

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 1. TITLE**

(Effective 1/1/69, Rev. Adopted & Effective 5/15/96)

These rules and regulations shall be known as the Rules and Regulations of the Air Pollution Control District of San Diego County.

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~~REGULATION I GENERAL PROVISIONS (Effective 1/1/69, Rev. Adopted & Effective 5/15/96; Rev. Adopted & Effective 5/21/97; Rev. Adopted & Effective 6/30/99)~~

~~RULE 1. TITLE~~

~~These rules and regulations shall be known as the Rules and Regulations of the Air Pollution Control District of San Diego County~~

**RULE 2. DEFINITIONS** (Rev. Adopted & Effective 5/15/96)  
(Rev. Adopted & Effective 6/30/99)  
(Table 1-Exempt Compounds: Rev. Effective 11/04/09)

(a) **APPLICABILITY**

(1) The definitions listed in Section (b) of this rule shall be applicable to all Rules and Regulations of the Air Pollution Control District of San Diego County, unless the same term is specifically defined in any other applicable Rule or Regulation.

(2) Except as otherwise specifically provided in these Rules or where the context otherwise indicates, words used in these Rules are used in exactly the same sense as the same words are used in Division 26 of the Health and Safety Code.

(b) **DEFINITIONS**

(1) **"12-Month Period"** means any 12 consecutive calendar months.

(2) **"Abrasive Blasting Cabinet"** means an enclosure used to contain abrasive media and which can only be entered through ports for gloved arms and hands when abrasive blasting is conducted.

(3) **"Air Contaminant" or "Air Pollutant"** means any substance discharged, released, or otherwise propagated into the atmosphere and includes, but is not limited to, any of the following: volatile organic compounds, exempt compounds, oxides of nitrogen, particulate matter, gaseous sulfur compounds, carbon monoxide, toxic air contaminants, smoke, dust, soot, carbon, noxious acids and gases, fumes, odors, or any combination thereof.

(4) **"Air Pollution Control Board of San Diego County"** is a board whose members are the Supervisors of the County of San Diego.

(5) **"Air Pollution Control Officer (APCO)"** means the Air Pollution Control Officer of the San Diego County Air Pollution Control District.

(6) **"Application Station"** means a booth, a room, a designated area, a location, or a location on a process line where, at any given time, a material is applied.

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(7) **"Atmosphere"** means the air that 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 emissions into the atmosphere.

(8) **"Calendar Day"** means the 24-hour period starting at 12 midnight and continuing through to the subsequent 12-midnight hour.

(9) **"Calendar Quarter"** means 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.

(10) **"Calendar Year"** means the consecutive 12-month period beginning January 1 and ending December 31.

(11) **"California Coastal Waters "** means the area described in California Government Code Section 170. The area of water lying west of the San Diego County coastline and bounded by the following line, excluding the islands of Santa Barbara, San Clemente, San Nicolas, and Santa Catalina and the area within three miles from each of the islands' coastlines, generally describes the California Coastal Waters off San Diego County:

(i) Beginning at the intersection of the coastline and the San Diego-Orange County boundary, N 33° 23' 10", W 117° 35' 40";

(ii) thence southwesterly to N 33° 20' 10", W 117° 37' 00";

(iii) thence southeasterly to N 32° 53' 30", W 117° 18' 30";

(iv) thence southwesterly, southerly, southeasterly, southerly, easterly and northeasterly to N 32° 37' 30", W 117° 11' 40";

(v) thence southerly to N 32° 31' 30", W 117° 10' 20";

(vi) thence easterly to N 32° 32' 00", W 117° 07' 30", which is the intersection of the coastline and the United States-Mexico International boundary.

(12) **"Combustion Particulates"** means particulate matter discharged into the atmosphere from the burning of any kind of material containing carbon in a free or combined state.

(13) **"Combustible Refuse"** means any solid or liquid combustible waste material containing carbon in a free or combined state.

(14) **"Contiguous Property"** means two or more parcels of land with a common boundary or separated solely by a public or private roadway or other public or private right-of-way. Non-adjoining parcels of land which are connected by a process line, conveyors,

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or other equipment shall be considered to be contiguous property. Non-adjoining parcels of land separated by bodies of water designated "navigable" by the U.S. Coast Guard, shall not be considered contiguous properties.

(15) **"Control Equipment"** means an air pollution control device which reduces or eliminates the release of a specified air contaminant to the atmosphere.

(16) **"Desert Portion"** means that part of San Diego County, State of California, lying east of the following described line:

(i) Beginning at the United States-Mexico International boundary and running north along the range line common to Range 7 East and Range 6 East (San Bernardino Base and Meridian); to the point of intersection with the township line common to Township 16 South and Township 17 South;

(ii) thence east along the township line common to Township 16 South and Township 17 South to the point of intersection with the range line common to Range 7 East and Range 6 East;

(iii) thence north along the range line common to Range 7 East and Range 6 East to the point of intersection with the township line common to Township 16 South and Township 17 South;

(iv) thence west along the township line common to Township 16 South and Township 17 South to the point of intersection with the range line common to Range 6 East and Range 5 East;

(v) thence north along the range line common to Range 6 East and Range 5 East to the point of intersection with the township line common to Township 14 South and Township 15 South;

(vi) thence west along the township line common to Township 14 South and Township 15 South to the point of intersection with the boundary of the Rancho Cuyamaca Land Grant;

(vii) thence north along the east boundary of the Rancho Cuyamaca Land Grant to the point of intersection with the range line common to Range 5 East and Range 4 East;

(viii) thence north along the range line common to Range 5 East and Range 4 East to the point of intersection with the south boundary of the Rancho San Felipe Land Grant;

(ix) thence beginning east and continuing along the land grant boundary to the point of intersection with the range line common to Range 5 East and Range 4 East;

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(x) thence north along the range line common to Range 5 East and Range 4 East to the point of intersection with the township line common to Township 10 South and Township 9 South;

(xi) thence west along the township line common to Township 10 South and Township 9 South to the point of intersection with the range line common to Range 4 East and Range 3 East;

(xii) thence north along the range line common to Range 4 East and Range 3 East to the San Diego-Riverside County boundary.

(17) **"District"** means the San Diego County Air Pollution Control District.

(18) **"Dust"** means minute solid particles released into the air by natural forces or by mechanical processes including, but not limited to: crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, and sweeping.

(19) **"Eastern Section of the Air Pollution Control District of San Diego County"** means all of that portion of San Diego County, State of California, lying east of the line described in Subsections (53)(i) through (53)(v) of this rule.

(20) **"Emission Unit"** means any article, machine, equipment, contrivance, process, or process line which emit(s) or reduce(s), or may emit or reduce, the emissions of any air contaminant, except motor vehicles.

(21) **"Exempt Compounds"** means any compound listed in Table 1.

The Air Pollution Control Officer may revise Table 1 upon the Environmental Protection Agency (EPA) decision to add new negligibly photochemically reactive compounds duly noticed in the Federal Register and codified in Part 51 of Title 40 of the Code of Federal Regulations (CFR). Such a revision may not be made earlier than 30 days after public notice of the proposed revision is published in a newspaper of general circulation in the District, after consideration of any comments received thereupon and after consultation with the California Air Resources Board (ARB). The revised list of exempt compounds will subsequently be included in Table 1 of this rule.

(22) **"Facility"** means the same as stationary source.

(23) **"Hearing Board"** means the Hearing Board of the San Diego County Air Pollution Control District.

(24) **"ISO Standard Day Conditions"** means atmospheric conditions at a temperature of 59°F (15°C), 60 percent relative humidity, and an atmospheric pressure of 14.70 pounds per square inch, absolute (760 mm Hg).

(25) **"Low-Solids Stain"** means a stain containing one pound of solids per gallon, or less. The VOC content of such stains shall be calculated on a "VOC Content per Volume of Material" basis as defined in Subsection (b)(52).

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(26) **"Major Stationary Source"** means a stationary source which has or will have, after issuance of a permit, an aggregate potential to emit one or more air contaminants in amounts equal to or greater than any of the following emission rates:

<u>Air Contaminant</u>	<u>Emission Rate</u> <u>(tons/year)</u>
Particulate Matter (PM <sub>10</sub> )	100
Oxides of Nitrogen(NO <sub>x</sub> )	50
Volatile Organic Compounds (VOC)	50
Oxides of Sulfur (SO <sub>x</sub> )	100
Carbon Monoxide (CO)	100
Lead (Pb)	100

(27) **"Military Tactical Support Equipment"** means any equipment owned by the U.S. Department of Defense or the National Guard and used in combat, combat support, combat service support, tactical or relief operations, or training for such operations.

(28) **"Motor Vehicle"** means a vehicle which is self-propelled.

(29) **"Multiple-Chamber Incinerator"** means any article machine, equipment, contrivance, structure or part of 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 and employing adequate design parameters necessary for maximum combustion of the material to be burned. The refractories shall have a Pyrometric Cone Equivalent of at least 17 when tested according to ASTM Method C-24.

(30) **"Non-Desert Portion"** means all of that portion of San Diego County, State of California, lying west of the line described in Subsections (15)(i) through (15)(xii).

(31) **"NO<sub>x</sub>"** means the sum of all oxides of nitrogen, except for nitrous oxide, collectively expressed as nitrogen dioxide.

(32) **"Orchard or Citrus Grove Heater"** means any article, machine, bowl burner or contrivance, which is designed for, used, maintained or capable of being used for burning any kind of fuel for frost protection of orchards, citrus groves or plant nurseries in areas that are not completely enclosed.

(33) **"Particulate Matter"** means any finely divided material which exists as a solid or liquid at standard conditions, excluding uncombined water.

(34) **"PM<sub>2.5</sub>"** means suspended fine particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (microns). For non-fugitive emissions, test methods specified in 40 CFR 50, Appendix L, shall be used to measure PM<sub>2.5</sub>.

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(35) "**PM<sub>10</sub>**" means suspended particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (microns). For non-fugitive emissions, test methods specified in Title 17, California Code of Regulations, Section 94100 et seq., or any applicable test method approved by the Air Pollution Control Officer and EPA shall be used to measure PM<sub>10</sub>.

(36) "**Permit to Operate**" means a written authorization issued by the Air Pollution Control Officer pursuant to Rule 10 or Rule 24 for the operation of any product line, process, process line, article, machine, equipment or other contrivance, the use of which may cause the issuance, reduction, control, or elimination of air contaminants.

(37) "**Person**" means any individual, firm, association, organization, partnership, business trust, corporation, company, contractor, supplier, installer, user or owner, or any state or local government agency or public district and any officer or employee thereof, or the federal government and any officers or employees thereof to the extent authorized by federal law, or any other entity whatsoever which is recognized by law as the subject of rights and duties.

(38) "**Portable Equipment**" means any article, machine, equipment or other contrivance that is routinely moved from one location to another in order to perform its function.

(39) "**Process**" means any method, reaction, or operation wherein materials are handled or whereby materials undergo physical change (i.e., the size, shape, appearance, temperature, state or other physical property of the materials is altered) or chemical change (i.e., a substance or substances with different chemical composition or properties are formed or created). A process includes all of the equipment and facilities necessary for the handling of materials or the completion of the transformation of the materials to produce a physical or chemical change. There may be several processes in series or in parallel necessary to manufacture a product.

(40) "**Process Line**" means one or more pieces of equipment linked by the process flow and producing a product or performing a service such that the product cannot be produced or the service cannot be performed if any piece of equipment is removed or not functioning.

(41) "**Registration**" means the process of obtaining a Certificate of Registration for an emission unit. Registration is the same as "permit" as used in Division 26 of the California Health and Safety Code, Part 3, Chapter 8 and Part 4, Chapter 4, Articles 2 and 4, respectively entitled Hearing Board, Variances, and Orders of Abatement. The Air Pollution Control Officer and the Hearing Board shall have the same authority concerning registration as with permits, and the owner or operator of registered equipment shall be entitled to the same privileges and rights granted to a permittee.

(42) "**Regulation**" means one of the major subdivisions contained within the Rules and Regulations of the Air Pollution Control District of San Diego County.

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(43) **"Rule"** means any rule contained within the Rules and Regulations of the Air Pollution Control District of San Diego County.

(44) **"SO<sub>x</sub>"** means the sum of all oxides of sulfur, collectively expressed as sulfur dioxide.

(45) **"Standard Conditions"** means a temperature of 68°F (20°C) and a pressure of 14.70 pounds per square inch, absolute (760 mm Hg).

(46) **"State Implementation Plan (SIP)"** means the State prepared plan, approved by the United States Environmental Protection Agency (EPA), detailing how National Ambient Air Quality Standards will be achieved and maintained.

(47) **"Stationary Source" or "Source"** means an emission unit or aggregation of emission units which are located on the same or contiguous properties and which units are under common ownership or entitlement to use. Stationary sources also include those emission units or aggregation of emission units located in the California Coastal Waters.

(48) **"Touch-up Operation"** means the portion of a coating operation which is incidental to the main coating process but necessary to achieve coverage as required or to cover minor imperfections, or a coating operation which is necessary to repair minor mechanical damage incurred prior to intended use.

(49) **"Toxic Air Contaminant"** means 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).

(50) **"Volatile Organic Compound (VOC)"** means any volatile compound containing at least one atom of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonates, and exempt compounds.

(51) **"VOC Content Per Volume of Coatings, Less Water and Exempt Compounds"** means the weight of VOC per combined volume of VOC and coating solids and is calculated by the following equation:

$$C_{\text{Cvoc}} = ((W_s - W_w - W_{\text{es}})/(V_m - V_w - V_{\text{es}}))$$

where:

$C_{\text{Cvoc}}$  = VOC content per volume of coating, less water and exempt compounds

$W_s$  = weight of volatile compounds including water and exempt compounds

$W_w$  = weight of water

$W_{\text{es}}$  = weight of exempt compounds

$V_m$  = volume of material including water and exempt compounds



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$V_w$  = volume of water

$V_{es}$  = volume of exempt compounds

(52) **"VOC Content Per Volume of Material"** means the weight of VOC per volume of material and is calculated by the following equation:

$$C_{m\text{voc}} = (W_s - W_w - W_{es})/V_m$$

where:

$C_{m\text{voc}}$  = VOC content per volume of material

$W_s$  = weight of volatile compounds including water and exempt compounds

$W_w$  = weight of water

$W_{es}$  = weight of exempt compounds

$V_m$  = volume of material including water and exempt compounds

(53) **"Western Section of the Air Pollution Control District of San Diego County"** means all of that portion of San Diego County, State of California, lying west of the following described line:

(i) Beginning at the San Diego-Riverside County boundary and running south along the range line common to Range 2 West and Range 1 West (San Bernardino Base and Meridian); to the point of intersection with the township line common to Township 9 South and Township 10 South;

(ii) thence east along the township line common to Township 9 South and Township 10 South to the point of intersection with the range line common to Range 1 West and Range 1 East;

(iii) thence south along the range line common to Range 1 West and Range 1 East to the point of intersection with the township line common to Township 11 South and Township 12 South;

(iv) thence east along the township line common to Township 11 South and Township 12 South to the point of intersection with the range line common to Range 1 East and Range 2 East;

(v) thence south along the range line common to Range 1 East and Range 2 East to the point of intersection with the United States-Mexico International boundary.

TABLE 1 EXEMPT COMPOUNDS (Revised 11/04/09)

<b>I. Negligibly Photochemically-Reactive Organic Compounds</b>
methane
methylene chloride (dichloromethane)
1,1,1-trichloroethane(methyl chloroform)
trichlorofluoromethane (CFC-11)
dichlorodifluoromethane (CFC-12)
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
chloropentafluoroethane (CFC-115)
chlorodifluoromethane (HCFC-22)
chlorofluoromethane (HCFC-31)
1,1,1-trifluoro-2,2-dichloroethane (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-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)
1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)
difluoromethane (HFC-32)
trifluoromethane (HFC-23)
fluoroethane (ethyl fluoride, HFC-161)
1,1,2,2-tetrafluoroethane (HFC-134)
1,1,1,2-tetrafluoroethane (HFC-134a)
pentafluoroethane (HFC-125)
1,1,1-trifluoroethane (HFC-143a)
1,1-difluoroethane (HFC-152a)
1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC-43-10mee)
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)
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane (C <sub>4</sub> F <sub>9</sub> OCH <sub>3</sub> or HFE-7100)

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Table 1  
Exempt Compounds - Continued

2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF <sub>3</sub> ) <sub>2</sub> CF <sub>2</sub> OCH <sub>3</sub> ) 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C <sub>4</sub> F <sub>9</sub> OC <sub>2</sub> H <sub>5</sub> or HFE-7200) 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF <sub>3</sub> ) <sub>2</sub> CF <sub>2</sub> OC <sub>2</sub> H <sub>5</sub> ) cyclic, branched, or linear completely methylated siloxanes (VMS) 1,1,1,2,2,3,3-heptafluoro-3-methoxypropane (n-C <sub>3</sub> F <sub>7</sub> OCH <sub>3</sub> , or HFE-7000) 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl)hexane (HFE-7500) 1,1,1,2,3,3,3-heptafluoropropane (HFC-227ea) methylformate (HCOOCH <sub>3</sub> ) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300) propylene carbonate dimethyl carbonate Four classes of perfluorocarbon (PFC) compounds: cyclic, branched, or linear, completely fluorinated alkanes cyclic, branched, or linear, completely fluorinated ethers with no unsaturations cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine
<b>II. Low Photochemically-Reactive Organic Compounds</b>
acetone ethane 1-chloro-4-trifluoromethyl benzene (parachlorobenzotrifluoride, PCBTF) methyl acetate perchloroethylene (tetrachloroethylene)

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## **RULE 4. REVIEW OF RULES** (Effective 1/1/70)

The Rules and Regulations of the Air Pollution Control District shall be reviewed periodically by a Citizen's Advisory Committee composed of such representatives of government, industry and the public as may be appointed by the Air Pollution Control Board. Such review shall be conducted at such times as the Air Pollution Control Board shall direct.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 10. PERMITS REQUIRED

(Adopted 1/1/69; Rev. Effective 7/25/95)

(a) **AUTHORITY TO CONSTRUCT.** Any person building, erecting, altering or replacing 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 contaminant, shall first obtain written authorization for such construction from the Air Pollution Control Officer. A separate Authority to Construct will be required for each piece of equipment, product line, system, process line or process that produces a product or performs a service independently of other equipment, product lines, systems, process lines or processes. An Authority to Construct shall remain in effect until the Permit to Operate the equipment for which the application was filed is granted or denied or the application is cancelled. [Rev. Effective 1/17/92]

(b) **PERMIT TO OPERATE.** [Rev. Effective 7/25/95] Before a person operates or uses, or causes to be operated or used, any article, machine, equipment or other contrivance described in Rule 10(a) (Authority to Construct) that person shall obtain a written Permit to Operate from the Air Pollution Control Officer. No Permit to Operate or use shall be granted either by the Air Pollution Control Officer or the Hearing Board for any article, machine, equipment or contrivance described in Rule 10(a) which is constructed or installed without authorization as required by Rule 10(a) until all information required for the Authority to Construct of Rule 10(a) is presented to the Air Pollution Control Officer and such article, machine, equipment or contrivance is altered, if necessary, and made to conform to the standards set forth in Rule 20 and elsewhere in these Rules and Regulations. A separate Permit to Operate will be required for each piece of equipment, product line, system, process line or process that produces a product or performs a service independently of other equipment, product lines, systems, process lines or processes.

A temporary authorization may be issued for the sole purpose of testing and/or evaluating the article, machine, equipment or contrivance to determine compliance with the conditions of the Authority to Construct, District Rules and Regulations and applicable state and federal law. A temporary authorization may be extended to cover the period before a final Permit to Operate can be issued provided the article, machine, equipment, or contrivance has been determined to be in compliance. For temporary operations as described in Rule 18(e), any temporary authorization shall be issued with a delayed effective date as specified in Rule 18(e).

A final Permit to Operate shall not be issued while the Authority to Construct or temporary authorization is being appealed before the Hearing Board in accordance with Rule 25 of District Rules and Regulations. A temporary authorization for testing and/or evaluation as provided herein may be issued despite an appeal of the Authority to Construct filed pursuant to Rule 25(b).

In the case of an appeal of an Authority to Construct for equipment proposed to be installed in conjunction with existing equipment operating under a Permit to Operate, to comply with new requirements of District Rules and Regulations, enforcement of the new requirements shall be deferred until the appeal is resolved. This paragraph applies only to an Authority to Construct issued before the effective date of the new requirements.

(c) **POSTING OF PERMIT TO OPERATE.** [Rev. Effective 7/25/95] A person who has been granted under Rule 10(a) Permit to Operate any article, machine, equipment or other contrivance described in Rule 10(b), shall firmly affix the current Permit to Operate or an approved facsimile upon the article, machine, equipment or other contrivance in such a manner as to be clearly visible and accessible. In the event that the article, machine, equipment or other contrivance is so constructed or operated that the Permit to Operate cannot be so placed, the Permit to Operate shall be

mounted so as to be clearly visible in an accessible place within 25 feet of the article, machine, equipment or other contrivance, or maintained readily available at all times on the operating premises.

(d) **ALTERATION OF PERMIT.** A person shall not willfully deface, alter, forge, counterfeit or falsify any permit issued under these Rules and Regulations.

(e) **(Reserved)**

(f) **(Reserved)** [Rev. Effective 7/25/95]

(g) **CONTROL EQUIPMENT.** Nothing in this rule shall be construed to authorize the control officer to require the use of machinery, devices or equipment of a particular type or design, if the required emission standard may be met by machinery, device, equipment, product or process change otherwise available.

(h) **ANNUAL RENEWAL OF PERMITS TO OPERATE.** [Rev. Effective 7/25/95] Permits to Operate shall be renewable annually on a staggered schedule to be determined by the Air Pollution Control Officer. Any person who holds a Permit to Operate as required by Rule 10(b) and who desires to operate any article, machine, equipment or other contrivance pursuant to said permit after the expiration date of the permit shall, prior to the expiration date of the permit, apply to the Air Pollution Control Officer for an annual renewal permit. Expired permits may be reinstated only:

1. Within the first six months following the expiration date of the permit, and
2. Upon application for renewal to the Air Pollution Control Officer, and
3. Upon payment of the appropriate renewal fee and penalty. (See Rule 40 for applicable fees.)

Any person who holds a Permit to Operate as required by Rule 10(b) and who desires to not operate any article, machine, equipment or other contrivance pursuant to said permit may, prior to the expiration date of the permit, apply to the Air Pollution Control Officer for a revised permit indicating the equipment is to be maintained in an inactive status. A renewal permit in this case shall contain a condition prohibiting operation of the equipment. Any portable equipment having an inactive status permit shall be stored at a fixed address known to the Air Pollution Control District. All such inactive status permits shall be renewable annually. The condition prohibiting operation of the equipment shall be removed by the Air Pollution Control Officer, notwithstanding Rule 21, upon receipt of an application and payment of the appropriate renewal fees pursuant to Rule 40. Operation of inactive equipment without prior authorization from the District shall constitute a violation of Rules 10(a), 10(b), and 21, and a new Authority to Construct and Permit to Operate shall be required for continued operation of the equipment.

(i) **CHANGE OF LOCATION.** Any person who possesses a Permit to Operate any article, machine, equipment or other contrivance and desires to change the location of such article, machine, equipment or other contrivance shall first apply to the Air Pollution Control

Officer for an Authority to Construct and Permit to Operate. (See Rule 40 for applicable fees.) The provisions of Rule 10(i) shall not apply to any change of work location for any portable article, machine, equipment or other portable contrivance, or any change of location within a contiguous parcel of land in the possession of, or owned by, or recorded as the property of, the same person.

**(j) TRANSFER OF OWNERSHIP.** [Rev. Effective 7/25/95]

1. Any article, machine, equipment or other contrivance which has a valid Permit to Operate and which is transferred from one person to another shall not be operated until an application to transfer the ownership of the Permit to Operate is made to the Air Pollution Control Officer and a temporary or final permit to operate is issued. If the article, machine, equipment or other contrivance had a valid permit to operate within the 18-month period immediately preceding the application to transfer ownership of the permit to operate, such application, if submitted with all required fees, shall be deemed a temporary permit to operate until a temporary or final permit to operate is issued or denied. Such temporary permit to operate shall be subject to all terms and conditions of the permit to operate being transferred. The application to transfer a permit to operate shall not be deemed a temporary permit to operate for an article, machine, equipment or other contrivance that has been shut down and its associated emission reductions banked pursuant to Rules 26.0 - 26.10 unless the requirements of Rule 26.8 are met.
2. Any article, machine, equipment or other contrivance which is being transferred from one person to another shall not be altered or modified (unless the alteration or modification is exempt under Rule 11) until an application for Authority to Construct and Permit to Operate has been filed with the District and an Authority to Construct for such alteration or modification has been granted by the District. (See Rule 40 for applicable fees.)
3. Any article, machine, equipment or other contrivance shall not be relocated from where it was previously permitted to another stationary source, as defined in Rule 20.1, and operated under a temporary permit to operate pursuant to this section unless it was previously permitted as portable equipment .

**RULE 11. EXEMPTIONS FROM RULE 10 PERMIT REQUIREMENTS**

(Effective 1/1/69: Rev. Adopted & Effective 10/17/95  
Rev. Adopted & Effective 7/30/96`  
Rev. Adopted & Effective 5/21/97  
Rev. Adopted & Effective 11/15/00  
Rev. Adopted & Effective 4/25/07  
Rev. Adopted 11/09/11 & Effective 5/09/12  
Rev. Adopted & Effective 5/11/16

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## **RULE 11. EXEMPTIONS FROM RULE 10 PERMIT REQUIREMENTS**

### **(a) APPLICABILITY**

(1) This rule is applicable to any article, machine, equipment, or other contrivance which would otherwise be subject to Rule 10.

(2) This rule shall not exempt equipment, operations, or processes described in Section (d) from meeting all other applicable requirements of these Rules and Regulations, and State and federal regulations, including the National Emission Standards for Hazardous Air Pollutants (NESHAP) and the New Source Performance Standards (NSPS).

(3) This rule shall not apply to any equipment, operation, or process that violates Rule 50 or Rule 51 as determined by the Air Pollution Control Officer. When the Air Pollution Control Officer makes such a determination and written notification is given to the owner or operator, the equipment, operation, or process may thereafter be subject to Rule 10 for a specified time as determined by the Air Pollution Control Officer.

(4) This rule shall not apply to any equipment, operation, or process described in Subsections (d)(2) through (d)(19) that emits more than 100 pounds per day of any one of the following criteria air pollutants: particulate matter (PM<sub>10</sub>), oxides of nitrogen (NO<sub>x</sub>), volatile organic compound (VOC), oxides of sulfur (SO<sub>x</sub>), carbon monoxide (CO), or lead (Pb).

(5) Except for equipment specified in Subsection (d)(20)(iii), Section (d) of this rule shall not apply to any equipment, operation, or process that

(i) emits or may emit toxic air contaminants, as defined in Rule 1200, and

(ii) has emissions of toxic air contaminants that, in the absence of any emission control device or limitation on material usage or production, may be expected to exceed any standard specified in Rule 1200 (d)(1)(i), (d)(2), or (d)(3) as determined by the Air Pollution Control Officer. This provision shall not apply to any equipment, operation, or process for which construction or modification, as applicable, commenced prior to November 15, 2000, unless such equipment, operation, or process is subsequently modified in such a manner that increases emissions of one or more toxic air contaminants.

In the event the Air Pollution Control Officer makes a preliminary determination that any standard specified in Rule 1200 (d)(1)(i), (d)(2), or (d)(3) may be exceeded, the Air Pollution Control Officer shall notify the owner or operator in writing and specify the information needed to make a final determination. If the Air Pollution Control Officer makes a final determination that emissions, in the absence of any emission control device or limitation on material usage or production, may be expected to exceed any standard

specified in Rule 1200 (d)(1)(i), (d)(2), or (d)(3), the Air Pollution Control Officer shall notify the owner or operator in writing and include a statement that, as a result, Rule 11(d) does not apply and an Authority to Construct and Permit to Operate are therefore required.

(b) **RESERVED**

(c) **DEFINITIONS**

For the purposes of this rule, unless otherwise noted, the following definitions shall apply:

- (1) **"Abrasive Blasting Cabinet"** means the same as defined in Rule 2.
- (2) **"Abrasive Blasting Room or Booth"** means a structure that includes abrasive blasting equipment, a dust collector and/or recycling system for recovering spent abrasive. The operator blasts from within this structure and the emissions from abrasive blasting operations are vented through a control device. The abrasive blasting room or booth definition does not apply to temporary enclosures including, but not limited to, those at shipyards or inside ships.
- (3) **"Additive Manufacturing (3-D Printing)"** means a process of joining materials to create objects from 3-D model data, usually layer upon layer, as opposed to subtractive manufacturing methodologies. Additive manufacturing processes include, but are not limited to, Direct Metal Laser Sintering, Selective Laser Melting, Selective Laser Sintering, and Direct Laser Melting.
- (4) **"Agricultural Source"** means any equipment, operation, or process, or aggregation thereof, used in the production of crops, or raising of fowl or animals and located on contiguous property under common ownership or control that meets any of the criteria identified in Section 39011.5 of California Health and Safety Code, as it exists on May 11, 2016.
- (5) **"Biotechnology"** means the use of living organisms and/or biological processes often combined with chemical processes to develop products used in a variety of fields such as medicine, agriculture, and food production. Biotechnology industry includes, but is not limited to, medicinal drug manufacturing, peptide synthesis and DNA synthesis.
- (6) **"Brake Horsepower Rating"** means the maximum continuous brake horsepower output rating of the internal reciprocating combustion engine as specified by the engine manufacturer and listed on the engine nameplate or in other documentation establishing the maximum continuous brake horsepower as approved by the Air Pollution Control Officer.
- (7) **"CFR"** means Code of Federal Regulations.
- (8) **"Designated Workstation"** means an assigned area within the stationary source where a specified operation is conducted.

(9) **"Digital Printing Operation"** means an operation that uses a printing device guided by a computer-driven machine to transfer an electronic image to a substrate through the use of inks, toners, or other graphic arts materials. Digital printing operation also includes associated surface preparation, solvent cleaning, and the cleaning of application equipment.

(10) **"Exempt Compounds"** means the same as defined in Rule 2.

(11) **"First-Article Deliverable Product"** means the first product that is produced using research and development equipment and that is delivered to a potential intra-company or external customer for approval. First-article deliverable product shall not exceed one unit of each product per customer unless necessary in order for the customer to obtain statistically significant data required to make a decision on the approval of a new product.

(12) **"Green Material"** means waste material that includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood waste. Green material does not include food material, biosolids, mixed solid waste, material processed from commingled collection, wood containing lead-based paint or wood preservative, mixed construction or mixed demolition debris.

(13) **"Hazardous Air Pollutant (HAP)"** means an air contaminant identified in the Federal Clean Air Act, Title 1, Section 112 (b).

(14) **"Hot Melt Adhesive"** means a thermoplastic adhesive that melts at temperatures above 180°F (82°C), does not contain organic solvents, and sets rapidly upon cooling.

(15) **"Industrial Wastewater Treatment"** means the treatment of spent process water prior to discharging into municipal wastewater system or disposal. Industrial wastewater treatment includes, but is not limited to, dewatering, pH adjustment, precipitation, sludge processing, and gravity separation and/or filtration of the wastewater.

(16) **"Large Commercial Digital Printing Operation"** means a commercial digital printing operation where the print capacity of any individual printer that uses solvent based inks is 1,000 ft<sup>2</sup>/hr or higher; or an operation where the print capacity of any individual printer that uses water-based or UV inks is 10,000 ft<sup>2</sup>/hr or higher.

(17) **"Major Stationary Source"** means the same as defined in Rule 20.1.

(18) **"Military Tactical Support Equipment"** means any equipment owned by the U.S. Department of Defense or the National Guard and used in combat, combat support, combat service support, tactical or relief operations, or training for such operations.

(19) **"Operating Day"** means any calendar day during which the specified equipment is operated, or specified operations occur.

(20) **"Organic Solvent"** means any substance that is liquid at standard conditions and contains an organic compound or combination of organic compounds, and that is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or for other similar purposes. For the purpose of this definition, a reagent is not considered an organic solvent.

(21) **"Pilot Plant Facility"** means a trial assembly of small-scale reaction and processing equipment that is the intermediate stage between laboratory experiment and full-scale operation in the development of a new product and/or process.

(22) **"Portable Emission Unit"** means the same as defined in Rule 20.1.

(23) **"Preservative Oils and Compounds"** means materials which do not contain solids, and are applied to prevent corrosion and/or to provide lubrication.

(24) **"Process Heater"** means any combustion equipment fired with liquid and/or gaseous fuel that transfers heat from the combustion gases to water or process streams. Heaters used for swimming pools, spas, and/or therapy pools shall be considered process heaters. This definition does not include any combustion equipment where the material being heated is in direct contact with the products of combustion, such as furnaces or kilns, or any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment.

(25) **"Research and Development (R&D) Equipment"** means equipment that is used to conduct research and develop new or improved processes and/or products, where such equipment is operated by technically trained personnel under the supervision of a research director, and may not be used to manufacture products or byproducts for sale or exchange for commercial profit, other than the first-article deliverable product.

(26) **"Reclaimed Water"** means wastewater that has been treated to remove solids and certain impurities to meet the standards specified in California Code of Regulations Title 22, Division 4, Chapter 3.

(27) **"Stationary Internal Combustion Engine"** means a spark or compression ignited, reciprocating internal combustion engine that is not a portable emission unit.

(28) **"Stationary Source"** means the same as defined in Rule 2.

(29) **"Thermal Spraying Operation"** means one or more of several processes in which metallic or nonmetallic surfacing materials are deposited in a molten or semi-molten condition on a substrate to form a coating. The surfacing material may originate in the form of powder, rod, or wire before it is heated, prior to spraying and deposition. Thermal spraying operations include: detonation gun spraying, flame spraying, high-velocity oxy-fuel spraying, plasma spraying, and twin-wire electric arc spraying.

(30) **"Toxic Air Contaminant"** means the same as defined in Rule 2.

(31) **"Volatile Organic Compound (VOC)"** means the same as defined in Rule 2.

(32) **"Volatile Organic Liquid"** means any organic liquid either having a Reid Vapor Pressure (RVP) greater than 3 pounds per square inch if the American Society for Testing Material International (ASTM) RVP test method is applicable, or having a true vapor pressure greater than 3 pounds per square inch absolute at 100°F if the ASTM RVP test is not applicable.

(33) **"Volatile Organic Solvent"** means an organic solvent with an initial boiling point of less than 400°F (204°C).

(34) **"Wet Screening Operation"** means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

**(d) EQUIPMENT, OPERATIONS, OR PROCESSES NOT REQUIRING A PERMIT TO OPERATE**

Except as otherwise specified in Subsections (a)(2) through (a)(5), any equipment, operation, or process that is listed below in Subsections (d)(1) through (d)(20), and that meets the stated exemption provision, parameter, requirement, or limitation, is exempt from the requirements of Rule 10. Such equipment, operation, or process shall not be exempt from any otherwise applicable standards in these Rules and Regulation, or applicable State or federal regulations, unless specified as exempt by that rule or regulation.

Any person claiming such an exemption shall provide documentation sufficient to substantiate the applicability of the stated exemption provision, parameter, requirement, or limitation at the request of the Air Pollution Control Officer.

**(1) MOBILE SOURCES**

(i) Any engine mounted on, within, or incorporated into any vehicle, train, ship, boat, or barge, that is used primarily to provide propulsion, but which may also supply heat, mechanical, hydraulic, or electrical power to that same vehicle, train, ship, boat, or barge. This exemption does not apply to equipment located onboard floating dry docks or equipment used for dredging operations.

(ii) Railway, road, and runway sweepers used respectively for cleaning rail tracks, roadways, and runways, provided the maximum manufacturer's output rating of any auxiliary sweeper engine is 200 brake horsepower or less.

**(2) COMBUSTION AND HEAT TRANSFER EQUIPMENT**

(i) Any reciprocating internal combustion engine with a brake horsepower rating of less than 50.

(ii) Any engine mounted on, within, or incorporated into any motor vehicle, train, ship, boat, or barge, that is used exclusively to load or unload cargo. For the purposes of this exemption, cargo shall not include the removal or relocation of sand, rock, silt, soil, or other materials from dredging operations.

(iii) Any gas turbine engine that has:

(A) an output power rating of less than 0.3 megawatt (MW), or

(B) a maximum gross heat input rating at International Standards Organization (ISO) Standard Day Conditions of less than 1 million British thermal units (BTU) per hour.

This exemption does not apply to any gas turbine operating on waste-derived gaseous fuel.

(iv) Any boiler, process heater, or steam generator with a manufacturer's maximum gross heat input rating of less than:

(A) 1 million BTU per hour fired with any fuel, or

(B) 5 million BTU per hour fired exclusively with natural gas and/or liquefied petroleum gas.

This exemption does not apply to reciprocating internal combustion or gas turbine engines.

(v) Air heaters with a manufacturer's maximum gross heat input rating of less than 20 million BTU per hour fired exclusively with natural gas and/or liquefied petroleum gas and installed in conjunction with combustor testing in gas turbine test cells.

(vi) Portable aircraft engine test stands constructed before November 4, 1976.

