and 6.2, the APCO shall:

- (a) Publish, in at least one newspaper of general circulation in the District, a notice stating the preliminary decision of the APCO, noting how pertinent information can be obtained, including how the public can access the information specified in Section 8(b), and inviting written public comment for a 30-day period following the

date of publication. The notice shall include the time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled).

- (b) No later than the date the notice of the preliminary written determination is published, make available in at least one location in each region in which the proposed source would be constructed, a copy of all materials the applicant submitted, a copy of the preliminary decision, a copy of the proposed Authority to Construct and a copy or summary of other materials, if any, considered in making the preliminary written decision.
- (c) Send a copy of the notice of public comment to the applicant, EPA Region 9, any persons requesting such notice and any other interested parties such as: any other state or local air pollution control agencies, the chief executives of the city and county where the source would be located; any comprehensive regional land use planning agency, and any state, Federal Land Manager, or Indian governing body whose lands may be affected by emissions from the source or modification.
- (d) Provide opportunity for a public hearing for persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations, if in the APCO's judgment such a hearing is warranted. The APCO shall give notice of any public hearing at least 30 days in advance of the hearing.

9 PLANT-WIDE APPLICABILITY LIMITS (PAL)

9.1 APPLICABILITY

- (a) The APCO may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in Sections 9.1 through 9.15. The term "PAL" shall mean "actuals PAL" throughout Section 9.
- (b) Any physical change in, or change in the method of operation of, a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements of Sections 9.1 through 9.15, and complies with the PAL Permit:
 - (i) Is not a major modification for the PAL pollutant;
 - (ii) Does not have to be approved through the plan's Nonattainment Major NSR Program; and
 - (iii) Is not subject to the provisions in Section 7.4.
- (c) Except as provided under paragraph (b)(3) of Section 9.1, a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

9.2 DEFINITIONS

Unless the context otherwise requires, the following terms shall have the meanings set forth below for the purposes of Section 9 of this rule. When a term is not defined in these paragraphs, it shall have the meaning given in Section 2 of this rule or in the CAA.

“Actuals PAL for a major stationary source” means a PAL based on the baseline actual emissions of all emissions units at the source that emit, or have the potential to emit, the PAL pollutant.

“Allowable emissions” means allowable emissions as defined in Section 2 of this rule, except as this definition is modified according to paragraphs (a) and (b) below:

- (a) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit’s PTE.
- (b) An emissions unit’s PTE shall be determined using the definition in Section 2 for this term, except that the words “or enforceable as a practical matter” should be added after “federally enforceable.”

“Major emissions unit” means:

- (a) Any emissions unit that emits, or has the potential to emit, 100 tpy or more of the PAL pollutant in an attainment area; or
- (b) Any emissions unit that emits, or has the potential to emit, the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Act for nonattainment areas.

“Plantwide Applicability Limitation (PAL)” means an emission limitation, expressed in tpy, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with Sections 9.1 through 9.15 of this rule.

“PAL effective date” generally means the date of issuance of the PAL Permit. However, the PAL effective date for an increased PAL is the date any emissions unit which is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

“PAL effective period” means the period beginning with the PAL effective date and ending ten years later.

“PAL major modification” means any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

“PAL Permit” means the title V operating permit issued by the APCO that establishes a PAL for a major stationary source.

“PAL pollutant” means the pollutant for which a PAL is established at a major stationary source.

“*Project*” means a physical change in, or change in the method of operation of, an existing stationary source.

“*Significant emissions unit*” means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in Section 2 of this rule or in the CAA, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit.

“*Small emissions unit*” means an emissions unit that emits, or has the potential to emit, the PAL pollutant in an amount less than the significant level (as defined in Section 2 of this rule or in the CAA, whichever is lower).

9.3 PERMIT APPLICATION REQUIREMENTS

As part of an application for a title V operating permit requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the APCO for approval:

- (a) A list of all emissions units at the source designated as small, significant, or major based on their PTE. In addition, the owner or operator of the source shall indicate which, if any, federal, state or county applicable requirements, emission limitations, or work practices apply to each unit;
- (b) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction;
- (c) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month, as required by paragraph (a) of Section 9.13.

9.4 GENERAL REQUIREMENTS FOR ESTABLISHING PALs

- (a) The APCO may establish a PAL at a major stationary source, provided that, at a minimum, the requirements in paragraphs (a)(i) through (a)(vii) below are met.
 - (i) The PAL shall impose an annual emission limitation, in tpy, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first twelve months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous twelve consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first eleven months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.
 - (ii) The PAL shall be established in a PAL Permit that meets the public participation requirements in Section 9.5 of this rule.

- (iii) The PAL Permit shall contain all the requirements of Section 9.7 of this rule.
 - (iv) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.
 - (v) Each PAL shall regulate emissions of only one pollutant.
 - (vi) Each PAL shall have a PAL effective period of ten years.
 - (vii) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in Sections 9.12 through 9.14 of this rule for each emissions unit under the PAL through the PAL effective period.
- (b) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant, which occur during the PAL effective period, creditable as decreases for purposes of generating offsets unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

9.5 PUBLIC PARTICIPATION REQUIREMENTS FOR PALs

PALs for existing major stationary sources shall be established, renewed, or increased through the public participation procedures in Section 8 of this rule.

9.6 SETTING THE 10-YEAR ACTUALS PAL LEVEL

- (a) Except as provided in paragraph (b) of this Section, the Actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant as defined in Section 2 or under the CAA, whichever is lower. When establishing the actuals PAL level for a PAL pollutant, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level. The APCO shall specify a reduced PAL level(s) (in tons/yr) in the PAL Permit to become effective on the future compliance date(s) of any applicable federal or state regulatory requirement(s) that the APCO is aware of prior to issuance of the permit.
- (b) For newly constructed units (which does not include modifications to existing units) on which actual construction began after the 24-month period, in lieu of adding the baseline actual emissions as specified in paragraph (a) of Section 9.6, the emissions must be added to the PAL level in an amount equal to the PTE of the units.

9.7 CONTENTS OF THE PAL PERMIT

The PAL Permit shall contain, at a minimum, the following information:

- (a) The PAL pollutant and the applicable source-wide emission limitation in tpy;
- (b) The PAL effective date and the expiration date of the PAL Permit (PAL effective period).
- (c) Specification in the PAL Permit that if a major stationary source owner or operator applies to renew the PAL Permit in accordance with Section 9.10 before the end of the PAL effective period, then the PAL conditions shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL Permit is issued by the APCO.
- (d) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns, and malfunctions;
- (e) A requirement that, once the PAL Permit expires, the major stationary source is subject to the requirements of Section 9.9;
- (f) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month, as required by paragraph (a) of Section 9.13;
- (g) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under Section 9.12;
- (h) A requirement to retain the records required under Section 9.13 on-site. Such records may be retained in an electronic format;
- (i) A requirement to submit the reports required under Section 9.14 by the required deadlines; and
- (j) Any other requirements that the APCO deems necessary to implement and enforce the PAL Permit.

9.8 PAL EFFECTIVE PERIOD AND REOPENING OF PAL PERMIT

The PAL shall include the following information:

- (a) PAL Effective Period. The APCO shall specify a PAL effective period of ten years from the date of issuance.
- (b) Reopening of the PAL Permit.
 - (i) During the PAL effective period, the plan shall require the APCO to reopen the PAL Permit to:
 - A. Correct typographical/calculation errors made in setting the PAL, or reflect a more accurate determination of emissions used to establish the PAL.
 - B. Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets.

- C. Revise the PAL to reflect an increase in the PAL as provided under Section 9.11.
- (ii) The APCO may reopen the PAL Permit for the following:
- A. Reduce the PAL to reflect newly applicable federal requirements with compliance dates after the PAL effective date.
 - B. Reduce the PAL consistent with any other requirement that is enforceable as a practical matter, and that the APCO may impose on the major stationary source under District Rules.
 - C. Reduce the PAL if the APCO determines that a reduction is necessary to avoid causing or contributing to a National Ambient Air Quality Standard or PSD increment violation, or to an adverse impact on an air-quality-related value that has been identified for a federal Class I area by a Federal Land Manager and for which information is available to the general public.
- (iii) Except for the permit reopening in paragraph (b)(i)(A) of Section 9.8 for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of Section 9.5 of this rule.

9.9 EXPIRATION OF A PAL

Any PAL which is not renewed in accordance with the procedures in Section 9.10 shall expire at the end of the PAL effective period, and the requirements in Section 9.9 of this rule shall apply.

- (a) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the following:
 - (i) Within the time frame specified for PAL renewals in paragraph (b) of Section 9.10, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the APCO) by distributing the PAL allowable emissions for the affected major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (e) of Section 9.10, such distribution shall be made as if the PAL had been adjusted.
 - (ii) The APCO shall decide whether and how the PAL allowable emissions will be distributed and issue a revised title V operating permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the APCO determines is appropriate.
- (b) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The APCO may approve the use of monitoring systems other

than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.

- (c) Until the APCO issues the revised title V operating permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph (a)(ii) of Section 9.9, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
- (d) Any physical change or change in the method of operation at the major stationary source will be subject to the nonattainment major NSR requirements if such change meets the definition of *Major Modification* in Section 2.1.
- (e) The major stationary source owner or operator shall continue to comply with any federal, state or county applicable requirements that may have applied either during the PAL effective period or prior to the PAL effective period except as provided in paragraph (b)(iii) of Section 9.1.