(vii) Back-pack power blowers.

(viii) Orchard or citrus grove heaters.

(ix) Any oven having an internal volume of 27 cubic feet (0.765 cubic meter) or less.

(x) Curing or baking ovens in which no volatile organic solvents or materials containing volatile organic solvents are introduced.

(xi) Any oven used exclusively for the curing, softening, or annealing of plastics.

(xii) Any oven that is an integral part of a process for which a Permit to Operate is not required pursuant to this rule.

(xiii) Any portable internal combustion engine or gas turbine engine used exclusively in conjunction with military tactical support equipment. Such engines shall not be subject to the limitations of Subsections (a)(3) or (a)(4) of this rule. For the purposes of this subsection, portable means carried or moved from one location within a stationary source to another location within the same stationary source, or from one stationary source to another stationary source, in the normal course of operations. Indicia of portability shall include, but are not limited to, wheels, skids, carrying handles, or a dolly, trailer, or vessel.

(xiv) Internal combustion or gas turbine engines used exclusively for purposes of educating students in the operation, maintenance, repair, and rebuilding of such engines provided that each engine or turbine is operated less than 20 hours per calendar year.

(xv) Auxiliary internal combustion reciprocating engines mounted on any authorized emergency vehicle as specified in Section 27156.3 of the California Vehicle Code.

### **(3) STRUCTURES AND STRUCTURAL MODIFICATIONS**

(i) Equipment used exclusively in support of any structure designed for and used exclusively as a dwelling for not more than four families.

(ii) Structural modifications that cannot change the quality, nature, or quantity of air contaminant emissions.

### **(4) LABORATORY EQUIPMENT AND RELATED OPERATIONS**

(i) Laboratory testing equipment, and quality control testing equipment, including associated wipe cleaning, used exclusively for chemical and physical analysis, or quality control.

(ii) Laboratory equipment and laboratory operations conducted at secondary schools, colleges, or universities and used exclusively for instruction or research purposes.

(iii) Vacuum-producing devices used in laboratory or R&D operations.

(iv) Hoods, stacks, or ventilators used in laboratory or R&D operations.

(v) Research and development equipment, including associated wipe cleaning.

(vi) Equipment used to manufacture the following products, provided that the total uncontrolled VOC emissions from all operations specified below do not exceed 5 tons per calendar year:

(A) biotechnology pharmaceutical products for exclusive use in federal Food and Drug Administration (FDA) approved clinical trials, or

(B) biomedical devices and diagnostic kits for exclusive use in FDA approved clinical trials and laboratory failure analysis testing, or

(C) bioagricultural products for exclusive use in field testing required to obtain FDA, Environmental Protection Agency (EPA), United States Department of Agriculture (USDA) and/or California Environmental Protection Agency (Cal-EPA) approval.

All data and/or records necessary to demonstrate the applicability of this exemption shall be maintained on-site for three years and made available to the District upon request.

(vii) Any temporary equipment installed in a pilot plant facility, provided that the total emissions increase from all such temporary equipment does not exceed 10 pounds per day of VOCs. For the purposes of this exemption, temporary equipment means equipment located at a pilot plant facility for a period not exceeding 90 days in any consecutive 12-month period excluding construction and installation periods. It shall be the responsibility of a person claiming this exemption to maintain daily records necessary for the District to determine its applicability.

**(5) REPLACEMENT OF EQUIPMENT**

Subject to the limitations and requirements stated in this Subsection (d)(5), identical replacement equipment and like-kind replacement equipment as listed below are exempt from the requirements of Rule 10(a). The provisions of this Subsection (d)(5) shall not apply to replacement of equipment pursuant to other requirements of these Rules and Regulations; or replacement of equipment subject to air contaminant control standards specified for replacement equipment; or replacement of equipment in whole or part, that in sum would constitute reconstruction or modification under NSPS or District Regulation X - Standards of Performance for New Stationary Sources, or would constitute a major stationary source or replacement of any or stationary or portable compression ignition reciprocating internal combustion engine; or rim seal replacements for bulk gasoline floating roof tanks subject to the Best Available Control Technology (BACT) requirements of Rule 61.1.

(i) Identical replacement in whole or part of any article, machine, equipment or other contrivance for which a Permit to Operate has previously been granted for such equipment. Identical means the same manufacturer, model number, and type.



In order to claim the applicability of Subsection (d)(5)(i) for portable equipment (other than a diesel-fueled portable engine), written notification of the proposed equipment replacement and information identifying the manufacturer, model number, serial number, and type of the item used as a replacement, and information detailing the expected use of the equipment being replaced, must be submitted to the District prior to such replacement.

(ii) Like-kind replacement in whole or part of any article, machine, equipment, or other contrivance where a Permit to Operate has previously been granted for such equipment, and the Air Pollution Control Officer determines that the replacement equipment meets the following requirements:

(A) is identical in function, and

(B) is similar in design, and

(C) the actual air contaminant emissions are the same in nature, and

(D) has a capacity, production rate, and actual air contaminant emissions that are equal to or less than those of the currently permitted equipment.

In order to claim the applicability of Subsection (d)(5)(ii) and prior to replacing any equipment, written notification in the form of an application for permit revision, the information required to make the determinations listed above, and the fees specified in Rule 40 must be submitted to the District.

#### **(6) PLANT SUPPORT EQUIPMENT**

The exemptions listed in this Subsection (d)(6) shall not apply to any combustion equipment associated with plant support equipment unless the combustion equipment is also exempt pursuant to Subsection (d)(2) of this rule.

(i) Vacuum cleaning devices used exclusively for housekeeping purposes.

(ii) Equipment used exclusively for comfort air conditioning or comfort ventilation systems, and not designed or used to remove air contaminants generated by or released from specific equipment.

(iii) Refrigeration units except those used as, or in conjunction with, air pollution control equipment.

(iv) Equipment used exclusively to compress or hold dry natural gas.

(v) Vacuum-producing devices used in connection with other equipment not requiring a Permit to Operate pursuant to this rule.

- (vi) Equipment used exclusively for space heating, other than boilers.
- (vii) Water cooling towers and water cooling ponds used for evaporative cooling of water, including reclaimed water, utilized solely in heat transfer processes but not used for evaporative cooling of:
  - (A) process water (e.g., contaminated water or industrial wastewater), or
  - (B) water from barometric jets or barometric condensers.

**(7) METALLURGICAL PROCESSING EQUIPMENT - GENERAL**

- (i) Non-automated soldering equipment, such as handheld soldering irons and guns.
- (ii) Solder-screen processes and associated soldering ovens that use a process similar to silk-screening in order to apply the solder paste.
- (iii) Each solder leveler, hydrosqueegee, wave solder machine or drag solder machine that emits less than an average of 5 pounds of VOCs per operating day for each calendar month. The number of operating days per calendar month, monthly purchase records, and daily or monthly records of material usage shall be maintained on-site for three years and be made available to the District upon request.
- (iv) Brazing and welding equipment, including arc welding equipment and laser welding.
- (v) Molds used for the casting of metals.
- (vi) Foundry sand mold forming equipment. This exemption does not apply if heat, sulfur dioxide, or VOCs are used.
- (vii) Forming equipment used exclusively for forging, rolling, or drawing of metals.
- (viii) Thermal spraying operations where materials sprayed contain no cadmium, chromium, copper, lead, manganese or nickel, and provided the maximum amount of material sprayed is less than 20 pounds per day at the stationary source.
- (ix) Tumblers used for the cleaning or deburring of metal products without abrasive blasting.
- (x) Shell-core and shell-mold manufacturing machines.

(xi) Extrusion equipment used exclusively for extruding metals or minerals. This exemption does not apply to coking extrusion equipment or processes that manufacture products containing greater than 1% asbestos by weight.

(xii) Shot peening operations where only steel shot is employed and no surface material such as scale, rust, or old paint is removed.

(xiii) Chemical milling of titanium or niobium (columbium) and/or their alloys using nitric and/or hydrofluoric acid at milling bath temperatures below 110°F (43°C).

(xiv) Equipment used for anodizing, plating, polishing, stripping, or etching, if the VOC content of the aqueous material does not exceed 10% by weight. This exemption does not apply to acid chemical milling, chrome plating, chromic acid anodizing, chromate conversion coating processes, or the stripping of chromium. This exemption also does not apply to copper etching or copper plating operations which use formaldehyde, ammonium hydroxide, ammonium chloride, or solutions of nitric, hydrofluoric, and/or hydrochloric acids which contain more than 17% acid concentration by weight.

(xv) Oil quenching tanks that use less than 20 gallons per year of make-up oil. Monthly purchase records and daily or monthly usage records of all materials added must be maintained on-site to claim applicability of this exemption.

(xvi) Salt bath quenching tanks where no chromium containing compounds are added to the tank.

**(8) METALLURGICAL, GLASS, AND CERAMIC PROCESSING EQUIPMENT - USING FURNACES, KILNS, AND OVENS**

(i) Crucible furnaces, pot furnaces, or induction furnaces, each with a maximum rated capacity of less than 450 cubic inches of any molten metal.

(ii) Crucible furnaces, pot furnaces, or induction furnaces each with a maximum rated capacity of 2,500 cubic inches or less, or 950 pounds or less, and where

(A) no sweating or distilling is conducted, and

(B) only non-ferrous metals, except lead and yellow brass, are poured or held in a molten state.

Records of the types of all metal poured from such furnaces shall be maintained on-site for three years and be made available to the District upon request. This exemption does not apply if alloying elements of arsenic, beryllium, cadmium, chromium, lead, and/or nickel are utilized in such furnaces.

(iii) Equipment used exclusively for the sintering of glass or metals (excluding lead), where no coke or limestone is used.

(iv) Equipment used exclusively for heating metals immediately prior to forging, pressing, rolling, or drawing.

(v) Any oven used exclusively for heat treating glass or metal if the materials are not heated to a molten state, and the oven is heated exclusively by natural gas, liquefied petroleum gas, and/or electricity.

(vi) Atmosphere generators and vacuum producing devices used in connection with metal heat treating processes.

(vii) Die casting machines.

(viii) Kilns used exclusively for firing ceramic ware, heated exclusively with natural gas, liquefied petroleum gas, and/or electricity.

**(9) ABRASIVE BLASTING EQUIPMENT**

The exemptions listed in this Subsection (d)(9) shall not apply to any combustion equipment associated with abrasive blasting equipment unless the associated combustion equipment is also exempt pursuant to Subsection (d)(2) of this rule.

(i) Abrasive blasting equipment using a suspension of abrasive in water.

(ii) Abrasive blasting cabinets that are vented through a control device into the building where such cabinets are located.

(iii) Robotically-operated enclosed abrasive blasting equipment that emits less than 5 pounds of particulate matter per day, operates at a negative pressure, and is vented through a control device into the building where it is located.

(iv) Abrasive blasting equipment or pots with a manufacturer's sand capacity rating of less than 100 pounds (45.4 kg), or 1 cubic foot or less. This exemption does not apply to pots used in an abrasive blasting room or booth, or to abrasive blasting cabinets.

**(10) MACHINING EQUIPMENT**

(i) Equipment used for buffing, polishing, carving, cutting, deburring, drilling, machining, routing, shearing, sanding, sawing, surface grinding, or turning of: ceramic artwork, ceramic precision parts, glass, leather, metal, rubber, fiberboard, masonry, or non-fiberglass reinforced plastic. This exemption does not apply to tire buffers.

- (ii) Wet-jet devices used to cut fiberglass reinforced plastic.
- (iii) Portable handheld equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of fiberglass reinforced plastic, when not used at a designated workstation, booth, or room.
- (iv) Equipment used for carving, cutting, drilling, surface grinding, planing, routing, sanding, sawing, shredding, or turning of wood.
- (v) Tub grinders and trommel screens used for processing green material. This exemption does not apply to any associated combustion equipment unless such equipment is also exempt pursuant to Subsection (d)(2) of this rule.
- (vi) Equipment used for the pressing or storing of sawdust, wood chips, or wood shavings.
- (vii) Equipment used exclusively to mill or grind coatings or molding compounds where all materials introduced are in a paste form and no volatile organic solvents are used.
- (viii) Equipment used for buffing, polishing, carving, cutting, deburring, drilling, machining, routing, shearing, sanding, sawing, or surface grinding of fiberglass or calcium silicate parts that are exclusively vented through a control device that exhausts inside an enclosed building where such equipment is located.

**(11) PRINTING AND REPRODUCTION EQUIPMENT AND OPERATIONS**

- (i) Any graphic arts operation or group of graphic arts operations located at a stationary source, that emit less than an average of 15 pounds of VOCs per operating day for each calendar month from all such operations. All records necessary to calculate average daily VOC emissions, such as emission factors or mix ratios, VOC content of each material used, number of operating days per month, and daily or monthly records of material usage, shall be maintained on-site for three years and be made available to the District upon request.
- (ii) Inkjet and laser printing equipment.
- (iii) Digital printing operations where the print capacity of any individual printer which uses solvent based inks is less than 1,000 ft<sup>2</sup>/hr, or an operation where the print capacity of any individual printer which uses water-based or UV inks is less than 10,000 ft<sup>2</sup>/hr.
- (iv) Large commercial digital printing operations, provided that the records specified in Rule 67.16(f) for these operations are maintained.

- (v) Ink cartridge filling, refilling, and/or refurbishing operations.

**(12) FOOD PROCESSING AND FOOD PREPARATION EQUIPMENT**

- (i) Equipment used exclusively to grind, blend, or package tea, cocoa, spices, dried flowers, or roasted coffee.
- (ii) Equipment located at eating establishments that is used for preparing food for human consumption at the same establishment. This exemption does not apply to boilers or coffee roasting equipment.
- (iii) Coffee roasting equipment with a maximum capacity of 11 pounds (5 kg) or less.
- (iv) Any bakery oven that is located at a stationary source where the combined rated heat input capacity of all bakery ovens, excluding ovens subject to Subsection (d)(12)(v) below, is less than 2 million BTU per hour.
- (v) Any bakery oven used exclusively to bake non-yeast-leavened products.
- (vi) Equipment used to crush and/or ferment grapes to produce wine.
- (vii) Equipment used to brew beer at breweries that produce less than 100,000 barrels (3.1 million gallons) of beer per calendar year and associated equipment cleaning. This exemption does not apply to boilers or silos.
- (viii) Smokehouses used for preparing food.

**(13) PLASTICS, FOAM, AND RUBBER PROCESSING EQUIPMENT OR OPERATIONS**

- (i) Extrusion equipment used exclusively for extruding rubber products or plastics where no organic additives are present.
- (ii) Equipment used for compression molding and/or injection molding of plastics.
- (iii) Mixers, roll mills, and calenders for rubber or plastics, where no material in powder form is added and no volatile organic solvents are used.
- (iv) Equipment used exclusively for conveying and storing plastic materials.
- (v) Foam manufacturing or foam application operations that emit less than an average of 5 pounds of VOCs per operating day for each calendar month. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily

or monthly records of material usage, shall be maintained on-site for three years and be made available to the District upon request.

(vi) Plastic manufacturing or fabrication operations, including reinforced plastic fabrication operations using epoxy that emit less than an average of 5 pounds of VOCs per operating day for each calendar month. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for three years and be made available to the District upon request.

(vii) Polyester resin operations using less than 20 gallons of polyester resin materials per month. Daily or monthly records of material usage shall be maintained on-site for three years and be made available to the District upon request.

(viii) Hot wire cutting of expanded polystyrene foam.

**(14) MIXING, BLENDING, AND PACKAGING EQUIPMENT**

(i) Dry batch mixers with a rated working capacity of 0.5 cubic yards or less, where material is added in a dry form prior to the introduction of a subsequent liquid fraction or where no liquid fraction is added.

(ii) Wet batch mixers with a rated working capacity of 1 cubic yard or less, where no volatile organic solvents are used.

(iii) Equipment used exclusively for the manufacture of water emulsions of asphalt, greases, oils, or waxes.

(iv) Equipment used exclusively for the packaging of lubricants or greases.

(v) Equipment used at ambient temperatures exclusively for mixing and blending materials to make water-based adhesives.

(vi) Any coating and/or ink manufacturing operations located at a stationary source that emit less than an average of 15 pounds of VOCs per operating day for each calendar month from all such operations. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for three years and be made available to the District upon request.

**(15) COATING AND ADHESIVE APPLICATION EQUIPMENT AND OPERATIONS**

(i) Powder coating operations where less than 0.5 gallons per day of any surface preparation or cleaning material containing VOCs are used. Monthly

purchase and daily or monthly usage records of surface preparation and cleaning materials shall be maintained on-site for three years and made available to the District upon request. This exemption does not apply to metallizing gun operations.

(ii) Application equipment and processes used exclusively to apply coatings and/or adhesive materials to stationary structures and/or their appurtenances at the site of installation, to portable buildings including mobile homes at the site of installation, to pavement, or to curbs. This exemption does not apply to application equipment and processes where coatings or adhesive materials are applied in off-site shops or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles.

(iii) Any coating or adhesive materials application operation (portable or stationary) where 20 gallons or less of liquid coatings or adhesive materials are applied per consecutive 12-month period. Monthly purchase records and daily or monthly usage records of all coatings or adhesive materials applied must be maintained on-site for three years to claim applicability of this exemption. The volume of materials applied using non-refillable handheld aerosol spray containers shall not be included when determining the applicability of this exemption.

(iv) Any coating or adhesive materials application operation (portable or stationary) where the VOC emissions from the application of liquid coatings or adhesive materials are 150 pounds or less per consecutive 12-month period. All records necessary to calculate VOC emissions, such as VOC content of each coating or adhesive material applied and daily or monthly usage records of such materials must be maintained on-site for three years to claim applicability of this exemption. The volume or VOC content of materials applied using non-refillable handheld aerosol spray containers shall not be included when determining the applicability of this exemption.

(v) Chromate conversion coating processes where coatings are applied exclusively by brush, roller, or marking pen.

(vi) Coating operations that exclusively use non-refillable handheld aerosol spray containers.

(vii) The application of coatings outside of a defined application station that are necessary to cover minor imperfections or repair minor mechanical damage incurred prior to intended use.

(viii) Coating operations located at primary or secondary schools and used exclusively for instruction.

(ix) Coating operations located at schools (i.e., primary, secondary, or schools of higher education) and used exclusively for student theatrical productions or art instruction.



(x) Liquid surface coating operations that exclusively use hand-held brushes to apply wet fastener primer coatings from containers that are 8 ounces or less in size.

(xi) Liquid surface coating operations that exclusively use air brushes with a coating capacity of 2 ounces or less.

(xii) Hot melt adhesive application equipment.

(xiii) The application of coatings outside of a designated workstation that is necessary for the maintenance of stationary equipment.

**(16) SOLVENT APPLICATION EQUIPMENT AND OPERATIONS**

(i) Cold solvent cleaning or stripping operations and/or vapor degreasing operations that exclusively utilize water-based materials with a VOC content that does not exceed 50 grams per liter, as applied. For the purposes of this exemption, a water-based cleaning solvent is any solvent that consists only of water and VOC and does not contain exempt compounds.

(ii) Cold solvent cleaning dip tanks, vapor degreasers, and paint stripping tanks:

(A) with a liquid surface area of 1 square foot or less, or

(B) with a maximum capacity of 1 gallon or less.

(iii) Cold solvent cleaning remote reservoirs with a sink cross-sectional area of 1 square foot (0.09 square meters) or less.

(iv) Batch-type waste solvent recovery stills for on-site recovery of waste solvent with a maximum solvent usage of 350 gallons per day, provided the still is equipped with a device that shuts off the heating system if the solvent vapor condenser is not operating properly.

(v) Metal inspection tanks that:

(A) have a liquid surface area of less than 5 square feet, or

(B) do not use volatile organic solvents, or

(C) are not equipped with spray type flow devices or a means of solvent agitation.

(vi) Metal inspection spraying operations where no materials applied contain volatile organic compounds.

- (vii) Cold solvent degreasers used exclusively for educational purposes.
- (viii) Golf grip application stations that exclusively use liquid materials with an initial boiling point of 450°F (232°C), or greater.
- (ix) Surface preparation or solvent cleaning, including wipe cleaning:
  - (A) for quality control or quality assurance purposes, or
  - (B) using non-refillable handheld aerosol spray containers, or
  - (C) for routine janitorial maintenance, including graffiti removal or
  - (D) performed in conjunction with welding of 5XXX series aluminum structures for Navy ships and in accordance with quality assurance standards for such structures, or
  - (E) not associated with any permitted operation, provided:
    - (1) the cleaning materials have a VOC content of 25 grams per liter (0.21 lbs/gal), or less, as used, or
    - (2) the uncontrolled VOC emissions from all such cleaning operations located at the stationary source do not exceed 3,650 pounds per consecutive 12-months, or the total purchase or usage of solvents for such cleaning operations does not exceed 550 gallons per consecutive 12-months. The volume of materials applied from operations specified in Subsections (d)(16)(ix)(A) through (E)(1) above shall not be included when determining the applicability of this exemption. All data and/or records necessary to demonstrate that this exemption is applicable shall be maintained on-site for three years and made available to the District upon request.
- (x) Asbestos mastic removal operations using organic solvents provided the total VOC vapor pressure of the solvent is 0.2 mm Hg or less, at 20°C (68°F).

**(17) STORAGE AND TRANSFER EQUIPMENT**

- (i) Stationary equipment used exclusively to store and/or transfer liquid organic compounds that are not volatile organic liquids.
- (ii) Stationary storage tanks for volatile organic liquids with a capacity of less than 250 gallons and associated equipment used exclusively to transfer materials into such tanks.

- (iii) Equipment used exclusively to store and/or transfer organic solvents that are not used as fuels.
- (iv) Equipment used exclusively to store and/or transfer natural gas, butane, or propane when not mixed with other volatile organic liquids, other than odorants.
- (v) Equipment used exclusively to store and/or transfer fuels that are used exclusively as a source of fuel for wind machines used for agricultural purposes.
- (vi) Mobile transport, delivery, or cargo tanks on vehicles used for the delivery of volatile organic liquids. This exemption does not apply to asphalt tankers used to transport and transfer hot asphalt used for roofing applications.
- (vii) Equipment used to transfer fuel to and from amphibious ships for maintenance purposes, provided total annual transfers do not exceed 60,000 gallons per year at a stationary source.
- (viii) Equipment used exclusively to store and/or transfer liquid soaps, liquid detergents, vegetable oils, fatty acids, fatty esters, fatty alcohols, or waxes, and wax emulsions.
- (ix) Pressurized tanks used to store inorganic or halogenated organic gases and associated equipment used exclusively to transfer materials into such tanks.

**(18) DRYCLEANING, LAUNDRY EQUIPMENT, AND FABRIC RELATED OPERATIONS**

The exemptions listed in this Subsection (d)(18) shall not apply to any operation that uses perchloroethylene (perc) as a dry cleaning solvent.

- (i) Non-immersion dry cleaning equipment that uses water or exempt compounds as the cleaning solvent, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter.
- (ii) Lint traps used exclusively in conjunction with dry cleaning tumblers.
- (iii) Wastewater processing units associated with dry cleaning operations using halogenated compounds, provided the concentration of halogenated compounds in the water being evaporated in the unit does not exceed 400 parts per million (by weight).
- (iv) Laundry dryers, extractors, or tumblers used for fabrics cleaned only with solutions of bleach or detergents, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter. This exemption does not apply to equipment used for previously VOC-laden materials such as rags, cloths, etc.
- (v) Industrial wet cleaning equipment that uses water or exempt compounds as the cleaning solvent, provided that the VOC content of detergents and additives

used does not exceed 50 grams per liter. This exemption does not apply to equipment cleaning VOC-laden materials such as rags, cloths, etc.

(vi) Equipment, including dryers, used exclusively for printing, dyeing, stripping, or bleaching of textiles, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter.

(vii) Industrial laundering equipment that uses liquid carbon dioxide as the cleaning solvent, provided that the VOC content of detergents and additives used does not exceed 50 grams per liter.

(19) **MISCELLANEOUS EQUIPMENT AND OPERATIONS**

(i) Air pollution control equipment used exclusively to reduce

(A) emissions from any article, machine, equipment, process, or contrivance not required to have a Permit to Operate; or

(B) emissions generated during the draining and degassing of stationary floating roof gasoline storage tanks provided that a written authorization from the Air Pollution Control Officer to conduct the draining and degassing is obtained pursuant to Rule 61.1.

(ii) Repairs or maintenance not involving structural changes to any equipment for which a Permit to Operate has been granted.

(iii) Roofing kettles (used to heat asphalt), each with a capacity of 85 gallons or less.

(iv) Paper shredders and disintegrators, each with a maximum throughput capacity not to exceed 600 pounds per hour, either as rated by the manufacturer or as stated in writing by the manufacturer for the current configuration, and the associated conveying systems and baling equipment.

(v) Alkaline chemical milling equipment:

(A) used exclusively for the cleaning of internal combustion engine parts, or

(B) for which construction or installation commenced prior to March 27, 1990.

(vi) Portable conveyors (belt or screw type) where there is no screening.

(vii) Fire extinguishing equipment using halons.

- (viii) Equipment used exclusively for the purposes of:
  - (A) flash-over fire fighting training, or
  - (B) hand-held fire extinguisher training operations.
- (ix) Equipment used exclusively for bonding lining to brake shoes, where no volatile organic solvents are used.
- (x) Equipment used exclusively to liquefy or separate oxygen, nitrogen, or the inert gases from air.
- (xi) Any operation producing or blending materials for use in cosmetic, pharmaceutical or biotechnology products and/or manufacturing cosmetic, pharmaceutical or biotechnology products by chemical processes, that emit less than an average of 15 pounds of uncontrolled VOC per operating day for each calendar month from all phases of all such operations located at a single stationary source. All records necessary to calculate average daily VOC emissions, such as emission factors, VOC content of each material used, number of operating days per calendar month, and daily or monthly records of material usage, shall be maintained on-site for three years and be made available to the District upon request.
- (xii) Equipment used for hydraulic or hydrostatic testing.
- (xiii) Ethylene oxide sterilizing processes that use less than 5 pounds of ethylene oxide per calendar year. Purchase records and records of monthly ethylene oxide usage shall be maintained on-site for three years and be made available to the District upon request.
- (xiv) Sterilizers or autoclaves using only steam or hydrogen peroxide.
- (xv) Nail salon operations.
- (xvi) Equipment used exclusively for the melting or applying wax where no volatile organic solvents are used.
- (xvii) Aerosol can puncturing or crushing operations that use:
  - (A) a closed loop recovery system that emits no air contaminants, or
  - (B) a recovery system that vents all emissions through a properly operated and maintained carbon canister, provided not more than 500 cans are processed through the equipment per day. Throughput records of the number of cans processed shall be maintained on-site for three years and be made available to the District upon request.

(xviii) Any article, machine, equipment, or contrivance that emits airborne radioactive materials in concentrations above the natural radioactive background concentration in air in the form of dusts, fumes, smoke, mists, liquids, vapors, or gases. This exemption does not apply to incinerators or boilers.

Atomic energy development and radiation protection are controlled by the State of California to the extent it has jurisdiction thereof, in accordance with the advice and recommendations made to the Governor by the Advisory Council on atomic energy development and radiation protection. Such development and protection are fully regulated by the Nuclear Regulatory Commission to the extent that such authority has not been delegated to the states.

(xix) Any other piece of equipment or operation not covered by other subsections that has an uncontrolled emission rate of each criteria pollutant of 2 pounds or less per day, or of 75 pounds or less per year. All data and/or records necessary to demonstrate that this exemption is applicable shall be maintained on-site for three years and made available to the District upon request.

(xx) Equipment approved for use by the EPA for recovering and/or recycling chlorofluorocarbons (CFCs) or alternative fluorocarbons.

(xxi) Municipal wastewater treatment facilities, municipal water reclamation facilities, and municipal wastewater pump stations each with a design throughput capacity of less than one million gallons of wastewater per day.

(xxii) Industrial wastewater treatment that:

(A) does not use processes designed to remove or destroy VOCs, or

(B) if such processes are used, the uncontrolled VOC emissions do not exceed an average of 5 pounds per day from all such treatment at the stationary source.

(xxiii) Sludge processing operations at municipal wastewater treatment facilities each with a design throughput capacity of less than one million gallons of wastewater per day.

(xxiv) Smoke generating equipment in training sessions conducted by government agencies for the purpose of certifying persons to evaluate visible emissions for compliance with State law or District Rules and Regulations.

(xxv) Smoke generating equipment used for training military personnel and smoke generating equipment used for the testing of military equipment by the Department of Defense.

(xxvi) Agricultural sources at a stationary source that, in aggregate, produce actual emissions less than one-half of any applicable emission threshold for a major source in the District. For the purposes of determining permitting applicability, fugitive emissions, except fugitive dust emissions, are included in determining aggregate emissions. This exemption shall not apply to an agricultural source required to obtain a Title V permit pursuant to Regulation XIV (Title V Operating Permits).

(xxvii) Fuel cells used in power and/or heat generating equipment that are certified under California Air Resources Board's Distributed Generation Program or meet the emission standards of that program.

(xxviii) Operations that exclusively use preservative oils and compounds; lubricants, including solid film lubricants; greases or waxes.

(xxix) Ozone generators with a generation capacity of less than 1,000 grams of ozone per hour.

(xxx) Site assessment for soil and/or groundwater remediation projects, provided that all of the following conditions are met:

(A) the sole purpose of the site assessment is to determine the extent of the contamination and the VOC concentrations in the soil and/or groundwater in order to design the appropriate collection and control equipment for the remediation project; and

(B) the site assessment is conducted for no more than 30 cumulative days within a calendar year. A record of the number of operating days must be maintained with the equipment for the duration of the site assessment; and

(C) the collected soil, vapor or groundwater is routed through emission control equipment.

This exemption does not apply to any associated combustion equipment unless such equipment is also exempt pursuant to Subsection (d)(2) of this rule.

(xxxix) Soil, sediment, air or groundwater monitoring, and installation of associated wells, performed to meet the requirements of other regulatory agencies.

(xxxix) Any underground building ventilation system, sub-slab depressurization system, or soil/vapor intrusion mitigation associated with soil, vapor or groundwater that is not required to be remediated by any other regulatory agency.

(xxxix) Additive manufacturing (3-D printing) equipment.

(xxxiv) Except as otherwise provided in Subsection (d)(16)(x), asbestos removal equipment and operations subject to 40 CFR Part 61, Subpart M – National Emission Standards for Asbestos.

(xxxv) Wet screening operations.

(20) **REGISTERED EQUIPMENT**

(i) Any portable equipment that is registered in accordance with District Rule 12.1. This exemption does not apply to any equipment while in use for screening of soils in contaminated soil remediation projects.

(ii) Any emission unit registered in accordance with District Rule 12.

(iii) Any portable equipment registered in accordance with the Statewide Portable Equipment Registration Program adopted pursuant to California Health and Safety Code Section 41750, et seq., except in circumstances specified in that program (California Code of Regulations, Title 13, §2451 and §2457).

(e) **RESERVED**

(f) **RESERVED**

(g) **TEST METHODS**

The following test methods will be used for compliance verification purposes.

(1) The VOC content of coating and adhesive materials containing more than 50 grams of VOC per liter shall be determined by the Environmental Protection Agency (EPA) Reference Method 24 (40 CFR Part 60, Appendix A, Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings), September 1995, or by the South Coast Air Quality Management District (SCAQMD) Method 304-91 (Determination of Volatile Organic Compounds in Various Materials), February 1996.

(2) The VOC content of surface preparation or cleaning materials containing 50 grams of VOC per liter or less, subject to the requirements of Subsection (d)(16)(i) and (ix), shall be determined by SCAQMD Method 313-91 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry), February 1997, or by SCAQMD Method 308-91 (Quantitation of Compounds by Gas Chromatography), February 1993.

(3) The initial boiling point of materials subject to this rule shall be determined in accordance with ASTM Standard Test Method D1078-11 (Standard Test Method for Distillation Range of Volatile Organic Liquids), or its most current version.



(4) Calculation of total VOC vapor pressure for materials subject to this rule shall be conducted in accordance with the District's "SD 1, Procedures for Estimating the Vapor Pressure of VOC Mixtures," June 2004. If the vapor pressure of the liquid mixture, as calculated by this procedure, exceeds the limits specified, the vapor pressure shall be determined in accordance with ASTM Standard Test Method D2879-10 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), or its most current version.

(5) Reid Vapor Pressure pursuant to Subsections (c)(32) and (d)(17) of this rule shall be measured in accordance with ASTM Standard Test Method D323-08(2014) (Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)), or its most current version.

(6) Concentration of halogenated compounds in water pursuant to Subsection (d)(18)(iii) shall be measured in accordance with EPA Publication SW-846 Test Method 8021B (Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and Electrolytic Conductivity Detectors), July 2014.

(h) **COMPLIANCE SCHEDULE**

Any person operating existing equipment previously exempt from Rule 10 permit requirements pursuant to the version of Rule 11 existing prior to May 11, 2016, and that is no longer exempt from Rule 10 permit requirements pursuant to this rule, shall submit an application for a permit to operate such equipment by May 11, 2017.

# **SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT**

## **RULE 17. CANCELLATION OF APPLICATIONS**

(Rev. Effective 11/25/81)

**(a)** An Authority to Construct shall expire and the application shall be cancelled one-year from the date of issuance of the Authority to Construct. A period of more than one-year may be granted by the Air Pollution Control Officer if it is stated in the application, or in a letter to the Air Pollution Control Officer, and the Air Pollution Control Officer determines that the additional time is required for completion of the construction, or when a period of more than one-year is authorized by the Hearing Board for construction. The Authority to Construct shall expire and the application shall be cancelled upon the expiration of such construction period, but in any event not later than five years from the date of issuance of the Authority to Construct. (Rev. Effective 11/25/81)

**(b)** An application for Permit to Operate shall be cancelled six months from the date of filing the application or six months from the date of completion of construction authorized by an Authority to Construct, whichever date is later, provided however, that the Air Pollution Control Officer may for good cause shown extend the six month's period in increments of up to six months.

**(c)** An application for Authority to Construct and/or Permit to Operate shall be cancelled if the Air Pollution Control Officer request additional information necessary to complete evaluation of the application and the applicant fails to furnish the information within six months after the request.

**(d)** Notice of any cancellation action taken pursuant to this rule shall be deemed to have been given when written notification has been delivered to the applicant or his representative.

**SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT**

**RULE 19. PROVISION OF SAMPLING AND TESTING FACILITIES**

(Rev. Effective 4/6/93)

Any person owning or operating any article, machine, equipment or other contrivance for which these rules require a permit shall provide access, facilities, utilities, and any necessary safety equipment, for inspection and testing, as specified and approved by the Air Pollution Control Officer.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 19.2. CONTINUOUS EMISSION MONITORING REQUIREMENTS

(Effective 4/20/77: Rev. Effective 1/12/79)

(a) **DEFINITIONS.** Definitions used shall be those given in CFR 40, Part 51, or equivalent ones established by mutual agreement of the Air Pollution Control District, Air Resources Board, and Environmental Protection Agency. "CFR" as used in this rule means Code of Federal Regulations.

(b) **SOURCES AND EMISSIONS TO BE MONITORED.** The owner or operator of any source listed below for which these Rules and Regulations require a permit shall provide, properly install, maintain in good working order, and operate continuous monitoring, systems to measure and record the emissions from the source as follows:

1. Fossil-fuel fired steam generators with a heat input of 250 million BTU (63 million kilogram calories) or more per hour with a use factor of at least 30 percent per year. The emissions to be monitored are:

(i) Oxides of nitrogen;

(ii) Carbon dioxide or oxygen;

(iii) Visible emissions, as opacity, except:

(A) when gaseous fuel is the only fuel burned, or

(B) when oil or a mixture of gaseous fuel and oil is the only fuel burned; and the source has a heat input of less than 1000 million BTU (252 million kilogram calories) per hour and is able to comply with all applicable particulate matter and visible emission rules herein without collection equipment; and the source has not been found since December 31, 1970, through administrative or judicial proceedings, to be in violation of Rule 50 or any other applicable visible emission standard.

(iv) Sulfur dioxide (SO<sub>2</sub>), if SO<sub>2</sub> control equipment is used.

2. All sulfur recovery plants. The emission to be monitored is sulfur dioxide.

3. Carbon monoxide (CO) boilers of regenerators of fluid catalytic cracking units. The emissions to be monitored are:

(i) Sulfur dioxide;

(ii) Visible emissions, as opacity.

4. Carbon monoxide (CO) boilers of fluid cokers if feed rate is greater than 10,000 barrels (1,500,000 liters) per day. The emissions to be monitored are:

(i) Sulfur dioxide;

(ii) Visible emissions, as opacity.

(c) **INSTALLATION AND STARTUP.** Owners or operators of sources required to have continuous emission monitors shall have installed all necessary monitoring and recording equipment and shall have begun monitoring and recording by October 6, 1978.

(d) **REPORTING.**

1. File of Records.

Owners or operators subject to the provisions of these Rules and Regulations shall maintain for a period of at least two years a record in a permanent form suitable for inspection and shall make such record available upon request to the State Air Resource Board and the Air Pollution Control District. The record shall include:

(i) Occurrence and duration of any startup, shutdown or malfunction in the operation of any affected facility.

(ii) Performance testing, evaluations, calibrations, checks, adjustments, and maintenance of any continuous emission monitors that have been installed pursuant to these rules.

(iii) Emission measurements.

2. Quarterly Report.

Owners or operators subject to provisions of these Rules and Regulations shall submit a written report for each calendar quarter to the Air Pollution Control Officer. The report is due by the 30th day following the end of the calendar quarter and shall include:

(i) Time intervals, date and magnitude of excess emissions, nature and cause of the excess (if known), corrective actions taken and preventive measures adopted.

(ii) Averaging period used for data reporting corresponding to averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant/source category in question.

(iii) Time and date of each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs and adjustments.

(iv) A negative declaration when no excess emissions occurred.

(v) Reports on opacity monitors giving the number of three minute periods during which during the average opacity exceeded the standard for each hour of operation. The averages may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced instantaneous opacity measurements per minute. Any time period exempted shall be subtracted before determining the excess averages of opacity.

3. Reports of Violations.

Any violation of any emission standard to which the stationary source is required to conform, as indicated by the records of the monitoring device, shall be reported by the operator of the source to the District within 96 hours after such occurrence. The District shall, in turn, report the violation to the State Air Resources Board within five working days after receiving of the report of the violation from the operator.

#### 4. Emission Reporting Units (Effective 1/12/79)

All emission data shall be reported in the units of the applicable standards.

### (e) DATA REDUCTION

Data shall be reduced according to the procedure established in CFR 40 Part 51, Appendix P, paragraph 5.0 through 5.3.3, or by other methods deemed equivalent by joint decision of the Air Pollution Control District, Air Resources Board and Environmental Protection Agency.

### (f) STANDARDS OF PERFORMANCE FOR MONITORING SYSTEMS

1. Systems shall be installed, calibrated, maintained and operated in accordance with the following sections of CFR 40.

(i) Fossil-fuel Fired Steam Generators: Section 60.45.

(ii) Petroleum Refineries: Section 60.105.

Equivalent standards may be used by mutual agreement of the Air Pollution Control District, Air Resources Board and Environmental Protection Agency.

2. Calibration gas mixtures shall meet the specifications in CFR 40, Part 51, Appendix P, Section 3.3, and Part 60, Appendix B, Performance Specification 2, Section 2.1; or shall meet equivalent specifications established by mutual agreement of the Air Pollution Control District, Air Resources Board and Environmental Protection Agency.
3. Cycling times shall be those specified in CFR 40, Part 51, Appendix P, Section 3.4, 3.4.1 and 3.4.2; or shall meet equivalent specifications established by mutual agreement of the Air Pollution Control District, Air Resources Board and Environmental Protection Agency.
4. The continuous sulfur dioxide and oxides of nitrogen monitors shall meet the applicable performance specification requirements in CFR 40, Part 51, Appendix P, and Part 60, Appendix B; or shall meet equivalent specifications established by mutual agreement of the Air Pollution Control District, Air Resources Board and Environmental Protection Agency.
5. The continuous carbon dioxide and oxygen (O<sub>2</sub>) monitoring system shall meet the performance specification requirements in CFR 40, Part 51, Appendix P, and Part 60, Appendix B; or shall meet equivalent specifications established by mutual agreement of the Air Pollution Control District, Air Resources Board and Environmental Protection Agency.
6. The continuous opacity monitoring system shall meet the performance specification requirements in CFR 40, Part

51, Appendix P, and Part 60, Appendix B; or shall meet equivalent specifications established by mutual agreement of the Air Pollution Control District, Air Resources Board and Environmental Protection Agency.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 19.3. EMISSION INFORMATION

(Adopted & Effective 4/6/93; Rev. Adopted & Effective 5/15/96)

### (a) APPLICABILITY

This rule is applicable to any person owning or operating any source of emissions of air pollutants, or to any person selling or supplying any material the use of which may cause the emission of air pollutants.

### (b) DEFINITIONS (Rev. Effective 5/15/96)

For the purposes of this rule, the following definitions shall apply:

1. **"Air Pollutant"** means any substance discharged, released, or otherwise propagated into the atmosphere and includes, but is not limited to, any combination of the following: volatile organic compounds, exempt compounds, oxides of nitrogen, particulate matter, gaseous sulfur compounds, carbon monoxide, and toxic air contaminants, including hazardous air pollutants identified in the 1990 Federal Clean Air Act Amendments, Title I, Section 112(b).
2. **"Contiguous Property"** means two or more parcels of land with a common boundary or separated solely by a public or private roadway or other public or private right-of-way. Non-adjoining parcels of land separated solely by bodies of water designated "navigable" by the U.S. Coast Guard shall not be considered contiguous properties.
3. **"Emissions Inventory Report Form"** means a form provided by the District to a person subject to this rule, specifying direction on the complete and accurate submission of process information necessary to determine emissions of air pollutants. This form may include some or all of the following: process information or equipment specifications; material or fuel consumption; material throughput or production rates; material disposal or reclamation rates; material composition or characteristics; temporal specification of operations; location of emission origin; emission control equipment and operational parameters; material sales and distribution information; and, specification of applicable District Permits to Operate.
4. **"Emissions Statement Form"** means a form provided by the District to a person owning or operating a stationary source subject to this rule, specifying direction on the complete and accurate submission of information on emissions subject to this rule. Information subject to specification on this form may include, but is not limited to, emission factors and calculated emission rates of air pollutants, as well as any information subject to the "Emissions Inventory Report Form".
5. **"Emission Unit"** means any article, machine, equipment, process, process line, or contrivance, which emit(s) or reduce(s) or may cause to emit or reduce the emission of any air pollutant.
6. **"Exempt Compound"** means the same as defined in Rule 2. (Rev. Effective 5/15/96)
7. **"Stationary Source"** means an emission unit or aggregation of emission units, located on the same or contiguous properties. Emission units which are on the same or contiguous property but which are not under the same ownership or entitlement to use and which are not related shall not be considered a single stationary source. Stationary sources also include those emission units or aggregation of emission units located in the California Coastal Waters.



8. **"Toxic Air Contaminant"** means an air pollutant 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.
9. **"Volatile Organic Compound (VOC)"** means any volatile compound containing at least one atom of carbon excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonates, and exempt compounds which may be emitted to the atmosphere during operations or activities resulting in emissions of air pollutants.

(c) **REQUIREMENTS**

1. Except as provided in Subsection (c)(2), and in accordance with the provisions in Subsections (c)(3), (c)(4) and (c)(5), any person subject to this rule shall be subject to requirements for submission of Emissions Statement Forms and/or Emissions Inventory Report Forms.
2. Any person owning or operating any stationary source of emissions subject to this rule which emits less than 5 tons per year of each air pollutant, and does not emit toxic air contaminants, shall not be required to submit an Emissions Statement Form.
3. Any person owning or operating any stationary source of emissions subject to this rule which emits 25 tons per year or greater of volatile organic compounds or oxides of nitrogen shall, in accordance with the 1990 Federal Clean Air Act Amendments, Title I, Section 182 (a)(3)(B), submit Emissions Statement Forms to the District for the 1992 calendar year and for each calendar year thereafter.
4. Effective January 1, 1994, any person owning or operating any stationary source subject to this rule which emits 5 or more tons per year but less than 25 tons per year of VOC or NO<sub>x</sub>, and any person who sells or supplies any material the use of which may cause the emission of air pollutants, may be required to submit an Emissions Statement Form and/or Emissions Inventory Report Form, as deemed appropriate by the Air Pollution Control Officer.
5. The District shall require the completion and submission of Emissions Statement Forms and/or Emissions Inventory Report Forms by persons subject to this rule at such frequency as the Air Pollution Control Officer determines is necessary to comply with federal or state requirements or to develop or implement an air contaminant control program to meet federal or state requirements.
6. Upon receipt of an Emissions Statement Form or Emissions Inventory Report Form, a person subject to this rule shall:
  - (i) Complete the form as directed and return it to the District by the due date, which shall be 60 days from the date the form was first provided by the District.
  - (ii) Provide with the completed form a signed statement by the person, or a responsible official, certifying that the information contained in the form is accurate to the best knowledge of that person or official.
7. Any person required to submit an Emissions Statement Form or Emissions Inventory Report Form to the District shall maintain the supporting documentation upon which the information in the form was based. This documentation shall be retained on site for at least three years, and shall be made available to the District upon request.
8. The Air Pollution Control Officer may grant, on a case-by-case basis, one extension of the Emissions Statement

Form or Emissions Inventory Report Form due date, not to exceed 60 days, in those cases where the person demonstrates that, due to circumstances beyond the control of that person, the original due date cannot be met. The person shall request the extension, in writing, specifying the circumstances and the number of additional days requested.

**RULE 20. STANDARDS FOR GRANTING PERMITS**

(Adopted and Effective 9/19/84)

(Revision Adopted and Effective 6/10/86)

(a) The Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate or Use or Permit to Sell or Rent, except as provided in Rule 21, if the applicant does not show that every 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, is so designed, controlled or equipped with such air pollution control equipment, that it may be expected to operate in compliance with Sections 41700 and 41701 and of the Health and Safety Code, and Rules 20.1, 20.2, 20.3, 20.4, 20.5, 20.6, 20.7 and other requirements of these Rules and Regulations.

(b) Before an Authority to Construct or a Permit to Operate is granted, the Air Pollution Control Officer may require the applicant to 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 article, machine, equipment or other contrivance described in the Authority to Construct or Permit to Operate. 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 and testing equipment. The platform and access shall be constructed in accordance with the General Industrial Safety Orders of the State of California.

(c) In acting upon a Permit to Operate, if the Air Pollution Control Officer finds that the article, machine, equipment or other contrivance has not been constructed in accordance with the Authority to Construct, he shall deny the Permit to Operate. The Air Pollution Control Officer shall not accept any further application for Permit to Operate the article, machine, equipment or other contrivance so constructed until he finds that the article, machine, equipment or other contrivance has been constructed in accordance with the Authority to Construct.

**SAN DIEGO AIR POLLUTION CONTROL DISTRICT**

**RULE 20.1**

**NEW SOURCE REVIEW - GENERAL PROVISIONS**

(ADOPTED AND EFFECTIVE 5/17/94)

(REV. ADOPTED AND EFFECTIVE 5/15/96)

(REV. ADOPTED AND EFFECTIVE 12/17/97)

(REV. ADOPTED 11/4/98; EFFECTIVE 12/17/98)

(REV. ADOPTED 4/27/16; EFFECTIVE (*date of EPA approval into SIP*))

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**RULE 20.1. NEW SOURCE REVIEW - GENERAL PROVISIONS**

(Adopted & Effective 5/17/94)

(Rev. Adopted & Effective 5/15/96)

(Rev. Adopted & Effective 12/17/97)

(Rev. Adopted 11/4/98; Effective 12/17/98)

(Rev. Adopted 4/27/16 & Effective (*date of EPA approval into SIP*))

(a) **APPLICABILITY**

Except as provided in Rule 11, Section (b) of this Rule, or Subsections (d)(1)(ii)(B) or (d)(4)(iii)(C) of this rule, this rule applies to any new or modified emission unit, any replacement emission unit, any relocated emission unit or any portable emission unit for which an Authority to Construct or Permit to Operate is required pursuant to Rule 10, or for which a Determination of Compliance is required pursuant to Rule 20.5. This rule does not apply to identical or like-kind replacement emission units exempt from Authority to Construct and modified Permit to Operate requirements pursuant to these Rules and Regulations. Except as specified herein, the provisions and requirements of this rule shall be applied on an air contaminant-specific basis. Compliance with this rule does not relieve a person from having to comply with other applicable requirements in these Rules and Regulations, or state and federal law.

(b) **EXEMPTIONS**

Except as provided below, the provisions of Rules 20.1, 20.2, 20.3 and 20.4 shall not apply to:

(1) Any emission unit for which a permit is required solely due to a change in Rule 11, provided the unit was operated in San Diego County at any time within one year prior to the date of adoption of the applicable Rule 11 change and provided a District permit application for the unit is submitted within one year after the date upon which permit requirements became applicable to the unit. An emission unit to which this subsection applies shall be included in the calculation of a stationary source's aggregate potential to emit, as provided in Subsection (d)(1)(ii).

(2) The following changes, provided such changes are not contrary to any permit condition, and the change does not result in an increase in the potential to emit of any air contaminant not previously emitted:

- (i) Repair or routine maintenance of an existing emission unit.
- (ii) A change of ownership.
- (iii) An increase in the hours of operation.
- (iv) Use of alternate fuel or raw material.

(3) Portable and stationary abrasive blasting equipment which comply with the requirements of 17 CCR Section 92000 et. seq. This exemption shall not apply if the abrasive blasting equipment would be, by itself, a major stationary source, nor to any equipment used in conjunction with the abrasive blasting equipment the use of which may cause the issuance of air contaminants.

(4) Piston engines used at airplane runways at military bases and which engines are used exclusively for purposes of hoisting cable to assist in the capture of errant aircraft during landings. This exemption shall not apply to any new, modified, relocated or replacement piston engine emission unit, or project consisting of one or more such units, that results in an emissions increase which, by itself, constitutes a new federal major stationary source or a federal major modification.

(5) Air compressors used exclusively to pressurize nuclear reactor containment domes, provided the compressors are not operated more than 50 hours over any two-year period, and that the compressors satisfy the Air Quality Impact Analysis (AQIA) provisions of Subsections (d)(2) of Rules 20.2 and 20.3, as applicable.

(6) Applications for modified Authority to Construct or modified Permit to Operate which are for the sole purpose of reducing an emission unit's potential to emit and which will not result in a modified emission unit, a modified stationary source or an actual emission reduction calculated pursuant to Rule 20.1(d)(4)(ii) shall be exempt from the Best Available Control Technology (BACT), Lowest Achievable Emission Rate (LAER), AQIA and Emission Offset provisions of Rules 20.1, 20.2, 20.3 and 20.4.

(c) **DEFINITIONS**

For purposes of Rules 20.1, 20.2, 20.3, 20.4 and 20.5, the following definitions shall apply. For terms not defined herein, the definitions in Rule 2 shall apply.

(1) "**Actual Emissions**" means the emissions of an emission unit calculated pursuant to Subsection (d)(2) of this rule.

(2) "**Actual Emission Reductions**" means emission reductions which are real, surplus, enforceable, quantifiable and permanent. Actual emission reductions shall be calculated pursuant to Subsection (d)(4) of this rule.

(3) "**Aggregate Potential to Emit**" means the sum of the potential to emit of all emission units at the stationary source, calculated pursuant to Section (d) of this rule.

(4) "**Air Contaminant Emission Control Project**" means any activity or project undertaken at an existing emission unit which, as its primary purpose, reduces emissions of air contaminants from such unit in order to comply with a District, California Air Resources Board (ARB) or federal Environmental Protection Agency (EPA) emission control requirement.

(i) Such activities or projects do not include:

(A) the replacement of an existing emission unit with a newer or different unit;

(B) a modification or replacement of an existing emission unit to the extent that such replacement or modification results in an increase in capacity of the emissions unit;

(C) any air contaminant emission control project for a new or modified emission unit which project is proposed to meet these New Source Review Rules 20.1, 20.2, 20.3 or 20.4; or,

(D) any air contaminant emission control project for an existing emission unit proposed to create an actual emission reduction or emission reduction credit in order to meet a requirement of these New Source Review Rules 20.1-20.4.

(ii) Air contaminant emission control projects include, but are not limited to, any of the following:

(A) The installation of conventional or advanced flue gas desulfurization, or sorbent injection for emissions of oxides of sulfur;

(B) Electrostatic precipitators, baghouses, high efficiency multiclones, or scrubbers for emissions of particulate matter or other pollutants;

(C) Flue gas recirculation, low-NO<sub>x</sub> burners, selective non-catalytic reduction or selective catalytic reduction for emissions of oxides of nitrogen;

(D) Regenerative thermal oxidizers, catalytic oxidizers, condensers, thermal incinerators, flares, absorption equipment or carbon adsorbers for volatile organic compounds or hazardous air pollutants;

(E) Activities or projects undertaken to accommodate switching to an inherently less polluting fuel, including but not limited to, natural gas firing, or the cofiring of natural gas and other inherently less polluting fuels, for the purpose of controlling emissions. The air contaminant emission control project shall include any activity that is necessary to accommodate switching to an inherently less polluting fuel; and

(F) Activities or projects undertaken to replace or reduce the use and emissions of stratospheric ozone depleting compounds subject to regulation by the federal EPA.

(5) "**Air Quality Impact Analysis (AQIA)**" means an analysis of the air quality impacts of the air contaminant emissions from an emission unit, a project, or a stationary



source, as applicable, conducted by means of modeling as defined herein and as approved by the Air Pollution Control Officer. Methods other than modeling may be used, as the Air Pollution Control Officer and the federal EPA may approve. An AQIA shall be based on the emission exhaust system design and discharge characteristics but not on an exhaust stack height greater than good engineering practice stack height. This provision shall not be applied to limit actual stack height.

(6) "Air Quality Increment" means any of the following maximum allowable cumulative increases in air contaminant concentration over the minor source baseline concentration from all increment consuming and increment expanding sources (see Tables 20.1-1 and 20.1-2).

**TABLE 20.1 - 1**  
**Air Quality Increments**  
**(Class I Areas)**

<u>Air Contaminant</u>	<u>Increment</u>
<u>Nitrogen Dioxide (NO<sub>2</sub>)</u>	
Annual arithmetic mean	2.5 µg/m <sup>3</sup>
<u>Sulfur Dioxide (SO<sub>2</sub>)</u>	
Annual arithmetic mean	2.0 µg/m <sup>3</sup>
24-hr. maximum	5.0 µg/m <sup>3</sup>
3-hr. maximum	25.0 µg/m <sup>3</sup>
<u>Particulate Matter</u>	
PM <sub>10</sub> Annual arithmetic mean	4.0 µg/m <sup>3</sup>
PM <sub>10</sub> 24-hr. maximum	8.0 µg/m <sup>3</sup>
PM <sub>2.5</sub> Annual arithmetic mean	1.0 µg/m <sup>3</sup>
PM <sub>2.5</sub> 24-hr. maximum	2.0 µg/m <sup>3</sup>

**TABLE 20.1 - 2**  
**Air Quality Increments**  
**(Class II Areas)**

<u>Air Contaminant</u>	<u>Increment</u>
<u>Nitrogen Dioxide (NO<sub>2</sub>)</u>	
Annual arithmetic mean	25.0 µg/m <sup>3</sup>
<u>Sulfur Dioxide (SO<sub>2</sub>)</u>	
Annual arithmetic mean	20.0 µg/m <sup>3</sup>
24-hr. maximum	91.0 µg/m <sup>3</sup>
3-hr. maximum	512.0 µg/m <sup>3</sup>
<u>Particulate Matter</u>	
PM <sub>10</sub> Annual arithmetic mean	17.0 µg/m <sup>3</sup>
PM <sub>10</sub> 24-hr. maximum	30.0 µg/m <sup>3</sup>
PM <sub>2.5</sub> Annual arithmetic mean	4.0 µg/m <sup>3</sup>
PM <sub>2.5</sub> 24-hr. maximum	9.0 µg/m <sup>3</sup>

(7) "**Area Fugitive Emissions of PM<sub>10</sub>**" means fugitive emissions of PM<sub>10</sub> which occur as a result of earth moving operations such as drilling, blasting, quarrying, stockpiling, and front end loader operations, and on-site vehicular travel on haul roads used to move materials to, from or within a stationary source.

(8) "**Attainment**" means designated as attainment of the National Ambient Air Quality Standards (NAAQS) pursuant to Section 107(d) of the federal Clean Air Act or of the State Ambient Air Quality Standards (SAAQS) pursuant to Section 39608 of the California Health and Safety Code, as applicable. For the purposes of these Rules 20.1, 20.2, 20.3 and 20.4, attainment of a NAAQS means also designated as attainment or unclassifiable by EPA in 40 CFR Section 81.305.

(9) "**Baseline Concentration**" means the ambient concentration of an air contaminant for which there is an air quality increment, which existed in an impact area on the major and minor source baseline dates. The baseline concentration includes the impact of actual emissions from any stationary source in existence on the baseline date and the impacts from the potential to emit of Prevention of Significant Deterioration (PSD) stationary sources which commenced construction but were not in operation by the baseline date. The baseline concentration excludes impacts of actual emission increases and decreases at any stationary source occurring after the baseline date and actual emissions from any PSD stationary source which commenced construction after January 6, 1975. There are two baseline concentrations for any given impact area, a baseline concentration as of the major source baseline date and a baseline concentration as of the minor source baseline date.

(10) "**Baseline Date**" means either the major source baseline date or source baseline date, as applicable.

(11) "**Begin Actual Construction**" means initiation of physical on-site construction activities on an emission 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 modified emission unit resulting from an operational change, begin actual construction means those on-site activities, other than preparatory activities, which mark the initiation of the change.

(12) "**Best Available Control Technology (BACT)**" means and is applied as follows:

(i) The lowest emitting of any of the following:

(A) the most stringent emission limitation, or the most effective emission control device or control technique, or combination thereof, which has been proven in field application and which is cost-effective for such class or category of emission unit unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that such limitation, device, control technique or combination thereof is not technologically feasible; or

(B) any emission control device, emission limitation or control technique, or combination thereof, which has been demonstrated but not necessarily proven in field application and which is cost-effective for such class or category of emission unit as determined by the Air Pollution Control Officer, unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that such limitation, device, control technique or combination thereof is not technologically feasible; or

(C) any emission control device, emission limitation or control technique, process modifications, changes in raw material including alternate fuels, and substitution of equipment or processes with any equipment or processes, or any combination of these, determined by the Air Pollution Control Officer on a case-by-case basis to be technologically feasible and cost-effective, including transfers of technology from another category of source; or

(D) the most stringent emission limitation, or the most effective emission control device or control technique, or combination thereof, contained in any State Implementation Plan (SIP) approved by the federal EPA for such class or category of emission unit unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that such limitation or technique has not been proven in field application, that it is not technologically feasible or that it is not cost-effective for such class or category of emission unit.

(ii) In determining BACT, the Air Pollution Control Officer may also consider lower-emitting alternatives to a proposed new emission unit or process.

(iii) For modified emission units, not including any relocated or replacement emission units, the entire emission unit's post-project potential to emit shall be subject to BACT, except that BACT shall apply to the emissions increase associated with the modification and not the emission unit's entire potential to emit if:

(A) control technology, an emission limit or other emission controls meeting BACT was previously applied to the unit; and

(B) the emissions increase associated with the modification is less than 25 percent of the emission unit's pre-project potential to emit; and

(C) the project's emission increase is less than the major modification thresholds of Table 20.1-6a.

(iv) In no event shall application of BACT result in the emission of any air contaminant which would exceed the emissions allowed by any District rule or regulation, or by any applicable standard under 40 CFR Part 60 (New Source Performance Standards) or 40 CFR Part 61 or Part 63 (National Emission Standards for Hazardous Pollutants).

(v) Whenever feasible, the Air Pollution Control Officer may stipulate an emission limit as BACT instead of specifying control equipment.

(vi) In making a BACT determination, the Air Pollution Control Officer shall take into account those environmental and energy impacts identified by the applicant.

(vii) In the case of a project consisting of multiple new, modified, relocated or replacement emission units subject to BACT under these Rules 20.1-20.4, BACT shall be determined for each such emission unit. The Air Pollution Control Officer may also require BACT be evaluated for combinations of such emission units. The Air Pollution Control Officer may determine that BACT for the project is the lowest emitting, technologically feasible combination of emission limitations, control devices, control techniques, or process modifications applied to individual emission units and/or combinations of such emission units. BACT applied to a combination of emission units shall not result in less stringent BACT for any emission unit in the combination than BACT determined for that emission unit individually.

(13) "**Class I Area**" means any area designated as Class I under Title I, Part C of the federal Clean Air Act. As of April 27, 2016, the Agua Tibia National Wilderness Area was the only area so designated within San Diego County. As of April 27, 2016, the following were the only designated Class I areas within 100 km of San Diego County (see Table 20.1-3):

**TABLE 20.1 - 3**  
**Class I Areas**

<u>Class I Area</u>	<u>Approximate Location</u>
Agua Tibia Wilderness Area	San Diego County
Cucamonga Wilderness Area	San Bernardino County
Joshua Tree Wilderness Area	Riverside County
San Gabriel Wilderness Area	Los Angeles County
San Geronio Wilderness Area	San Bernardino County
San Jacinto Wilderness Area	Riverside County

(14) "**Class II Area**" means any area not designated as a Class I area.

(15) "**Commenced Construction**" means that the owner or operator of a stationary source has an Authority to Construct or a Determination of Compliance issued pursuant to these rules and regulations and either has:

(i) Begun, or caused to begin, a continuous program of actual on-site construction of the source to be completed within a reasonable time, or

(ii) 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.

(16) "**Construction**" means any physical change or change in the method of operation, including fabrication, erection, installation, demolition or modification of an emission unit, which would result in a change in emissions.

(17) "**Contemporaneous Net Emissions Increase**" means the sum of emission increases from new, modified, relocated or replacement emission units occurring at a stationary source within a five-year contemporaneous period consisting of the calendar year in which the subject emission unit(s) is expected to commence operation and the four calendar years preceding that calendar year, including all other emission units with complete applications under District review and which are expected to commence operation within such calendar years. The sum of emission increases may be reduced by the following:

(i) Actual emission reductions occurring at the stationary source within the five-year contemporaneous period and which have not been used to create an emission reduction credit or to offset an emission increase under these rules, and

(ii) Enforceable reductions in the potential to emit of a new, modified, relocated or replacement unit, which unit resulted in a contemporaneous net emissions increase within the five-year contemporaneous period at the stationary source. In no case shall the reduction in the potential to emit exceed the emission increases from such unit that occurred within the five-year contemporaneous period.

When an emissions increase from a new, modified, relocated or replacement emission unit or project has been determined to be subject to, and approved as in compliance with, the emission offset requirements of Rules 20.1 and 20.3 or Rule 20.4, the contemporaneous net emissions increase for the subject air contaminant or precursor shall thereafter not include the emission increase from such emission unit or project.

(18) "**Cost-Effective**" means that the annualized cost in dollars per pound of emissions of an air contaminant reduced does not exceed \$6.00 per pound for NO<sub>x</sub>, \$6.00 per pound for VOC, \$3.33 per pound for PM<sub>10</sub>, and \$6.00 per pound for SO<sub>x</sub>, multiplied by the applicable BACT Cost Multiplier specified in Table 20.1 – 4 below. For all other air contaminants subject to BACT requirements by Rules 20.1-20.4, cost-effective means that the annualized cost in dollars per pound of emissions of an air contaminant reduced does not exceed the highest cost per pound of emissions reduced by other control measures required to meet stationary source emission standards contained in these rules and regulations, for the specific air contaminant(s) under consideration, multiplied by the BACT Cost Multiplier specified in Table 20.1 – 4. When determining the highest cost per pound of emissions reduced by other control measures, the cost of measures used to comply with the requirements of New Source Review shall be excluded.

**TABLE 20.1 - 4**  
**BACT Cost Multiplier**

Stationary Source's Post-Project Aggregate <u>Potential to Emit</u>	<u>BACT Cost Multiplier</u>
Potential < 15 tons/year	1.1
Potential ≥ 15 tons/year	1.5

(19) "**Emergency Equipment**" means an emission unit used exclusively to drive an electrical generator, an air compressor or a pump in emergency situations, except for operations up to 52 hours per calendar year for non-emergency purposes. Emission units used for supplying power for distribution to an electrical grid shall not be considered emergency equipment.

(20) "**Emergency Situation**" means an unforeseen electrical power failure from the serving utility or of on-site electrical transmission equipment such as a transformer, an unforeseen flood or fire, or a life-threatening situation. In addition, operation of emergency generators at Federal Aviation Administration licensed airports for the purpose of providing power in anticipation of a power failure due to severe storm activity shall be considered an emergency situation. Emergency situations do not include operation for purposes of supplying power for distribution to an electrical grid, operation for training purposes, or other foreseeable event.

(21) "**Emission Increase**" means an increase in the potential to emit, calculated pursuant to Subsection (d)(3).

(22) "**Emission Offsets**" means actual emission reductions used to mitigate emission increases and which meet the applicable requirements of Rules 20.1, 20.3 and 20.4 of these Rules and Regulations.

(23) "**Emission Reduction Credit (ERC)**" means a credit for an actual emission reduction which has been approved by the Air Pollution Control Officer upon determining that such credit and emission reduction meet the applicable requirements of these Rules and Regulations in effect at the time that such credit is approved.

(24) "**Emission Unit**" means any article, machine, equipment, contrivance, process or process line, which emit(s) or reduce(s) or may emit or reduce the emission of any air contaminant.

(25) "**Enforceable**" means capable of being enforced by the District, including but not limited to, through either the SIP or legally and practicably enforceable limits, including limits contained in conditions of an Authority to Construct, Permit to Operate, Determination of Compliance or Emission Reduction Credit (ERC) Certificate.

(26) "**Existing**" means the configuration of an emission unit, aggregation of emission units or a stationary source prior to, and without consideration of, the project under review.

(27) "**Federal Land Manager**" means the National Park Service's Western Regional Director, the U.S. Forest Service's Pacific Southwest Regional Air Program Manager and the U.S. Fish and Wildlife Service.

(28) "**Federally Enforceable Requirement**" means all of the following as they apply to emission units at a stationary source, including requirements that have been promulgated or approved by the federal EPA through rulemaking but which have future effective compliance dates:

(i) Any standard, emission reduction measure or other requirement provided for in the State Implementation Plan (SIP).

(ii) Any term or condition of an Authority to Construct issued pursuant to these rules and regulations which term or condition is imposed pursuant to any federally-mandated new source review (NSR) or prevention of significant deterioration (PSD) rule or regulation which has been approved or promulgated by the federal EPA into the SIP.

(iii) Any standard or other requirement under Sections 111 or 112 of the federal Clean Air Act.

(iv) Any standard or other requirement of the Acid Rain Program under Title IV of the federal Clean Air Act or the regulations promulgated thereunder.

(v) Any requirements established pursuant to Section 504(b) or Section 114(a)(3) of the federal Clean Air Act (enhanced monitoring and compliance certifications).

(vi) Any standard or other requirement governing solid waste combustion under Section 129 of the federal Clean Air Act.

(vii) Any standard or other requirement for consumer and commercial products under Section 183(e) of the federal Clean Air Act.

(viii) Any standard or other requirement for tank vessels under Section 183(f) of the federal Clean Air Act.

(ix) Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under Section 328 of the federal Clean Air Act.

(x) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act unless the Administrator of the federal EPA has determined that such requirements need not be contained in a permit to operate.

(xi) Any national ambient air quality standard or air quality increment or visibility requirement under Part C of Title I of the federal Clean Air Act, but only as it would apply to temporary sources permitted pursuant to Section 504(e) of the federal Clean Air Act.

(xii) Requirements capable of being enforced by the federal EPA including through either the SIP, terms and conditions of a Permit to Operate, an Authority to Construct, a Determination of Compliance, or an ERC that are for purposes of creating, approving and/or using creditable actual emission reductions to meet federal emission offset requirements and that are necessary to ensure the validity of the emission reductions and compliance with those portions of these Rules and Regulations approved into the SIP.

This subsection shall not preclude enforcement of federally-enforceable requirements by the Air Pollution Control Officer.

(29) **"Federal Major Modification"** means a physical or operational change at an existing federal major stationary source which results, or may result, for an air contaminant for which the stationary source is a federal major stationary source, in both: (1) an emissions increase, including fugitive emission increases, equal to or greater than any of the significant emissions increase rates listed below in Table 20.1-5a; and, (2) a contemporaneous net emissions increase, including fugitive emission increases, equal to or greater than any of the significant emissions increase rates listed below in Table 20.1 – 5a.

**TABLE 20.1 – 5a  
Federal Major Modification**

Air Contaminant:	Significant Emissions Increase (Ton/yr)
Fine Particulate Matter (PM <sub>2.5</sub> )	10
Particulate Matter (PM <sub>10</sub> )	15
Oxides of Nitrogen (NO <sub>x</sub> )	
>NO <sub>x</sub> , if the San Diego Air Basin is designated by EPA in 40 CFR 81.305 as a marginal or moderate ozone nonattainment area:	40
>NO <sub>x</sub> , if the San Diego Air Basin is designated by EPA in 40 CFR 81.305 as a serious ozone nonattainment area:	25
Volatile Organic Compounds (VOC)	
>VOC, if the San Diego Air Basin is designated by EPA in 40 CFR 81.305 as a marginal or moderate ozone nonattainment area:	40
>VOC, if the San Diego Air Basin is designated by EPA in 40 CFR 81.305 as a serious ozone nonattainment area:	25
Oxides of Sulfur (SO <sub>x</sub> )	40
Carbon Monoxide (CO)	100
Lead (Pb)	0.6



(30) "**Federal Major Stationary Source**" means any emission unit, project or stationary source which has, or will have after issuance of an Authority to Construct or modified Permit to Operate, an aggregate potential to emit one or more air contaminants in amounts equal to or greater than any of the emission rates listed below in Table 20.1 – 5b. Fugitive emissions shall not be included in determining the aggregate potential to emit for purposes of applying this definition unless the emission unit, project or stationary source, as applicable, belongs to one of the following source categories:

- (i) Coal cleaning plants (with thermal dryers);
- (ii) Kraft pulp mills;
- (iii) Portland cement plants;
- (iv) Primary zinc smelters;
- (v) Iron and steel mills;
- (vi) Primary aluminum ore reduction plants;
- (vii) Primary copper smelters;
- (viii) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (ix) Hydrofluoric, sulfuric or nitric acid plants;
- (x) Petroleum refineries;
- (xi) Lime plants;
- (xii) Phosphate rock processing plants;
- (xiii) Coke oven batteries;
- (xiv) Sulfur recovery plants;
- (xv) Carbon black plants (furnace process);
- (xvi) Primary lead smelters;
- (xvii) Fuel conversion plants;
- (xviii) Sintering plants;

- (xix) Secondary metal production plants;
- (xx) Chemical process plants, but not including ethanol production facilities that produce ethanol by natural fermentation included in included in NAICS codes 325193 or 312140;
- (xxi) Fossil-fuel boilers, or combination thereof, totaling more than 250 million British thermal units per hour heat input;
- (xxii) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (xxiii) Taconite ore processing plants;
- (xxiv) Glass fiber processing plants;
- (xxv) Charcoal production plants;
- (xxvi) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
- (xxvii) Any other stationary source category which, as of August 7, 1980, is being regulated under Sections 111 or 112 of the federal Clean Air Act.

**TABLE 20.1 – 5b**  
**Federal Major Stationary Source**

<u>Air Contaminant</u>	<u>Emission Rate</u> <u>(Ton/yr)</u>
Fine Particulate Matter (PM <sub>2.5</sub> )	100
Particulate Matter (PM <sub>10</sub> )	100
Oxides of Nitrogen (NO <sub>x</sub> )	
>NO <sub>x</sub> , if the San Diego Air Basin is designated by EPA in 40 CFR 81.305 as a marginal or moderate ozone nonattainment area:	100
>NO <sub>x</sub> , if the San Diego Air Basin is designated by EPA in 40 CFR 81.305 as a serious ozone nonattainment area:	50
Volatile Organic Compounds (VOC)	
>VOC, if the San Diego Air Basin is designated by EPA in 40 CFR 81.305 as a marginal or moderate ozone nonattainment area:	100
>VOC, if the San Diego Air Basin is designated by EPA in 40 CFR 81.305 as a serious ozone nonattainment area:	50
Oxides of Sulfur (SO <sub>x</sub> )	100
Carbon Monoxide (CO)	100
Lead (Pb)	100

(31) "**Federally-mandated New Source Review (NSR)**" means those portions of these Rules and Regulations applicable to the permitting of new and modified stationary sources and which are contained in the San Diego Air Basin portion of the approved State Implementation Plan.

(32) "**Fugitive Emissions**" means those quantifiable emissions which could not reasonably pass through a stack, chimney, flue, vent or other functionally equivalent opening.

(33) "**Good Engineering Practice Stack Height**" means the same term as defined in 40 CFR §51.100.

(34) "**Impact Area**" means the circular area with the emission unit as the center and having a radius extending to the furthest point where a significant impact is expected to occur, not to exceed 50 kilometers.

(35) "**Increment Consuming**" means emission increases which consume an air quality increment. Emission increases which consume increment are those not accounted for in the baseline concentration, including:

(i) Actual emission increases occurring at any major stationary source after the major source baseline date, and

(ii) Actual emission increases from any non-major stationary source, area source, or mobile source occurring after the minor source baseline date.

(36) "**Increment Expanding**" means actual emission reductions which increase an available air quality increment. Actual emission reductions which increase available increment include:

(i) Actual emission reductions occurring at any major stationary source after the major source baseline date, and

(ii) Actual emission reductions from any non-major stationary source, area source, or mobile source occurring after the minor source baseline date.

(37) "Legally and Practicably Enforceable Limits" means the provisions of these Rules and Regulations, and terms or conditions contained in any valid Authority to Construct, Temporary Permit to Operate, or Permit to Operate issued pursuant to these Rules and Regulations, that limit the actual emissions of an emission unit or group of emission units and that are permanent, technically accurate, quantifiable; have associated recordkeeping, reporting, and monitoring requirements sufficient to determine ongoing compliance with the emission limitation; are not in violation of any of these Rules or Regulations, State Law or the State Implementation Plan; and there is a legal obligation to adhere to the terms and conditions of the emission limitation and associated requirements.