9.10 RENEWAL OF A PAL

- (a) The APCO will follow the procedures specified in Section 9.5 in approving any request to renew a PAL Permit for a major stationary source, and will provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the APCO.
- (b) Application deadline. A major stationary source owner or operator shall submit a timely application to the APCO to request renewal of the PAL Permit. A timely application is one that is submitted at least six months prior to, but not earlier than eighteen months prior to, the date of expiration of the PAL Permit. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL Permit within this time period, then the PAL Permit shall continue to be effective until the revised permit with the renewed PAL is issued.
- (c) Application Requirements. The application to renew a PAL Permit shall contain the information required in paragraphs (c)(i) through (c)(iv) of Section 9.10 of this rule:
 - (i) The information required in paragraphs (a) through (c) of Section 9.3;
 - (ii) A proposed PAL level;
 - (iii) The sum of the PTE of all emissions units under the PAL (with supporting documentation); and
 - (iv) Any other information the owner or operator wishes the APCO to consider in determining the appropriate level for renewing the PAL Permit.
- (d) PAL Adjustment. In determining whether and how to adjust the PAL, the APCO shall consider the options outlined in paragraphs (d)(i) and (d)(ii) of Section 9.10. However, in no case may any such adjustment fail to comply with paragraph (d)(iii) of Section 9.10.

- (i) If the emissions level calculated in accordance with Section 9.6 is equal to or greater than eighty (80) percent of the PAL level, the APCO may renew the PAL at the same level without considering the factors set forth in paragraph (d)(ii) of Section 9.10; or
- (ii) The APCO may set the PAL at a level that the APCO determines to be more representative of the source's baseline actual emissions, or that the APCO determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the APCO in his written rationale.
- (iii) Notwithstanding paragraphs (d)(i) and (d)(ii) of Section 9.10:
 - A. If the PTE of the major stationary source is less than the PAL, the APCO shall adjust the PAL to a level no greater than the PTE of the source; and
 - B. The APCO shall not approve a renewed PAL level higher than the current PAL unless the major stationary source has complied with the provisions of Section 9.11.
- (e) If the compliance date for a federal or state requirement that applies to the PAL source occurs during the PAL effective period, and if the APCO has not already adjusted for such requirement, the PAL shall be adjusted at the time the affected title V operating permit is renewed.

9.11 INCREASING A PAL DURING THE PAL EFFECTIVE PERIOD

- (a) The APCO may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs (a)(i) through (a)(iv) of Section 9.11.
 - (i) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.
 - (ii) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units, assuming application of BACT-equivalent controls, plus the sum of the allowable emissions of the new or modified emissions unit(s), exceeds the PAL. The level of control that would result from BACT-equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding ten years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

- (iii) The owner or operator obtains an Authority to Construct issued in accordance with Paragraphs 1 through 8 of this rule for all emissions unit(s) identified in paragraph (a)(i) of Section 9.11, regardless of the magnitude of the emissions increase resulting from them. These emissions unit(s) shall comply with any emissions requirements resulting from the nonattainment Authority to Construct issued in accordance with Paragraphs 1 through 8 of this rule (for example, LAER), even though they have also become subject to the PAL or continue to be subject to the PAL.
- (iv) The PAL Permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- (b) The APCO shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT-equivalent controls as determined in accordance with paragraph (a)(ii) of Section 9.11), plus the sum of the baseline actual emissions of the small emissions units.
- (c) The PAL Permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of Section 9.5.

9.12 MONITORING REQUIREMENTS FOR PALS

- (a) General requirements.
 - (i) The PAL Permit must include enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL Permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL Permit.
 - (ii) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (b)(i) through (b)(iv) of Section 9.12 and must be approved by the APCO.
 - (iii) Notwithstanding paragraph (a)(ii) of Section 9.12, the PAL monitoring system may also employ an alternative monitoring approach that meets paragraph (a)(i) of Section 9.12 if approved by the APCO.
 - (iv) Failure to use a monitoring system that meets the requirements of Section 9.12 renders the PAL invalid.
- (b) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (c) through (i) of Section 9.12:

- (i) Mass balance calculations for activities using coatings or solvents;
 - (ii) CEMS;
 - (iii) CPMS or PEMS; and
 - (iv) Emission factors.
- (c) Mass Balance Calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coatings or solvents shall meet the following requirements:
- (i) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;
 - (ii) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and
 - (iii) Where the vendor of a material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the APCO determines there is site-specific data or a site-specific monitoring program to support another content within the range.
- (d) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
- (i) The CEMS must comply with applicable performance specifications found in 40 CFR Part 60, Appendix B; and
 - (ii) The CEMS must sample, analyze, and record data at least every fifteen minutes while the emissions unit is operating.
- (e) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:
- (i) The CPMS or PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and
 - (ii) Each CPMS or PEMS must sample, analyze, and record data at least every fifteen minutes, or at another, less frequent interval approved by the APCO while the emissions unit is operating.
- (f) Emission Factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
- (i) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

- (ii) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and
 - (iii) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six months of PAL Permit issuance unless the APCO determines that testing is not required.
- (g) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time when there is no monitoring data unless another method for determining emissions during such periods is specified in the PAL Permit.
- (h) Notwithstanding the requirements in paragraphs (c) through (g) of Section 9.12, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the APCO shall, at the time of permit issuance:
- (i) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or
 - (ii) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.
- (i) Revalidation. All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the APCO . Such testing must occur at least once every five years after issuance of the PAL Permit.

9.13 RECORDKEEPING REQUIREMENTS

- (a) The PAL Permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of Section 9 and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for five years from the date of such record.
- (b) The PAL Permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus five years:
 - (i) A copy of the PAL Permit application and any applications for revisions to the PAL Permit; and
 - (ii) Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.

9.14 REPORTING AND NOTIFICATION REQUIREMENTS

The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the APCO, in accordance with the applicable title V operating permit program. The reports shall meet the requirements in paragraphs (a) through (c) of Section 9.14.

- (a) Semiannual Report. The semiannual report shall be submitted to the APCO within thirty days of the end of each reporting period. This report shall contain the information required in paragraphs (a)(i) through (a)(vii) of Section 9.14:
 - (i) The identification of owner and operator and the permit number;
 - (ii) Total annual emissions (in tpy) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (a) of Section 9.13.
 - (iii) All data relied upon, including, but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions;
 - (iv) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period;
 - (v) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken;
 - (vi) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by paragraph (g) of Section 9.12; and
 - (vii) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
- (b) Deviation Report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL Permit, including periods where no monitoring is available. A report submitted pursuant to 40 CFR 70.6(a)(3)(iii)(B) shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the affected title V operating permit. The reports shall contain the following information:
 - (i) The identification of owner and operator and the permit number;
 - (ii) The PAL requirement that experienced the deviation or that was exceeded;
 - (iii) Emissions resulting from the deviation or the exceedance; and

- (iv) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
- (c) Revalidation Results. The owner or operator shall submit to the APCO the results of any revalidation test or method within three months after completion of such test or method.

9.15 TRANSITION REQUIREMENTS

The APCO may not issue a PAL Permit that does not comply with the requirements in Section 9 after the EPA has approved regulations incorporating these requirements into the District portion of the California SIP.

10 INVALIDATION

If any provision of this rule or the application of such provision to any person or circumstance is held invalid, the remainder of this rule or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

11 EFFECTIVE DATE FOR REFERENCED FEDERAL REGULATIONS

All references and citations in this rule to Title 40 of the Code of Federal Regulations (CFR) refer to the referenced federal regulation as in effect on July 27, 2021.

RULE 524 EMISSION REDUCTION CREDITS

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RULE 524

EMISSION REDUCTION CREDITS

524.1 GENERAL

- A. **PURPOSE:** To provide an administrative mechanism for quantifying, adjusting and certifying surplus emission reductions for:
 - 1. Later use as offsets pursuant to District, state or federal rules or regulations, or
 - 2. Transfer to other sources as offsets pursuant to Rule 523, NEW SOURCE REVIEW.
- B. **APPLICABILITY:** This rule shall apply to all emissions reduction credits for use within a stationary source or for transfer to other sources.
- C. **EXEMPTION, NOTIFICATION REQUIREMENTS:** The requirements of Sections 524.4 D. and 524.4 E; relating to notification, publication, and public inspection of Preliminary Decisions; shall not apply if the application is for emission reduction credits less than the following per calendar quarter:

Affected Pollutant	Emission Reduction Credits
Reactive Organic Compounds	9,000 lbs/quarter
Nitrogen Oxides	9,000 lbs/quarter
Sulfur Oxides	9,000 lbs/quarter
PM10	7,200 lbs/quarter
Carbon Monoxide	49,500 lbs/quarter

- D. **EXEMPTION, CONCURRENT STATIONARY SOURCE MODIFICATION:** Pursuant to Section 40709(c) of the California Health and Safety Code, need not be banked prior to use as offsets, if those reductions satisfy all criteria established by this rule, Rule 501, GENERAL PERMIT REQUIREMENTS, and Rule 523, NEW SOURCE REVIEW. For the purposes of this exemption, "concurrent stationary source modification" means the simultaneous modification of emission units and/or the addition of new emissions units to a stationary source with all emission reductions occurring after the issuance of the Authority to Construct authorizing such reductions, but before the start of operation of the new or modified emissions unit(s) with emission increases.