(38) "**Lowest Achievable Emission Rate (LAER)**" means and is applied as follows:

(i) The lowest emitting of any of the following:

(A) the most stringent emission limitation, or most effective emission control device or control technique, or combination thereof, contained in any SIP approved by the federal EPA for such class or category of emission unit, unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that such emission limitation, device or technique is not achievable, or

(B) the most stringent emission limitation which is achieved in practice by such class or category of emission unit, or

(C) Best Available Control Technology (BACT).

(ii) For modified emission units subject to the LAER requirements of these rules, the entire emission unit's post-project potential to emit shall be subject to LAER.

(iii) In no event shall application of LAER result in the emission of any air contaminant which would exceed the emissions allowed by any District Rule or Regulation, or by any applicable standard under 40 CFR Part 60 (New Source Performance Standards) or 40 CFR Parts 61 and 63 (National Emission Standards for Hazardous Air Pollutants).

(39) "**Major Modification**" means a physical or operational change which results, or may result, in a contemporaneous net emissions increase at an existing major stationary source which source is major for the air contaminant for which there is a contemporaneous net emissions increase, equal to or greater than any of the emission rates listed in Table 20.1 – 6a.

**TABLE 20.1 – 6a**  
**Major Modification**

<u>Air Contaminant:</u>	<u>Emission Rate</u> <u>(Ton/yr)</u>
Fine Particulate Matter (PM <sub>2.5</sub> )	10
Particulate Matter (PM <sub>10</sub> )	15
Oxides of Nitrogen (NO <sub>x</sub> )	25
Volatile Organic Compounds (VOC)	25
Oxides of Sulfur (SO <sub>x</sub> )	40
Carbon Monoxide (CO)	100
Lead (Pb)	0.6

(40) "**Major Source Baseline Date**" means, for all of San Diego County, January 6, 1975 for sulfur dioxide (SO<sub>2</sub>) and particulate matter (PM<sub>10</sub>), February 8, 1988 for nitrogen dioxide (NO<sub>2</sub>), and October 20, 2010 for PM<sub>2.5</sub>.

(41) "**Major Stationary Source**" means any emission unit, project or stationary source which has, or will have after issuance of an Authority to Construct or modified Permit to Operate an aggregate potential to emit one or more air contaminants, including fugitive emissions, in amounts equal to or greater than any of the emission rates listed in Table 20.1 – 6b.

**TABLE 20.1 – 6b**  
**Major Stationary Source**

<u>Air Contaminant:</u>	<u>Emission Rate</u> <u>(Ton/yr)</u>
Fine Particulate Matter (PM <sub>2.5</sub> )	100
Particulate Matter (PM <sub>10</sub> )	100
Oxides of Nitrogen (NO <sub>x</sub> )	50
Volatile Organic Compounds (VOC)	50
Oxides of Sulfur (SO <sub>x</sub> )	100
Carbon Monoxide (CO)	100
Lead (Pb)	100

(42) "**Minor Source Baseline Date**" means for all of San Diego County, December 8, 1983 for sulfur dioxide (SO<sub>2</sub>), October 1, 1999 for particulate matter (PM<sub>10</sub>) and nitrogen dioxide (NO<sub>2</sub>), and June 14, 2012 for fine particulates (PM<sub>2.5</sub>).

(43) "**Modeling**" means the use of an applicable federal EPA-approved air quality model to estimate ambient concentrations of air contaminants or to evaluate other air quality related data. Applicable federal guidelines, including those contained in 40 CFR Part 51, Appendix W - Guideline on Air Quality Models, shall be followed when performing modeling to determine air quality impacts relative to the national ambient air quality standards, a significant impact, or an air quality increment. Where an air quality model specified in Appendix W 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 for purposes of these Rules and Regulations. Written approval of the federal EPA Region 9 Administrator shall be obtained for any such modification or substitution. The use of a modified or substitute model shall be identified in the applicable public notice and opportunity for public comment required in Subsections (d)(4) of Rules 20.2-20.4, unless use on a generic basis has been previously subject to an equivalent public and government agency notice and comment period.

(44) "**Modified Emission Unit**" means any physical or operational change, including but not limited to a permit condition change, which results or may result in an increase in an existing emission unit's potential to emit, including those air contaminants not previously emitted. The following shall not be considered a modified emission unit,

provided such a change is not contrary to any permit condition, and the change does not result in an increase in the potential to emit of any air contaminant:

- (i) The movement of a portable emission unit from one stationary source to another.
- (ii) Repair or routine maintenance of an existing emission unit.
- (iii) An increase in the hours of operation or in the production rate.
- (iv) Use of alternate fuel or raw material.

(45) "**Modified Stationary Source**" means an existing stationary source where a new, modified, relocated or replacement emission unit is, or will be, located or where a change in the aggregation of emission units occurs, including, but not limited to, the movement of a relocated emission unit to or from a stationary source or where a modification of an existing unit occurs. The following shall not be considered a modification of a stationary source:

- (i) The replacement of an emission unit, provided there is no increase in the unit's potential to emit or in the potential to emit of any other unit at the stationary source.
- (ii) The movement to or from the stationary source of any portable emission unit, provided there is no increase in the potential to emit of any other unit at the stationary source.

(46) "**National Ambient Air Quality Standards (NAAQS)**" means maximum allowable ambient air concentrations for specified air contaminants and monitoring periods as established by the federal EPA.

#### **TABLE 20.1 – 7 (RESERVED)**

(47) "**New Emission Unit**" means any of the following:

- (i) Any emission unit not constructed or installed in San Diego County as of April 27, 2016.
- (ii) Except as provided in Subsection (b)(1) of this rule, any emission unit which was constructed, installed or operated at its current location without a valid Authority to Construct or Permit to Operate from the District.
- (iii) Any emission unit which was inactive for a one-year period or more and which did not hold a valid Permit to Operate during that period.

(iv) A new emission unit shall no longer be considered a new emission unit, and shall be considered an existing emission unit, on and after the earlier of: (a) two years after the date that such unit first operated; or (b) the date when the Air Pollution Control Officer has

(A) determined that construction is complete;

(B) determined that any required initial emissions and performance testing has been completed and the results reported and approved;

(C) determined that the operation of the unit is in compliance with all conditions of the Authority to Construct relevant to the construction and operation of the unit; and,

(D) issued a temporary or final Permit to Operate.

(48) **“New Federal Major Stationary Source”** means a new emission unit, new project or new stationary source which will be a federal major stationary source, or a modification of an existing stationary source which modification itself constitutes a federal major stationary source. On and after (*effective date of revised rule*), if an existing previously permitted stationary source will become a federal major stationary source solely due to a relaxation of a permit limitation on the capacity of the stationary source to emit an air contaminant, such as a limit on emissions, hours of operation, process rates or fuel use, the stationary source shall be considered a new federal major stationary source and the requirements of these Rules 20.1, 20.2, 20.3 and 20.4 shall apply as if construction of the stationary source had not yet commenced.

(49) **“New Major Stationary Source”** means a new emission unit, new project or new stationary source which will be a major stationary source, or a modification of an existing stationary source which modification itself constitutes a major stationary source.

(50) **“New Stationary Source”** means a stationary source which, prior to the project under review, did not contain any permitted equipment, excluding portable emission units.

(51) **“Nonattainment”** means designated as not in attainment of a National Ambient Air Quality Standard (NAAQS) pursuant to Section 107(d) of the federal Clean Air Act or of a State Ambient Air Quality Standard (SAAQS) pursuant to Section 39608 of the California Health and Safety Code, as applicable. For the purposes of these Rules 20.1, 20.2, 20.3 and 20.4, nonattainment of a NAAQS means also designated as nonattainment by EPA in 40 CFR Section 81.305.

(52) **“Non-Criteria Pollutant Emissions Significance Level”** means a contemporaneous net emissions increase occurring at any new or modified PSD stationary source, equal to or greater than the amounts listed in Table 20.1 - 8.

**TABLE 20.1 - 8**  
**Non-Criteria Pollutant Emissions Significance Levels**

<u>Air contaminant:</u>	<u>Emission Rate</u> <u>(Ton/yr)</u>
Fluorides	3
Hydrogen Sulfide (H <sub>2</sub> S)	10
Mercury	0.1
Reduced Sulfur Compounds	10
Sulfuric Acid Mist	7

(53) “**Non-Major Stationary Source**” means any emission unit, project or stationary source which has, or will have after issuance of an Authority to Construct or modified Permit to Operate, an aggregate potential to emit, including fugitive emissions, of each air contaminant listed in Table 20.1-6b less than the applicable emission rates specified in Table 20.1-6b.

(54) “**Offset Ratio**” means the required proportion of emission offsets to emission increases, as specified in Rules 20.3 or 20.4.

(55) “**Permanent**” means enforceable and which will exist for an unlimited period of time.

(56) “**Permit Limitation on Potential to Emit**” means an enforceable permit condition that restricts, or will restrict, the maximum potential emissions from an emission unit or aggregation of emission units and that does not violate any District, state or federal law, rule, regulation, order, or permit condition.

(57) “**Portable Emission Unit**” means an emission unit that is subject to the permit requirements of Rule 10 of these Rules and Regulations, and is designed to be and capable of being carried or moved from one location to another. Indicia of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer or platform. For the purposes of this regulation, dredge engines on a boat or barge are considered portable. An emission unit is not portable if any of the following apply:

(i) The unit, or its replacement, is attached to a foundation or, if not so attached, will reside at the same location for more than 12 consecutive months. Any portable emission unit such as a backup or standby unit that replaces a portable emission unit at a location and is intended to perform the same function as the unit being replaced will be included in calculating the consecutive time period. In that case, the cumulative time of all units, including the time between the removal of the original unit(s) and installation of the replacement unit(s), will be counted toward the consecutive time period; or

(ii) The emission unit remains or will reside at a location for less than 12 consecutive months if the unit is located at a seasonal source and operates during the full annual operating period of the seasonal source. A seasonal source is a stationary



source that remains in a single location on a permanent basis (i.e., at least two years) and operates at that single location at least three months each year; or

(iii) The emission unit is moved from one location to another in an attempt to circumvent the portable emission unit residence time requirements.

Days when portable emission units are stored in a designated holding or storage area shall not be counted towards the above time limits, provided the emission unit was not operated on that calendar day except for maintenance and was in the designated holding or storage area the entire calendar day.

The Air Pollution Control Officer may determine, on a case-by-case basis, that emission units which exceed the above time limits will be considered as relocated equipment and will be subject to the applicable requirements for relocated emission units contained in Rules 20.1, 20.2 and 20.3.

(58) **"Post-Project Potential to Emit"** means an emission unit's potential to emit after issuance of an Authority to Construct for the proposed project, calculated pursuant to Section (d).

(59) **"Potential to Emit"** means the maximum quantity of air contaminant emissions, including fugitive emissions, that an emission unit is capable of emitting or permitted to emit, calculated pursuant to Section (d).

(60) **"Precursor Air Contaminants"** means any air contaminant which forms or contributes to the formation of a secondary air contaminant for which an ambient air quality standard exists. For purposes of this rule, the precursor relationships are listed in Table 20.1 - 9.

**TABLE 20.1 - 9  
Precursor Air Contaminants**

<u>Precursor Air Contaminant</u>	<u>Secondary Air Contaminant</u>
NOx	NO <sub>2</sub>
	PM <sub>10</sub>
	PM <sub>2.5</sub>
	Ozone
VOC	PM <sub>10</sub>
	Ozone
SOx	SO <sub>2</sub>
	PM <sub>10</sub>
	PM <sub>2.5</sub>

(61) **"Pre-Project Actual Emissions"** means an emission unit's actual emissions prior to issuance of an Authority to Construct for the proposed project, calculated pursuant to Section (d).

(62) "**Pre-Project Potential to Emit**" means an emission unit's potential to emit prior to issuance of an Authority to Construct for a proposed project, calculated pursuant to Section (d).

(63) "**Project**" means an emission unit or aggregation of emission units for which an application or combination of applications for one or more Authorities to Construct or modified Permits to Operate is under District review.

(64) "**Proven in Field Application**" means demonstrated in field application to be reliable, in continuous compliance and maintaining a stated emission level for a period of at least one year, as determined by the Air Pollution Control Officer.

(65) "**PSD Modification**" means a contemporaneous net emissions increase occurring at a modified PSD stationary source equal to or greater than the amounts listed in Table 20.1 - 10 or any non-criteria pollutant emissions significance level listed in Table 20.1-8.

**TABLE 20.1 - 10  
PSD Modification**

<u>Air contaminant:</u>	<u>Emission Rate (Ton/yr)</u>
Particulate Matter (PM <sub>10</sub> )	15
Oxides of Nitrogen (NO <sub>x</sub> )	40
Volatile Organic Compounds (VOC)	40
Oxides of Sulfur (SO <sub>x</sub> )	40
Carbon Monoxide (CO)	100
Lead and Lead Compounds (Pb)	0.6

(66) "**PSD Stationary Source or Prevention of Significant Deterioration Stationary Source**" means any stationary source, as specified in Table 20.1 - 11, which has, or will have after issuance of a permit, an aggregate potential to emit one or more air contaminants in amounts equal to or greater than any of the emission rates listed in Table 20.1 - 11.

**TABLE 20.1 - 11  
PSD Stationary Sources and Trigger Levels**

<b><u>For stationary sources consisting of:</u></b>	
1. Fossil fuel fired steam electrical plants of more than 250 MM Btu/hr heat input	
2. Fossil fuel boilers or combinations thereof totaling more than 250 MM Btu/hr of heat input	
3. Municipal incinerators capable of charging more than 250 tons of refuse per day	
4. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels	
5. Charcoal production plants	17. Phosphate rock processing plants
6. Chemical process plants	18. Petroleum refineries
7. Coal cleaning plants with thermal dryers	19. Primary aluminum ore reduction plants
8. Coke oven batteries	20. Primary copper smelters
9. Fuel conversion plants	21. Primary lead smelters
10. Furnace process carbon black plants	22. Primary zinc smelters
11. Glass fiber processing plants	23. Portland cement plants
12. Hydrofluoric acid plants	24. Secondary metal production plants
13. Iron and steel mill plants	25. Sintering plants
14. Kraft pulp mills	26. Sulfuric acid plants
15. Lime plants	27. Sulfur recovery plants
16. Nitric acid plants	28. Taconite ore processing plants
<b><u>The following emission rates:</u></b>	
<u>Air Contaminant</u>	<u>(Ton/yr)</u>
Particulate Matter (PM <sub>10</sub> )	100
Oxides of Nitrogen (NO <sub>x</sub> )	100
Volatile Organic Compounds (VOC)	100
Oxides of Sulfur (SO <sub>x</sub> )	100
Carbon Monoxide (CO)	100
<b><u>For all other stationary sources:</u></b>	
<u>Air Contaminant</u>	<u>(Ton/yr)</u>
Particulate Matter (PM <sub>10</sub> )	250
Oxides of Nitrogen (NO <sub>x</sub> )	250
Volatile Organic Compounds (VOC)	250
Oxides of Sulfur (SO <sub>x</sub> )	250
Carbon Monoxide (CO)	250

(67) "**Quantifiable**" means that a reliable basis to estimate emission reductions in terms of both their amount and characteristics can be established, as determined by the Air Pollution Control Officer. Quantification may be based upon emission factors, stack tests, monitored values, operating rates and averaging times, process or production inputs, mass balances or other reasonable measurement or estimating practices.

(68) "**Real**" means actually occurring and which will not be replaced, displaced or transferred to another emission unit at the same or other stationary source within San Diego County, as determined by the Air Pollution Control Officer.

(69) "**Reasonably Available Control Technology**" or "**RACT**" means the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available, as determined by the Air Pollution Control Officer pursuant to the federal Clean Air Act, considering technological and economic feasibility.

(70) "**Relocated Emission Unit**" means a currently permitted emission unit or grouping of such units which is to be moved within San Diego County from one stationary source to another stationary source. The moving of a portable emission unit shall not be considered a relocated emission unit.

(71) "**Replacement Emission Unit**" means an emission unit which supplants another emission unit where the replacement emission unit serves the same function and purpose as the emission unit being replaced, as determined by the Air Pollution Control Officer.

(72) "**Secondary Emissions**" means emissions which would occur as a result of the construction, operation or modification of a PSD stationary source, but which are not directly emitted from any emission unit at the stationary source. Except as provided below, secondary emissions exclude emissions which come directly from mobile sources, such as emissions from the tailpipe of a motor vehicle. Secondary emissions include, but are not limited to:

(i) Emissions from ships or trains coming to or from the stationary source, unless such emissions are regulated by Title II of the federal Clean Air Act, and

(ii) Emission increases from any emission unit at a support facility not located at the stationary source, but which would not otherwise be constructed or increase emissions, and

(iii) Emissions from any emission unit mounted on a ship, boat, barge, train, truck or trailer, where the operation of the emission unit is dependent upon, or affects the process or operation (including duration of operation) of any emission unit located on the stationary source.

(73) "**Significant Impact**" means an increase in ambient air concentration, resulting from emission increases at a new or modified stationary source, equal to or greater than any of the levels listed in Tables 20.1 - 12 and 20.1 - 13.

**TABLE 20.1 - 12  
Stationary Sources Impacting Any Class I Area**

<u>Air Contaminant</u>	<u>Significant Impact (24-hour Maximum)</u>
Particulate Matter (PM <sub>10</sub> )	1.0 µg/m <sup>3</sup>
Nitrogen Dioxide (NO <sub>2</sub> )	1.0 µg/m <sup>3</sup>
Sulfur Dioxide (SO <sub>2</sub> )	1.0 µg/m <sup>3</sup>
Carbon Monoxide (CO)	1.0 µg/m <sup>3</sup>

**TABLE 20.1 - 13  
Stationary Sources Impacting Any Class II Area**

<u>Air Contaminant</u>	<u>Significant Impact</u>
<u>Particulate Matter (PM<sub>10</sub>)</u>	
Annual arithmetic mean	1.0 µg/m <sup>3</sup>
24-hr. maximum	5.0 µg/m <sup>3</sup>
<u>Nitrogen Dioxide (NO<sub>2</sub>)</u>	
Annual arithmetic mean	1.0 µg/m <sup>3</sup>
<u>Sulfur Dioxide (SO<sub>2</sub>)</u>	
Annual arithmetic mean	1.0 µg/m <sup>3</sup>
24-hr. maximum	5.0 µg/m <sup>3</sup>
<u>Carbon Monoxide (CO)</u>	
8-hr. maximum	500.0 µg/m <sup>3</sup>
1-hr. maximum	2000.0 µg/m <sup>3</sup>

(74) "**State Ambient Air Quality Standards (SAAQS)**" means the maximum allowable ambient air concentrations for specified air contaminants and monitoring periods as established by the California Air Resources Board (ARB).

(75) "**Surplus**" means any emission reduction which is surplus of federal requirements, as defined herein, and is also in excess of:

- (i) Any stationary source emission reduction measure contained in the San Diego Regional Air Quality Strategy, California Clean Air Act requirements, or state law, and any District rule, regulation, or order, including those which carry out such emission reduction measures. A variance issued by the Air Pollution Control District Hearing Board is not an order within the meaning of this subsection.

(76) "**Surplus of Federal Requirements**" means any emission reduction which is in excess of:

(i) Any standard, emission reduction measure or other requirement contained in the San Diego portion of the California SIP;

(ii) The most recent version of any standard, emission reduction measure or other requirement adopted by the Air Pollution Control Board and submitted for EPA approval into the SIP;

(iii) Any standard or other requirement under Sections 111 or 112 of the federal Clean Air Act;

(iv) Any standard or other requirement of the Acid Rain Program under Title IV of the federal Clean Air Act or the regulations promulgated thereunder;

(v) Any stationary source emission reduction measure contained in the federal Clean Air Act or federal law, and any District or state law, rule, regulation, or order which carry out such emission reduction measures. A variance issued by the Air Pollution Control District Hearing Board is not an order within the meaning of this subsection;

(vi) Any term or condition of an Authority to Construct issued pursuant to these rules and regulations which term or condition is imposed pursuant to 40 CFR Parts 60 or 61, 40 CFR Part 63, 40 CFR Part 52.21 or 40 CFR Part 51, Subpart I; and

(vii) Emission reductions which have already been approved as ERCs or otherwise committed for air quality purposes, including but not limited to as emission offsets.

(77) "**Temporary**" means enforceable, existing and valid for a specified, limited period of time.

(78) "**Yearly**" means twelve consecutive months.

(d) **EMISSION CALCULATIONS**

The emission calculation provisions and requirements of this Section (d) shall be applied on an air contaminant-specific basis.

(1) **POTENTIAL TO EMIT**

The potential to emit of each air contaminant shall be calculated on an hourly, daily and yearly basis.

(i) **Calculation of Pre-Project and Post-Project Potential to Emit**

Except as provided in Subsections (d)(1)(i)(A) through (F), the pre-project and post-project potential to emit of each emission unit shall be calculated based on the

maximum design capacity or other operating conditions which reflect the maximum potential emissions, including fugitive emissions.

(A) Permit Limitations on Pre-Project and Post-Project Potential to Emit Shall be Used

Except as provided in Subsections (d)(1)(i)(C) and (D), if specific enforceable permit limitations on potential to emit restrict or will restrict maximum potential emissions of an emission unit on an hourly, daily or annual basis to a lower level, these limitations shall be used to calculate the pre-project or post-project potential to emit, as applicable, on an hourly, daily and annual basis.

(B) Calculation of Pre-Project Potential to Emit for Modified Emission Units Where No Permit Limitations Exist

If there are no specific enforceable conditions limiting an emission unit's pre-project potential to emit, the pre-project potential to emit shall be limited to the emission unit's highest actual emissions calculated pursuant to Subsection (d)(2), unless limited to a lower level of emissions, as the applicant and the Air Pollution Control Officer may agree, by a permit limitation on potential to emit for the emission unit.

(C) Calculation of Pre-Project Potential to Emit for Modified Emission Units Located at Major Stationary Sources

If a modified emission unit is or will be located at an existing major stationary source, or if a modified emission unit will itself be a major stationary source, the pre-project potential to emit of the emission unit shall be calculated as follows.

(1) If the modified emission unit's pre-project actual emissions are less than 80 percent of the emission unit's potential to emit calculated pursuant to Subsections (d)(1)(i)(A) and (B), then the emission unit's pre-project potential to emit shall be the same as the unit's actual emissions.

(2) If the modified emission unit's pre-project actual emissions are equal to or greater than 80 percent of the emission unit's potential to emit calculated pursuant to Subsection (d)(1)(i)(A) and (B), then the emission unit's pre-project potential to emit shall be as calculated pursuant to Subsection (d)(1)(i)(A) and (B).

(3) Notwithstanding paragraphs (1) and (2) above, if an Authority to Construct has previously been issued for an emission unit pursuant to New Source Review rules for the District, and the

previous emission increases that resulted from that emission unit were offset in accordance with the New Source Review rules in effect at that time, the emission unit's pre-project potential to emit shall be as calculated pursuant to Subsection (d)(1)(i)(A) and (B).

(4) The provisions of paragraph (3) above shall not apply to a modified emission unit which constitutes a federal major modification for an air contaminant, or its precursors, for which the San Diego Air Basin is designated as nonattainment of a national ambient air quality standard. In such case, the pre-project potential to emit of the modified emission unit shall equal the unit's actual emissions.

(D) Calculation of Pre-Project Potential to Emit for New Emission Units

Notwithstanding any other provision of this rule, the pre-project potential to emit for a new emission unit shall be zero.

(E) Calculation of Post-Project and Pre-Project Potential to Emit for Projects

The post-project and pre-project potential to emit for a project shall be calculated as the sum of all the post-project or pre-project potentials to emit, as applicable, for the emission units aggregated in the project unless limited to a lower level of emissions, as the applicant and the Air Pollution Control Officer may agree, by a permit limitation on potential to emit for the project. The aggregate pre-project and post-project potentials to emit for a project shall not affect the applicability of BACT requirements in Rules 20.2, 20.3 and 20.4 to individual emission units that are a part of the project.

(ii) Calculation of Aggregate Potential to Emit - Stationary Source

Except as provided for below in Subsections (d)(1)(ii)(A) through (E), the aggregate potential to emit of a stationary source shall be calculated as the sum of the post-project potential to emit of all emission units permitted for the stationary source, including emission units under District review for permit and those to which Subsection (b)(1) applies.

(A) Permit Limitations on Post-Project Potential to Emit Shall be Used

If specific, enforceable limiting conditions restrict, or will restrict, emissions of a stationary source, or an aggregation of emission units at a stationary source, to a lower level on an hourly, daily or annual basis, these



limitations on post-project potential to emit shall be used in calculating the aggregate potential to emit of the stationary source.

(B) Permit-Exempt Equipment

The potential to emit of emission units exempt from permit requirements under these Rules and Regulations or state law shall not be included in the aggregate potential to emit of a stationary source except that emissions of any air contaminant from such emission units shall be included if the actual emissions of such air contaminant would be determining as to whether the stationary source is a federal major stationary source.

The applicant and the Air Pollution Control Officer may agree to place all permit-exempt emission units which would be classified under the same class or category of source under permit for purposes of creating emission reduction credits (ERCs). In such case, the potential to emit of such emission units shall be included in the stationary source's aggregate potential to emit.

(C) Emergency Equipment

The potential to emit from the operation of emergency equipment during emergency situations shall not be included in the calculation of a stationary source's aggregate potential to emit. The potential to emit from operation of emergency equipment during non-emergency situations shall be included in the calculation of a stationary source's aggregate potential to emit.

(D) Portable Emission Units

The potential to emit of portable emission units which are considered under the same major industrial grouping, as identified by the first two digits of the applicable code in *The Standard Industrial Classification Manual*, as the stationary source where such units are or will be operated, or which are used as part of or to supplement a primary process at the stationary source where the operation of one is dependent upon or affects the operation of the other, shall be included in such stationary source's aggregate potential to emit. All other portable emission units shall be excluded from the calculation of a stationary source's aggregate potential to emit.

(E) Military Tactical Support Equipment Engines

Emissions from portable engines, including gas turbines, used exclusively in conjunction with portable military tactical support

equipment shall be excluded from the calculation of a stationary source's aggregate potential to emit.

(2) **ACTUAL EMISSIONS**

Actual emissions are used: to determine pre-project potential to emit where specified in Subsection (d)(1) of this rule; and, in procedures to quantify emission reductions as specified in Subsection (d)(4)(ii) of this rule. Actual emissions are calculated based on the actual operating history of the emission unit and shall be calculated in accordance with Subsections (d)(2)(i), (ii), (iii) and (iv) below, as applicable.

(i) **Calculation of Actual Emissions for Purposes of Determining Pre-Project Potential to Emit**

Actual emissions of an existing emission unit shall be calculated in accordance with Subsections (d)(2)(i)(A) or (B) below on an operating hour, day and year basis for purposes of determining an emission unit's pre-project potential to emit.

(A) The emission unit's pre-project actual hourly, daily and yearly emissions shall be based on the highest level of hourly, daily and yearly emissions, respectively, occurring during a twenty-four consecutive month period representative of normal operations within the five-year period preceding the receipt date of the application.

(B) The pre-project actual emissions for emission units operated for a period less than twenty-four consecutive months shall be based on the longest operating time period determined by the Air Pollution Control Officer to be most representative of actual operations.

(ii) **Calculation of Actual Emissions for Purposes of Quantifying Emission Reductions**

(A) Actual emissions of an existing emission unit shall be calculated on an operating hour, day and year basis averaged over the most representative twenty-four consecutive months within the five years preceding the receipt date of an application, as determined by the Air Pollution Control Officer.

(B) For emission units which have not been operated for a twenty-four consecutive month period which is representative of actual operations within the five years preceding the receipt date of the application, the calculation of actual emissions shall be based on the average of any two twelve consecutive month operating periods determined by the Air Pollution Control Officer to be representative within that five-year period. If two representative twelve consecutive month operating time periods do not exist, the calculation of actual emissions shall be based on the average of the total operational time period within that five-year period.

(iii) **Adjustments for Violations**

If an emission unit was operated in violation of any District, state or federal law, rule, regulation, order or permit condition during the period used to determine actual emissions, the actual emissions calculated pursuant to this Subsection (d)(2) shall be adjusted to reflect the level of emissions which would have occurred if the emission unit had not been in violation.

(iv) **Adjustments for Currently Applicable Federally Enforceable Requirements**

For an emission unit being modified, replaced or relocated, and which will be located at a federal major stationary source, the actual emissions calculated on an operating year (yearly) basis pursuant to this Subsection (d)(2) shall be further adjusted to reflect the level of emissions which would have occurred had the emission unit been required to comply with all federally enforceable requirements applicable to the emission unit at the time that a complete application to modify, replace or relocate the emission unit is submitted. This subsection (d)(2)(iv) shall only apply to air contaminants, and their precursors, for which the San Diego Air Basin is designated as nonattainment of a national ambient air quality standard. This subsection (d)(2)(iv) shall not apply to any existing electric utility steam generating unit which is intended to supply more than one-third of its potential electric output capacity and more than 25 megawatts 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 shall be included in determining the electrical energy output of the unit.

(3) **EMISSION INCREASE**

A project's or emission unit's emission increase shall be calculated as follows:

(i) **New Emission Units**

Emission increases from a new emission unit shall be equal to the post-project potential to emit for the emission unit.

(ii) **Modified Emission Units**

Emission increases from a modified emission unit shall be calculated as the emission unit's post-project potential to emit minus the emission unit's pre-project potential to emit.

(iii) **Relocated Emission Units**

Emission increases from a relocated emission unit at its new location shall be equal to the emission unit's post-project potential to emit.

(iv) **Replacement Emission Units**

Emission increases from a replacement emission unit shall be calculated as the replacement emission unit's post-project potential to emit minus the existing emission unit's pre-project potential to emit.

(v) **Portable Emission Units**

Emission increases from a portable emission unit shall be calculated as the emission unit's post-project potential to emit minus the emission unit's pre-project potential to emit.

(vi) **Projects**

Emission increases from a project shall be calculated as the project's post-project potential to emit minus the project's pre-project potential to emit.

(vii) **Determining Emissions Increases for Federal Major Modifications and Federal Major Stationary Sources**

When calculating emissions increases for the sole purpose of determining whether a project at an existing federal major stationary source constitutes a federal major modification, or whether a modification at an existing stationary source constitutes a new federal major stationary source, and thereafter applying the provisions of this Rule 20.1 and Rules 20.2, 20.3, and 20.4 of these Rules and Regulations specific to federal major modifications and federal major stationary sources, an applicant for such project or modification may choose to use the methods contained in 40 CFR 51.165 (a)(2)(ii)(B) through (F), and references therein, as they existed on April 27, 2016. References in 40 CFR 51.165 (a)(2)(ii)(B) through (F) to major modification and to major stationary source shall be read as referring to federal major modification and federal major stationary source as defined in Section (c) of this rule. The provisions of this Section (d) for determining emissions increases, excluding this Subsection (d)(3)(vii), shall apply for all other purposes of this Rule 20.1 and Rules 20.2, 20.3 and 20.4.

(4) **EMISSION REDUCTION - POTENTIAL TO EMIT, ACTUAL EMISSION REDUCTION, EMISSION REDUCTION CREDITS**

A project's or emission unit's emission reduction shall be calculated as follows:

(i) **Reduction in the Potential to Emit**

(A) Modified Emission Units

Reduction in the potential to emit for a modified emission unit shall be calculated as the emission unit's pre-project potential to emit minus the emission unit's post-project potential to emit.

(B) Relocated Emission Units

Reduction in the potential to emit for a relocated emission unit shall be calculated as the emission unit's pre-project potential to emit minus the emission unit's post-project potential to emit. Notwithstanding the foregoing, the post-project potential to emit of a relocated emission unit shall be used in determining the aggregate potential to emit of, and any contemporaneous net emissions increase at, the stationary source to which it is relocated, and the emission increase of any project which the relocated emission unit is a part.

(C) Replacement Emission Units

Reduction in the potential to emit for a replacement emission unit shall be calculated as the existing emission unit's pre-project potential to emit minus the replacement emission unit's post-project potential to emit.

(D) Portable Emission Units

Reduction in the potential to emit for a portable emission unit shall be calculated as the emission unit's pre-project potential to emit minus the emission unit's post-project potential to emit.

(E) Projects

Reduction in the potential to emit for a project shall be calculated as the project's pre-project potential to emit minus the project's post-project potential to emit.

(ii) **Actual Emission Reduction**

Notwithstanding any other provision of this rule, actual emissions calculated pursuant to Subsection (d)(2)(ii), (iii) and (iv) shall be used for purposes of determining an actual emission reduction in accordance with this Subsection (d)(4)(ii) and Subsection (d)(4)(iii). An actual emission reduction must be real, surplus, enforceable, quantifiable and permanent. Actual emission reductions shall be calculated as follows:

(A) Shutdowns

Unless an emission unit is replaced, actual emission reductions from the shutdown of an emission unit shall be calculated based on the emission unit's pre-project actual emissions. Actual emission reductions from the shutdown and replacement of an emission unit shall be calculated pursuant to Subsection (d)(4)(ii)(D).

(B) Modified Emission Units

Actual emission reductions from a modified emission unit shall be calculated as the emission unit's pre-project actual emissions minus the emission unit's post-project potential to emit.

(C) Relocated Emission Units

Actual emission reductions from a relocated emission unit shall be calculated as the emission unit's pre-project actual emissions minus the emission unit's post-project potential to emit.

(D) Replacement Emission Units

Actual emission reductions from a replacement emission unit shall be calculated as the existing emission unit's pre-project actual emissions minus the replacement emission unit's post-project potential to emit.

(E) Portable Emission Units

Actual emission reductions from a portable emission unit shall be calculated as the emission unit's pre-project actual emissions minus the emission unit's post-project potential to emit.

(F) Projects

Actual emission reductions from a project shall be calculated as the sum of all the pre-project actual emissions from the emission units aggregated in the project minus the project's post-project potential to emit.

(iii) **Adjustments For Determining Actual Emission Reductions**

The following adjustments shall be made in determining actual emission reductions:

(A) Units Permitted and Operated Less Than Two Years

If an emission unit has been permitted and operated for a period less than two years, the emission unit's actual emissions (in tons per year) shall be calculated as the unit's actual emissions (in tons) that occurred during the actual operating time period multiplied by the actual operating time period in days divided by 1,460 days.

(B) Adjustments for Permitted Emission Units

Actual emission reductions from permitted emission units shall exclude emission reductions which are not surplus at the time the actual emission reduction is determined.

(C) Adjustments for Emission Units Exempt from Permit Requirements

This provision shall apply to actual emission reductions from an emission unit which is exempt from permit requirements pursuant to Rule 11. Such actual emission reductions shall be determined in accordance with Subsections (d)(2)(ii), (d)(2)(iii) and (d)(4)(ii) of this rule, but shall not be further reduced in accordance with this rule at the time the actual emission reduction is determined. However, at the time the emission reduction credits (ERCs) or actual emission reductions created from such an exempt emission unit are used to meet an emission offset requirement of these Rules 20.1 and 20.3 or 20.4, the ERCs or the actual emission reduction, as applicable, shall be further adjusted to exclude emission reductions which are not surplus at the time the ERC or actual emission reduction is so used. A condition shall be included in any ERC for such an exempt emission unit requiring such adjustment to occur at the time of use of the ERC.

(iv) **Emission Reduction Credits (ERCs)**

The following procedures shall be followed in evaluating and acting on an application for emission reduction credits:

(A) An emission reduction credit may be approved by the Air Pollution Control Officer upon determining that the actual emission reduction that is the basis of such credit meets the applicable requirements of this Rule 20.1, and of these Rules and Regulations, in effect at the time that such credit is approved.

(B) The Air Pollution Control Officer's approval of an emission reduction credit shall be in writing and shall contain conditions necessary to ensure the validity of the credit.

(C) Such approval shall be first subject to public notice in a newspaper of general circulation and a 30-calendar day period for public, agency and

applicant review and comment. A copy of the public notice shall be provided to the federal EPA, through its Region 9 office, and to the California ARB.

(D) An applicant for an emission reduction credit may appeal the denial or conditional approval of a credit to the Air Pollution Control District Hearing Board within 30 days of receipt of such denial or conditional approval.

(E) The use of an emission reduction credit to meet an emission offset requirement of these Rules 20.1, 20.3 or 20.4 shall be subject to the applicable requirements of those rules.

**(5) EMISSION OFFSETS**

Emission offsets are actual emission reductions which are provided to mitigate emission increases where required by these Rules and Regulations. In order to be considered an emission offset, actual emission reductions or ERCs must be valid for the life of the emission increase which they are offsetting. Emission offsets must meet the applicable criteria specified in this Rule 20.1 and Rules 20.3 and 20.4.

(i) Emission offsets shall consist of:

(A) actual emission reductions calculated in accordance with Subsections (d)(4)(ii) and (d)(4)(iii) of this rule; or,

(B) ERCs meeting the applicable requirements of Rules 20.1 through 20.4 in effect at the time such ERCs were approved; or,

(C) mobile source ERCs issued pursuant to Rule 27.1; or,

(D) emission reduction credits issued pursuant to a District rule which has been approved by the federal EPA into the District portion of the State Implementation Plan and which contains standards for the creation and approval of such credits.