E. **EXEMPTION, SHUTDOWNS AND CURTAILMENTS:** The provisions of Section 524.2 A.4.a and 524.3 D.3. shall not apply to emission reduction credits from shutdowns or curtailments provided:

1. The shutdowns or curtailment occurred after December 31, 1987 for State requirements, and November 15, 1990 for federal requirements applicable to major stationary sources and major modifications; or
2. The shutdowns or curtailments are documented in District permitting actions pursuant to Rule 523, NEW SOURCE REVIEW, for shutdowns or curtailments which occurred prior to April 26, 1994; and
3. The emissions from the emissions unit to be shutdown or curtailed are included in the District's 1987 emission inventory for State requirements, and the 1990 base-year emission inventory for federal requirements applicable to major stationary sources and major modifications; and
4. The District is notified before October 26, 1994, of shutdowns and curtailments which occurred before April 26, 1994.

524.2 **DEFINITIONS:** Unless otherwise defined below, the terms used in this rule are defined in Rule 523, NEW SOURCE REVIEW.

A. **ACTUAL EMISSIONS REDUCTIONS -** Reductions of emissions from an emissions unit. Actual emission reductions shall be calculated pursuant to Section 524.4 H., Calculation of Emissions, and meet all of the following criteria:

1. The emissions reductions shall be real, enforceable, quantifiable, and permanent.
2. The emissions reductions shall be surplus emissions reductions in excess of any emissions reduction which is:
 - a. Required or encumbered by any laws, rules, regulations, agreements, or orders, and unless such law by its terms states that the emission reduction shall be considered surplus, or
 - b. Attributed to a control measure noticed for workshop in the District, or proposed or contained in a State Implementation Plan, or

- c. Proposed or contained in an adopted District Air Quality Attainment Plan (AQAP) for attaining the annual reductions required by the Clean Air Acts.
 3. Except for control measures which are federally mandated or otherwise required or encumbered by law, emissions reductions attributed to a proposed control measure contained in the District AQAP may be re-eligible as surplus emission reductions only if such control measure has been removed from the AQAP during the next AQAP update.
 4. Source shutdowns and curtailments may not be given emission reduction credit in the case of non-attainment pollutants, including precursors, if they occurred prior to the date of application unless:
 - a. The shutdown or curtailment was claimed by the affected facility as a credit within 180 days of the last date of operation. Shutdown or curtailment credits not claimed within 180 days shall pass to the Priority Reserve Bank as provided in Rule 525, PRIORITY RESERVE, and
 - b. For stationary sources or modifications subject to federal requirements for major stationary sources or major modifications, the crediting of shutdown emissions complies with the most recent emission trading policy of the U.S. Environmental Protection Agency; and
 - c. The proposed new source or modification is a replacement, and the shutdown or curtailment occurred after August 7, 1977, or
 - d. The proposed new source or modification does not meet the U.S. Environmental Protection Agency definition of a major source or major modification; the shutdown or curtailment occurred after August 7, 1977; the shutdown or curtailment was document by a concurrent application to the District for emissions reduction; and the emission reduction credit is used at the same stationary source.
- B. **BANKING** - The system of quantifying, adjusting, certifying, recording, and storing ERC's for future use and transfer. This system shall be called the Emission Reduction Credit Bank (ERC Bank).

- C. **BEST AVAILABLE RETROFIT CONTROL TECHNOLOGY (BARCT)** - an emission limitation that is based upon the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source. The criteria for BARCT are specified in "California Clean Air Act Guidance for the Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology", California Air Resources Board, April 1990.
- D. **CERTIFIED** - Emission reduction credits which have been evaluated under the requirements of this rule and other applicable District, state and federal rules and regulations and which have been authorized by the Air Pollution Control Officer.
- E. **ELECTRICAL POWER PLANTS** - An electrical generating facility located within the District that regularly generates electricity so the local electric utility can provide its daily energy requirements. Emergency electrical generating equipment are not considered electrical power plants.
- F. **EMISSION REDUCTION CREDITS (ERC)** - Reductions of actual emissions from an emission unit that are registered with the District in accordance with the requirements of this rule.
- G. **EMISSIONS UNIT** - An identifiable operation or piece of process equipment such as an article, machine, or other contrivance which controls, emits, may emit, or results in the emissions of any affected air pollutant, regulated air pollutant or Hazardous Air Pollutant (HAP), directly or as fugitive emissions. An emissions unit shall not include the open burning of agricultural biomass. With the exception of early reductions of Hazardous Air Pollutants in accordance with Section 112(i)(5) of Title V of Federal Clean Air Act as amended in 1990, reduction credits may only be obtained for reductions in affected pollutants.
- H. **ENFORCEABLE** - Verifiable and legally binding. Enforceable, for the purposes of federal requirements, means all federally enforceable limitations and conditions enforceable by the administrator, including: NSPS; NESHAP; requirements within any applicable State Implementation Plan; any permit requirement established pursuant to 40 CFR 52.21, 51.160-166; or federal operating permit requirements.

- I. **ERC CERTIFICATE** - A document certifying title to a defined quantity and type of ERC's issued by the District to the owner(s) identified on the Certificate.
- J. **HISTORIC ACTUAL EMISSIONS** -
1. For applications for emissions reductions deemed complete after the **April 26, 1994**, "historic actual emissions" are the actual emissions for the existing emissions unit averaged over the consecutive two year period immediately preceding the date of application for emission reduction credits. If the last two years are unrepresentative of normal source operations as determined by the Air Pollution Control Officer, then any two consecutive years of the last five years that represent normal source operation may be used.
 2. For applications for emissions reductions deemed complete prior to the **April 26, 1994**, "historic actual emissions" are either as calculated in Subsection 524.2 J.1., above, or, at the option of the applicant and with the approval of the Air Pollution Control Officer, are the actual emissions for the existing emissions unit averaged over the three year period immediately preceding the date of application for emission reduction credits.
 3. If, at any time during the two or three year period, actual emissions exceeded allowed or permitted emission levels, then actual emissions shall be reduced to reflect emission levels that would have occurred if the unit were in compliance with all applicable limitations and rules.
 4. Where an emissions unit has been in operation for less than two years, a shorter averaging period of at least one year may be used, provided that the averaging period is representative of the full operational history of the emissions unit. If less than one year has passed since the date of issuance of the permit to operate then the historic actual emissions shall be zero.
- K. **NON-PERMITTED EMISSIONS** - Those emissions of an affected pollutant which are not required to obtain a permit pursuant to Rule 501, GENERAL PERMIT REQUIREMENTS. Non-permitted emissions may include emissions from mobile sources, indirect sources, and exempt equipment.

- L. **OFFSET** - The use of an emission reduction credit to compensate for an emission increase of an affected pollutant from a new or modified source subject to the requirements of Rule 523, NEW SOURCE REVIEW.
- M. **PARCEL(S)** - A legally identifiable piece of land as registered with the County Assessors's office for property tax purposes.
- N. **PERMANENT** - Only permanent reductions in emissions can qualify for emission reduction credit. Permanence may generally be assured for sources subject to federal requirements by requiring federally enforceable changes in source permits, or applicable state regulations to reflect a reduced level of allowable emissions.
- O. **PROPOSED EMISSIONS** - Emissions based on the potential to emit for the new or modified emissions unit.
- P. **PORTABLE EQUIPMENT** - Equipment which is periodically relocated and is not operated more than a total of 180 days at any one location in the District within any continuous 12 month period.
- Q. **QUANTIFIABLE** - Ability to estimate emission reductions in terms of both their amount and characteristics. The same method of estimating emissions should generally be used to quantify the emission levels before and after the reduction.
- R. **QUARTERLY** - Calendar quarter beginning in January, April, July, and October.
- S. **REAL** - Actually occurring, implemented, and not artificially devised.
- T. **REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT)** - The lowest emission limitation that a particular source is capable of meeting by the application of emission control technology that is reasonably available considering technical and economic feasibility. The criteria for RACT are specified in "California Clean Air Act Guidance for the Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology", California Air Resources Board, April 1990.
- U. **REGISTER** - The document that records all ERC deposits, withdrawals, transfers, and transactions.

V. REPLACEMENT EQUIPMENT -

1. Functionally Identical Replacement: The replacement of or modification of emission units(s) where the replacement unit serves the identical function as the unit(s) being replaced, and the maximum rating and the potential to emit any pollutant will not be greater from the new or modified emissions unit(s) than the replaced unit(s), when the emissions unit(s) are operated at the same permitted conditions and as if current BACT were applied. The Air Pollution Control Officer will determine, on a case-by-case basis, whether a project to replace an emissions unit in whole or part with functionally equivalent equipment is a routine repair, commonly made in the industry. Projects intended to extend the expected useful life of the unit may not be considered routine replacements.
 2. Identical Replacement: The total or partial replacement of an emissions unit where the replacement is the same as the original unit in all respects except for serial number.
- W. **SHUTDOWN** - The earlier of either the permanent cessation of emissions from a source or an emission unit or the surrender of that unit's or source's operating permit.
- X. **TEMPORARY SOURCE** - Temporary emission sources such as pilot plants, and portable facilities which will be terminated or located outside the District after less than a cumulative total of 90 days of operation in any 12 continuous months, and the emissions resulting from the construction phase of a new source.
- Y. **TRANSFER** - The change in ownership of an ERC from one person or legal entity to another.

524.3 STANDARDS

- A. **CERTIFICATION:** Only actual emission reductions shall be certified as ERC's. Such actual emission reductions shall meet the following requirements to be certified as ERC's.
1. Apply for emission reduction credits pursuant to Section 524.4 A., and
 2. Receive written approval of the Air Pollution Control Officer, and

3. If the emission reduction is created from an emission unit where the demand for the services or product could shift to other similar sources in the District, submittal of data to document that such reductions will result in District-wide emission reductions may be required by the Air Pollution Control Officer. Such documentation must be approved by the Air Pollution Control Officer.
 4. Emissions decreases shall be prescribed by enforceable emission limitations contained in authorities to construct and permits to operate, or result from the permanent surrender or the voiding of permits to operate.
- B. **REEVALUATION:** Actual emission reductions calculated prior to April 26, 1994, shall be reevaluated under the requirements and procedures specified in this rule.
- C. **NON-PERMITTED SOURCES:**
1. Except as provided in Section 524.3 C.2., non-permitted emissions units or stationary sources requesting emission reduction credits from such emissions units shall void the exemption from Rule 501, GENERAL PERMIT REQUIREMENTS. Such sources shall not operate such emissions unit or stationary source without first obtaining a permit pursuant to Rule 501, GENERAL PERMIT REQUIREMENTS.
 2. If state or federal law prohibits the District from requiring an authority to construct or a permit to operate pursuant to Rule 501, GENERAL PERMIT REQUIREMENTS, the applicant for emission reduction credits shall execute a legally binding contract with one or more owner(s) or operator(s) of the non-permittable emissions unit that ensures the sum of all emission reductions will be provided in accordance with the requirements of this rule, and will continue for the life of the stationary source using the credits or life of the credits as provided in the application. Such a contract shall be filed with the District and, by its terms, be enforceable by the Air Pollution Control Officer. For sources subject to federal NSR requirements, in the absence of federally enforceable permit conditions, the execution of a source specific SIP revision is required.

- D. **SHUTDOWNS:** Except as provided in Section 524.1 E. shutdowns or curtailments occurring after the April 26, 1994, claimed for emission reduction credit shall comply with the following:
1. Applicants for emission reductions due to the shutdown of permitted or non-permitted emissions units shall demonstrate to the satisfaction of the Air Pollution Control Officer that such equipment will no longer be operated within the District.
 2. Emission reductions from the shutdown of retail dry cleaners and retail gasoline stations shall be prohibited.
 3. An application for emission reduction credits from the shutdown of emissions units or stationary sources shall be submitted within 180 days after the surrender of the permit to operate or for non-permitted sources the last date of operation of such emissions unit or stationary source.
- E. **USE OF ERC'S, BANKING:** ERC's may be banked for later use as offsets. The name of the user shall be entered into the Register for the applicable ERC's. Except as provided in Section 524.3 G., 524.3 H., 524.3 I., and 524.3 J., such ERC's may not be returned to the bank following the start of operation of the stationary source or emissions unit using the ERC as offsets.
- F. **USE OF ERC'S, OFFSETS:** ERC's may be used immediately as offsets. The ERC shall be entered into the Register along with the name of the user. Except as provided in Sections 524.3 G., 524.3 H., 524.3 I., and 524.3 J., such ERC's may not be returned to the bank following the start of operation of the stationary source or emissions unit using the ERC as offsets. ERC's may not be used to offset increases in toxic air contaminants.
- G. **RETURNS, USE OF ERC'S FOR TEMPORARY STATIONARY SOURCES AND PORTABLE EQUIPMENT:** ERC's used as offsets for temporary stationary sources or emissions units or used as offsets for portable equipment shall be returned in full to the owner upon verification of shutdown of the temporary stationary source, emissions unit, or portable equipment by the Air Pollution Control Officer. ERC's must then be re-deposited in the Bank and re-entered into the Register by the owner, within 60 days.
- H. **RETURNS, ISSUANCE OF PERMIT TO OPERATE:** If the applicant for a Permit to Operate requests a lowering of the quarterly emission limitation as a result of emissions

testing conducted pursuant to an Authority to Construct and the requested new emissions limitation has been demonstrated as achievable by such emissions testing and will be continuously achieved, the difference in emission reductions credits necessary to offset the emissions unit pursuant to Rule 523, NEW SOURCE REVIEW, shall be re-deposited in the Bank and re-entered into the Register.

- I. **RETURNS, USE OF ERC'S FOR ELECTRICAL POWER PLANTS:** ERC's may be used at electrical power plants to offset emission increases resulting from increased power plant operation needed to compensate for reduced operation at other electrical power plant(s) within the District, due to emergency breakdown, pursuant to Rule 516, UPSET and BREAKDOWN CONDITIONS, or regularly scheduled maintenance. ERC's shall be returned in full to the owner upon verification of return to normal operation of the using electrical power plant. ERC's shall be re-deposited in the Bank and re-entered into the Register. The application of the provisions of this Section shall be approved in writing by the Air Pollution Control Officer prior to use.
- J. **RETURNS, ERC'S FROM THE PRIORITY RESERVE:** Emission Reduction Credits are returned after a being loaned in accordance with Rule 525, PRIORITY RESERVE, shall be returned to the originating Priority Reserve. Legal title to ERC's transferred to the ERC Bank from the Priority Reserve remains with the District and not the borrower.

524.4 ADMINISTRATIVE REQUIREMENTS

A. APPLICATION PROCEDURES:

1. Any person or entity, or an authorized agent, which owns or operates a source at which an eligible emission reduction has occurred or will occur may apply for an ERC certificate in accordance with the requirements of this rule.
2. The person or entity requesting the ERC certificate shall make an application on forms supplied by the District.
3. The application may be for reductions in one or more affected pollutants. The application shall contain sufficient information to allow for adequate evaluation of actual emission reductions.
4. Applicants may claim confidentiality for submitted information to the extent allowed and provided for

by provisions of the Federal Clean Air Act and the Administrative Procedures of the California Government Code.

5. To verify emission reductions claimed in conjunction with an application for an ERC certificate, the District may require source tests by California Air Resources Board and/or U.S. Environmental Protection Agency approved methods, continuous monitoring, production records, fuel use records, or any other appropriate means.

B. COMPLETE APPLICATION:

1. The Air Pollution Control Officer shall determine whether the application for ERC is complete not later than 30 days after receipt of the application for ERC, or after such longer time as both the applicant and the Air Pollution Control Officer have agreed in writing. If the Air Pollution Control Officer determines that the application is not complete, the applicant shall be notified in writing of the decision specifying the information required. If specified information is not submitted by the applicant within 60 days from the notification from the District that the application is incomplete, the application shall be automatically canceled unless the applicant has requested an extension of time, in writing and prior to the end of the 60 day period, from the Air Pollution Control Officer. The Air Pollution Control Officer may grant an extension of time not to exceed 90 days. If the application is for a shutdown or curtailment emission reduction credit, failure to provide the additional information or failure to request an extension of time shall result in those credits passing to the Priority Reserve Bank pursuant to Rule 525, PRIORITY RESERVE.
2. Upon receipt of any re-submittal of the application, a new 30-day period to determine completeness shall begin.
3. Completeness of an application or re-submitted application shall be evaluated on the basis of the information requirements set forth in District regulations (adopted pursuant to Article 3, Sections 65940 through 65944 of Chapter 4.5 of Division 1 of Title 7 of the California Government Code) as they exist on the date on which the application or re-submitted application was

received. The Air Pollution Control Officer may, during the processing of the application, request an applicant to clarify, amplify, correct, or otherwise supplement the information submitted in the application.

4. A fee shall be required pursuant to Rule 607, FEE SCHEDULES.
 5. For offsets provided in accordance with Health and Safety Code Sections 41605.5, 42314.5, and 41865 concerning emission reductions from open field burning, an ERC application covering the total emission reductions necessary to offset stationary source emissions may be submitted at the time of application for an Authority to Construct. Applications for ERC's from agricultural burning shall not be required if such emissions are covered by an ERC obtained by the stationary source utilizing such emission reductions.
 6. The applicant shall submit to the Air Pollution Control Officer records required pursuant to Section 524.5 A.
- C. **PRELIMINARY DECISION:** Except as provided in Section 524.1 C., following acceptance of an application as complete, the Air Pollution Control Officer shall perform the evaluations required to determine compliance with all applicable District rules and regulations and make a preliminary written decision as to whether the emission reductions should be certified as an ERC. The decision shall be supported by a succinct written analysis.
- D. **PUBLICATION AND PUBLIC COMMENT:** Except as provided in Section 524.1 C., within ten calendar days following a preliminary decision, the Air Pollution Control Officer shall publish, in at least one newspaper of general circulation in the District, a notice stating the preliminary decision of the Air Pollution Control Officer, noting how the pertinent information can be obtained, and inviting written public comment for a 30-day period following the date of publication.
- E. **PUBLIC INSPECTION:** Except as provided in Section 524.1 C., the Air Pollution Control Officer shall make available for public inspection at the Air Pollution Control District's office the information submitted by the applicant and the Air Pollution Control Officer's analysis no later than the date the notice of the preliminary decision is published, pursuant to Section 404. Information submitted which contains trade secrets

shall be handled in accordance with Section 6254.7 of the California Government Code and relevant sections of the California Administrative Code. Further, all such information shall be transmitted no later than the date of publication to the California Air Resources Board and the U.S. Environmental Protection Agency regional office, and to any party which requests such information.