(ii) In order to qualify as an emission offset, actual emission reductions shall have been evaluated and approved as an emission reduction credit by the Air Pollution Control Officer pursuant to the applicable requirements of Rules 20.1, 20.3 and 20.4 or Rule 27.1, or an applicable District emission reduction credit creation and approval rule approved by the federal EPA into the State Implementation Plan, unless the actual emission reductions are being proposed to offset emission increases occurring concurrently at the stationary source. In such a case, the Air Pollution Control Officer may choose to administratively forego the issuance of ERCs.

(iii) Emission offsets shall be in effect and enforceable at the time of startup of the emission unit, project or stationary source requiring the offsets.



(iv) Emission offsets must be federally enforceable at the time of issuance of an Authority to Construct if the source is a new federal major stationary source or a federal major modification for the pollutant for which offsets are being provided.

(v) Actual emission reductions and ERCs used to meet the emission offset requirements of Rules 20.3 applicable to a new federal major stationary source or a federal major modification shall be surplus of federal requirements at the time such emission reductions and ERCs are to be used as offsets. If the actual emission reductions, which were the basis of any such offsetting emission reductions or ERCs, resulted from the shutdown or curtailment in production and/or operating hours of an existing emission unit or existing stationary source, where such shutdown or curtailment occurred on or before the last day of the baseline year used in the Air Pollution Control District's most recent NAAQS attainment plan, such emissions must have been included in the projected emissions inventory used to develop the attainment demonstration associated with that plan.

(vi) Emission offsets shall be provided on a ton per year basis.

(vii) Emission offsets shall be located in San Diego County, except as provided pursuant to a District rule, approved by the California ARB and the federal EPA into the District portion of the State Implementation Plan, containing standards for the creation and approval of emission reduction credits in coastal waters adjacent to San Diego County.

(e) **OTHER PROVISIONS**

(1) **CONTINUITY OF EXISTING PERMITS**

All of the conditions contained in any Authority to Construct or Permit to Operate issued prior to (*effective date of revised rule*), shall remain valid and enforceable for the life of the Authority to Construct or Permit to Operate, unless specifically modified by the District.

**RULE 20.2**  
**NEW SOURCE REVIEW**  
**NON - MAJOR STATIONARY SOURCES**  
(ADOPTED AND EFFECTIVE 5/17/94)  
(REV. ADOPTED AND EFFECTIVE 12/17/97)  
(REV. ADOPTED 11/4/98; EFFECTIVE 12/17/98)  
(REV. ADOPTED 4/27/16; EFFECTIVE *(date of EPA approval into SIP)*)

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**NOTE:** The following listed subsections have not been submitted to the federal Environmental Protection Agency (EPA) for inclusion in the San Diego State Implementation Plan (SIP). As such, the following listed subsections are not enforceable by EPA, but remain enforceable by the San Diego County Air Pollution Control District.

Subsections (d)(2)(i)(B), (d)(2)(v) and (d)(2)(vi)(B); and Subsection (d)(3).

**RULE 20.2. NEW SOURCE REVIEW - NON-MAJOR STATIONARY SOURCES**

(Adopted & Effective 5/17/94)

(Rev. Adopted & Effective 12/17/97)

(Rev. Adopted 11/4/98 & Effective 12/17/98)

(Rev. Adopted 4/27/16; Effective (*date of EPA approval into SIP*))

(a) **APPLICABILITY**

This rule applies to any new or modified stationary source, to any new or modified emission unit, to any replacement emission unit, and to any relocated emission unit being moved to a stationary source provided that, after completion of the project, the stationary source is not a major stationary source. This rule does not apply to identical or like-kind replacement emission units exempt from Authority to Construct and modified Permit to Operate requirements pursuant to these Rules and Regulations. This rule does not apply to any portable emission unit. Compliance with this rule does not relieve a person from having to comply with other applicable requirements in these rules and regulations, or state and federal law.

(b) **EXEMPTIONS**

The exemptions contained in Rule 20.1, Section (b) apply to this rule. In addition, for purposes of this rule, the following exemptions shall apply.

(1) An existing permitted emission unit which is to be relocated from one stationary source within San Diego County to another shall be exempt from the BACT requirements of Subsection (d)(1)(ii), provided that:

(i) The emission unit is not being modified,

(ii) There is no increase in the emission unit's potential to emit,

(iii) The unit is not located for more than 180 days at the stationary source where it is moved to, and

(iv) The emission unit is not located at more than two stationary sources over any 365-day period.

(2) An existing permitted emission unit which is to be permanently relocated from one stationary source within San Diego County to another stationary source shall be exempt from the BACT requirements of Subsection (d)(1)(ii), provided that:

(i) There is no increase in the emission unit's potential to emit,

(ii) The relocation occurs within 10 miles of the previous stationary source,

(iii) The relocated emission unit commences operating at the stationary source it was relocated to within one year of the emission unit ceasing operations at its previous stationary source.

(c) **DEFINITIONS**

The definitions contained in Rule 20.1, Section (c) apply to this rule.

(d) **STANDARDS**

(1) **BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

The Air Pollution Control Officer shall deny an Authority to Construct or modified Permit to Operate for any emission unit and project subject to this rule unless the applicant demonstrates that the following requirements will be satisfied:

(i) **New or Modified Emission Units**

Any new or modified emission unit which has any increase in its potential to emit particulate matter (PM<sub>10</sub>), oxides of nitrogen (NO<sub>x</sub>), volatile organic compounds (VOC) or oxides of sulfur (SO<sub>x</sub>) and which unit has a post-project potential to emit of 10 pounds per day or more of PM<sub>10</sub>, NO<sub>x</sub>, VOC, or SO<sub>x</sub> shall be equipped with Best Available Control Technology (BACT) for each such air contaminant.

(ii) **Relocated Emission Units**

Except as provided for in Subsections (b)(1) and (b)(2), any relocated emission unit with a post-project potential to emit of 10 pounds per day or more of PM<sub>10</sub>, NO<sub>x</sub>, VOC or SO<sub>x</sub> shall be equipped with BACT for each such air contaminant.

(iii) **Replacement Emission Units**

Any replacement emission unit with a post-project potential to emit of 10 pounds per day or more of PM<sub>10</sub>, NO<sub>x</sub>, VOC or SO<sub>x</sub> shall be equipped with BACT for each such air contaminant.

(iv) **Emergency Equipment Emission Units**

For any emergency equipment emission unit subject to the BACT requirements of Subsections (d)(1)(i), (ii) or (iii) of this rule, BACT shall apply based on the unit's non-emergency operation emissions and excluding the unit's emissions while operating during emergency situations.

(v) **Projects with Multiple Emission Units**

Where a project at a stationary source consists of multiple new, modified, relocated or replacement emission units required by this Subsection (d)(1) to be equipped with BACT, BACT shall be evaluated for each such emission unit pursuant to (d)(1)(i) through (iv). The Air Pollution Control Officer may require that BACT be also evaluated for combinations of such emission units. Where technologically feasible, lowest emitting and cost-effective, the Air Pollution Control Officer may

require that BACT be applied to a combination of such emission units. In such case, BACT applied to such combinations shall not result in greater emissions for the project nor for each emission unit that is part of the project than were BACT applied to each emission unit.

(2) **AIR QUALITY IMPACT ANALYSIS (AQIA)**

The Air Pollution Control Officer shall deny an Authority to Construct or modified Permit to Operate for any emission unit and project subject to this rule unless the following requirements are satisfied.

The demonstrations required by this Subsection (d)(2) shall be based on the emission unit or project emission exhaust system design and discharge characteristics but not to an extent greater than good engineering practice stack height. This provision shall not be applied to limit actual stack height.

(i) **AQIA for New, Modified, Replacement or Relocated Emission Units and Projects**

(A) For each new, modified, replacement or relocated emission unit and project which results in an emissions increase equal to or greater than any of the amounts listed in Table 20.2 – 1 below, the applicant shall demonstrate to the satisfaction of the Air Pollution Control Officer through an AQIA, as defined in Rule 20.1, that such emissions increase will not:

- (1) cause a violation of a national ambient air quality standard anywhere that does not already exceed such standard, nor
- (2) cause additional violations of a national ambient air quality standard anywhere the standard is already being exceeded, nor
- (3) prevent or interfere with the attainment or maintenance of any national ambient air quality standard.

(B) This subsection not submitted into the State Implementation Plan (SIP).

**TABLE 20.2 - 1**  
**AQIA Trigger Levels**

<u>Air Contaminant</u>	<u>Emission Rate</u>		
	<u>(lb/hr)</u>	<u>(lb/day)</u>	<u>(tons/yr)</u>
Particulate Matter (PM <sub>10</sub> )	---	100	15
Fine Particulate Matter (PM <sub>2.5</sub> )	---	67	10
Oxides of Nitrogen (NO <sub>x</sub> )	25	250	40
Oxides of Sulfur (SO <sub>x</sub> )	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6

(ii) **AQIA for PM<sub>2.5</sub> and PM<sub>10</sub> Emission Increases**

In determining if a PM<sub>2.5</sub> or PM<sub>10</sub> AQIA is required under this Subsection (d)(2), the emissions increases shall include both directly emitted PM<sub>2.5</sub> and PM<sub>10</sub>, and PM<sub>2.5</sub> and PM<sub>10</sub> which would condense after discharge to the atmosphere. If a PM<sub>2.5</sub> or PM<sub>10</sub> AQIA is required, the AQIA shall include both directly emitted PM<sub>2.5</sub> or PM<sub>10</sub>, and PM<sub>2.5</sub> or PM<sub>10</sub> which would condense after discharge to the atmosphere. Any permit terms or conditions limiting emissions of PM<sub>2.5</sub> or PM<sub>10</sub> as a result of the requirements of this Subsection (d)(2) shall apply to the combination of both directly emitted and condensable PM<sub>2.5</sub> or PM<sub>10</sub>. The provisions of this Subsection (d)(2)(ii) shall apply separately to PM<sub>2.5</sub> and PM<sub>10</sub>.

(iii) **AQIA for Projects**

Where a project consists of multiple new, modified, replacement or relocated emission units, the determination of whether an air quality impact analysis is required under this Subsection (d)(2) shall be based on the aggregate total of emission increases occurring from those project emission units for which emissions are increasing, excluding any concurrent actual emission reductions occurring from other emission units at the same stationary source. If an air quality impact analysis is required, the air quality impacts of the project shall be based on the aggregate of the air quality impacts of each unit's emission increases at each off-site location analyzed. The simultaneous air quality impact reduction at each off-site location analyzed that results from any concurrent, enforceable actual emission reductions occurring from other emission units at the same stationary source may be included to determine the net air quality impacts of a project at each off-site location.

(iv) **AQIA Not Required for NO<sub>x</sub> or VOC Impacts on Ozone**

Notwithstanding the requirements of this Subsection (d)(2), a demonstration shall not be required for determining the impacts from an emission unit's or project's NO<sub>x</sub> or VOC emissions on an ambient air quality standard for ozone unless the Air Pollution Control Officer determines that adequate procedures exist for determining the impacts of NO<sub>x</sub> or VOC emissions from such emission unit or project on ozone ambient air quality standards and that such procedures are acceptable to the California Air Resources Board (ARB) with regard to state ambient air quality standards and the federal Environmental Protection Agency (EPA) with regard to national ambient air quality standards.

(v) This subsection not submitted into the State Implementation Plan (SIP).

(vi) **AQIA May be Required**

(A) Notwithstanding any other provision of this rule, the Air Pollution Control Officer may require an AQIA for any new or modified stationary source, any new or modified emission unit or any project if the stationary source, emission unit or project may be expected to:

(1) cause a violation of a national ambient air quality standard anywhere that does not already exceed such standard, or

(2) cause additional violations of a national ambient air quality standard anywhere the standard is already being exceeded, or

(3) prevent or interfere with the attainment or maintenance of any national ambient air quality standard.

The Air Pollution Control Officer shall deny an Authority to Construct or modified Permit to Operate for any stationary source, emission unit or project for which an AQIA is required pursuant to this Subsection (d)(2)(vi)(A) unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that the emission increases from such source, unit or project will not result in any of the impacts to the national ambient air quality standards specified above in (1), (2) and (3) of this Subsection (d)(2)(vi)(A).

(B) This subsection not submitted into the State Implementation Plan (SIP).

(3) This subsection not submitted into the State Implementation Plan (SIP).

(4) **PUBLIC NOTICE AND COMMENT**

The Air Pollution Control Officer shall not issue an Authority to Construct or modified Permit to Operate for any emission unit or project subject to the AQIA or notification requirements of Subsection (d)(2) or (d)(3), nor for any emission unit or project which results in an emissions increase of VOCs equal to or greater than 250 pounds per day or 40 tons per year, unless the following requirements are satisfied.

(i) **Public Comment Period**

At least 40 days before taking final action on an application subject to the requirements of Subsection (d)(2) or (d)(3), the Air Pollution Control Officer shall:

(A) provide the public with notice of the proposed action in the manner prescribed by Subsection (d)(4)(iii), and

(B) provide a copy of the public notice to the federal EPA Administrator, through its Region 9 office, to the California ARB and to any tribal air pollution control agencies having jurisdiction in the San Diego Air Basin, and

(C) make available for public inspection all information relevant to the proposed action as specified in Subsection (d)(4)(iv), and

(D) provide at least a 30-day period within which comments may be submitted.



The Air Pollution Control Officer shall consider all comments submitted.

(ii) **Applicant Response**

Except as agreed to by the applicant and the Air Pollution Control Officer, no later than 10 days after close of the public comment period, the applicant may submit written responses to any comment received during the public comment period. Responses submitted by the applicant shall be considered prior to the Air Pollution Control Officer taking final action. The applicant's responses shall be made available in the public record of the permit action.

(iii) **Publication of Notice**

The Air Pollution Control Officer shall publish a notice of the proposed action in at least one newspaper of general circulation in San Diego County. The notice shall:

(A) describe the proposed action, including the use of any modified or substitute air quality impact model as allowed under 40 CFR Part 51, Appendix W, and

(B) identify the location(s) where the public may inspect the information relevant to the proposed action, and

(C) indicate the date by which all comments must be received by the District for consideration prior to taking final action.

(iv) **Information to be Made Available for Public Inspection**

The relevant information to be made available for public inspection shall include but not be limited to:

(A) the application and all analyses and documentation used to support the proposed action, the District's evaluation of the project, a copy of the draft Authority to Construct or modified Permit to Operate and any information submitted by the applicant not previously labeled Trade Secret pursuant to Regulation IX, and

(B) the proposed District action on the application, including the preliminary decision to approve, conditionally approve or deny the application and the reasons therefore.

(5) **RESERVED**

(6) **RESERVED**

SAN DIEGO AIR POLLUTION CONTROL DISTRICT

**RULE 20.3**  
**NEW SOURCE REVIEW**  
**MAJOR STATIONARY SOURCES AND PSD STATIONARY SOURCES**  
(ADOPTED AND EFFECTIVE 5/17/94)  
(REV. ADOPTED AND EFFECTIVE 12/17/97)  
(REV. ADOPTED 11/4/98; EFFECTIVE 12/17/98)  
(REV. ADOPTED 4/27/16; EFFECTIVE *(date of EPA approval into SIP)*)

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**NOTE:** The following listed subsections have not been submitted to the federal Environmental Protection Agency (EPA) for inclusion in the San Diego State Implementation Plan (SIP). As such, the following listed subsections are not enforceable by EPA, but remain enforceable by the San Diego County Air Pollution Control District.

Subsection(d)(1)(vi); Subsections (d)(2)(i)(B), (d)(2)(v), and (d)(2)(vi)(B); and, Subsection (d)(3).

**RULE 20.3. NEW SOURCE REVIEW - MAJOR STATIONARY SOURCES AND PREVENTION OF SIGNIFICANT DETERIORATION (PSD) STATIONARY SOURCES**

(Adopted & Effective 5/17/94)

(Rev. Adopted & Effective 12/17/97)

(Rev. Adopted 11/4/98; Effective 12/17/98)

(Rev. Adopted 4/27/16; Effective *(date of EPA approval into SIP)*)

**(a) APPLICABILITY**

This rule applies to any new or modified major stationary source, to any new or modified emission unit, to any replacement emission unit, and to any relocated emission unit being moved to a stationary source if, after completion of the project, the stationary source will be a major stationary source or a Prevention of Significant Deterioration (PSD) Stationary Source. This rule does not apply to identical or like-kind replacement emission units exempt from Authority to Construct and modified Permit to Operate requirements pursuant to these Rules and Regulations. This rule does not apply to any portable emission unit. Compliance with this rule does not relieve a person from having to comply with other applicable requirements in these rules and regulations, or state and federal law.

**(b) EXEMPTIONS**

The exemptions contained in Rule 20.1, Section (b) apply to this rule. In addition, for purposes of this rule, the following exemptions shall apply.

(1) An existing permitted emission unit which is to be temporarily relocated from one stationary source within San Diego County to another stationary source shall be exempt from the BACT requirements of Subsection (d)(1)(ii) provided that:

(i) The emission unit is not being modified,

(ii) There is no increase in the emission unit's potential to emit,

(iii) The unit is not located for more than 180 days at the stationary source where it is moved to,

(iv) The emission unit is not located at more than two stationary sources over any 365-day period, and

(v) The emission unit at the new location does not constitute a new federal major stationary source nor a federal major modification.

(2) An existing permitted emission unit which is to be permanently relocated from one stationary source within San Diego County to another stationary source shall be exempt from the BACT requirements of Subsection (d)(1)(ii), provided that:

- (i) There is no increase in the emission unit's potential to emit,
- (ii) The relocation occurs within 10 miles of the previous stationary source,
- (iii) The relocated emission unit commences operating at the stationary source it was relocated to within one year of the emission unit ceasing operations at its previous stationary source, and
- (iv) The emission unit at the new location does not constitute a new federal major stationary source nor a federal major modification.

(3) Emission increases resulting from an air contaminant emission control project shall be exempt from the emission offset requirements of Subsection (d)(5) of this rule to the extent that the project does not include an increase in the capacity of the emission unit being controlled. Emission increases that are associated with an increase in capacity of the emission unit being controlled shall be subject to the emission offset provisions of this rule, as applicable. This exemption from offsets shall not apply to any air contaminant for which the emissions increase constitutes a new federal major stationary source or a federal major modification.

(c) **DEFINITIONS**

The definitions contained in Rule 20.1, Section (c) apply to this rule.

(d) **STANDARDS**

(1) **BEST AVAILABLE CONTROL TECHNOLOGY (BACT) AND LOWEST ACHIEVABLE EMISSION RATE (LAER)**

The Air Pollution Control Officer shall deny an Authority to Construct or modified Permit to Operate for any emission unit and project subject to this rule unless the applicant demonstrates that the following requirements will be satisfied:

(i) **New or Modified Emission Units - BACT**

Except as provided in Subsection (d)(1)(v), any new or modified emission unit which has any increase in its potential to emit particulate matter (PM<sub>10</sub>), oxides of nitrogen (NO<sub>x</sub>), volatile organic compounds (VOC), or oxides of sulfur (SO<sub>x</sub>) and which unit has a post-project potential to emit 10 pounds per day or more of PM<sub>10</sub>, NO<sub>x</sub>, VOC or SO<sub>x</sub> shall be equipped with BACT for each such air contaminant.

(ii) **Relocated Emission Units - BACT**

Except as provided in Subsections (b)(1), (b)(2) and (d)(1)(v), any relocated emission unit with a post-project potential to emit of 10 pounds per day or more of PM<sub>10</sub>, NO<sub>x</sub>, VOC or SO<sub>x</sub> shall be equipped with BACT for each such air contaminant.

(iii) **Replacement Emission Units - BACT**

Except as provided in Subsection (d)(1)(v), any replacement emission unit with a post-project potential to emit of 10 pounds per day or more of PM<sub>10</sub>, NO<sub>x</sub>, VOC or SO<sub>x</sub> shall be equipped with BACT for each such air contaminant.

(iv) **Emergency Equipment Emission Units**

For any emergency equipment emission unit subject to the BACT requirements of Subsections (d)(1)(i), (ii), (iii) or (vi) of this rule, BACT shall apply based on the unit's non-emergency operation emissions and excluding the unit's emissions while operating during emergency situations.

(v) **Lowest Achievable Emission Rate (LAER)**

(A) Except as provided for in paragraphs (d)(1)(v)(B) and (C) below, LAER shall be required for each new, modified, relocated or replacement emission unit and project which results in an emissions increase which constitutes a new major stationary source or major modification. LAER shall be required only for those air contaminants and their precursors for which the stationary source is major and for which the District is classified as non-attainment of a national ambient air quality standard.

(B) If actual emission reductions of VOC or NO<sub>x</sub>, as applicable, are provided from within the stationary source at a ratio of at least 1.3 to 1.0 for the emissions increases of VOC or NO<sub>x</sub> from an emissions unit or project subject to the LAER provisions of this Subsection (d)(1)(v), such emission increases shall be exempt from the requirement for LAER and from further emission offsets under Subsection (d)(5) of this rule and shall instead be subject to BACT.

(C) A new, modified, relocated or replacement emission unit or project at an existing major stationary source which results in an emission increase of VOC or NO<sub>x</sub>, and which increase would be otherwise subject to LAER, shall be subject to BACT instead of LAER provided the stationary source's post-project aggregate potential to emit is less than 100 tons per year of VOC or NO<sub>x</sub>. This provision shall apply on a pollutant-specific basis.

(vi) This subsection not submitted into the State Implementation Plan (SIP).

(vii) **Projects with Multiple Emission Units**

Where a project at a stationary source consists of more than one new, modified, relocated or replacement emission unit required by this Subsection (d)(1) to be equipped with BACT or LAER, BACT or LAER, as applicable, shall be evaluated for each such emission unit. The Air Pollution Control Officer may require that BACT or LAER, as applicable, be also evaluated for combinations of such emission units. Where technologically feasible, lowest emitting and, for BACT, cost-

effective, the Air Pollution Control Officer may require that BACT or LAER be applied to a combination of such emission units. In such case, BACT or LAER applied to such combinations shall not result in greater emissions for the project nor for each emission unit that is part of the project than were BACT or LAER, as applicable, applied to each emission unit.

(2) **AIR QUALITY IMPACT ANALYSIS (AQIA)**

The Air Pollution Control Officer shall deny an Authority to Construct or modified Permit to Operate for any emission unit or project subject to this rule unless the following requirements are satisfied.

The demonstrations required by this Subsection (d)(2) shall be based on the emission unit or project emission exhaust system design and discharge characteristics but not to an extent greater than good engineering practice stack height. This provision shall not be applied to limit actual stack height.

(i) **AQIA for New, Modified, Replacement or Relocated Emission Units and Projects**

(A) For each new, modified, replacement or relocated emission unit and project which results in an emissions increase equal to or greater than any of the amounts listed in Table 20.3 – 1 below, the applicant shall demonstrate to the satisfaction of the Air Pollution Control Officer through an AQIA, as defined in Rule 20.1, that such emissions increase will not:

(1) cause a violation of a national ambient air quality standard anywhere that does not already exceed such standard, nor

(2) cause additional violations of a national ambient air quality standard anywhere the standard is already being exceeded, nor

(3) prevent or interfere with the attainment or maintenance of any national ambient air quality standard, nor

(4) by itself, result in an increase in ambient concentrations of any air contaminant, for which San Diego County is in attainment of the applicable national ambient air quality standards, greater than the applicable air quality increment above the baseline concentration for that air contaminant in any Class I or Class II area. This provision shall only apply if the emissions increase constitutes a new federal major stationary source or federal major modification.

(B) This subsection not submitted into the State Implementation Plan (SIP).

**TABLE 20.3 - 1**  
**AQIA Trigger Levels**

<u>Air Contaminant</u>	<u>Emission Rate</u>		
	<u>(lb/hr)</u>	<u>(lb/day)</u>	<u>(tons/yr)</u>
Particulate Matter (PM <sub>10</sub> )	---	100	15
Fine Particulate Matter (PM <sub>2.5</sub> )	---	67	10
Oxides of Nitrogen (NO <sub>x</sub> )	25	250	40
Oxides of Sulfur (SO <sub>x</sub> )	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6

(ii) **AQIA for PM<sub>2.5</sub> and PM<sub>10</sub> Emission Increases**

In determining if a PM<sub>2.5</sub> or PM<sub>10</sub> AQIA is required under this Subsection (d)(2), the emissions increases shall include both directly emitted PM<sub>2.5</sub> and PM<sub>10</sub>, and PM<sub>2.5</sub> and PM<sub>10</sub> which would condense after discharge to the atmosphere. If a PM<sub>2.5</sub> or PM<sub>10</sub> AQIA is required, the AQIA shall include both directly emitted PM<sub>2.5</sub> or PM<sub>10</sub>, and PM<sub>2.5</sub> or PM<sub>10</sub> which would condense after discharge to the atmosphere. Any permit terms or conditions limiting emissions of PM<sub>2.5</sub> or PM<sub>10</sub> as a result of the requirements of this Subsection (d)(2) shall apply to the combination of both directly emitted and condensable PM<sub>2.5</sub> or PM<sub>10</sub>. The provisions of this Subsection (d)(2)(ii) shall apply separately to PM<sub>2.5</sub> and PM<sub>10</sub>.

(iii) **AQIA for Projects**

Where a project consists of multiple new, modified, replacement or relocated emission units, the determination of whether an air quality impact analysis is required under this Subsection (d)(2) shall be based on the aggregate total of emissions increases occurring from those project emission units for which emissions are increasing, excluding any concurrent actual emission reductions occurring from other emission units at the same stationary source. If an air quality impact analysis is required, the air quality impacts of the project shall be based on the aggregate of the air quality impacts of each unit's emission increases at each off-site location analyzed. The air quality impact reduction at any off-site location analyzed that results from any concurrent, enforceable actual emission reductions occurring from other emission units, at the same stationary source, may be included to determine the net air quality impacts of a project at such off-site location.

(iv) **AQIA Not Required for NO<sub>x</sub> or VOC Impacts on Ozone**

Notwithstanding the requirements of this Subsection (d)(2) a demonstration shall not be required for determining the impacts from an emission unit's or project's NO<sub>x</sub> or VOC emissions on an ambient air quality standard for ozone, unless the Air Pollution Control Officer determines that adequate procedures exist for determining the impacts of NO<sub>x</sub> or VOC emissions from such emission unit or project on ozone ambient air quality standards and that such procedures are acceptable to the California Air Resources Board (ARB) with regard to state ambient air quality standards and the federal Environmental Protection Agency (EPA) with regard to national ambient air quality standards.



(v) This subsection not submitted into the State Implementation Plan (SIP).

(vi) **AQIA May be Required**

(A) Notwithstanding any other provision of this rule, the Air Pollution Control Officer may require an AQIA for any new or modified stationary source, any emission unit or any project if the stationary source, emission unit or project may be expected to:

(1) cause a violation of a national ambient air quality standard anywhere that does not already exceed such standard, or

(2) cause additional violations of a national ambient air quality standard anywhere the standard is already being exceeded, or

(3) prevent or interfere with the attainment or maintenance of any national ambient air quality standard, or

(1) by itself, result in an increase in ambient concentrations of any air contaminant, for which San Diego County is in attainment of the applicable national ambient air quality standards, greater than the applicable air quality increment above the baseline concentration for that air contaminant in any Class I or Class II area. This provision shall only apply if the emissions increase constitutes a new federal major stationary source or federal major modification.

The Air Pollution Control Officer shall deny an Authority to Construct or modified Permit to Operate for any stationary source, emission unit or project for which an AQIA is required pursuant to this Subsection (d)(2)(vi)(A) unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that the emission increases from such source, unit or project will not result in any of the impacts to the national ambient air quality standards or an air quality increment specified above in (1), (2), (3) and (4) of this Subsection (d)(2)(vi)(A).

(B) This subsection not submitted into the State Implementation Plan (SIP).

(3) This subsection not submitted into the State Implementation Plan (SIP).

(4) **PUBLIC NOTICE AND COMMENT**

The Air Pollution Control Officer shall not issue an Authority to Construct or modified Permit to Operate for any emission unit or project subject to the AQIA or notification requirements of Subsections (d)(2) or (d)(3) above, nor for any emission unit or project which results in an emissions increase of VOC equal to or greater than 250 pounds per day or 40 tons per year, nor for any emission unit or project that would

otherwise constitute a new major stationary source or a major modification, unless the following requirements are satisfied.

(i) **Public Comment Period**

At least 40 days before taking final action on an application, the Air Pollution Control Officer shall:

(A) provide the public with notice of the proposed action in the manner prescribed in Subsection (d)(4)(iii), and

(B) provide the California ARB, federal EPA, and any tribal air pollution control agencies having jurisdiction in the San Diego Air Basin with notice of the proposed action and all of the information specified in Subsection (d)(4)(iv), and

(C) make available for public inspection all information relevant to the proposed action as specified in Subsection (d)(4)(iv), and

(D) provide at least a 30-day period within which comments may be submitted.

The Air Pollution Control Officer shall consider all comments submitted.

(ii) **Applicant Response**

Except as agreed to by the applicant and the Air Pollution Control Officer, no later than 10 days after close of the public comment period, the applicant may submit written responses to any comment received during the public comment period. Responses submitted by the applicant shall be considered prior to the Air Pollution Control Officer taking final action. The applicant's responses shall be made available in the public record of the permit action.

(iii) **Publication of Notice**

The Air Pollution Control Officer shall publish a notice of the proposed action in at least one newspaper of general circulation in San Diego County. The notice shall:

(A) describe the proposed action, including the use of any modified or substitute air quality impact model as allowed under 40 CFR Part 51, Appendix W, and

(B) identify the location(s) where the public may inspect the information relevant to the proposed action, and

(C) indicate the date by which all comments must be received by the District for consideration prior to taking final action.

(iv) **Information to be Made Available for Public Inspection**

The relevant information to be made available for public inspection shall include, but not be limited to:

(A) the application and all analyses and documentation used to support the proposed action, the District's evaluation of the project, a copy of the draft Authority to Construct or modified Permit to Operate and any information submitted by the applicant not previously labeled Trade Secret pursuant to Regulation IX, and

(B) the proposed District action on the application, including the preliminary decision to approve, conditionally approve or deny the application and the reasons therefor.

(5) **EMISSION OFFSET REQUIREMENTS**

Except as provided for in Subsection (b)(3), the Air Pollution Control Officer shall not issue an Authority to Construct or modified Permit to Operate for any new or modified stationary source, new or modified emission unit, replacement or relocated emission unit or project which results in an emissions increase that constitutes a new major stationary source or a major modification for NO<sub>x</sub> or VOC, or for any air contaminant, or its precursor air contaminants, for which the San Diego Air Basin has been designated by EPA as nonattainment for the NAAQS for such air contaminant, unless emission offsets are provided, on a pollutant-specific basis, for such emission increases as specified below. Interpollutant offsets may be used, provided such offsets meet the requirements of Subsection (d)(5)(iii).

(i) **DETERMINATION OF APPLICABILITY**

The determination that a new emission unit, project or new stationary source is a new major stationary source shall be based on the emission unit's post-project potential to emit, or the project's or stationary source's aggregate post-project potential to emit, respectively. The determination that a new, modified, replacement or relocated emission unit or project at an existing major stationary source is a major modification shall be based on the stationary source's contemporaneous net emissions increase. These determinations shall be made on a pollutant-specific basis.

The applicant for a new major stationary source or a new, modified, replacement or relocated emission unit or project at an existing major stationary source shall submit, with each application for such emission unit, project or source, sufficient information to determine the emissions increases for the unit, project or source, and the contemporaneous net emissions increases if located at an existing major stationary source.

(ii) **EMISSION OFFSETS**

(A) If the NO<sub>x</sub> or VOC emissions increase from the project under review constitutes a new major stationary source or a major modification, such emissions increase shall be offset at a ratio of 1.2 to 1.0. For any other EPA designated nonattainment air contaminant or its precursor for which the emissions increase from the project under review constitutes a new major stationary source or a major modification, such emissions increase shall be offset at a ratio of 1.0 to 1.0. Interpollutant offsets may be used provided they meet the requirements of Subsection (d)(5)(iii) of this rule.

(B) When an emissions increase from a new, modified, replacement or relocated emission unit or project has been determined to be subject to, and approved as in compliance with, the emission offset requirements of this rule, the contemporaneous net emissions increase for the subject air contaminant shall thereafter not include the amount of such offset emissions increase from the new or modified emission unit or project, on a pollutant-specific basis.

(C) When the emissions offset requirements of this Subsection (d)(5) are being applied to a new federal major stationary source or federal major modification, the amount of creditable emission reductions from any emission reduction credits to be provided shall be adjusted as specified in Rule 20.1, Subsection (d)(5)(v). Such adjustments shall be made at the time that an Authority to Construct is issued, for credits provided by the applicant on or before such issuance, and at the time that a credit is surrendered, for credits provided by the applicant after issuance of the Authority to Construct.

(iii) **Interpollutant Offsets**

The Air Pollution Control Officer may allow the use of interpollutant emission offsets at the ratios specified in Table 20.3 – 2 to satisfy the VOC and NO<sub>x</sub> offset requirements of this Subsection (d)(5). For any other EPA-designated nonattainment air contaminant having precursor air contaminant relationships specified in Table 20.1-9 of Rule 20.1, the Air Pollution Control Officer may allow the use of interpollutant offsets of such precursor air contaminants in addition to or in lieu of providing offsets of the nonattainment air contaminant only if done pursuant to an interpollutant offset protocol approved by the Air Pollution Control Officer and the federal EPA. Interpollutant offsets may only be allowed if the applicant demonstrates, to the satisfaction of the Air Pollution Control Officer, that the AQIA requirements of Subsection (d)(2), as applicable, are satisfied for the emissions increases. The interpollutant ratios shall be multiplied by the emission offset ratios required by this rule to determine the final offset ratio.

**TABLE 20.3 – 2**  
**Interpollutant Ratio**

Emission Increase	Decrease	Interpollutant Ratio
Oxides of Nitrogen (NOx)	NOx	1.0
	VOC	2.0
Volatile Organic Compounds (VOC)	VOC	1.0
	NOx	1.0

**(e) ADDITIONAL REQUIREMENTS – FEDERAL MAJOR STATIONARY SOURCES**

**(1) Compliance Certification**

Prior to receiving an Authority to Construct or modified Permit to Operate pursuant to this rule, an applicant for any new federal major stationary source or federal major modification shall certify that all major stationary sources owned or operated by such person, or by any entity controlling, controlled by or under common control with such a person, in the state are in compliance, or on an approved schedule for compliance, with all applicable emission limitations and standards under the federal Clean Air Act.

**(2) Alternative Siting and Alternatives Analysis**

The applicant for any new federal major stationary source or federal major modification shall conduct an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source or modification which demonstrates that the benefits of the proposed source or modification outweigh the environmental and social costs imposed as a result of its location or construction. Analyses conducted in conjunction with state or federal statutory requirements may be used.

**(3) ANALYSIS OF VISIBILITY IMPAIRMENT IN CLASS I AREAS**

The Air Pollution Control Officer shall deny an Authority to Construct or modified Permit to Operate for any emission unit or project which constitutes a new federal major stationary source or federal major modification and which may have an impact on visibility in a Class I area unless the applicant demonstrates that the following requirements are satisfied. The demonstrations required by this Subsection (e)(3) shall be based on the emission unit or project emission exhaust system design and discharge characteristics but not to an extent greater than good engineering practice stack height. This provision shall not be applied to limit actual stack height.

**(i) Required Analyses**

At the time of application submittal, the applicant shall provide an initial screening analysis of the impairment to visibility, including any integral vista, in each affected Class I area as a result of the emissions increases from the new federal major stationary source or federal major modification, and any general commercial, residential, industrial and other growth associated with the new source or modification. If a screening analysis indicates that a visibility impairment will

occur, as determined by the Air Pollution Control Officer, a more in-depth visibility impairment analysis shall be prepared. All analyses of impairment to visibility shall be conducted using applicable methods and procedures promulgated or approved by the federal EPA.

(ii) **Notification Requirements**

The Air Pollution Control Officer shall notify the Federal Land Manager and EPA not later than 30 days after receipt of an application for a new federal major source or a federal major modification subject to the requirements of this Subsection (e)(3). The notification shall include a copy of the application submittal, the location of the project, the project's approximate distance from all Class I areas within 100 km of San Diego County (as specified in Rule 20.1, Table 20.1 - 3), the results of any AQIA, and the results of any screening analysis and any more in-depth analysis of the impacts of the project on visibility in any Class I area.

(iii) **Application Denial**

The Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate for any new federal major stationary source or federal major modification if the Air Pollution Control Officer finds, after consideration of comments and any analysis from the Federal Land Manager, that the emissions increases from such new source or modification would have an adverse impact on visibility in a Class I area. As defined in 40 CFR 52.21(b)(29), an adverse impact on visibility means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Class I area.