F. CERTIFICATION, FINAL ACTION:

1. Within 180 days after acceptance of an application as complete, the Air Pollution Control Officer shall take final action on the application after considering all written comments.
2. Except as provided in Section 524.1 C., the Air Pollution Control Officer shall provide written notice of the final action to the applicant, the U.S. Environmental Protection Agency, and the California Air Resources Board, and shall publish such notice in a newspaper of general circulation and shall make the notice and all supporting documents available for public inspection at the District's office.

G. WITHDRAWAL OF APPLICATION: Withdrawal of an application for certification of an ERC by the applicant shall result in cancellation.

H. CALCULATION OF EMISSIONS, GENERAL: Calculations performed pursuant to procedures specified in this Section shall not conflict with the requirements of state law. The following procedures apply to the calculation of ERC's for all sources, with the exception of ERC's from the open burning of biomass:

1. Actual emission reductions from modifications to, or shutdowns of, existing emissions units shall be calculated for each calendar quarter by subtracting the proposed emissions from historical actual emissions. Any positive value shall qualify for conversion to an emission reduction credit.
2. Credits for particulate matter emission reductions shall be expressed in terms of PM10.
3. Credits for nitrogen oxides, reactive organic compounds, carbon monoxide, sulfur oxides and PM10 shall be quantified in terms of pounds of pollutants per quarter for each calendar quarter.

4. Actual emission reductions shall be adjusted to at least reflect emission rates achievable with reasonably available control technology (RACT) or best available retrofit control technology (BARCT), whichever results in the greatest adjustment.

I. **PRIORITY RESERVE ADJUSTMENT OF CALCULATED CREDITS:**
Before the Air Pollution Control Officer may issue a certificate of ownership for any ERC's, the emission reductions calculated in Section 524.4 H. shall be adjusted five percent (5%). This 5% emission reductions captured by the ERC adjustment shall pass to the Priority Reserve Bank pursuant to Rule 525, PRIORITY RESERVE.

J. **REGISTRATION:**

1. Following certification of emission reduction credits and verification that the proposed emission reductions have been implemented, the Air Pollution Control Officer shall issue an original ERC Certificate to the owner(s) by certified mail or in person. The issuance of an ERC certificate shall not constitute evidence of compliance with the rules and regulations of the District, or a representation or assurance to the recipient upon which reliance is authorized or intended that the ERC represented by the ERC certificate are available from the District ERC bank.
2. The ERC Certificate shall contain:
 - a. Certificate number, and
 - b. Date of issuance, and
 - c. Street address and Assessor Parcel Number (APN) of site creating the surplus emissions reductions for which the ERC Certificate is issued, and
 - d. Signature of the responsible District official, and
 - e. The name of the owner shall be typed on the certificate and the owner shall sign the certificate. If the owner is a public or private business entity, a person authorized to sign on behalf of the owner shall sign the certificate, and
 - f. Conditions of operation or use, including the life of the credit.

3. A copy of each ERC Certificate issued shall be maintained in the Bank Register.
4. Multiple owners of emission reduction credits shall be separated according to agreements, filed with the District, between the owners with one ERC Certificate issued to each owner for their respective portion.
5. Upon transfer of ERC's between parties, the transferor's ERC certificate, and a copy of an agreement, signed by the transferor, authorizing and memorializing the transfer of the ERC to the transferee must be surrendered to the Air Pollution Control Officer by the transferee, within 30 days of the date of the writing authorizing the transfer of the ERC's. Upon receipt and review of said documents the Air Pollution Control Officer shall issue a new ERC certificate in the name of the transferee. If fewer than all the transferor's ERC's are transferred, a new certificate shall be issued to the transferor showing the remaining ERC's. The District may refuse to recognize any transfer of ERC's that does not comply with the requirements of this section.
6. The original ERC Certificate surrendered by the registered owner shall be filed in the register and marked with the date of issuance of the new ERC Certificate(s), the number of credits transferred, and the new ERC Certificate number(s). If fewer than all ERC's are transferred, the new balance in the name of the original owner shall be entered in the register.
7. Prior to the issuance of a permit allowing the use of ERC's, the registered owner shall surrender the ERC Certificate to the Air Pollution Control Officer. The certificate surrendered by the owner shall be filed in the register and marked with the permit number, street address and APN of site of use, and the name of the owner using the ERC's. If a balance of ERC's remain, a new ERC Certificate shall be issued to the original owner and the original ERC Certificate shall be filed in accordance with the provisions of this rule.
8. Unless such records and information were previously submitted to the Air Pollution Control Officer, each ERC transaction must be accompanied by submittal of the information of Section 524.5 A.

K. ERC REGISTER:

1. The register shall contain the following information for each ERC Certificate issued by the Air Pollution Control Officer:
 - a. Certificate number, and
 - b. Date of issuance, and
 - c. Name and address of the registered owner, and
 - d. Street address and APN of site creating the surplus emissions reductions for which the ERC Certificate is issued, and
 - e. Number of ERC's registered.
2. Upon notice of a transfer of an ERC Certificate the Air Pollution Control Officer shall enter the following information in the register:
 - a. Original ERC Certificate number, and
 - b. New ERC Certificate number, or street address, APN, and permit numbers at which the ERC's are being used, and
 - c. Name and address of new owner(s), if any, and
 - d. Number of ERC's being transferred.
3. Upon use of the ERC's for offsets, the following information shall be entered in the register:
 - a. All information required in Section 524.4 K.2, and
 - b. Date ERC Certificate was surrendered to the Air Pollution Control Officer, and
 - c. Permit numbers to which ERC's are being applied, and
 - d. Name and address of ERC user, and
 - e. Name, if any, address, and APN of site where ERC's are being used as offsets, and
 - f. Number of ERC's being used for offsets.

- L. **MORATORIUM:** If the District Air Pollution Control Board determines, after review of periodic reports prepared by the Air Pollution Control Officer, that additional emission reductions are necessary, a moratorium on withdrawals may be imposed. Prior to imposing a moratorium, the Air Pollution Control Officer shall provide a notice of the date of the meeting of the District Air Pollution Control Board to consider issuance of a moratorium to owners of ERC and other interested parties. The moratorium shall be lifted upon determination that additional emission reductions are not necessary by the District Air Pollution Control Board. Except as provided in Section 524.2 A.2, after the issuance of an ERC Certificate, subsequent changes in regulations, except Regulation 5, shall not reduce or eliminate the deposit.

524.5 **MONITORING AND RECORDS**

A. **RECORDKEEPING:**

1. Cost of Offsets: Each applicant seeking to deposit, withdrawal, or transfer Emission Reduction Credits shall, as applicable, report to the District each emissions trading transaction; the amount of emissions for offsets purchased, by pollutant; the year the offset transaction occurred; and the total cost, by pollutant, of the offsets purchased, and other such information as may be required to perform the cost analysis required by Section 40709.5(e) of the California Health and Safety Code. This information shall be part of the public record.

ADOPTED: April 26, 1994

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EDC-APCD

RULE 524

17

RULE 525 PRIORITY RESERVE

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RULE 525

PRIORITY RESERVE

525.1 GENERAL

- A. **PURPOSE:** The Priority Reserve Bank is established within the Emission Reduction Bank for the following purposes:
1. Use in achieving the emissions reduction rate of progress requirements of the District Air Quality Attainment Plan or State Implementation Plan; and
 2. Use in mitigating emission increases by stationary sources, represented by permit applications for new or modified permits, in the period of July 1, 1991, through January 1, 1993, and the period of January 1, 1993, through April 26, 1994, to the extent mitigation was required by law and was not obtained under the adopted District Rules and Regulations; and
 3. Use in providing loans of emission reductions for use as offsets for new or modified stationary sources that are essential public services.
- B. **APPLICABILITY:** Emission reduction loans from the Priority Reserve shall be made to the extent that banked emission reductions are available and the transfer is allowed pursuant to Section 525.3 D., to publicly owned or non-profit essential public services. The applicant must have secured all potential offsets available by modifying emission units at the same stationary source. Disbursement of emission reduction loans shall not be provided for on-site power generation. Disbursement of emission reduction loans shall not be provided for emissions units not necessary to provide or maintain public health and safety. Disbursement of emission reduction loans must be made with banked emission reductions that are surplus to mandated reductions - the emission reductions required to meet rate of progress plan commitments and to mitigate emission increases occurring prior to April 26, 1994.

525.2 **DEFINITIONS:** Unless otherwise defined below, the terms used in this rule are defined in Rule 523, NEW SOURCE REVIEW, and Rule 524, EMISSIONS REDUCTION CREDITS.

- A. **CLEANUP OPERATION** - Operation to remove environmental contaminants from soil or water.

B. **ESSENTIAL PUBLIC SERVICES** - Except as provided in Section 525.1 B., the following sources shall be considered essential public services.

1. Sewage treatment operations which are publicly owned and operated consistent with the approved General Plan; or
2. Prison, jail, correctional facility; or
3. Police or fire fighting facility; or
4. School or hospital; or
5. Landfill gas control or processing systems; or
6. Water delivery operations which are publicly owned and operated consistent with the approved General Plan; or
7. Cleanup or remediation operations mandated by Regional Water Quality Control Board, California Department of Health Services, Environmental Protection Agency or any other state or federal law, rule or regulation.

C. **PRIORITY RESERVE BANK** - A depository of emission reductions used by the District toward achieving mandated emission reductions or for loans to applicable essential public services for use as offsets pursuant to Rule 523, NEW SOURCE REVIEW.