SAN DIEGO AIR POLLUTION CONTROL DISTRICT

**RULE 20.4**  
**NEW SOURCE REVIEW**  
**PORTABLE EMISSION UNITS**  
(ADOPTED AND EFFECTIVE 5/17/94)  
(REV. ADOPTED AND EFFECTIVE 12/17/97)  
(REV. ADOPTED 11/4/98; EFFECTIVE 12/17/98)  
(REV. ADOPTED AND EFFECTIVE 4/27/16)

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**NOTE:** The following listed subsections have not been submitted to the federal Environmental Protection Agency (EPA) for inclusion in the San Diego State Implementation Plan (SIP). As such, the following listed subsections are not enforceable by EPA, but remain enforceable by the San Diego County Air Pollution Control District.

Subsections (b)(2) and (b)(3); Subsection (d)(1)(iii); Subsections (d)(2)(i)(B), (d)(2)(iv), and (d)(2)(v)(B); and Subsections (d)(3) and (d)(5).



**RULE 20.4. NEW SOURCE REVIEW - PORTABLE EMISSION UNITS**

(Adopted & Effective 5/17/94)

(Rev. Adopted & Effective 12/17/97)

(Rev. Adopted 11/4/98; Effective 12/17/98)

(Rev. Adopted & Effective 4/27/16)

(a) **APPLICABILITY**

This rule applies to any new, modified or replacement portable emission unit. Subsection (d)(2)(v) of this rule also applies to any stationary source where one or more portable emission units will be located. This rule does not apply to identical or like-kind replacement portable emission units exempt from Authority to Construct and modified Permit to Operate requirements pursuant to these Rules and Regulations. Compliance with this rule does not relieve a person from having to comply with other applicable requirements in these rules and regulations, or state and federal law.

(b) **EXEMPTIONS**

The exemptions contained in Rule 20.1, Section (b) apply to this rule. In addition, for purposes of this rule, the following exemptions shall apply.

- (1) Except as provided in Subsection (d)(2)(v) of this rule, the provisions of this rule shall not apply to any previously permitted portable emission unit, unless such unit is modified or replaced.
- (2) This subsection not submitted into the State Implementation Plan (SIP).
- (3) This subsection not submitted into the State Implementation Plan (SIP).

(c) **DEFINITIONS**

The definitions contained in Rule 20.1, Section (c) shall apply to this rule. In addition, for purposes of this rule, the following definitions shall apply.

- (1) "**Related to the Primary Activities of the Stationary Source**" means with regard to the operation of a portable emission unit, that the unit is considered under the same major industrial grouping, as identified by the first two digits of the applicable code in *The Standard Industrial Classification Manual*, as the stationary source where such unit will be operated, or is used as part of or supplements a primary process at the stationary source where the operation of one is dependent upon or affects the operations of the other. This includes industrial processes, manufacturing processes and any connected processes involving a common material, service or product.

(d) **STANDARDS**

(1) **BACT AND LAER FOR NEW, MODIFIED OR REPLACEMENT PORTABLE EMISSION UNITS**

The Air Pollution Control Officer shall deny an Authority to Construct or modified Permit to Operate for any new, modified or replacement portable emission unit unless the applicant demonstrates that the following requirements will be satisfied. These requirements shall be applied on an air contaminant-specific basis.

(i) **Portable Emission Units - BACT**

Unless a portable emission unit is equipped to comply with Lowest Achievable Emission Rate (LAER), as provided in Subsection (d)(1)(ii) of this rule, for the following air contaminants otherwise subject to BACT, any new or modified portable emission unit which has any increase in its potential to emit particulate matter (PM<sub>10</sub>), NO<sub>x</sub>, VOC, or oxides of sulfur (SO<sub>x</sub>), and which unit has a post-project potential to emit of 10 pounds per day or more of PM<sub>10</sub>, NO<sub>x</sub>, VOC, or SO<sub>x</sub>, respectively, and any replacement portable emission unit which has such a post-project potential to emit, shall be equipped with Best Available Control Technology (BACT) for each such air contaminant.

(ii) **Portable Emission Units - LAER**

Any new, modified or replacement portable emission unit which has any emissions increase of an air contaminant or its precursors for which the District is designated as non-attainment with respect to a national ambient air quality standard, and which may be expected to operate at a stationary source that is a major stationary source of such air contaminant or precursor, shall be equipped to comply with LAER for each such air contaminant or precursor except as provided in (A) or (B) below. For each air contaminant for which LAER is not required by the following, BACT shall apply:

(A) LAER shall not apply if the applicant demonstrates, to the satisfaction of the Air Pollution Control Officer, and agrees to federally enforceable permit conditions to ensure that, the emissions increase of such nonattainment air contaminant or precursor from such unit will not constitute a new major source or a major modification at any stationary source at which it is to be located and which is major for such non-attainment air contaminant or precursor.

(B) LAER shall not apply if operation of the portable emission unit is not related to the primary activities of the major stationary source at which it is to be located, provided the portable emission unit, or aggregation of such portable emission units co-located at the same stationary source, does not constitute a new federal major stationary source.

(iii) This subsection not submitted into the State Implementation Plan (SIP).

(2) **AIR QUALITY IMPACT ANALYSIS (AQIA)**

The Air Pollution Control Officer shall deny an Authority to Construct or modified Permit to Operate for any new, modified or replacement portable emission unit unless the following requirements are satisfied. Modeling shall be used to conduct any Air Quality Impact Analysis (AQIA). The AQIA shall be performed using maximum expected ambient air contaminant concentrations within San Diego County, based on existing data, unless the applicant agrees to enforceable permit conditions that require a new AQIA whenever the equipment is to be located at a stationary source for which the initial AQIA was not representative.

The demonstrations required by this Subsection (d)(2) shall be based on the emission unit emission exhaust system design and discharge characteristics but not to an extent greater than good engineering practice stack height. This provision shall not be applied to limit actual stack height.

(i) **AQIA for Portable Emission Units**

(A) For each new, modified or replacement portable emission unit which results in an emissions increase equal to or greater than the amounts listed in Table 20.4 - 1, the applicant shall demonstrate to the satisfaction of the Air Pollution Control Officer, through an AQIA, as defined in Rule 20.1, that the new, modified or replacement portable emission unit will not:

- (1) cause a violation of a national ambient air quality standard anywhere that does not already exceed such standard, nor
- (2) cause additional violations of a national ambient air quality standard anywhere the standard is already being exceeded, nor
- (3) prevent or interfere with the attainment or maintenance of national ambient air quality standard.

(B) This subsection not submitted into the State Implementation Plan (SIP).

**TABLE 20.4 - 1**  
**AQIA Trigger Levels**

<u>Air Contaminant</u>	<u>Emission Rate</u>		
	<u>(lb/hr)</u>	<u>(lb/day)</u>	<u>(tons/yr)</u>
Particulate Matter (PM <sub>10</sub> )	---	100	15
Fine Particulate Matter (PM <sub>2.5</sub> )	---	67	10
Oxides of Nitrogen (NO <sub>x</sub> )	25	250	40
Oxides of Sulfur (SO <sub>x</sub> )	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6

(ii) **AQIA for PM<sub>2.5</sub> and PM<sub>10</sub> Emission Increases**

In determining if a PM<sub>2.5</sub> or PM<sub>10</sub> AQIA is required under this Subsection (d)(2), the emissions increases shall include both directly emitted PM<sub>2.5</sub> and PM<sub>10</sub>, and PM<sub>2.5</sub> and PM<sub>10</sub> which would condense after discharge to the atmosphere. If a PM<sub>2.5</sub> or PM<sub>10</sub> AQIA is required, the AQIA shall include both directly emitted PM<sub>2.5</sub> or PM<sub>10</sub>, and PM<sub>2.5</sub> or PM<sub>10</sub> which would condense after discharge to the atmosphere. Any permit terms or conditions limiting emissions of PM<sub>2.5</sub> or PM<sub>10</sub> as a result of the requirements of this Subsection (d)(2) shall apply to the combination of both directly emitted and condensable PM<sub>2.5</sub> or PM<sub>10</sub>. The provisions of this Subsection (d)(2)(ii) shall apply separately to PM<sub>2.5</sub> and PM<sub>10</sub>.

(iii) **AQIA Not Required for NO<sub>x</sub> or VOC Impacts on Ozone**

Notwithstanding any other provision of this rule, a demonstration shall not be required for determining the impacts from a portable emission unit's NO<sub>x</sub> or VOC emissions on an ambient air quality standards for ozone, unless the Air Pollution Control Officer determines that adequate procedures exist for determining the impacts of NO<sub>x</sub> or VOC emissions from such portable emission units on ozone ambient air quality standards and that such procedures are acceptable to the California Air Resources Board (ARB) with regard to state ambient air quality standards and the federal Environmental Protection Agency (EPA) with regard to national ambient air quality standards.

(iv) This subsection not submitted into the State Implementation Plan (SIP).

(v) **AQIA May be Required**

(A) Notwithstanding any other provision of this rule, the Air Pollution Control Officer may require an AQIA for any portable emission unit, or aggregation of portable emission units, if it may be expected to:

(1) cause a violation of a national ambient air quality standard anywhere that does not already exceed such standard, or

(2) cause additional violations of a national ambient air quality standard anywhere the standard is already being exceeded, or

(3) prevent or interfere with the attainment or maintenance of any national ambient air quality standard.

The Air Pollution Control Officer shall deny an Authority to Construct or modified Permit to Operate for any portable emission unit or aggregation of portable emission units for which an AQIA is required pursuant to this Subsection (d)(2)(v)(A) unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that the emission increases from such unit or aggregation of units will not result in any of the impacts to the national

ambient air quality standards specified above in (1), (2) and (3) of this Subsection (d)(2)(v)(A).

(B) This subsection not submitted into the State Implementation Plan (SIP)

This Subsection (d)(2)(v) may be invoked notwithstanding the equipment being previously permitted.

(3) This subsection not submitted into the State Implementation Plan (SIP).

(4) **PUBLIC NOTICE AND COMMENT**

The Air Pollution Control Officer shall not issue an Authority to Construct or modified Permit to Operate for any portable emission unit subject to the AQIA or notification requirements of Subsections (d)(2) or (d)(3), nor for any emission unit or project which results in an emissions increase of VOCs equal to or greater than 250 pounds per day or 40 tons per year, unless the following requirements are satisfied.

(i) **Public Comment Period**

At least 40 days before taking final action on an application subject to the requirements of Subsections (d)(2) or (d)(3), the Air Pollution Control Officer shall:

(A) provide the public with notice of the proposed action in the manner prescribed in Subsection (d)(4)(iii), and

(B) provide a copy of the public notice to the federal EPA Administrator, through its Region 9 office, to the California ARB, and to any tribal air pollution control agencies having jurisdiction in the San Diego Air Basin, and

(C) make available for public inspection all information relevant to the proposed action as specified in Subsection (d)(4)(iv), and

(D) provide at least a 30-day period within which comments may be submitted.

The Air Pollution Control Officer shall consider all comments submitted.

(ii) **Applicant Response**

Except as agreed to by the applicant and the Air Pollution Control Officer, no later than 10 days after close of the public comment period, the applicant may submit written responses to any comment received during the public comment period. Responses submitted by the applicant shall be considered prior to the Air Pollution Control Officer taking final action. The applicant's responses shall be made available in the public record of the permit action.

(iii) **Publication of Notice**

The Air Pollution Control Officer shall publish a notice of the proposed action in at least one newspaper of general circulation in San Diego County. The notice shall:

(A) describe the proposed action, including the use of any modified or substitute air quality impact model as allowed under 40 CFR Part 51, Appendix W, and

(B) identify the location(s) where the public may inspect the information relevant to the proposed action, and

(C) indicate the date by which all comments must be received by the District for consideration prior to taking final action.

(iv) **Information to be Made Available for Public Inspection**

The relevant information to be made available for public inspection shall include, but is not limited to:

(A) the application and all analyses and documentation used to support the proposed action, the District's compliance evaluation, a copy of the draft Authority to Construct or Permit to Operate and any information submitted by the applicant not previously labeled Trade Secret pursuant to Regulation IX, and

(B) the proposed District action on the application, including the preliminary decision to approve, conditionally approve or deny the application and the reasons therefore.

(5) This subsection not submitted into the State Implementation Plan (SIP).

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 20.5. POWER PLANTS (Effective 7/5/79)**

(a) This rule shall apply to all new power plants, and modifications to existing power plants for which a Notice of Intention (NOI) or Application for Certification (AFC) has been accepted by the California Energy Commission. The Air Pollution Control Officer, pursuant to Section 25538 of the Public Resources Code, shall apply for reimbursement of all costs, including lost fees, incurred in order to comply with the provisions of this rule. The provisions of all other applicable air pollution rules and regulations shall apply to power plants subject to this rule.

(b) Within fourteen (14) days of receipt of an NOI, by the District, the Air Pollution Control Officer shall notify the State Air Resources Board and the Commission of the District's intent to participate in the NOI proceeding. If the District chooses to participate in the NOI proceeding, the Air Pollution Control Officer shall prepare and submit a report to the State Air Resources Board and the Commission prior to the conclusion of the nonadjudicatory hearings specified in Section 25509.5 of the Public Resource Code. That report shall include, at a minimum:

1. a preliminary specific definition of lowest achievable emission rate (LAER) for the proposed facility;
2. a preliminary discussion of whether there is substantial likelihood that the requirements of District Rules 20.1, 20.3, 20.4, 20.6 and all other applicable air pollution rules and regulations can be satisfied by the proposed facility;
3. a preliminary list of conditions which the proposed facility must meet in order to comply with District Rules and Regulations.

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

(c) Upon receipt of AFC 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 an Authority to Construct had been received for the power plant. If the information contained in the AFC is inadequate to conduct said review, the Air Pollution Control Officer shall,

within twenty (20) calendar days of receipt of the AFC, so inform the Commission, and the AFC shall be considered incomplete and returned to the applicant for resubmittal.

(d) The Air Pollution Control Officer shall consider the AFC to be equivalent to an application for an

Authority to Construct during the Determination of Compliance review, and shall apply all provisions of these rules and regulations which apply to applications for an Authority to Construct.

(e) 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 for an order directing the applicant to supply such information.

(f) Within 180 days of accepting an AFC as complete, the Air Pollution Control Officer shall make a preliminary decision on:

1. whether the proposed power plant meets the requirements of all applicable District regulations; and
2. in the event of compliance, what permit conditions will be required including the specific LAER requirements and a description of required mitigation measures.

(g) The preliminary written decision made under paragraph (f) shall be treated as a preliminary decision pursuant to Rule 20.3, and shall be finalized by the Air Pollution Control Officer only after being subject to the public notice and comment requirements of Rule 20.3. The Air Pollution Control Officer shall not issue a Determination of Compliance unless all requirements of applicable air pollution rules and regulations are met.

(h) Within 240 days of the filing of the AFC, the Air Pollution Control Officer shall issue and submit to the Commission a Determination of Compliance or, if such a determination cannot be issued, shall so inform the Commission. A Determination of Compliance shall confer the same rights and privileges as an Authority to Construct only when and if the Commission approves the AFC, and the Commission certificate includes all conditions of the Determination of Compliance as proposed by the Air Pollution Control Officer.

(i) Any applicant receiving a certificate from the Commission pursuant to this rule and in compliance with all conditions of the certificate and the Determination of Compliance shall be issued a Permit to Operate by the Air Pollution Control Officer.



**RULE 20.6. STANDARDS FOR PERMIT TO OPERATE AIR QUALITY ANALYSIS**

(Adopted and Effective 11/4/76)

(Rev. Adopted and Effective 12/14/87)

(Rev. Adopted and Effective 4/27/16)

(a) The Air Pollution Control Officer shall deny a Permit to Operate to any stationary source until the source has obtained an Authority to Construct granted pursuant to the Rules and Regulations except as provided in Section (b) of this rule.

(b) The Air Pollution Control Officer shall not grant a Permit to Operate to any stationary source that emits quantities of air contaminants greater than those assumed in the analysis required for the authority to construct for the source, unless the Air Pollution Control Officer determines that best available control technology or the lowest achievable emission rate is used as required under Rules 20.2, 20.3 or 20.4, and, where applicable, the Air Pollution Control Officer performs the air quality impact analysis required by Section (d) of Rules 20.2, 20.3 or 20.4, as applicable, and determines that the actual emissions from the source may not be expected to result in the violation of any national ambient air quality standard or any applicable air quality increment or interfere with the attainment or maintenance of any ambient air quality standard. In the event the stationary source emits or contributes to any air contaminant for which a national ambient air quality standard is exceeded and where the actual emissions from the source exceed the applicability or emission thresholds of Rule 20.3, the requirements of Rule 20.3(d) must be satisfied.

(c) The Air Pollution Control Officer shall impose reasonable conditions on a Permit to Operate as are necessary to ensure that the stationary source will be operated in the manner assumed in making the analysis required by Rules 20.1, 20.2, 20.3 and 20.4 or Section (b) of this rule, whichever is applicable. Where appropriate, this shall include a condition to prohibit the operation of an existing source after the replacement source is effectively operating.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 21 PERMIT CONDITIONS**

(Adopted 1/1/69; Rev. Effective 11/29/94)

The Air Pollution Control Officer may issue an Authority to Construct, Permit to Operate, Certificate of Emission Reduction Credit, Certificate of Mobile Source Emission Reduction Credit, or a Permit to Rent subject to temporary or permanent conditions which will ensure compliance with the provisions of these Rules and Regulations and applicable State laws and regulations. Such conditions shall be in writing, shall become part of the Authority to Construct, Permit to Operate, Certificate of Emission Reduction Credit, Certificate of Mobile Source Emission Reduction Credit, or Permit to Rent and shall be complied with at all times. Commencing work under such an Authority to Construct or commencing operation under such a Permit to Operate or renting under such a Permit to Rent shall be deemed acceptance of all the conditions specified. The Air Pollution Control Officer shall issue an Authority to Construct or Permit to Operate or Permit to Rent with revised conditions upon receipt of a new application, if the applicant demonstrates that an article, machine, equipment or other contrivance can operate in compliance with the provisions of these rules and regulations and applicable State laws and regulations under the revised conditions. Where the proposed revision of Permit to Operate or Permit to Rent conditions is for an article, machine, equipment or other contrivance for which an Authority to Construct was issued after March 27, 1974, and where the proposed revision of Permit to Operate or Permit to Rent conditions, including proposed revision of conditions relating to the method of operations, will result in increased emissions, the Air Pollution Control Officer shall evaluate the proposed revision in accordance with the provisions of Rule 20.1(b) and shall determine compliance with Rules 20.1, 20.2, 20.3, 20.4 and 20.7 as if an application for an Authority to Construct had been received containing the proposed revised conditions. In said situations, the Permit to Operate or Permit to Rent with revised conditions shall not be granted in cases where such an Authority to Construct would not have been granted in accordance with said Rules 20.1, 20.2, 20.3, 20.4 and 20.7. The Air Pollution Control Officer may revise a Certificate of Emission Reduction Credit or Certificate of Mobile Source Emission Reduction Credit upon receipt of a new application from the certificate owner that demonstrates the emission reductions under the revised conditions will remain real, permanent, and enforceable within provisions of these rules and regulations and applicable State and Federal laws and regulations. (Any person who fails to comply with any condition imposed shall be liable to penalty pursuant to Division 26, Part 4, Chapter 4, Article 3, of the State of California Health and Safety Code). This rule does not authorize the Air Pollution Control Officer to change conditions to a Permit to Operate, a Certificate of Emission Reduction Credit, Certificate of Mobile Source Emission Reduction Credit, or a Permit to Rent in effect without prior notice to the permittee.

**RULE 24. TEMPORARY PERMIT TO OPERATE**

(Adopted & Effective 3/20/96; Rev. Adopted & Effective 6/29/16)

(a) New Emission Unit – A person shall provide written notification to the Air Pollution Control Officer that construction is complete in accordance with a currently valid Authority to Construct before operating a new emission unit. Upon such notification, the Authority to Construct shall serve as a temporary Permit to Operate the emission unit and the emission unit shall be operated in accordance with the conditions specified in the Authority to Construct. This temporary Permit to Operate shall be valid until the emission unit is inspected by the Air Pollution Control Officer and a revised temporary Permit to Operate is issued or a Permit to Operate is granted or denied. If the Air Pollution Control Officer determines that construction has not been completed in accordance with the Authority to Construct and the emission unit has been operated under a temporary Permit to Operate, the Air Pollution Control Officer may grant a reasonable period of time for the construction to be completed in accordance with the Authority to Construct before acting on the application for a Permit to Operate. If, at the end of such reasonable period of time, the Air Pollution Control Officer determines that construction is not in accordance with the Authority to Construct, the Air Pollution Control Officer shall deny the Permit to Operate. If the Air Pollution Control Officer cancels the application for a Permit to Operate or denies the Permit to Operate, the Authority to Construct shall no longer serve as a temporary Permit to Operate. For the purpose of this section, a new emission unit is defined as an emission unit not previously authorized by the District to operate in San Diego County that is not a modified emission unit or a previously permitted emission unit as described in Sections (b) and (c) below. Emission units which were installed without a valid Authority to Construct may be operated only upon issuance of a valid Authority to Construct/Startup Authorization.

(b) Modified Emission Unit – A person shall provide written notification to the Air Pollution Control Officer that an emission unit having a valid Permit to Operate has been modified in accordance with the Authority to Construct granted for such modification before operating such modified emission unit. Upon such notification, the Authority to Construct granted to modify the emission unit shall serve as a temporary Permit to Operate the emission unit and the emission unit shall be operated in accordance with the conditions specified in the Authority to Construct and Permit to Operate unless the Authority to Construct conditions modify the Permit to Operate conditions in which case the Authority to Construct conditions shall take precedence. This temporary Permit to Operate shall be valid until the emission unit is inspected by the Air Pollution Control Officer and a revised temporary Permit to Operate is issued or until a modified Permit to Operate is granted or denied. If the Air Pollution Control Officer determines that the modification has not been completed in accordance with the Authority to Construct and the emission unit has been operated under a temporary Permit to Operate, the Air Pollution Control Officer may grant a reasonable period of time for the construction to be completed in accordance with the Authority to Construct before acting on the application for a Permit to Operate. If, at the end of such reasonable period of time the Air Pollution Control Officer determines that construction is not in accordance with the Authority to Construct, the Air Pollution Control Officer shall deny the modified Permit to Operate. If the Air Pollution Control Officer cancels the application for a Permit to Operate or denies the modified Permit to Operate, the Authority to Construct shall no longer serve as a temporary

Permit to Operate. In such event, the owner or operator may return the emission unit to its premodified condition and operate the emission unit under the Permit to Operate that existed prior to the modification. This provision shall not apply if the modification was intended, in whole or in part, to bring the equipment into compliance with these Rules and Regulations and to return the emission unit to its pre-modified condition would result in a violation of these Rules and Regulations.

(c) Previously Permitted Emission Unit Requiring a New Permit – When a substantially complete application (including applicable fees and supplemental information forms) for a Permit to Operate is filed for an existing emission unit that had a valid Permit to Operate within the previous 18 months and the ownership of such emission unit has not been transferred to another person, the application shall serve as a temporary Permit to Operate the equipment. Such temporary Permit to Operate shall not be applicable to an emission unit that is a portable emission unit, as defined in Rule 20.1, or to an emission unit that has been relocated to a different stationary source or that has been altered or modified since a Permit to Operate was previously held. This temporary Permit to Operate shall be valid until the emission unit is inspected by the Air Pollution Control Officer and a revised temporary Permit to Operate is issued or until the Permit to Operate is granted or denied. Operation of such existing emission unit under a temporary Permit to Operate shall not be contrary to the conditions specified in the previous Permit to Operate. Operation of such emission unit shall be in compliance with all applicable provisions of these Rules and Regulations. Where operation of an existing emission unit under a previously valid Permit to Operate, pursuant to this section, would result in a violation of an applicable provision of these Rules and Regulations, compliance with these Rules and Regulations shall take precedence. If the Air Pollution Control Officer cancels the application for a Permit to Operate or denies the Permit to Operate, the application shall no longer serve as a temporary Permit to Operate.

(d) Withdrawal of Temporary Permit to Operate - Except as provided in Sections (a) and (b) above allowing the granting of a reasonable period of time for construction to be completed in accordance with the Authority to Construct before acting on the application for a Permit to Operate, the Air Pollution Control Officer shall modify or withdraw, in writing, the temporary Permit to Operate if the Air Pollution Control Officer determines that operation of the emission unit under a temporary Permit to Operate may be expected to be in violation of any condition of the temporary Permit to Operate or an applicable provision of these Rules and Regulations.

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**RULE 25. APPEALS.** Within 10 days after notice, by the Air Pollution Control Officer, of denial or conditional approval of an Authority to Construct, Permit to Operate or Use or Permit to Sell or Rent, the applicant may petition the Hearing Board, in writing, for a public hearing. The Hearing Board, after notice and a public hearing held within 30 days after filing the petition, may sustain, reverse or modify the action of the Air Pollution Control Officer; such order may be made subject to specified conditions.

**RULE 27.1 FEDERAL REQUIREMENTS FOR THE SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT'S ALTERNATIVE MOBILE SOURCE EMISSION REDUCTION PROGRAM APPROVED ON SEPTEMBER 8, 2000 (Adopted & Effective 08/06/08)**

**(a) APPLICABILITY**

(1) The requirements of this rule shall apply to owners of mobile sources that form the basis of a mobile source emission reduction credit (MERC) created under the San Diego County Air Pollution Control District's (District) program entitled, "Alternative Mobile Source Emission Reduction Program for Replacing Medium and Heavy Heavy-Duty Diesel Powered Vehicles and Repowering of Marine Vessels under Rule 27(c)(1)(vi)" as approved on September 8, 2000, hereinafter referred to as the "Alternative Program," and to the use of such credits by owners or operators of stationary sources to satisfy federal New Source Review (NSR) offset requirements. The following portions of the Alternative Program are incorporated herein by reference in their entirety:

(i) Sections (d), (e), (h), and (o);

(ii) Subsections (f)(1) and (f)(2); and

(iii) Subsections (c)(2), (c)(4), (c)(5), (c)(6), (c)(11), (c)(16), (c)(20), (c)(30), (c)(32), (c)(36), (c)(39), and (c)(40).

(2) Owners of the mobile sources that form the basis of a MERC shall satisfy all applicable requirements before a MERC is eligible to be used as a NSR offset.

**(b) CONDITIONS FOR USE AS NSR OFFSETS**

MERCs created under the Alternative Program shall be eligible for use to meet federal requirements only if all of the following conditions are satisfied:

(1) The owner of the mobile source that generates the credit applied for the credit;

(2) Credit has been granted only for emission reductions of oxides of nitrogen (NOx) determined according to Sections (d) and (e) of the Alternative Program;

(3) The credit is generated by mobile sources that operate solely in San Diego County or Near-Shore San Diego Coastal Waters;

(4) The credit is generated by one of the following mobile source emission reduction projects:

- (i) Replacement of existing medium heavy-duty (MHD) vehicles that are powered with diesel-fueled compression-ignition engines with new MHD vehicles powered with spark-ignition or compression-ignition engines that are fueled with gaseous fuel;
  - (ii) Replacement of existing heavy heavy-duty (HHD) vehicles in refuse collection applications that are powered with diesel-fueled compression-ignition engines with new HHD vehicles powered with spark-ignition or compression-ignition engines that are dual fueled or fueled with gaseous fuel; or
  - (iii) Repowering of marine vessels that are powered with diesel-fueled compression-ignition engines with new compression-ignition engines that are fueled with diesel or an alternative clean fuel;
- (5) The credit is not used to satisfy any federal requirement except to provide NSR offsets for NOx emission increases as set forth at Clean Air Act §173;
- (6) The credit is not used as an interpollutant offset;
- (7) The credit is valid for the lifetime of the project for which it is surrendered to provide federal NSR offsets; and
- (8) The credit is only used pursuant to written authorization from the Air Division Director, United States Environmental Protection Agency, Region IX, to the Air Pollution Control Officer, or their legal successors, finding that the credit is based on emission reductions that are real, quantifiable, surplus, permanent, and enforceable.

(c) **DEFINITIONS**

Terms used in this rule or in the incorporated portions of the Alternative Program but not defined in this Section (c) or in the incorporated portions of the Alternative Program shall have the same meaning as in Rule 2 - Definitions.

- (1) "**Activity Metric**" means a parameter that is representative of the extent of a mobile source's use and, in conjunction with an emission factor, used to quantify emission reductions during a period of time. Activity metrics are vehicle miles traveled (VMT), volume or mass of fuel burned, or time of operation.
- (2) "**Approved Enhanced Maintenance Program**" means a maintenance program approved by the California Air Resources Board that allows a higher baseline emission factor to be used in creating a MERC pursuant to Subsection (d) of the Alternative Program including any recordkeeping and reporting requirements of that program that are in addition to, or in more specificity, to those already required by this rule.

(3) "**Baseline Activity Level**" means the quantity of an activity metric used to quantify annual emissions generated within the District or Near-Shore San Diego County Waters by a mobile source during a baseline period.

(4) "**Compression-Ignition**" means relating to a type of engine with operating characteristics that are significantly similar to the theoretical Diesel combustion cycle. The absence of a throttle to regulate intake air flow for controlling power during normal operation is indicative of a compression-ignition engine.

(5) "**Diesel Fuel**" means any fuel that is commonly or commercially known, sold, or represented as diesel fuel No. 1-D or No. 2-D.

(6) "**Dual-Fuel Vehicle**" means a vehicle designed to be operated simultaneously on gaseous fuel and diesel fuel, or diesel fuel alone.

(7) "**Equivalent Mobile Sources**" means a group of mobile sources owned by the same person or persons for which a single MERC certificate has been issued representing the combined emission reductions of all the mobile sources in the group.

(8) "**Gaseous Fuel**" means fuel existing as a gas at standard conditions including, but not limited to, natural gas, methane, ethane, propane, butane, and gases stored as a liquid at high pressure such as liquefied petroleum gas.

(9) "**Heavy-Duty Vehicle**" means any motor vehicle having a manufacturer's gross weight rating greater than 6,000 pounds, except passenger cars.

(10) "**Heavy Heavy-Duty Vehicle**" means a heavy-duty vehicle that is propelled by a heavy heavy-duty engine as defined in 40 CFR § 86.085-2, as amended November 16, 1983.

(11) "**Low NOx Rebuild Engine**" means a Low NOx Rebuild Engine, as defined in the applicable Settlement Agreement.

(12) "**Low NOx Rebuild Kit**" means a Low NOx Rebuild Kit, as defined in the applicable Settlement Agreement.

(13) "**Low NOx Rebuild Program**" means the Low NOx Rebuild Program, as described in the applicable Settlement Agreement, except that the date by which a vehicle must be equipped with a Low NOx Rebuild Kit is modified under this alternative program to the sooner of the date an engine is deployed outside of San Diego County or the date the accumulated mileage or service event criteria specified in the applicable Settlement Agreement is satisfied.

(14) "**Medium Heavy-Duty Vehicle**" means a heavy-duty vehicle that is propelled by a medium heavy-duty engine, as defined in 40 CFR § 86.085-2, as amended November 16, 1983.



(15) **"MERC Activity Monitoring Period"** means the ten year period that a MERC is subject to activity monitoring. The MERC activity monitoring period begins on the first day of the first calendar quarter following the date the MERC is granted by the District.

(16) **"MERC Creation Date"** means the date on which the action is taken to create the emission reductions on which the MERC is based. For replacement of medium or heavy heavy-duty diesel powered vehicles, the MERC creation date is the date that the replacement vehicle is delivered to the owner of the vehicle that is being replaced. For repowering of marine vessels, the MERC creation date is the date that the vessel first takes to sea under the power of the replacement engine.

(17) **"MERC Project"** means one or more MERCs that are based on equivalent mobile sources.

(18) **"Mobile Sources that Form the Basis of the MERC "** means the mobile source, or group of equivalent mobile sources, that generates the emission reductions that are represented by the MERC, including all subsequent replacements or repowerings of those mobile sources.

(19) **"Near-Shore San Diego Coastal Waters"** means the area of water lying within all harbors, bays, inlets, and estuaries in the jurisdiction of the San Diego County Air Pollution Control District, and the area of water bounded by latitude N 33° 20' 10" on the north and by the oceanward extension of the United States-Mexico International Boundary on the south, and lying within 25 English statute miles oceanward of lines drawn in front of all harbors along the outermost works and installations thereof; 25 English statute miles oceanward of lines drawn from headland to headland across the mouth of each bay, inlet, and estuary, regardless of the length of lines; and, where there are no harbors, bays, estuaries, or inlets, 25 miles oceanward of the lowest low-water mark on the shore.

(20) **"Ongoing Activity Metric"** means an activity metric that is not expected to change in magnitude between baseline operations and projected operations in a MERC Project, if the nature and operational mode of a mobile source's use does not change. Ongoing activity metrics include hours of operation and vehicle miles traveled.

(21) **"Projected Activity Level"** means the quantity of an activity metric that is used to quantify forecast annual emissions generated within the District or Near-Shore San Diego County Waters by a mobile source during its use in a proposed MERC Project.

(22) **"Settlement Agreement"** means one of the following, as applicable: Settlement Agreement Between the California Air Resources Board and Caterpillar Inc., as signed on December 15, 1998; Settlement Agreement Between the California Air Resources Board and Cummins Engine Company, Inc., as signed on December 15, 1998; Settlement Agreement Between the California Air Resources Board and Detroit Diesel Corporation, as signed on December 15, 1998; Settlement Agreement Between the California Air Resources Board and Mack Truck, Inc. & Renault V. I., s. a., as signed on December 15, 1998; Settlement Agreement Between the California Air Resources Board and Volvo Truck

Corporation, as signed on December 15, 1998; or Settlement Agreement Between the California Air Resources Board and Navistar International Transportation Company, as signed on October 22, 1998.

**(d) DISPOSAL OF ORIGINAL ENGINES**

In all cases, the original engine of a mobile source that is repowered or replaced as part of a MERC project shall not be operated in San Diego County and shall be permanently removed from San Diego County or destroyed. For engines that are destroyed, the engines must be destroyed and disposed of in a manner that complies with all applicable federal, State, and local laws. For engines that are not destroyed, the engine shall be disposed of as specified in Subsections (d)(1) and (d)(2).

(1) For an original engine that is a Low NO<sub>x</sub> Rebuild Engine, the engine shall be sold and/or permanently relocated, separately or as part of a mobile source, to a location:

(i) Outside of California and Baja California, Mexico;

(ii) Within California but outside the boundaries of the South Coast Air Basin, provided that prior to beginning operations outside of San Diego County, the engine is equipped with a Low NO<sub>x</sub> Rebuild Kit in accordance with the applicable Low NO<sub>x</sub> Rebuild Program; or

(iii) Within the boundaries of the South Coast Air Basin, provided that prior to beginning operations outside of San Diego County, the engine is equipped with a Low NO<sub>x</sub> Rebuild Kit in accordance with the applicable Low NO<sub>x</sub> Rebuild Program, and the mobile source's owner provides a demonstration approved by the Air Pollution Control Officer, the Air Resources Board, and the U. S. Environmental Protection Agency that the air quality of the South Coast Air Basin will not be degraded from the relocation and operation of the mobile source.

(2) For an original engine that is not a Low NO<sub>x</sub> Rebuild Engine, the engine shall be sold and/or permanently relocated, separately or as part of a mobile source, to a location:

(i) Outside of California and Baja California, Mexico;

(ii) Within California but outside the boundaries of the South Coast Air Basin; or

(iii) Within the boundaries of the South Coast Air Basin, provided that the engine was manufactured after October 1, 2002, and is certified to be in compliance with all applicable South Coast Air Quality Management District, State, and federal emission standards, and the mobile source's owner provides a demonstration approved by the Air Pollution Control Officer, the Air Resources Board, and the U. S. Environmental Protection Agency that the air quality of the South Coast Air Basin will not be degraded from the relocation and operation of the mobile source.

**(e) SUBSEQUENT REPLACEMENT OR REPOWERING OF MOBILE SOURCES THAT FORM THE BASIS OF MERC**

If a mobile source that forms the basis of a MERC granted under this Alternative Program is itself replaced or repowered at any time during the period of time a credit has been surrendered, or is eligible to be surrendered, to provide NSR offsets, the replacement or repowered mobile source must have an emission factor that is less than or equal to the smaller of the following two emission factors:

- (1) The most stringent emission factor derived from any federal or California standard applicable to a new engine for the model year corresponding to the date of the replacement of the engine powering the replacement or repowered mobile source; or
- (2) The emission factor of the mobile source that is replaced or repowered.

**(f) RECORDKEEPING AND REPORTING**

(1) For all replacement or repowered mobile sources that form the basis of a MERC, for 20 years following the first time the MERC is eligible to be surrendered to provide NSR offsets:

- (i) The owner of the mobile source shall maintain calendar quarterly records of:
  - (A) Location(s) where the mobile source is parked, garaged, or docked when not in operation;
  - (B) Mobile source and mobile source engine identifications such as Vehicle Identification Number or Hull Number, engine manufacturer model designation, and engine serial number;
  - (C) Identification of key engine components such as turbocharger, injectors, fuel pump, and electronic control program version;
  - (D) Engine modifications;
  - (E) Sale, lease, accidental loss, repowering, or replacement, including the identity of the mobile source and mobile source engine involved, and the identity of any mobile source and mobile source engine replacing or repowering the mobile source;
  - (F) Source testing results and supporting information; and
  - (G) Engine maintenance.