D. **QUARTERLY** - Calendar quarter beginning in January, April, July, and October.

525.3 STANDARDS

A. **CRITERIA:** The Priority Reserve Bank shall be supported by actual emission reductions which are certified as emission reduction credits (ERC) pursuant to Rule 524, EMISSION REDUCTION CREDITS.

B. **PRIORITY RESERVE BANK:** Support for the Priority Reserve Bank shall include, but not be limited to:

1. The adjustment on all emission reductions in accordance with Rule 524, EMISSION REDUCTION CREDITS.

2. Shutdowns or modifications of stationary sources or emission units not claimed for emission credits by the facility as provided in Rule 524, EMISSION REDUCTION CREDITS.

C. **ALLOCATION FOR ESSENTIAL PUBLIC SERVICES:** On or before December 31st of each year, the Air Pollution Control Officer shall determine the amount of emission reductions from the Priority Reserve Bank to be made available for withdrawal and application to essential public services for the upcoming year. Additional emission reductions not included in the yearly determination may be added, if the Air Pollution Control Officer determines there is a need, to the previously established quarterly allocations. Allocated emissions reductions shall be made available on the first Wednesday of each calendar quarter. The amount available shall never exceed the emission reductions in the Priority Reserve Bank. The Air Pollution Control Officer may reserve a portion or all of the available emission reductions in the Priority Reserve Bank to meet mandated emission reduction requirements. In the event the Priority Reserve Bank lacks sufficient emission reduction credits to offset emission increases for eligible stationary sources or emission units, or such emissions have not been allocated, the owner or operator of the new or modified stationary source or emission unit shall be responsible for obtaining the offsets required.

D. **DISBURSEMENT:** A loan of emission reductions from the Priority Reserve Bank shall be based upon issuance of a final action on an Authority to Construct, pursuant to Rule 523, NEW SOURCE REVIEW, and no later than 15 days following the end of the calendar quarter or other schedule deemed applicable by the Air Pollution Control Officer.

1. Legal Title to the emission reductions borrowed from the Priority Reserve Bank remains with the District. An ERC certificate of ownership will not be issued for emission reductions loaned from the Priority Reserve Bank.
2. A borrower of emission reductions from the Priority Reserve Bank will be issued an ERC Bank account number and the borrowed emission reductions will be credited to that account.
3. Upon application by the borrower for an authority to construct and permit to operate the emission reductions in the borrower's account will be

credited to the permit.

4. The District will enter the permit number and the amount of emission reductions credited from the borrower's account on the permit and in the borrower's account history.
 5. Disbursement of emission reductions from source shutdowns and curtailments shall be in accordance with the most current U.S. Environmental Protection Agency emissions trading policy and applicable federal regulations.
- E. **PRIORITY RESERVE PRIORITIZATION:** Priority shall be given to mandated emission reductions, the emission reductions required to meet rate of progress plan commitments and to mitigate emission increases occurring prior to **April 26, 1994**. To the extent surplus emission reductions are available, priority for essential public services shall be given to applications to the Priority Reserve Bank with the earliest date an application is deemed complete. The District Air Pollution Control Board may determine that a specific project shall be given priority for access to the Priority Reserve based on public health or safety, regardless of the application submittal date.
- F. **RESERVING PRIORITY RESERVE CREDITS:** Sources may, if the Air Pollution Control Officer determines a need, reserve Priority Reserve credits for up to three years to allow multi-year projects to be planned. The sum of such credits shall amount to no more than 25 percent of each calendar quarter allocation for the Priority Reserve for those three years.
- G. **UNUSED CREDITS:** During any calendar quarter for which there are fewer requests for emission credits in the Priority Reserve Bank than are available for the calendar quarter allocation, the credits not allocated shall be made available for use the following calendar quarter.
- H. **TRANSFERS:** Priority Reserve Bank credits shall not be transferable from one person to another.
- I. **RETURNS:** Emission reductions shall be returned in full from the borrower's account to the Priority Reserve Bank under any of the following conditions:
1. Construction is not complete within two years of date of issuance of the loan.

2. Voluntary surrender or revocation of an Authority to Construct or Permit to Operate.
 3. Emission reduction credits are issued to the stationary source pursuant to Rule 524, EMISSION REDUCTION CREDITS.
- J. **MORATORIUM:** Except as provided in Section 525.3 I., a loan of emission reduction credits shall exist for the life of the emissions unit using such credits. If the District Air Pollution Control Board determines that additional emission reductions are necessary, a moratorium on loans may be imposed. Prior to issuing a moratorium, the Air Pollution Control Officer shall provide a notice of the date of the meeting of the District Air Pollution Control Board to consider such actions. The moratorium shall be lifted upon determination that additional emission reductions are not necessary by the District Air Pollution Control Board.

525.4 ADMINISTRATIVE REQUIREMENTS

- A. **CALCULATION PROCEDURES:** Emission reductions deposited in the Priority Reserve Bank shall be quantified pursuant to calculation procedures specified in Rule 524, EMISSION REDUCTION CREDITS.
- B. **EMISSION REDUCTION CREDITS:** Any stationary source which holds Emission Reduction Credits for the affected pollutant requested in this application or requested in prior applications, must first use these to replenish credits previously obtained or for the pending application, prior to being allowed access to the Priority Reserve Bank.

525.5 MONITORING AND RECORDS

A. RECORDKEEPING

1. Each stationary source shall maintain a cumulative total of emission credits obtained from the Priority Reserve Bank.
2. The District shall maintain records of the source and amount of emission reductions obtained for deposit in the Priority Reserve Bank, and transfers of these credits to applicants and to satisfy mandated emission reduction measures.

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ADOPTED: April 26, 1994

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RULE 525

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EL DORADO COUNTY AIR QUALITY MANAGEMENT DISTRICT

(Revised 8/25/20)

RULE 1000 - EMISSION STATEMENT

The owner or operator of any source operation which emits or may emit oxides of nitrogen or reactive organic gas shall annually provide the APCO with a written statement, in such form as the APCO prescribes, showing actual emissions of oxides of nitrogen and reactive organic gas from that source or operational data allowing the District to calculate actual emissions.

Emissions calculations shall be based on emission factors acceptable to the APCO, the ARB, and the U.S. EPA. The statement shall contain emissions for the time period specified by the APCO. The statement shall also contain a certification by a responsible official of the company that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. The first statement will cover 1992 emissions and shall be submitted to the district by June 1993. Statements shall be submitted annually thereafter.

EL DORADO COUNTY AIR QUALITY MANAGEMENT DISTRICT

(Revised: 8/25/20)

RULE 1000.1 - EMISSION STATEMENT WAIVER

The APCO may waive Rule 1000 requirements to any class or category of stationary sources which emit less than 25 tons per year of oxides of nitrogen or reactive organic gas if the district provides the Air Resources Board with an emission inventory of sources emitting nitrogen oxides or reactive organic gas based on the use of emission factors acceptable to the APCO, the ARB, and the U.S. EPA.

**EL DORADO COUNTY
AIR QUALITY MANAGEMENT DISTRICT**

Ozone Emergency Episode Plan

**PREPARED IN COMPLIANCE WITH
THE FEDERAL CLEAN AIR ACT**

Adopted January 12, 2016

Purpose

This Ozone Emergency Episode Plan (Plan) contains actions to prevent ambient ozone from reaching potential public health endangerment concentrations and reduce such concentrations. It identifies emergency episode levels, public announcement components, and emission control strategies. El Dorado County (EDC) is classified as non-attainment for the 2008 federal ozone 8-hour average standard¹. Because EDC experienced more than one day with a maximum hourly ozone concentration greater than 0.10 ppm during the 2011/2012 period, the EDC Air Quality Management District (AQMD) is required to prepare this Plan.

Table 1 shows the number of days exceeding the 0.10 ppm threshold at EDC ozone monitoring sites from 2011 through 2014. During that period, the maximum ozone 1-hour concentration was 0.117 ppm. From 2013 to 2014, there were only two days in which the maximum hourly concentration exceeded 0.10 ppm. Both exceedances occurred at the Placerville site. As ozone concentrations continue to decline statewide, the likelihood of ever reaching the significant harm level (0.6 ppm) is very low.

Table 1
Number of Days with Maximum 1-hour Concentration Greater than 0.10 ppm*
at EDC Ozone Monitoring Sites

		2011**	2012**	2013**	2014***
Cool – Highway 193	# of Days	12	5	0	0
	Max Conc.	0.108	0.117	0.092	0.094
Echo Summit	# of Days	1	0	0	0
	Max Conc.	0.108	0.084	0.082	0.081
Placerville – Gold Nugget Way	# of Days	2	6	1	1
	Max Conc.	0.103	0.108	0.097	0.104

*Values were rounded to 2 decimal places before comparing with 0.10 ppm to determine the number of exceedance days

** Official data obtained from ARB's Aerometric Data Analysis & Management (iADAM)

<http://www.arb.ca.gov/adam/select8/sc8start.php>

***Preliminary unofficial data downloaded from ARB's Air Quality and Meteorological Information System (AQMIS2)

<http://www.arb.ca.gov/aqmis2/aqdselect.php?tab=daily>

Legal Authority

The Federal Clean Air Act (CAA)² gives the U.S. Environmental Protection Agency (U.S. EPA) authority to halt air pollutant emissions causing or contributing to public or welfare injury. The U.S. EPA is authorized to bring a lawsuit in federal court or issue such orders necessary to protect public health, welfare, or the environment. Pursuant to California Health & Safety Code (H&SC)³, this authority is vested in the California Air Resources Board (ARB) and local air districts. This requirement applies to a range of emissions violations.

¹ Portions of Sacramento Valley and Mountain Counties Air Basins in EDC are classified as Ozone Nonattainment area.

² Federal Clean Air Act Section 110(a)(2)(G)

³ California Health & Safety Code Section 42400 et seq.

The ARB is responsible for controlling mobile source emissions. Districts are responsible for controlling non-mobile source emissions. H&SC Section 41700 states sources are prohibited from emitting any pollutant(s) potentially causing public injury, detriment, nuisance or annoyance, or that endanger the public's comfort, repose, health or safety. H&SC Section 42450, et seq., gives districts authority to abate emissions from sources violating H&SC Section 41700 or any other order, rule, or regulation prohibiting or limiting pollutant discharge. Under H&SC Section 41509, the ARB or other local agency rules cannot infringe upon a district's authority to declare, prohibit, or abate a nuisance. The California's Attorney General is authorized to enjoin any pollution discharge or nuisance.

Pursuant to the California Emergency Services Act⁴, air districts can work with a local governing body, to proclaim a local emergency when air pollution presents conditions of disaster or extreme peril to the safety of persons and property within the territorial limits of the governing body's jurisdiction⁵. When a local emergency is declared, local jurisdictions shall implement their emergency plans and take actions to mitigate or reduce the threat. Actions may include emergency response personnel deployment, emergency operation center activation and public protection order issuance. Through a local emergency declaration, air districts may obtain local agency aid to accomplish ambient ozone concentration reduction actions.

Requirement of a Plan for the Prevention of Air Pollution Emergency Episodes

Under the Code of Federal Regulations (CFR)⁶, areas that do not attain federal ozone standards, and have 1-hour ozone concentrations above 0.10 parts per million (ppm), are required to develop a Plan. The Plan must include actions necessary to prevent all jurisdictional ambient two hour average ozone concentrations from reaching "significant harm level" of 0.6 ppm. The ozone pollution episode trigger levels are:

- Alert level 0.2 ppm
- Warning level 0.35ppm
- Emergency level 0.5 ppm⁷

Response actions to be taken when ozone concentrations reach the triggers levels are identified. Response actions provide rapid short-term emission reductions, to prevent reaching the 0.6 ppm significant harm level. The AQMD commits to implementing the proposed actions associated with each episode identified in this Plan. Plan implementation shall prevent the ambient ozone concentration from reaching the harmful level at 0.60 ppm.

⁴ California Emergency Services Act, California Government Code Section 8550-8668

⁵ California Government Code Section 8558 (c).

⁶ 40 CFR 51.150 and 51.151

⁷ 40 CFR 51 .150

Ozone Precursor Emissions

Ozone is created by the reaction of precursors Reactive Organic Gasses (ROG) and Nitrogen Oxides (NOx) in sunlight. Ozone emergency episode plans adopted by other jurisdictions require permitted facilities that emit large amounts of ozone precursors to prepare industrial abatement plans (IAP). IAPs contain actions necessary to rapidly reduce that facility's ozone precursor emissions when an episode level is triggered. The lowest threshold for requiring an IAP is 50 tons per year for both ROG and NOx⁸. Table 2 shows the three highest EDC facilities with emissions of ROG and NOx within EDC⁹. There are currently no facilities exceeding emission thresholds.

Table 2
Highest EDC Ozone Precursor (ROG and NOx) Emitting Facilities

ROG Emissions					
Facility	Facility ID	Air Basin	Area	Facility SIC	Tons/Year
Union Mine Landfill	28	Mountain Counties	El Dorado	4953	4.21
Tahoe Asphalt	3	Lake Tahoe	South Lake Tahoe	2951	0.061
DST Output	30	Mountain Counties	El Dorado Hills	2761	0.035
NOx Emissions					
Facility	Facility ID	Air Basin	Area	Facility SIC	Tons/Year
Union Mine Landfill	28	Mountain Counties	El Dorado	4953	2.13
DST Output	30	Mountain Counties	El Dorado Hills	2761	0.814
Tahoe Asphalt	3	Lake Tahoe	South Lake Tahoe	2951	0.34

If AQMD does permit a facility with actual ozone precursor emissions of 50 tons or more per year, the following actions will be taken:

- a) Initiate the development process for a rule that establishes IAP criteria (referred by 40 CFR 51 Appendix L) that will rapidly reduce facility ozone precursor emissions;
- b) Adopt an IAP rule within 90 days; and
- c) Request subject facilities submit IAP to AQMD for review and approval within 90 days of rule effective date.

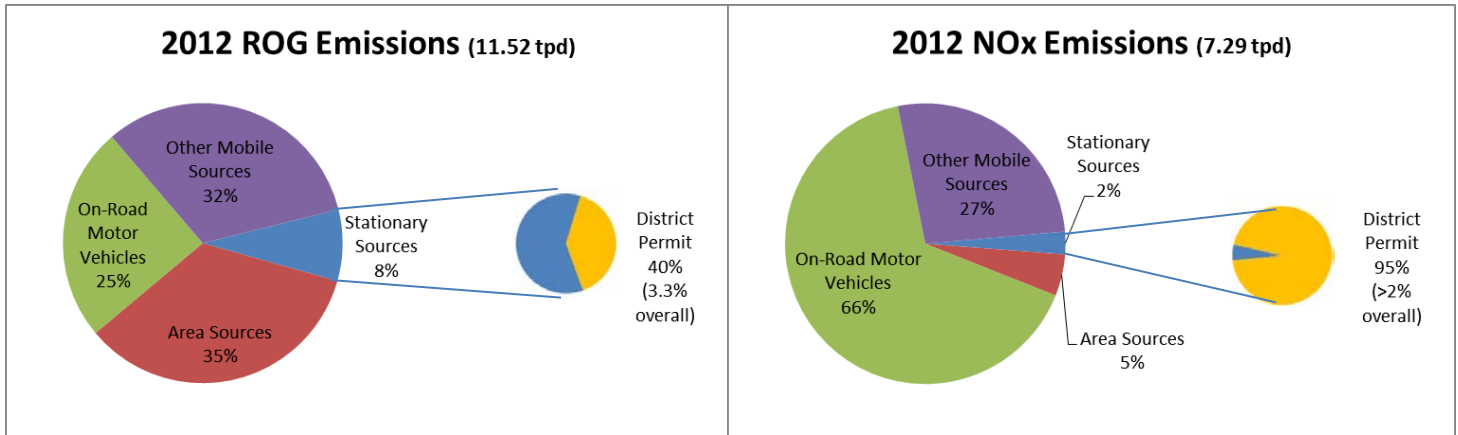
Permitted facilities comprise a very small portion of the ROG and NOx countywide emission inventories. Figure 1 presents the 2012¹⁰ reactive organic gases (ROG) and nitrogen oxides (NOx) emission inventories in EDC.

⁸ SMAQMD Rule 701

⁹ ARB online facility search engine <http://www.arb.ca.gov/app/emsinv/facinfo/facinfo.php>

¹⁰ ARB Emission Almanac (published in 2013)

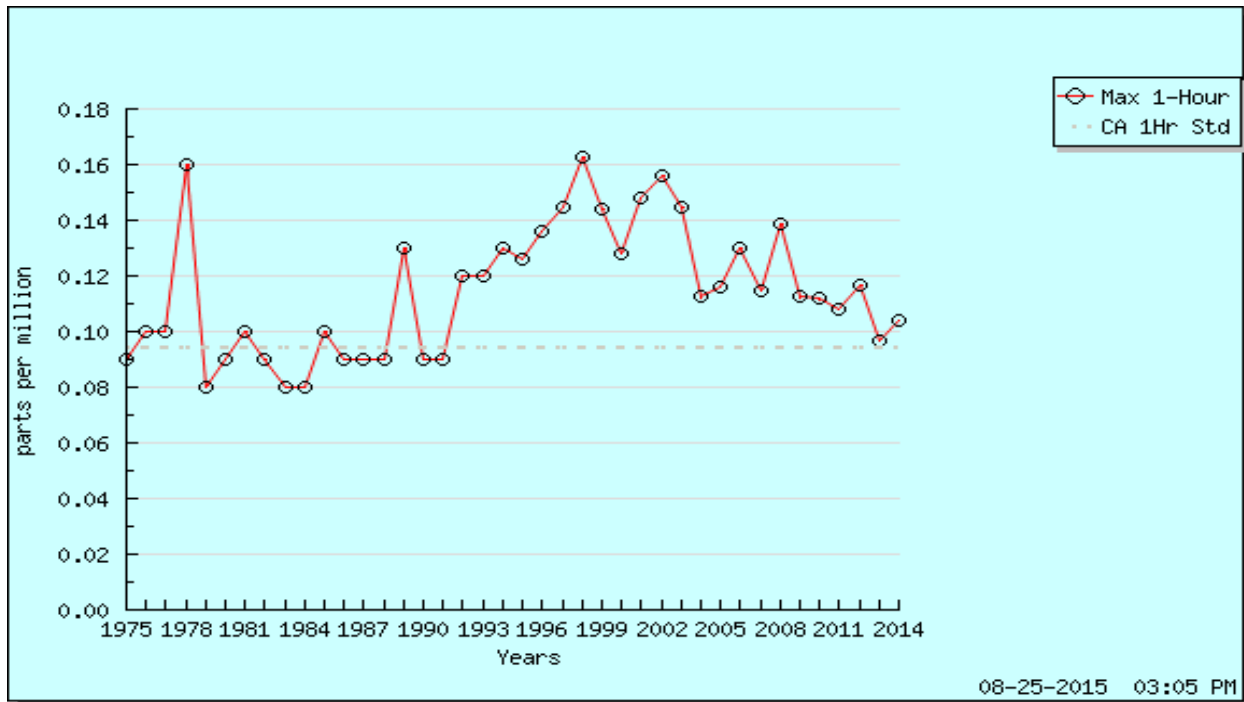
Figure 1
EDC 2012 Emission Inventory*



*This is the latest complete emissions inventory from ARB. District Permit emissions are from AQMD's permit database.