(ii) On or before the last day of the month following each calendar quarter, the owner of the mobile source shall provide copies of the records specified in Subsections (f)(1)(i)(A) through (f)(1)(i)(F) for the preceding calendar quarter to the District and any owner of the MERC, or portion thereof, and any owner or operator of any stationary source for which the MERC, or a portion thereof, has been surrendered to provide a new source review offset.

(iii) For any mobile sources that are subject to an approved enhanced maintenance program, the owner of the mobile source shall provide records as specified in Subsection (f)(1)(ii), or more frequently if required by the approved enhanced maintenance program. In addition, the owner shall maintain any additional records in accordance with the approved enhanced maintenance program and provide copies of those records to the District and any owner of the MERC, or portion thereof, and any owner or operator of any stationary source for which the MERC, or a portion thereof, has been surrendered to provide a new source review offset.

(2) For all replacement or repowered mobile sources that form the basis of a MERC, beginning at the start of the MERC activity monitoring period and for each of the succeeding ten years, the owner of the mobile source or group of equivalent mobile sources shall maintain calendar quarterly records of:

(i) Activity level in a metric specified in the MERC, as approved by the Air Pollution Control Officer;

(ii) Fuel use;

(iii) Hours of operation for each mobile source in San Diego County; and

(iv) Number, duration, and nature of any trips outside of San Diego County and Near-Shore San Diego Coastal Waters for each mobile source.

On or before the last day of the month following each calendar quarter, the owner of the mobile source shall provide copies of these records for the preceding calendar quarter to the District and any owner of the MERC, or portion thereof, and the owner or operator of any stationary source for which the MERC, or a portion thereof, has been surrendered to provide a new source review offset. A cover letter signed by the owner of the mobile sources(s) must accompany the information and must state that the information is true, accurate, and complete.

(3) Beginning with the MERC creation date, for the period of time the MERC is eligible to be surrendered to provide NSR offsets, or would have been eligible for such surrender if it had not already been surrendered, the owner or operator of any mobile source that forms the basis of a MERC granted under this Alternative Program shall make the mobile source available for source testing upon written request of the Air Pollution Control Officer, the Air Resources Board, or the U. S Environmental Protection Agency.

(4) Each mobile source that forms the basis of a MERC shall be equipped with a nonresettable totalizing clock hour meter, a nonresettable totalizing odometer - except for marine vessels, and any other device specified by the Air Pollution Control Officer that is necessary to monitor ongoing emission reductions or mobile source employment.

(5) All records shall be maintained at the location the mobile source is parked, garaged, or docked, or, with the advanced written approval of the Air Pollution Control Officer, an alternative location. All records shall be maintained for a period of at least five years from the date of the record except that records required pursuant to Subsection (f)(2) shall be maintained for at least 15 years from the start of the on-going activity monitoring period.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## REGULATION IV

### PROHIBITIONS

(Effective 1/1/69: Rev. Adopted & Effective 8/13/97)

#### **RULE 50 - VISIBLE EMISSIONS**

(Rev. Effective 8/13/97)

##### **(a) APPLICABILITY**

Except as otherwise provided in Section (b), this rule applies to the discharge of any air contaminant other than uncombined water vapor.

##### **(b) EXEMPTIONS** (Rev. Effective 8/13/97)

The provisions of this rule shall not apply to:

1. Smoke from the use of an orchard or citrus grove heater which does not produce unconsumed solid carbonaceous matter at a rate in excess of one gram per minute;
2. Emissions from the use of equipment in agricultural operations;
3. Smoke from open fires set pursuant to a permit and its conditions;
4. Abrasive blasting operations subject to the provisions of Rule 71 of Regulation IV of these Rules and Regulations;
5. The use of visible emissions generating equipment in training sessions conducted by governmental agencies for the purpose of certifying persons to evaluate visible emissions from compliance with applicable provisions of the State of California Health and Safety Code and District Rules and Regulations;
6. The use of obscurants for the purpose of training military personnel and the testing of military equipment by the United States Department of Defense on any military reservation;
7. Equipment used exclusively for the purpose of flash-over fire fighting training; and
8. Emissions from vessels using steam boilers during emergency boiler shutdowns for safety reasons, safety and operational tests required by governmental agencies, and where maneuvering is required to avoid hazards. Emissions from vessels during a breakdown condition, as long as it is reported in accordance with District Rule 98.

##### **(c) DEFINITIONS** (Rev. Effective 8/13/97)

1. **"Asphalt Plant Drop Zone"** means the area immediately below a device, in an asphalt manufacturing facility that loads or drops asphalt onto the cargo beds of trucks and trailers.
2. **"Asphalt Paving Equipment"** means equipment handling asphalt cement or asphaltic concrete as part of a paving operation, including chip seal or sand seal.

3. **"Obscurants"** means fog oil released into the atmosphere during military exercises which produces a smoke screen designed to eliminate the detection of persons or objects by visual or electronic means of observation within a localized area.
4. **"Observer"** means a certified human observer or a certified, calibrated opacity monitoring system.
5. **"Pavement Rehabilitation Equipment"** means equipment used to resurface or refinish an existing paved surface, such as asphalt pavement heaters, asphalt grinders, planers, profilers.
6. **"Single Source"** means individual unit of equipment or operations at a given location, including any associated outlets to the atmosphere, which may be operated simultaneously.
7. **"Rubber Modified Spray Applied Asphalt"** means rubber modified asphaltic cement, including, but not limited to rubber modified asphaltic cement containing polymers or asphalt rubber binders, applied with an application temperature specification of 320oF or higher, or encompassing a temperature range including 320oF or higher, in a thin layer to a road surface.

(d) **STANDARDS** (Rev. Effective 8/13/97)

1. Except as otherwise provided in Section (b) above and subsections below, a person shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any period of 60 consecutive minutes which is darker in shade than that designated as Number 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree greater than does smoke of a shade designated as Number 1 on the Ringelmann Chart.
2. A person shall not discharge into the atmosphere from any asphalt plant drop zone any contaminant for a period or periods aggregating more than three minutes in any period of 60 consecutive minutes which is as dark or darker in shade than that designated as Number 2 on the Ringelmann Chart, as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree greater than does smoke of a shade designated as Number 2 on the Ringelmann Chart.
3. A person shall not discharge into the atmosphere from any diesel pile driving hammer any contaminant for a period or periods aggregating more than four minutes during the driving of a single pile which is as dark or darker in shade than that designated as Number 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree greater than does smoke of a shade designated as Number 1 on the Ringelmann Chart.
4. A person shall not discharge into the atmosphere from any diesel pile driving hammer which uses kerosene fuel, smoke suppressing fuel additives, and synthetic lubricating oil any contaminant for a period or periods aggregating more than four minutes during the driving of a single pile which is as dark or darker in shade than that designated as Number 2 on the Ringelmann Chart, as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree greater than does smoke of a shade designated as Number 2 on the Ringelmann Chart.
5. A person shall not discharge into the atmosphere from any asphalt paving equipment with an application temperature specification of 320°F or higher, or encompassing a temperature range including 320°F or higher, or pavement rehabilitation equipment, any emissions whatsoever of air contaminants for a period or periods aggregating more than three minutes in any period of 60 consecutive minutes which is darker in shade than that designated as Number 2 on the Ringelmann Chart, as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree greater than does smoke of a shade designated as Number 2 on the Ringelmann Chart. This provision does not apply to portable rubber modified spray applied asphalt cement equipment.
6. A person shall not discharge into the atmosphere from the operation, maintenance or testing of fire fighting training units used exclusively for the purpose of shipboard fire fighting training, from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any period of 60 consecutive minutes which is darker in shade than that designated as Number 2 on the Ringelmann Chart, as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree greater than does smoke of a shade designated as Number 2 on the Ringelmann Chart.





# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 51 - NUISANCE**

(Effective 11/08/76)

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations in the growing of crops or raising of fowls or animals.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 52 - PARTICULATE MATTER**

(Rev. Effective 1/22/97)

### **(a) APPLICABILITY**

Except as provided in Section (b), the provisions of this rule are applicable to all sources of particulate matter discharged into the atmosphere.

This rule shall not be applicable to any asphalt plant in operation in San Diego County on or before January 22, 1997 until July 1, 1998, provided such plant is in compliance with Rule 54.

In those instances where Rule 53 is applicable the requirements of this rule shall not apply.

Except as provided in Section (b) the provisions of this rule shall only apply to equipment that is required to obtain an Authority to Construct, Permit to Operate or Registration in accordance with these Rules and Regulations.

### **(b) EXEMPTIONS**

The provisions of this rule shall not apply to stationary internal combustion engines.

### **(c) RESERVED**

### **(d) STANDARD**

A person shall not discharge into the atmosphere from any source particulate matter in excess of 0.10 grain per dry standard cubic foot (0.23 grams per dry standard cubic meter) of gas.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 53 - SPECIFIC AIR CONTAMINANTS**

(Rev. Effective 1/22/97)

### **(a) APPLICABILITY**

This rule is applicable to the following:

1. Sulfur recovery plants and others sources of gaseous sulfur emissions where the sulfur compounds emitted are not products of fuel combustion.
2. Except as provided for in Section (b) of this rule, all sources of particulate matter discharged into the atmosphere from the burning of any kind of material containing carbon in a free or combined state.
3. Except as provided in Section (b) the provisions of this rule shall only apply to equipment that is required to obtain an Authority to Construct, Permit to Operate or Registration in accordance with these Rules and Regulations.

### **(b) EXEMPTIONS**

1. The provisions of Subsection (d)(2) of this rule shall not apply to stationary liquid fueled piston-type internal combustion engines.
2. In those instances where Rule 54 is applicable, the requirements of Subsections (d)(2) and (d)(3) of this rule shall not apply.
3. The provisions of this rule shall not apply to natural gas, liquefied petroleum gas or propane gas fired boilers with a maximum heat input rating of 50 million Btu per hour or less.
4. The provisions of this rule shall not apply to liquid fuel fired boilers with a maximum heat input rating of 10 million Btu per hour or less.

### **(c) DEFINITIONS**

1. **"Combustible Material"** means any solid or liquid combustible waste material or combustible material, containing carbon in a free or combined state.

### **(d) STANDARDS**

A person shall not discharge into the atmosphere from any single source of emission whatsoever any one or more of the following contaminants, in any state or combination thereof, exceeding in concentration at the point of discharge:

1. Sulfur compounds calculated as sulfur dioxide (SO<sub>2</sub>): 0.05 percent, by volume, on a dry basis.
2. Combustion particulates: except as provided in Subsections (d)(3) and (d)(4) of this rule, 0.10 grains per dry standard cubic foot (0.23 grams per dry standard cubic meter) of gas which is standardized to 12 percent of carbon dioxide (CO<sub>2</sub>) by volume. In measuring the combustion particulates from incinerators used to reduce combustible material by burning, the carbon dioxide (CO<sub>2</sub>) produced by combustion of any liquid or gaseous fuels shall be excluded from the adjustment to 12 percent of carbon dioxide (CO<sub>2</sub>) by volume.
3. Combustion particulates from incinerators with a rated capacity of 100 pounds per hour or less: 0.30 grains per dry standard cubic foot (0.69 grams per dry standard cubic meter) of gas which is standardized to 12 percent of carbon dioxide (CO<sub>2</sub>) by volume. In measuring the combustion particulates from incinerators used to reduce combustible material by burning, the carbon dioxide (CO<sub>2</sub>) produced by combustion of any liquid or gaseous fuels shall be excluded from the adjustment to 12 percent of carbon dioxide (CO<sub>2</sub>) by volume.
4. Combustion particulates from the testing of jet engines in test cells: 0.07 grains per dry standard cubic foot (0.16 grams per dry standard cubic meter) of gas standardized to 1 percent of carbon dioxide (CO<sub>2</sub>).

6.30.72

RULE 53.1. SCAVENGER PLANTS. Where a separate source of air pollution is a scavenger or recovery plant, recovering pollutants which would otherwise be emitted to the atmosphere, the Air Pollution Control Officer may grant a temporary Permit to Operate where the total emissions of pollutants is substantially less with the plant in operation than when closed, even though the concentration exceeds that permitted by Rule 53(a). The Air Pollution Control Officer shall report immediately in writing to the Air Pollution Control Board the granting of any such permit, together with the facts and reasons therefor.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 54 - DUST AND FUMES**

(Rev. Effective 1/22/97)

### **(a) APPLICABILITY**

Except as provided in section (b), the provisions of this rule are applicable to:

1. Any operation that is comprised of one or more processes as defined in this Rule. This includes operations where solid fuels are introduced.
2. Only equipment that is required to obtain an Authority to Construct, Permit to Operate or Registration in accordance with these Rules and Regulations.

### **(b) EXEMPTIONS**

The provisions of this rule shall not apply to operations comprised exclusively of a combustion process where liquid fuels, gaseous fuels and corresponding combustion air are introduced.

### **(c) DEFINITIONS**

1. **"Process"** means any method, reaction, or operation wherein materials are handled or whereby materials undergo physical change (i.e., the size, shape, appearance, temperature, state or other physical property of the materials is altered) or chemical change (i.e., a substance or substances with different chemical composition or properties are formed or created). A process includes all the equipment and facilities necessary for the handling of materials or the completion of the transformation of the materials to produce a physical or chemical change. There may be several processes in series or in parallel necessary to the manufacture of a product.
2. **"Process Line"** means one or more pieces of equipment linked by the process flow and producing a product or performing a service such that the product cannot be produced or the service cannot be performed if any piece of equipment is removed or not functioning.
3. **"Process Weight"** means the total weight of all materials introduced into any specific process which process may cause any discharge of air contaminants into the atmosphere. Solid fuels introduced will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not.
4. **"Process Weight Per Hour"** means the value derived by dividing the total process weight by the 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.

### **(d) STANDARDS**

A person shall not discharge in any one hour into the atmosphere from any source dust or fumes, including lead and lead compounds, in excess of the amounts shown in the following table.

To use the following table, take the process weight per hour as defined above. This figure is then found on the table, opposite which is the maximum number of pounds of contaminants which may be discharged into the atmosphere in any one hour. As an example, if A is a process which emits contaminants into the atmosphere and which process takes 3 hours to complete, the weight of all materials in the specific process, in this example 1,500 lbs., is divided by 3, giving a process weight per hour of 500 lbs. The table shows that A may not discharge more than 1.77 lbs. in any one hour during the process. Where the process weight per hour falls between figures in the left hand column, the exact weight of permitted discharge may be interpolated. To convert from pounds to grams, multiply pounds by 454; to convert from pounds to kilograms, multiply pounds by 0.454.

**TABLE**

**RULE 54**

<b>Process <u>Wt/Hr (lbs)</u></b>	<b>Maximum Weight <u>Disch/Hr (lbs)</u></b>	<b>Process <u>Wt/Hr (lbs)</u></b>	<b>Maximum Weight <u>Disch/Hr (lbs)</u></b>
50	1.00	3500	5.52
100	1.00	3600	5.61
150	1.00	3700	5.69
200	1.00	3800	5.77
250	1.03	3900	5.85
300	1.20	4000	5.93
350	1.35	4100	6.01
400	1.50	4200	6.08
450	1.63	4300	6.15
500	1.77	4400	6.22
550	1.89	4500	6.30
600	2.01	4600	6.37
650	2.12	4700	6.45
700	2.24	4800	6.52
750	2.34	4900	6.60
800	2.43	5000	6.67
850	2.53	5500	7.03
900	2.62	6000	7.37
950	2.72	6500	7.71
1000	2.80	7000	8.05

1100	2.97	7500	8.39
1200	3.12	8000	8.71
1300	3.26	8500	9.03
1400	3.40	9000	9.36
1500	3.54	9500	9.67
1600	3.66	10000	10.00
1700	3.79	11000	10.63
1800	3.91	12000	11.28
1900	4.03	13000	11.89
200	4.14	14000	12.50
2100	4.24	15000	13.13
2200	4.34	16000	13.74
2300	4.44	17000	14.36
2400	4.55	18000	14.97
2500	4.64	19000	15.58
2600	4.74	20000	16.19
2700	4.84	30000	22.22
2800	4.92	40000	28.30
2900	5.02	50000	34.30
3000	5.10	60000	40.00
3100	5.18		
3200	5.27	or more	
3300	5.36		
3400	5.44		



# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 58 - INCINERATOR BURNING**

(Rev. Effect.1/17/73)

A person shall not burn any combustible refuse in any incinerator except in a multiple-chamber incinerator as described in Rule 2(r), or in equipment found by the Air Pollution Control Officer in advance of such use to be equally effective for the purpose of air pollution control as an approved multiple-chamber incinerator. This rule shall not apply to equipment used to dispose of combustible refuse where the disposal of such refuse by open fire is allowed under Rule 102 or Rule 103.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 60 - CIRCUMVENTION**

(Effective 1/1/69; Revised 11/8/76; 5/17/94)

(a) No person shall build, erect, install or use any article, machine, equipment, contrivance, or process, the use of which either conceals or dilutes an emission which would otherwise constitute a violation of Division 26, Part 4, Chapter 3, of the Health and Safety Code of the State of California or of these Rules and Regulations. Such concealment includes, but is not limited to, the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size, or the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. This rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California, or of Rule 51 of these Rules and Regulations. (Rev. Effective 11/8/76)

(b) Circumvention of New Source Review (NSR) by Ownership Arrangements (Rev. Effective 5/17/94)

For purposes of New Source Review Rules 20.1, 20.2, 20.3, and 20.4 emission units that are not under common ownership or entitlement to use, but which are located or proposed to be located on the same or contiguous property, may be aggregated by the District and designated as a single stationary source, if treatment of such emission units as separate stationary source(s) would prevent application of any requirements of Rules 20.1, 20.2, 20.3, or 20.4 to either stationary source or stationary sources, provided such emission units are substantially related to each other upon a determination by the Air Pollution Control Officer that one or more of the indicators of a potential intent to circumvent the requirements of Rules 20.1, 20.2, 20.3 or 20.4 described in Subsections (b)(1) through (b)(7) of this rule exists.

For purposes of this rule, emission units are substantially related if the operation of an emission unit is typically dependent upon another emission unit (or vice versa), or the output of an emission unit will typically or frequently be used as the input to another emission unit (or vice versa).

For purposes of this rule, a potential intent to circumvent the requirements of Rule 20.1, 20.2, 20.3 or 20.4 exists if any one of the following circumstances exists:

1. A transfer of ownership of an emission unit substantially related to another emission unit, both of which units were previously under common ownership, occurred within the one year period prior to the submission of an application for Authority to Construct or Permit to Operate for any of the following:
  - (i) To modify either of the emission units previously under common ownership; or
  - (ii) To add a new emission unit which will be substantially related to either of the emission units previously under common ownership; or
  - (iii) To modify an emission unit which is substantially related to either of the emission units previously under common ownership; or
  - (iv) To relocate an emission unit to the stationary source where either of the emission units previously under common ownership is located, if the relocated emission unit will be substantially related to either of the emission units previously under common ownership; or

2. Arrangements for lease or other payments, or prices for transfers of materials, between the owner or operator of an emission unit and the owner or operator of a substantially related emission unit do not reasonably reflect fair market values; or
3. The owner or operator of an emission unit will receive payments from the owner or operator of a substantially related emission unit, which payments are related to the operation or product of the emission unit; or
4. The owner or operator of an emission unit will make payments to the owner or operator of a substantially related emission unit, which payments are related to the operation or product of the substantially related emission unit; or
5. The owner or operator of an emission unit will share revenues or profits with the owner or operator of a substantially related emission unit, which revenues or profits are related to the operations or product of the emission unit; or
6. An emission unit functions substantially as a replacement for a similar emission unit or units that were part of a single stationary source on the same or contiguous property; or
7. An emission unit has been, is being or is likely to be used at different times by the owner or operator of the emission unit and the owner or operator of any other emission unit on the same or contiguous property.

Any two emission units that may be aggregated with a third emission unit under the conditions set out above may be aggregated with each other.

The District may require applicants and other holders of Permits to Operate who may be affected by this rule to provide such documentation or other information as the District deems necessary to effectively apply this rule. The District may add conditions to an Authority to Construct and Permit to Operate to ensure that none of the circumstances set forth above related to the potential intent to circumvent the requirements of Rules 20.1, 20.2, 20.3 or 20.4 will exist in the future.

**RULE 61.0. DEFINITIONS PERTAINING TO THE STORAGE AND HANDLING OF ORGANIC COMPOUNDS** (Effective 5/6/77: Rev. Effective 10/16/90)

For the purposes of Rules 61.1, 61.2, 61.3, 61.4, 61.7, 61.8 and 61.9 the following definitions shall apply:

(a) **"Best Available Control Technology (BACT)"** means the maximum degree of hydrocarbon vapor emission reduction which the Air Pollution Control Officer determines is achievable, on a case-by-case basis, taking into account technology which is demonstrated but not necessarily proven in field application. In no case shall BACT result in emissions of volatile organic compounds greater than allowed by the equipment and emissions standards of the rules to which this definition applies. In making a determination of BACT the Air Pollution Control Officer shall take into consideration the following:

(1) The cost of the control equipment proposed as BACT;

(2) The similarity of the control equipment proposed as BACT to equipment which has been installed and in use in similar field applications for a period sufficient to demonstrate that such equipment has performed effectively and reliably. This consideration may be waived by mutual agreement of the Air Pollution Control Officer and the operator to allow installation of equipment for purposes of testing new technologies; and

(3) The acceptability of the control equipment proposed as BACT to the California Air Resources Board and the United States Environmental Protection Agency.

(b) **"Bladder Tank"** means a fixed roof tank with an internal flexible diaphragm that rises and falls as the volume of vapors varies within the tank.

(c) **"Breathing Losses"** means the venting of volatile organic compound vapors from any vapor space of any storage tank at any time except during transfer operations.

(d) **"Bulk Plant"** means any facility at which volatile organic compounds are received from mobile transport tanks for storage and are transferred into mobile transport tanks for delivery to any stationary storage tank, motor vehicle, boat or aircraft.

(e) **"Bulk Terminal"** means any primary distributing facility for delivering volatile organic compounds to bulk plants, service stations and other distribution points; and where delivery to the facility is by means other than by truck.

(f) **"Certified"** means certified in accordance with the requirements of Division 26, Part 4, Chapter 3, Article 5 of the State of California Health and Safety Code and meeting the requirements of the State Executive Order(s) certifying the vapor control equipment.

(g) **"Emergency Roof Drain"** means a drain on an external floating roof, which allows rain water accumulating on the roof to drain directly into the stored product to prevent the floating roof from sinking. (Effect. 10/16/90)

(h) **"Emergency Work"** means work necessary to restore property to a safe condition following a public calamity or work required to protect persons or property from imminent exposure to danger or damage.

(i) **"Fixed Roof Tank"** means a stationary tank of any shape, above or below ground, with a fixed external shell.

(j) **"Floating Roof Tank"** means a tank equipped with either an external floating roof if the tank shell is open at the top or an internal floating cover if the tank shell has a fixed roof. The floating roof or cover floats on the surface of the stored liquid, rising and falling with the liquid level.

(k) **"Fugitive Liquid Leak"** means any visible leak of liquid volatile organic compounds at a rate in excess of three drops per minute, other than spillage or other losses which occur upon disconnecting transfer fittings.

(l) **"Fugitive Vapor Leak"** means any hydrocarbon vapor leak along any vapor transfer path which results in a concentration of 500 parts per million by volume (ppmv) or more measured as propane, or 1375 ppmv or more measured as methane, when measured at a distance of 1/2 inch (1.3 cm) from the vapor path, other than nonrepeatable, momentary readings.

(m) **"Gas Tight"** means no detectable gaseous emissions.

(n) **"Hydrocarbon Vapors"** means the volatile organic compounds in the vapors, including any entrained organic liquid.

(o) **"Intermediate Refueler"** means a mobile transport tank used primarily in the fueling of vehicle, boat or aircraft fuel tanks.

(p) **"Mobile Transport Tank"** means any tank truck or trailer, railroad tank car, or tanker used to transport volatile organic compounds.

(q) **"Motor Vehicle"** has the same meaning as defined in Section 415 of the State of California Vehicle Code.

(r) **"Organic Compound"** means any compound containing at least one atom of carbon, except: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, methylene chloride, 1,1,1-trichloroethane, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (CFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114) and chloropentafluoroethane (CFC-115).

(s) **"Parcel of Land"** means a contiguous quantity of land in the possession of, or owned by, or recorded as the property of, the same person.

(t) **"Phase I Vapor Recovery System"** means any system by which hydrocarbon vapors resulting from the transfer of volatile organic compounds into a stationary tank are returned to the mobile transport tank or any system by which hydrocarbon vapors resulting from the transfer of volatile organic compounds into a mobile transport tank are returned to the stationary tank.

(u) **"Phase II Vapor Recovery System"** means a gasoline vapor recovery system which recovers vapors during the fueling of motor vehicles from stationary storage tanks.

(v) **"Retail Service Station"** means any new or existing motor vehicle fueling facility subject to payment of California sales tax on gasoline sales.

(w) **"Spillage"** means any quantity of liquid volatile organic compound which spills from any device, fitting, pipe or connection used for liquid transfer or storage during a disconnect or an overfill.

(x) **"Stationary Storage Tank"** means any tank, reservoir or other container used to store, but not transport, volatile organic compounds.

(y) **"Submerged Fill Pipe"** means any permanent fill pipe which has its discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank. "Submerged fill pipe" when applied to a tank which is loaded from the side means any fill pipe which has its discharge opening entirely submerged when the liquid level is 18 inches above the bottom of the tank.

(z) **"Volatile Organic Compound (VOC)"** means any organic compound either having a Reid vapor pressure greater than 3.0 pounds per square inch if the American Society of Testing and Materials (ASTM) Reid Vapor Pressure test method is applicable, or having a true vapor pressure greater than 3.0 pounds per square inch absolute at 100°F if the ASTM Reid Vapor Pressure test is not applicable.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 61.1 - RECEIVING AND STORING VOLATILE ORGANIC COMPOUNDS AT BULK PLANTS AND BULK TERMINALS**

(Effective 5/6/77; Rev. Effective 1/10/95)

### **(a) APPLICABILITY**

Except as otherwise provided in Section (b), this rule is applicable to the receiving and storage of any volatile organic compound (VOC) in a bulk plant or bulk terminal stationary tank which is used primarily to fill mobile transport tanks.

### **(b) EXEMPTIONS (Rev. Effective 1/10/95)**

1. This rule shall not apply to a stationary tank which is less than 40,000 gallons (150,000 liters) in capacity that :
  - (i) Is used primarily to fuel motor vehicles; or
  - (ii) Is used exclusively to store organic compounds that are not volatile organic compounds as defined in Rule 61.0; or
  - (iii) Is used exclusively for the storage of organic solvents which are liquids at standard conditions and which are to be used as solvers, viscosity reducers, reactants, extractants, cleaning agents or thinners and not used as fuels; or
  - (iv) Is used for the storage of natural gas or propane when not mixed with other volatile organic compounds as defined in Rule 61.0; or
  - (v) Is used exclusively as a source of fuel for wind machines used for agricultural purposes.
2. This rule shall not apply to any stationary floating roof tank while the tank is being completely drained and degassed for maintenance, repairs or product changes, nor shall it apply after maintenance, repairs or product changes are completed, while the tank is being refilled to the point where the floating roof or pan floats on the liquid surface. This exemption shall not apply unless the owner/operator of the tank receives written authorization from, and adheres to any conditions specified by the Air Pollution Control Officer. This exemption shall not apply from May 1 through October 31 of every calendar year.
3. Subsections (c)(1) and (c)(2) shall not apply to fixed roof tanks at bulk plants where the annual bulk plant throughput does not exceed 5,000,000 gallons (18,925 kiloliters) of volatile organic compounds provided such tanks meet the requirements of Subsections (c)(3), (c)(6) and (c)(8). It shall be the responsibility of any person claiming this exemption to maintain separate records of monthly VOC and oxygenated fuel throughputs. These records shall be kept on site for three years and made available to the District upon request.

### **(c) STANDARDS (Rev. Effective 1/10/95)**

1. New tank construction and replacement of rim seals: Except as otherwise provided in Subsection (b)(3) of this rule no person shall store volatile organic compounds in, or transfer such compounds into, any bulk plant or bulk terminal stationary tank which is used primarily to fill mobile transport tanks and which was installed or replaced after November 15, 1979, unless the tank is equipped with best available control technology (BACT) at the time of construction or replacement. No person shall install a rim seal unless the rim seal configuration represents BACT at the time of installation.
2. Tanks constructed prior to November 15, 1979: Except as otherwise provided in Subsection (b)(3) of this rule, no person shall store volatile organic compounds in, or transfer such compounds into, any bulk plant or bulk terminal

stationary tank which is used primarily to fill mobile transport tanks and which was installed on or before November 15, 1979, unless the tank as described in, and meets the requirements of, either (i), (ii) or (iii) below:

(i) Any tank with an external floating roof which has either a pontoon type or double-deck type construction if the tank shell is opened at the top, or an internal floating cover if the tank shell has a fixed roof, shall be equipped as specified below.

Except as otherwise provided for in Subsection (b)(2), both external floating roofs and internal floating covers shall rest on the surface of the liquid contents. (Internal floating covers that are suspended above the liquid surface on floating pontoons are not considered to be resting on the surface of the liquid contents.)

Each external floating roof or internal floating cover shall be equipped with a closure device between the floating roof or cover edge and the tank shell. The closure device shall be one of the types listed in (A), (B), or (C) below and shall meet the design criteria of the type chosen at all liquid levels in the tank. In addition, the requirements of (D), (E) or (F) below shall be met.

**(A) External Floating Roof Tank with a Shoe Seal/Secondary Seal Configuration:** This type of closure device shall have two seals, one above the other. The lower seal, referred to as the primary seal, shall be of a metallic-shoe type design with a rubber coated fabric, or similar covering, completely enclosing the space between the shoe and the edge of the roof. The upper seal, referred to as the secondary seal, shall consist primarily of a flap made of reinforced rubber, rubber coated fabric, or similar material. The primary and secondary seals shall be designed to follow the contours of the tank shell.

If the secondary seal has gaps greater than 1/16 inch (0.16 cm), gaps between the tank shell and primary seal shall not exceed the following:

(I) There shall be no gap greater than 1 1/2 inches (3.8 cm) in width.

(II) The cumulative length of gaps exceeding 1/2 inch (1.3 cm) in width shall not exceed 10% of the tank circumference.

(III) The cumulative length of gaps exceeding 1/8 inch (0.32 cm) in width shall not exceed 30% of the tank circumference.

(IV) The cumulative length of gaps exceeding 1/16 inch (0.16 cm) in width shall not exceed 60% of the tank circumference.

No continuous gap greater than 1/8 inch (0.32 cm) shall exceed 10% of the circumference of the tank. There shall be no holes, tears, or other openings in the cover which extends between the primary shoe seal and the edge of the floating roof. The geometry of the shoe seal shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria, for a height of at least 18 inches (46 cm) in the vertical plane above the liquid surface.

Gaps between the tank shell and the secondary seal shall not exceed the following:

(I) There shall be no gap greater than 1/2 inch (1.3 cm) in width.

(II) The cumulative length of gaps exceeding 1/8 inch (0.32 cm) in width shall not exceed 5% of the tank circumference.

(III) The cumulative length of gaps exceeding 1/16 inch (0.16 cm) in width shall not exceed 95% of the tank circumference.

The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary shoe seal. There shall be no holes, tears, or other openings in the secondary seal or seal fabric.



**(B) External Floating Roof with a Toroid Seal/Secondary Seal Configuration:** This type of closure device shall have two seals, one above the other. The lower or primary seal shall have a resilient toroid configuration (also known as a log or tube seal). The outer surface of the toroid seal shall be designed to prevent capillary action if the seal can become partially submerged in the stored liquid.

Gaps between the tank shell and the primary seal shall not exceed the following:

- (I) There shall be no gap greater than 1/2 inch (1.3 cm) in width.
- (II) The cumulative length of gaps exceeding 1/8 inch (0.32 cm) in width shall not exceed 5% of the tank circumference.
- (III) The cumulative length of gaps exceeding 1/16 inch (0.16 cm) in width shall not exceed 95% of the tank circumference.

There shall be no holes, tears, or other openings in the toroid seal which extend to the stored volatile organic compounds or which allow stored volatile organic compounds to be exposed to the atmosphere.

If there are no gaps exceeding 1/16 inch (0.16 cm) between a partially submerged primary toroid seal and the tank shell, the tank may be equipped with a weather shield in lieu of a secondary seal.

For tanks with resilient toroid primary seals having seal-to-shell gaps greater than 1/16 inch (0.16 cm), the secondary seal shall consist primarily of a flap made of reinforced rubber, rubber coated fabric, or similar material. The secondary seal shall be designed to follow the contours of the tank shell and shall enclose the space above the primary seal between the roof edge and the tank shell.

Gaps between the tank shell and the secondary seal shall not exceed the following:

- (I) There shall be no gap greater than 1/2 inch (1.3 cm) in width.
- (II) The cumulative length of gaps exceeding 1/8 inch (0.32 cm) in width shall not exceed 5% of the tank circumference.
- (III) The cumulative length of gaps exceeding 1/16 inch (0.16 cm) in width shall not exceed 95% of the tank circumference.

There shall be no holes, tears, or other openings in the secondary seal or seal fabric.

**(C) Internal Floating Cover with a Toroid Seal Configuration:** Only fixed-roof tanks with internal floating covers shall be equipped with this type of closure device consisting of a single toroid rim seal. The closure device shall have at least a single toroid seal. The outer cover of the toroid seal shall be designed to prevent capillary action if the seal can become partially submerged in the stored liquid.

Gaps between the tank shell and the toroid seal shall not exceed the following:

- (I) There shall be no gap greater than 1/2 inch (1.3 cm) in width.
- (II) The cumulative length of gaps exceeding 1/8 inch (0.32 cm) in width shall not exceed 5% of the tank circumference.
- (III) The cumulative length of gaps exceeding 1/16 inch (0.16 cm) in width shall not exceed 95% of the tank circumference.

There shall be no holes, tears, or other openings in the seal which extend to the stored volatile organic compounds or which allow stored volatile organic compounds to be exposed to the atmosphere.

(D) Replacement of Rim Seals: Replacement of rim seals after November 15, 1979 on any floating roof or floating cover equipped tank shall incorporate BACT.

(E) Other Structures: Ladders, sampling pipes, and other structures that pass through the floating roof or floating cover shall be equipped with closure devices extending from the roof to the structure. There shall be no gaps greater than 1/8 inch (0.32 cm) between closure devices and structures. Slotted sampling tubes shall be equipped with floating cylinders that average 1/8 inch (0.32 cm) or less annular gap between cylinders and tube walls. All other tank wells used for gauging, sampling standpipes, or other purposes shall be gas tight except when gauging or sampling is taking place.

(F) Highly Volatile Organic Compounds: The above control equipment is not acceptable if the volatile organic compound has a true vapor pressure of 11 pounds per square inch absolute or greater under actual storage conditions. If this paragraph applies, then BACT shall be installed.

(ii) Any fixed roof tank shall be equipped with a vapor control system capable of recovering or disposing of the hydrocarbon vapors generated by storage conditions within the tank and by the transfer of volatile organic compounds into the tank. The control system shall prevent at least 95 percent by weight of the displaced vapors from being released to the atmosphere. Vapors generated due to storage shall be vented through the operating vapor control system.

All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place. No tank shall be opened for gauging or sampling when the pressure in the tank is above atmospheric pressure.

Replacement vapor control systems installed after November 15, 1979 shall employ BACT.

(iii) Any tank not described in (i) or (ii) above shall be equipped with other methods or equipment which are demonstrated, to the satisfaction of the Air Pollution Control Officer, to control hydrocarbon vapors at all tank liquid levels with an effectiveness equivalent to a fixed roof tank vapor control system which meets the requirements of Subsection (c)(2)(ii) of this rule.

3. Low-throughput Bulk Plants: Fixed roof tanks at bulk plants where the annual bulk plant throughput does not exceed 5,000,000 gallons (18,925 kiloliters) of volatile organic compounds shall meet the following requirements:

(i) All such tanks shall be equipped with a vapor control system which will prevent at least 95 percent by weight of the hydrocarbon vapors displaced from the tanks during their loading and breathing from being released to the atmosphere. This provision does not apply to the control of breathing losses associated with storage if the bulk plant was constructed on or before November 15, 1979; and

(ii) All aboveground tanks shall be equipped with a pressure/vacuum valve approved by the Air Pollution Control Officer and having a minimum pressure relief setting of 8 ounces per square inch, provided that such setting will not exceed the container's safe working pressure; and

(iii) All tank gauging and sampling devices shall be gas tight except when gauging or sampling is taking place. No tanks shall be opened for gauging or sampling when the pressure in the tank is above atmospheric pressure, except for gauging within one-hour prior to a bulk delivery.

4. **Vents:** Floating roofs with vapor spaces beneath the roof, and fixed roof tanks without internal floating covers, shall be leak tight except during venting from designated vents. Such vents shall be equipped with automatic pressure/vacuum relief valves approved by the Air Pollution Control Officer, and set at the maximum safe working pressure and vacuum settings.