As depicted in Figure 1, EDC stationary sources produce only 8% of ROG emissions and 2% of NOx emissions. Of the total stationary source emissions, 40% of ROG emissions and 95% of NOx emissions are from permitted sources. Therefore, permitted sources produce only approximately 3% of ROG emissions and 2% of NOx emissions countywide. The major ozone precursor contributors are mobile sources and unpermitted area and stationary sources. Unusually high ozone precursor emissions from numerous additional sources outside EDC could raise concentrations to the Alert level and initiate ozone emergency episode plan implementation.

Figure 2
Annual Maximum 1-hour Ozone Concentration in EDC since 1975



*Data downloaded from ARB ADAM on 8/25/15

Figure 2 indicates the 0.2 ppm 1-hour ozone level has not been reached in EDC since monitoring began in 1975. The trend shows a generally consistent decrease since 1998. EDC ozone concentrations have substantially reduced by the implementation of regional control regulations and programs. Western EDC is in the Sacramento Federal Ozone Nonattainment Area (SFONA). The SFONA is designated as nonattainment for the federal 8-hour ozone standards. Two SFONA ozone State Implementation Plans (SIP) have been developed to identify ozone precursor emission control strategies for mobile and non-mobile sources. Based on SIP commitments, AQMD adopted or amended rules and developed programs to progress towards attaining the standards. The SFONA air districts continue to develop control strategies to achieve attainment. The current (2015) federal ozone eight-hour average standard is 0.070 ppm. Development and implementation of control regulations to achieve the standard will continually reduce one-hour maximum ozone concentrations ensuring trigger levels are not reached.

AQMD regulates open burning, including residential, land development, fire hazard reduction, vegetation management, prescribed fire, and agricultural¹¹. For both the Mountain Counties and Lake Tahoe Air Basins, AQMD works cooperatively with the ARB and CalFire to disseminate daily burn day information. Proactive burn program implementation through no burn day patrol, 24 hour complaint response, and a first time violators training program minimize emissions during periods of atmospheric conditions conducive to high ozone levels.

AQMD contributes funding to the regional “Spare the Air” program, managed by the Sacramento Metropolitan Air Quality Management District. Spare the Air is an air quality forecasting and reporting program providing daily public notifications. Notifications are based on regional ozone and particulate matter concentrations. Advisories include an episodic ozone reduction element, during the summer ozone season. The program protects public health by informing the public of unhealthy air quality and encouraging them to minimize vehicle trips to reduce emissions. The notifications are based on ozone concentration measurements from all SFONA monitoring stations and meteorological forecasts the national weather service advisories and local agencies. When atmospheric stagnation conditions are forecasted, the public is notified through email, text, or the media, that a Spare the Air Day is issued. AQMD’s participation in the Sacramento regional Spare the Air program will promote the acquisition of forecasts of the atmospheric stagnation conditions as frequently as they are issued, pursuant to the CFR requirements¹².

¹¹ AQMD Rule 300

¹² 40 CFR 51.152 “Contingency Plans”¹³ EDC Ordinance Code Article 2.21.080 Emergency Organization and Functions

Ozone Episodes

The one hour ozone episode trigger levels are shown in Table 3.

Table 3
Ozone Episode Trigger Levels

	Alert, Stage 1	Warning, Stage 2	Emergency, Stage 3
Ozone (1-hour average)	0.20 ppm	0.35 ppm	0.50 ppm

Ozone Monitoring

AQMD staff do not operate ozone monitors. Staff monitor ozone levels with the Spare the Air program notifications and CARB's Air Quality and Meteorological Information System.

Episode Declaration

Whenever the ozone 1-hour concentration, measured at any of the EDC monitoring sites, reaches an episode trigger level, AQMD shall declare an episode stage to be in effect in EDC. If an episode stage is declared, AQMD shall notify the following:

1. EDC Board of Supervisors/OES Director
2. All Sacramento region and Mountain Counties Air Basin air districts,
3. California Air Resources Board,
4. EDC Chief Administrative Officer,
5. Chief executive officers of the EDC incorporated municipalities,
6. Sheriff, Police and Fire chiefs,
7. EDC Health Officer,
8. Local Hospitals
9. EDC Office of Emergency Services
10. EDC Office of Education and private school principals,
11. Major regional newspapers, television and radio stations,
12. Sacramento Regional Spare the Air Program,
13. AQMD permitted facilities, and
14. Any other entities as deemed appropriate by the APCO,

The AQMD shall periodically review and update this notification list (List). Emergency episode notifications shall include:

- Predicted and/or current episode level data and trigger levels,
- The duration anticipated,
- The affected area geographic boundaries anticipated,
- An air quality health significance statement, and
- The voluntary or mandatory control actions proposed for each episode level.

Episode Actions:

The actions identified for each trigger level include:

- Public notification,
- Activity cessation,
- Ozone precursor emission reductions, and
- IAP implementation.

These actions are to:

- Provide the public with recommendations to minimize their ozone exposure, and
- Rapidly reduce precursor emissions to lower ozone concentrations below trigger levels.

If ever an ozone episode is declared, AQMD shall implement the following:

1. Alert Episode, Stage 1:

- a) Prepare the emergency episode notification, including a request to the public to curtail any unnecessary motor vehicle operation;
- b) Notify the entities identified in the List of the alert episode declaration;
- c) Advise the EDC Office of Education Superintendent to contact and coordinate with public and private schools, to suspend students' strenuous activities;
- d) Notify the news media to broadcast the appropriate warning to the public, in cooperation with the EDC Office of Emergency Services (OES) and the County Health Officer;
- e) Request facilities with approved IAPs implement those plans and recommend employees refrain from operating vehicles until episode termination;
- f) Conduct on-site inspection of IAP facilities to ascertain compliance with applicable IAP emission control action requirements; and
- g) Prohibit all open burning including agricultural waste and incineration

2. Warning Episode, Stage 2: In addition to the Alert Episode actions, the following actions should be implemented in a Warning episode.

- a) Request Listed entities, within the scope of their authority:
 - i. Prohibit all types of open burning;
 - ii. Close non-essential facilities, except emergency facilities and those necessary to protect public safety, national security or national defense; and
 - iii. Request that employees of closed non-essential public agency facilities refrain from using vehicles.
- b) Request closure of all EDC public and private schools, colleges, and universities;
- c) Conduct on-site inspection of major source (25 tpy ozone precursor) permitted facilities to ascertain the accomplishment of applicable emission control actions.
- d) Request subject facilities to close in accordance with approved IAPs;
- e) Request closed facility employers refrain from vehicle use until episode termination;

- f) Request the suspension of all indoor and outdoor events at parks or recreational facilities open to the public;
 - g) Request the suspension of all athletic events, including boating and off-road recreational vehicle usage; and
 - h) Request that the EDC Board of Supervisors and Health Officer consider declaring a local emergency for air pollution¹³, and implement emergency control measures, pursuant to the California Emergency Services Act.
3. Emergency Episode, Stage 3: In addition to the Alert and Warning Episode actions, the following will be implemented:
- a) Request that the OES Director/Board of Supervisors Chair declare a local emergency for air pollution and initiate the emergency operations plan;
 - b) Request the media broadcast that a local emergency exists due to high ozone concentrations;
 - c) Through the EDC OES, conduct the following actions:
 - i. Close all government facilities which are not immediately necessary for public health and safety, national security or national defense;
 - ii. Close all recreational and non-emergency commercial and industrial facilities;
 - iii. Request implementation of carpooling and the use of mass transportation; and
 - iv. Request that the public use only mass transit.
 - d) Close principal streets, as deemed necessary by the OES Director, Health Officer, APCO, and local law enforcement agencies, to protect public health and welfare; and
 - e) Request OES engage with the State agency for necessary actions pursuant to the California Emergency Services Act, which includes prohibiting the use of all motor vehicles except for emergencies, or any other action deemed warranted.

Episode Termination

The AQMD shall declare an episode terminated when the one-hour ozone concentration measurements from all EDC monitoring sites fall below the Alert level and meteorological data indicates concentrations will continue decreasing. Upon episode termination declaration, AQMD shall notify all entities listed above.

Interdistrict Coordination

Should the Air Pollution Control Officer (APCO) of a district within the Sacramento Valley nonattainment area, or adjacent to the El Dorado Air Quality Management District declare a stage 1, 2, or 3 episode within that district and request assistance, the APCO of AQMD shall take action to make a determination as to the significance of sources within the district and notify the adjacent district of any action being taken to reduce pollutants.

¹³ EDC Ordinance Code Article 2.21.080 Emergency Organization and Functions