5. **Openings:** All openings in any floating roof or floating cover, except pressure/vacuum valves and hatches on manhole covers, shall provide projections below the liquid surface. The projections shall be designed to prevent belching of liquid and to prevent entrained or foamed volatile organic compounds from escaping from the liquid contents of the tank and shall be equipped with a cover, seal, or lid which shall be gas tight at all times, except when the device or appurtenance is in use. Hatches on manhole covers shall also be gas tight except during

sampling, inspection or maintenance. Any emergency roof drain on a floating roof tank must be equipped with a slotted membrane fabric cover, or equivalent, that has no gap greater than 1/8 inch (0.32 cm.).

6. **Leaks:** All piping, valves, fittings, and component parts of floating roofs, floating covers, and fixed roof tank vapor recovery systems shall be constructed and maintained so that there are no fugitive vapor or liquid leaks except as otherwise provided for in this rule.
7. **Inspection and Recordkeeping:** The primary seal envelope on either external floating roofs or internal floating covers shall be made available for unobstructed inspection by the Air Pollution Control Officer at locations selected at random along its circumference. The Air Pollution Control Officer may require further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. A District approved secondary seal which meets the BACT provisions of this rule shall not constitute an obstruction.

The operator of any floating roof bulk storage tank subject to the standards of Subsections (c)(1) and (c)(2) of this rule shall:

- (i) Inspect the outer external floating roof or internal floating cover seal at least once every 90 days to determine ongoing compliance with both the applicable standards of this rule and the Permit to Operate conditions pertaining to the tank; and
- (ii) Inspect the upper surface of the floating roof or cover, from the top of each tank, for signs of liquid VOC leakage at least once every 30 days; and
- (iii) Maintain records of the above inspections and make the records available to the Air Pollution Control Officer for review upon request; and
- (iv) Inspect and, if necessary, repair the rim seals each time the tank is emptied and degassed; and
- (v) Notify the District at least 48 hours in advance each time the tank is being emptied and degassed; and
- (vi) Record, maintain, and make available to the Air Pollution Control Officer, upon request, monthly averages of each stored VOC's Reid or true vapor pressure and storage temperature.

The operator of any fixed roof bulk storage tank subject to Subsections (c)(1) and (c)(2) shall comply with paragraphs (v) and (vi) above.

8. **Maintenance:** A maintenance program designed to ensure continuous compliance with the provisions of this rule shall be submitted to the Air Pollution Control Officer by the tank owner for approval within 45 days of a request. The owner shall adhere to the approved maintenance program.

(d) **TEST METHODS** (Effective 1/10/95)

1. Measurements of Reid vapor pressure of stored VOC's pursuant to Subsection (c)(7)(vi) of this rule shall be conducted in accordance with ASTM Standard Test Method D 323-89. As an alternative, Reid vapor pressure may be calculated using measurements of total vapor pressure conducted in accordance with ASTM Standard Test Method D 5191-93a as approved by EPA.
2. Calculation of the true vapor pressure of stored VOC's pursuant to Subsections (c)(2)(i)(F) and/or (c)(7)(vi) of this rule shall be conducted in accordance with the District's "Procedures for Estimating the Vapor Pressure of VOC Mixtures" as it exists on January 10, 1995. If the vapor pressure of the liquid mixture, as determined by this procedure, exceeds the limits specified in Subsection (c)(2)(i)(F), the vapor pressure shall be determined in accordance with ASTM Standard Test Method D2879-86, Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.
3. The control efficiency of a vapor control system required pursuant to Subsection (c)(2)(ii) or (c)(3)(i) shall be determined using a protocol approved by the District and in accordance with either EPA Methods 18 and 25A (40 CFR 60, Appendix A) as they exist on January 10, 1995 or ARB "Procedures for Certification of Vapor Control System for Fixed Roof Storage Tanks at Bulk Plants and Bulk Terminal" as they exist on January 10, 1995, as applicable. An alternative method for determining the control efficiency pursuant to Subsection (c)(2)(ii) or (c)(3)

(i) may be used provided such method has been approved, in advance, by the Air Pollution Control Officer, ARB and EPA.

**RULE 61.2. TRANSFER OF ORGANIC COMPOUNDS INTO MOBILE  
TRANSPORT TANKS**

**(a) APPLICABILITY**

Except as otherwise provided in Section (b), this rule is applicable to the transfer of any volatile organic compound (VOC) into a mobile transport tank with a capacity of 550 gallons (2,082 liters) or greater. It is also applicable to the transfer of any liquid compound, regardless of its vapor pressure, into any mobile transport tank with a capacity of 550 gallons (2,082 liters) or greater where the transfer involves the displacement or results in the generation of VOC vapors.

**(b) EXEMPTIONS**

(1) Transfer into any mobile transport tank from any stationary tank specified in Rule 11 shall not be subject to the provisions of Section (c) of this rule.

(2) The provisions of Subsection (c)(4) shall not apply to any bulk plant in operation prior to March 1, 1984, and for which the throughput does not exceed 500,000 gallons (1,892,700 liters) per year of VOC. To qualify for this exemption, the owner or operator of the bulk plant shall maintain monthly records of VOC and diesel fuel throughputs that demonstrate the applicability of the exemption. Records shall be maintained on-site for at least two years and shall be made readily available to the District upon request.

(3) The provisions of Subsection (c)(4) shall not apply during the calibration of the marker inside a cargo tank when done in accordance with the San Diego County Department of Weights and Measures test procedure.

(4) The provisions of Subsections (c)(6)(i) and (c)(8) shall not apply to any bulk plant or bulk terminal where the VOC throughput does not exceed 5,000,000 gallons (18,927,000 liters) per year. To qualify for this exemption, the owner or operator of the bulk plant shall maintain monthly records of VOC and diesel fuel throughputs that demonstrate the applicability of the exemption. Records shall be maintained on-site for at least two years and shall be made readily available to the District upon request.

(5) The provisions of Subsection (c) (10) shall not apply to any bulk plant or bulk terminal owned by any branch of the United States Armed Forces.

(6) The provisions of this rule, except for Subsections (c)(3), (c)(7), and (c)(10), shall not apply to the transfer of VOC liquid from any United States military ship, provided that the total annual throughput for such transfers occurring in San Diego County does not exceed 21,000 gallons (79,494 liters) per year. It shall be the responsibility of any person claiming this exemption to maintain monthly records of

VOC liquid transfer. The records shall be maintained on-site for at least two years and made readily available to the District upon request.

(7) This rule shall not apply to:

(i) Emergency work that the Air Pollution Control Officer determines is necessary to protect persons or property from imminent exposure to danger or damage;

(ii) VOC liquid transfers involving less than 500 gallons (1,893 liters) from one compartment to another within the same mobile transport tank; and

(iii) VOC liquid transfers to any mobile transport tank from any disabled mobile transport tank which cannot be driven for the purpose of facilitating the hauling of the disabled vehicle to a repair facility.

(c) **STANDARDS**

(1) No person shall transfer or allow the transfer of VOC from any stationary storage tank into any mobile transport tank, each with a capacity of more than 550 gallons (2,082 liters), unless 90 percent by weight of the hydrocarbon vapors resulting from the transfer, including any venting losses associated with the transfer, are prevented from being released to the atmosphere.

(2) There shall be no fugitive vapor leaks along the vapor transfer path. For purposes of this rule the vapor transfer path is that combination of piping, hoses, valves, fittings, storage tanks, saturator tanks, vapor processor, and other devices through which hydrocarbon vapors are transferred, stored, or processed to meet the requirements of this rule. The vapor transfer path shall include the interface between a mobile transport tank having a capacity greater than 550 gallons (2,082 liters) and the stationary storage tank facility vapor control fittings. The vapor transfer path shall not include any mobile transport tank, vapor control processor exhaust, or designated vapor control system vent from which the vapor-air mixtures are released after passing through a vapor processor.

There shall be no fugitive vapor leaks from any pressure/vacuum relief valve unless the vapors have passed through a vapor processor, except at bulk plants where a vapor processor is not required by this rule.

(3) No person shall transfer or allow the transfer of VOC into any mobile transport tank as described above when there are any fugitive liquid leaks along the liquid path including the transport tank and associated fittings through which the VOC are being transferred. There shall be no spillage upon disconnect at the loading head-transport tank interface except for spillage which would normally occur when the equipment is handled in a manner designed to minimize spillage. Equipment used to transfer fuel shall be free of defects and properly maintained in a manner designed to minimize spillage.

(4) No person shall transfer or allow the transfer of compounds not subject to the requirements of this rule into any mobile transport tank, having a capacity of more than 550 gallons (2,082 liters) which was transporting VOC or VOC vapor prior to said transfer unless at least 90 percent by weight of the hydrocarbon vapors resulting from the transfer, including any venting losses associated with the transfer, are prevented from being released to the atmosphere.

(5) No person shall displace or allow the displacement of vapors of compounds not subject to the requirements of this rule into a saturator using a VOC unless at least 90 percent by weight of all organic compound vapors resulting from transfers into mobile transports at the facility, are prevented from being released to the atmosphere. This includes any venting losses associated with such transfer.

(6) No person shall transfer or allow the transfer of any liquid into any mobile transport tank having a capacity of more than 550 gallons (2,082 liters) if the transfer displaces VOC, unless:

(i) The displaced vapors are vented to a vapor recovery or disposal unit where the emissions from the unit into the atmosphere do not exceed 0.29 lbs of non-methane organic compounds per 1,000 gallons (35 milligrams of non-methane organic compounds per liter) of the liquid that displaces the VOC vapor-air mixtures, and

(ii) The pressure does not exceed 18 inches of water gauge and the vacuum does not exceed six inches of water gauge in the mobile transport tank vapor space or the vapor space of any of its compartments during the transfer.

(7) The hydrocarbon vapor concentration measured at a distance of 1/2 inch (1.3 cm) or more from the bladder in any bladder tank shall not exceed 500 parts per million by volume (ppmv) measured as propane or 1,375 ppmv measured as methane.

(8) Every product line at each loading rack connected to the vapor recovery system shall be equipped with a dual automatic shutoff overfill prevention system. Each system shall consist of:

(i) A fill meter with automatic flow shutoff at a preset fill quantity; and

(ii) A transport tank compartment high liquid level thermistor or optic sensor-activated automatic loading shutdown system; or

(iii) A float switch type liquid level sensor overfill prevention system, if a loading rack is not compatible with (ii) above.

In lieu of (i), and (ii) or (iii) above, each loading rack shall be equipped with a combination of overfill devices and/or procedures, approved in writing by the Air

Pollution Control Officer, that is at least as effective in preventing overflow spillage as the sum of (i), and (ii) or (iii) above.

Each loading rack shutdown system shall, upon overflow sensor activation, automatically stop all liquid transfer to the transport tank(s) being loaded. The system shall be designed so that after sensor activation the additional liquid quantity transferred (meter overrun) shall not exceed 3.0% of the full-level volume of the tank compartment being loaded.

(9) No person shall transfer or allow the transfer of VOC from any mobile transport tank into any other mobile transport tank, each with a capacity of more than 550 gallons (2,082 liters), unless:

(i) 90 percent by weight of the hydrocarbon vapors resulting from the transfer, including any venting losses associated with the transfer, are prevented from being released to the atmosphere, and

(ii) 90 percent by weight of the hydrocarbon vapors generated by daily cycles of heating and cooling in the mobile transport tank from which the VOC are transferred are prevented from being released to the atmosphere. This emission limit applies only when the mobile transport is stationary.

(10) No person shall transfer or allow the transfer of VOC into any mobile transport tank unless the liquid transferred enters within six inches of the bottom of the mobile transport tank or compartment.

(11) A maintenance program, designed to ensure that the vapor collection and/or vapor recovery/disposal systems are in continuous compliance with the provisions of this rule, shall be submitted to the Air Pollution Control Officer by the equipment owner within 45 days of a request. The owner shall adhere to the maintenance plan as approved by the Air Pollution Control Officer.

(12) No person shall install a Phase I vapor recovery system unless it is certified by the State of California Air Resources Board (ARB), pursuant to Section 41954 of the Health and Safety Code.

**(d) TEST METHODS**

Testing shall be performed in accordance with the following:

(1) Mobile transport tanks shall be certified and tested annually using ARB "Certification Procedure for Vapor Recovery Systems of Cargo Tanks" (CP-204) and ARB Test Method TP-204.1 "Determination of Five Minute Static Pressure Performance of Vapor Recovery Systems of Cargo Tanks." Ongoing testing shall be performed using either ARB Test Method TP-204.1, or ARB Test Method TP-204.2 "Determination of



One Minute Static Pressure Performance of Vapor Recovery Systems of Cargo Tanks” as approved by Environmental Protection Agency (EPA).

(2) Vapor control systems at bulk plants and bulk terminals shall be tested using the ARB Test Methods TP-202.1 “Determination of Emission Factor of Vapor Recovery Systems of Bulk Plants” and TP-203.1 “Determination of Emission Factor of Vapor Recovery Systems of Terminals,” respectively, as they exist on July 26, 2000.

(3) Fugitive leaks shall be tested using either EPA Method 21 “Determination of Volatile Organic Leaks” or ARB Test Method TP-204.3 “Determination of Leak(s),” as they exist on July 26, 2000.

(4) Any other test procedure approved by EPA and ARB for determining the performance of systems used to control VOC emissions from the transfer of organic compounds into mobile transport tanks may be used.

All test procedures shall be performed in accordance with a protocol approved in writing by the Air Pollution Control Officer.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 61.3 - TRANSFER OF VOLATILE ORGANIC COMPOUNDS INTO STATIONARY STORAGE TANKS**

(Effective 5/6/77; Rev. Effective 10/16/90)

### **(a) APPLICABILITY**

Except as otherwise provided in Section (b), this rule is applicable to the transfer of volatile organic compounds (VOC's) from any mobile transport tank into any stationary storage tank at the following fuel dispensing facilities:

1. Any retail service station, as defined in Rule 61.0 where VOC's are transferred from any mobile transport tank into any stationary storage tank with a capacity of 260 gallons (984) liters or more, and
2. Any facility not described in Subsection (a)(1) where VOC's are transferred from any mobile transport tank into any stationary storage tank, each with a capacity of more than 550 gallons (2080 liters).

### **(b) EXEMPTIONS**

The provisions of this rule shall not apply to the transfer of:

1. VOC's from any mobile transport tank into any stationary storage tank of more than 550 gallons (2080 liters) capacity which is used primarily to fill mobile transport tanks and which is located at a bulk plant or bulk terminal; or
2. VOC's from any mobile transport tank into a stationary storage tank of more than 550 gallons (2080 liters) capacity used exclusively as a source of fuel for wind machines used for agricultural purposes; or
3. Organic solvents which are liquids at standard conditions and which are to be used as dissolvers, viscosity reducers, extractants, cleaning agents or thinners and not used as fuels; or
4. Natural gas or propane when not mixed with other volatile organic compounds; or
5. VOC's from any mobile transport tank into any stationary storage tank used by the San Diego County Department of Weights and Measures solely to test meters in cargo tanks; or
6. VOC's from any mobile transport tank into any stationary storage tank with a capacity of 260 gallons (984 liters) to 550 gallons (2080 liters) at any retail service station, provided that:

(i) No stationary storage tank with a capacity of 260 gallons (984 liters) or more has been added, installed or replaced at the facility after March 14, 1989; and

(ii) No modification, replacement or repair of any underground liquid VOC piping from any stationary storage tank to any dispenser has occurred at the facility after March 14, 1989.

### **(c) STANDARDS (Rev. Effective 10/16/90)**

1. Except as provided for in Subsection (c)(2) no person shall transfer or allow the transfer of volatile organic compounds from any mobile transport tank into any stationary storage tank unless:

(i) Such tank is equipped with a permanent submerged fill pipe;

(ii) At least 95 percent by weight of the hydrocarbon vapors displaced during the transfer are prevented from being released into the atmosphere; and

(iii) Such tank, if it is an aboveground tank, does not have a hydrocarbon emission rate caused by vapor generation, other than during a transfer, that exceeds 1.0 pound per 1000 gallons of tank throughput if Phase I

only is required or 0.2 pounds per 1000 gallons of tank throughput if Phase I and II are both required.

2. No person shall transfer or allow the transfer of volatile organic compounds from any mobile transport tank into any stationary storage tank which was in use on or before July 1, 1978, other than at bulk plants or bulk terminals, when such tank is located on a parcel of land at which the total output does not exceed 9,000 gallons (34.065 kiloliters) during each and every calendar month, unless (Rev. Effective 10/16/90)
  - (i) Such tank is equipped with a permanent submerged fill pipe;
  - (ii) At least 90 percent by weight of the hydrocarbon vapors resulting from the transfer, including any venting losses associated with such transfer, are prevented from being released to the atmosphere; and
  - (iii) The operator maintains records of total VOC liquid throughput on the parcel of land for each and every calendar month, keeps each monthly record for at least two years, and makes the monthly records available to the District upon request.
3. All stationary storage tanks shall be equipped with a Phase I vapor recovery system certified by the State of California; unless the installation is granted written approval by both the California Air Resources Board (ARB) and the District for the purpose of conducting field evaluations to determine certification status of the Phase I control equipment. When certification evaluation is completed, the stationary tank(s) shall not be operated unless their Phase I system has been certified by the ARB.
4. No person shall alter or allow the alteration of any Phase I vapor recovery system previously approved by the Air Pollution Control Officer unless approval for such alteration has been obtained from the Air Pollution Control Officer.
5. No person shall transfer or allow the transfer of VOC into any stationary storage tank where the Phase I system and/or the submerged fill pipe, is inoperative, missing or damaged so as to impair the effectiveness of the Phase I system.

**RULE 61.4. TRANSFER OF VOLATILE ORGANIC COMPOUNDS INTO VEHICLE FUEL TANKS** (Effect. 5/6/77: Rev. 10/16/90, Rev. 03/26/08)

**(a) APPLICABILITY**

Except as provided for in Section (b) - Exemptions, this rule is applicable to the transfer of volatile organic compounds (VOC's) into any motor vehicle tank with a capacity greater than 5 gallons (18.9 liters) at the following fuel dispensing facilities:

- (1) Any retail service station, as defined in Rule 61.0 where VOC's are dispensed into motor vehicle tanks from any stationary storage tank with a capacity of 250 gallons (946 liters) or more, and
- (2) Any facility that is not a retail service station where:
  - (i) VOC's are dispensed into motor vehicle tanks from any stationary storage tank with a capacity greater than 550 gallons (2080 liters), and
  - (ii) Where more than 2000 gallons (7570 liters) of VOC's are transferred into motor vehicle tanks in any calendar month on the parcel of land where the facility is located.

**(b) EXEMPTIONS**

This rule does not apply to the dispensing of:

- (1) VOC's into motor vehicle fuel tanks from any intermediate refueler provided VOC's are not sold directly from the intermediate refueler; or
- (2) Natural gas or propane when not mixed with any other VOC; or
- (3) VOC's into any vehicles performing emergency work necessary to restore property to a safe condition following a public calamity or work required to protect persons or property from imminent exposure to danger or damage.
- (4) VOC's from any stationary storage tank that:
  - (i) Is used primarily in the fueling of aircraft and/or intermediate aircraft refuelers, or boats; or
  - (ii) Is located on a parcel of land where not more than 2,000 gallons (7570 liters) are transferred into motor vehicles during any calendar month, provided that the facility is not a retail service station. The owner or operator of a stationary tank subject to this requirement shall maintain monthly VOC throughput records. These records shall be

maintained on site for a period of at least three years and be made available to the District upon request.

(5) VOC's from any stationary storage tank into a vehicle fuel tank at any non-retail service station where 95 percent of vehicles refueled are equipped with Onboard Refueling Vapor Recovery (ORVR) provided that the Phase II vapor recovery system, if previously installed, has been properly removed. Any person claiming this exemption shall maintain records of the make, model year, vehicle identification number and any other information indicating whether the vehicle is equipped with ORVR, for all vehicles refueled at such facility. These records shall be maintained on site for at least three years and be made available to the District upon request.

(6) E85 from any stationary storage tank into a Flexible Fuel Vehicle fuel tank at any retail or non-retail service station.

**(c) STANDARDS**

Except as provided for in Section (b) of this rule, no person shall transfer or allow the transfer of VOC's into any motor vehicle fuel tank unless all the following requirements are met:

(1) The vapors displaced during the transfer, and displaced from any storage tank associated with the transfer, shall be controlled by a Phase II vapor recovery system certified by the California Air Resources Board (CARB) to be at least 95% effective.

The Phase II vapor recovery system and its components shall have been certified by the CARB prior to installation; unless the installation is granted written approval by both the CARB and the District for the purpose of conducting field evaluations to determine the certification status of the system and/or any of its components.

(2) No person shall insert or allow the insertion of an object between any vehicle tank fill spout and any vapor recovery nozzle in order to prevent sealing at the vehicle-nozzle interface.

(3) The Phase II vapor recovery system and its components shall be installed, operated, and maintained so that their performance in actual use, as determined by the Air Pollution Control Officer, is:

(i) The same as the CARB certification test system associated with the applicable CARB Executive Order, and

(ii) The Phase II vapor recovery system and its components are installed, operated and maintained in accordance with the applicable CARB Executive Orders and any instructions of the manufacturer(s) of the system and its components.

(4) The Phase II vapor recovery system and its components shall not be altered from their certified configuration. Alterations include, but are not limited to:

- (i) Piping and fitting changes, or installation of valves in the vapor piping; or
- (ii) Substitutions of certified components with non-certified components and removal of certified components; and
- (iii) Any other modifications that can affect the emissions.

(5) Except as provided in Subsection (c)(6) below, any component, device, or system identified and recorded by the owner/operator as not being in good condition or not operating properly shall be repaired, replaced, or adjusted within seven calendar days of detection in a manner that will bring the facility into compliance with this rule and the most recent applicable CARB Executive Orders. Upon request and for good cause, the Air Pollution Control Officer may allow an additional seven calendar days for the repairs, replacements, or adjustments specified above to be made.

(6) Any component, device or system having a defect identified in Title 17, California Code of Regulations, shall not be used or made available for use.

(7) Each VOC dispensing nozzle shall be equipped with a hold-open latch device in proper working order, except where prohibited by the local fire authority.

**(d) SOURCE TESTING**

(1) Within 60 calendar days of the installation date of any new or modified service station an initial compliance source test shall be conducted as required by the applicable Authority to Construct and the most recent applicable CARB Executive Orders.

(2) Periodic compliance source tests shall be conducted at least once every calendar year and in accordance with the schedule specified by the Air Pollution Control Officer. More frequent tests may be required as determined necessary by the Air Pollution Control Officer to assure compliance with this rule.

**(e) RECORDKEEPING**

An owner/operator of a service station shall maintain at a minimum the following information:

- (1) Records of initial and periodic compliance source tests, which include at a minimum:
  - (i) Date and time of each test;

- (ii) Name, affiliation, address, and phone number of the person(s) who performed the test;
  - (iii) For a retest following a failed initial compliance or periodic compliance source test, description of repairs performed; and
  - (iv) Copies of all test reports, including test equipment calibration date(s), test results and failed test data, in District-approved format and, for a test that fails, a description of the reasons for the test failure.
- (2) Monthly throughput records of VOC liquids

All information specified in Subsections (e)(1) and (e)(2) shall be maintained on site for a period of at least three years and be made available to the District upon request.

**(f) TEST METHODS**

(1) The control efficiency of the Phase II Vapor Recovery System shall be determined in accordance with CARB Test Method TP-201.2 – Efficiency and Emission Factor for Phase II Systems and CARB Test Method TP-201.2A – Determination of Vehicle Matrix for Phase II Systems as applicable, and shall be determined by including all refueling emissions, stationary storage tank vent emissions, and pressure-related fugitive emissions. Pressure-related fugitive emissions shall be determined in accordance with CARB Test Method TP-201.2F – Pressure-Related Fugitive Emissions or the most recent applicable test method approved by EPA and CARB.

(2) The liquid removal rate of a liquid removal system, when required to be installed pursuant to the most recent applicable CARB Executive Order, shall be determined in accordance with the CARB Test Method TP-201.6C (Option 2) – Compliance Determination of Liquid Removal Rate or the most recent applicable test method approved by EPA and CARB.

(3) As applicable, the air to liquid (A/L) volumetric ratio for each nozzle shall be determined in accordance with the CARB Test Method TP -201.5 or the most recent applicable test method approved by EPA and CARB.

(4) A pressure decay leak test of the entire vapor recovery system shall be performed in accordance with the CARB Test Method 201.3 or 201.3.B as applicable, or in accordance with the most recent applicable test method approved by EPA and CARB.

(5) Any other applicable test methods approved by EPA and CARB.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 61.5 - VISIBLE EMISSION STANDARDS FOR VAPOR CONTROL SYSTEMS**

(Effective 5/6/77: Rev. Effective 9/20/78)

No person shall discharge, or allow to be discharged, into the atmosphere from any vapor control system used to meet the requirements of Rules 61.1, 61.2, 61.3, 61.4 or 61.7, air contaminants in such a manner that the opacity of the emission is:

1. Greater than 10% for a period or periods aggregating more than one (1) minute in any 60 consecutive minutes; or
2. Greater than 40% at any time.



# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 61.7 - SPILLAGE AND LEAKAGE OF VOLATILE ORGANIC COMPOUNDS**

(Effective 9/20/78: Rev. Effective 1/13/87)

### **(a) APPLICABILITY**

This rule is applicable to the spillage and fugitive liquid leaks associated with the transfer and storage of volatile organic compounds.

### **(b) EXEMPTIONS**

1. This rule does not apply to spillage or leakage that is specifically addressed by other rules of the District's Rules and Regulations.
2. This rule does not apply during normal maintenance and repair activities when work practices are followed that minimize spillage.

### **(c) STANDARD**

1. Except as provided for in Section (b) above, no person shall:
  - (i) Spill, allow the spillage or cause spillage of such compounds during the disconnection of fittings used for transfer, except for spillage which would normally occur with equipment handled in a manner designed to minimize spillage.
  - (ii) Use or allow equipment to be used to transfer fuel unless the equipment is free of defects and properly maintained in a manner designed to minimize spillage, and
  - (iii) No person shall allow fugitive liquid leaks along the liquid transfer path, including any storage tank.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 61.8 - CERTIFICATION REQUIREMENTS FOR VAPOR CONTROL EQUIPMENT**

(Effective 2/22/84: Rev. Effective 1/13/87)

### **(a) APPLICABILITY**

This rule is applicable to all vapor recovery systems installed after July 1, 1976, which are subject to the certification requirements of Division 26, Part 4, Chapter 3, Article 5, of the State of California Health and Safety Code.

### **(b) EXEMPTIONS**

Section (c) of this rule shall not apply to vapor control devices installed in order to conduct field evaluations to determine certification status, provided the installation and use of such devices has the written approval of both the California Air Resources Board and the District. This exemption shall cease to be in effect upon determination that the device or devices under evaluation fail to meet the certification standards of the California Air Resources Board.

### **(c) STANDARDS**

No person shall install, provide, sell or sell for use within the County of San Diego a gasoline vapor control system or system component subject to the certification requirements of Division 26, Part 4, Chapter 3, Article 5, of the State of California Health and Safety Code unless it has been certified by the California Air Resources Board.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 62 - SULFUR CONTENT OF FUELS**

(Effective 7/14/70: Rev. Effective 10/21/81)

### **(a) APPLICABILITY**

This rule is applicable to all stationary fuel burning equipment except as provided for by Rule 53.1, and except for the combustion of sewage treatment plant digester gases and the incineration of gases emitted from solid waste disposal landfill sites. (Rev. Effective 10/21/81)

### **(b) STANDARD**

A person shall not operate any stationary fuel-burning equipment subject to this rule unless:

1. Any gaseous fuel used contains no more than 10 grains of sulfur compounds, calculated as hydrogen sulfide, per 100 cubic feet of dry gaseous fuel (0.23 grams of sulfur compounds, calculated as hydrogen sulfide, per cubic meter of dry gaseous fuel), at standard conditions.
2. Any liquid or solid fuel used contains no more than 0.5 percent sulfur by weight, or
3. The equipment can be so operated as to achieve equivalent results, documented by the person by stack test to the satisfaction of the Air Pollution Control Officer.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 64 - REDUCTION OF ANIMAL MATTER**

(Rev. Effective 8/21/81)

(a) A person shall not operate or use any article, machine, equipment or other contrivance for the reduction of animal matter unless all gases, vapors and gas-entrained effluents from such an article, machine, equipment or other contrivance are:

1. Incinerated at temperatures of not less than 1200 degrees Fahrenheit (649 C) for a period of not less than 0.3 seconds, or (Rev. Effective 3/30/77)
2. Processed in a manner determined by the Air Pollution Control Officer to be equally, or more, effective for the purpose of air pollution control than (1) above.

(b) A person incinerating or processing gases, vapors or gas-entrained effluents pursuant to this rule shall provide, properly install and maintain in calibration, in good working order and in operation, devices, as specified in the Authority to Construct or Permit to Operate or as specified by the Air Pollution Control Officer, for indicating temperature, pressure or other operating conditions.

(c) For the purpose of this rule, "reduction" is defined as any heated process used for rendering, cooking, drying, dehydrating, digesting, evaporating and protein concentrating of animal matter. [Rev. Effect. 8/21/81]

(d) The provisions of this rule shall not apply to any article, machine, equipment or other contrivance used exclusively for the processing of food, other than fish cooking for commercial canning, for human consumption. [Rev. Effective 8/21/81]

**RULE 66.1 MISCELLANEOUS SURFACE COATING OPERATIONS AND OTHER PROCESSES EMITTING VOLATILE ORGANIC COMPOUNDS (Adopted 2/24/10)**

**(a) APPLICABILITY**

(1) This rule is applicable to all surface coating, solvent cleaning or other operations or processes that may result in emissions of VOCs and are not subject to or exempt from, the following rules:

- 67.0 - Architectural Coatings;
- 67.2 - Dry Cleaning Equipment Using Petroleum Based Solvents;
- 67.3 - Metal Parts and Products Coating Operations;
- 67.4 - Metal Container, Metal Closure and Metal Coil Coating Operations;
- 67.5 - Paper, Film and Fabric Coating Operations;
- 67.6.1 - Cold Solvent Cleaning and Stripping Operations;
- 67.6.2 - Vapor Degreasing Operations;
- 67.9 - Aerospace Coating Operations;
- 67.10 - Kelp Processing and Bio-Polymer Manufacturing Operations;
- 67.11 - Wood Products Coating Operations;
- 67.11.1 - Large Coating Operations for Wood Products;
- 67.12 - Polyester Resin Operations;
- 67.15 - Pharmaceutical and Cosmetic Manufacturing Operations;
- 67.16 - Graphic Arts Operations;
- 67.18 - Marine Coating Operations;
- 67.19 - Coatings and Printing Inks Manufacturing Operations;
- 67.20 - Motor Vehicle and Mobile Equipment Refinishing Operations;
- 67.21 - Adhesive Materials Application Operations;
- 67.24 - Bakery Ovens;
- 61.1 through 61.8 – Vapor Recovery Rules;
- 68 through 69.4.1 – Rules Regulating Combustion Sources.

(2) Section (g) of this rule is applicable to any manufacturer, seller or supplier of any coating, coating component, solvent cleaning material, or any other VOC containing material that is used in an operation that may be subject to this rule.

**(b) EXEMPTIONS**

(1) This rule shall not apply to the following:

(i) Surface coatings, surface preparation or solvent cleaning materials applied using hand-held non-refillable aerosol spray containers.

(ii) Any surface coating operation where 20 gallons or less of surface coatings are applied per consecutive 12-month period. To claim applicability of this exemption monthly coating usage records shall be maintained on site for three years and made available to the District upon request.

(iii) Any surface coating or other VOC emitting operation where the total VOC emissions, excluding emissions from cleaning or surface preparation materials, are 150 lbs or less per consecutive 12-month period. To claim applicability of this exemption all records necessary to calculate VOC emissions shall be maintained on site for three years and made available to the District upon request.

(iv) The use of pesticides, including insecticides, rodenticides or herbicides.

(v) Research and development operations or testing for quality control or quality assurance purposes.

(vi) Operations involved in the manufacture of biotechnology pharmaceutical and bio-agricultural products that are exempt from the District permit to operate requirements by Rule 11, Section (d).

(vii) Laboratory operations located at secondary schools, colleges, or universities and used exclusively for instruction.

(viii) Touch-up operations.

(ix) Stripping of cured inks, coatings and adhesives.

(x) Digital printing operations.

(xi) Any solvent cleaning, including wipe cleaning, or surface preparation of electrical or electronic components, medical devices, laser optics or precision optics components.

(2) Subsection (d)(2) and Section (f) shall not apply to

(i) Any solvent cleaning, including wipe cleaning, of aerospace components not associated with a surface coating operation and provided that the cleaning material complies with the requirements of Rule 67.9, Subsection (d)(4).

(ii) Any solvent cleaning, including wipe cleaning, performed in conjunction with welding of 5XXX series aluminum structures for Navy ships and in accordance with quality assurance standards for such structures.

(iii) Any cleaning or surface preparation operation, including wipe cleaning, necessary to achieve the required purity of surfaces for precision welding or thermal spray operations used in the manufacture of gas turbine engines, provided that the combined total amount of such cleaning materials used for these operations at the stationary source does not exceed 50 gallons per consecutive 12-months.

(iv) Any cleaning or surface preparation operation, including wipe cleaning, where not more than 20 gallons of cleaning materials are used per consecutive 12-months, provided that the total amount of non-compliant cleaning materials used at the stationary source does not exceed 20 gallons per consecutive 12-months; or

(v) Any cleaning or surface preparation operation, including wipe cleaning, where the VOC emissions from cleaning materials do not exceed 150 lbs per consecutive 12-months, provided that the total VOC emissions from non-compliant cleaning materials used at the stationary source do not exceed 150 lbs per consecutive 12-months.

To claim the applicability of the exemptions in Subsection (b)(2), all records of monthly purchase or usage of cleaning materials, their VOC content, vapor pressure, or any other data necessary to calculate VOC emissions, as applicable, shall be maintained on site for three years and made available to the District upon request.

(c) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

(1) **"Aerospace Component"** means any raw material, partial or completed fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle, including mockups, test panels and prototypes.

(2) **"Air-Dried Coating"** means any coating that is not heated above 90°C (194°F) for the purpose of curing or drying.

(3) **"Baked Coating"** means any coating that is cured or dried in an oven where the oven air temperature exceeds 90°C (194°F).

(4) **"Coating"** means a material which can be applied as a thin layer to a substrate, and which either dries or cures to form a continuous solid film or impregnates a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, lacquers, and stains but exclude adhesives.

(5) **"Digital Printing Operation"** means an operation that uses a printing device guided by a computer-driven machine to transfer an electronic image to a substrate through the use of inks, toners, or other graphic materials. Digital printing operations also include associated surface preparation, solvent cleaning, and the cleaning of application equipment.

(6) **"Dip Coat"** means a coating application method accomplished by dipping an object into the coating material.

(7) **"Electrical Components"** means internal components such as wires, windings, stators, rotors, magnets, contacts, relays, energizers, and connections in an apparatus that generate or transmit electrical energy including, but not limited to, generators, transformers, and electric motors.

(8) "**Electronic Components**" means components or assemblies of components including, but not limited to, circuit card assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and other electrical fixtures, except for the cabinet in which the components are to be housed.

(9) "**Electrostatic Spray**" means a coating application method accomplished by charging atomized paint particles for deposition by electrostatic attraction.

(10) "**Exempt Compound**" means the same as defined in Rule 2.

(11) "**Existing Operation or Process**" means a surface coating operation or other process emitting VOCs for which a complete application for an Authority to Construct in San Diego County was submitted before February 24, 2010. Wipe cleaning operations that are exempt from permit requirements per Rule 11 before February 24, 2010, are considered existing operations.

(12) "**Flow Coat**" means a coating application method accomplished by flowing a stream of coating over an object.

(13) "**Hand Application Method**" means a coating application method accomplished by applying a coating by manually held, non-mechanically operated equipment. Such equipment includes, but is not limited to, paintbrushes, hand rollers, rags and sponges.

(14) "**High-Volume Low-Pressure (HVL) Spray**" means a coating application method which uses pressurized air at a permanent pressure between 0.1 and 10.0 psig, not to exceed 10.0 psig, measured at the air cap of the coating application system.

(15) "**Low-Solids Coating**" means a coating containing one pound of solids or less per gallon of material, as supplied.

(16) "**Medical Device**" means an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar article including any component or accessory, that is intended for use in the diagnosis of disease or other conditions or in the cure, mitigation, treatment, or prevention of disease, or is intended to affect the structure or any function of the body.

(17) "**New Operation or Process**" means a surface coating operation or other process emitting VOCs for which a complete application for an Authority to Construct in San Diego County was submitted on or after February 24, 2010.

(18) "**Organic Solvent**" means any substance containing an organic compound or combination of organic compounds which is liquid at atmospheric pressure and ambient temperature and which is used as a reactant, diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or for other similar purposes.



(19) "**Operation**" means any process that includes one or more pieces of equipment linked by the process flow and resulting in a product that cannot be made if any piece of equipment is removed or not functioning.

(20) "**Precision Optics Components**" means the components used to create high resolution images in optical devices.

(21) "**Research and Development Operation**" means a small scale operation for the purpose of creating new or improved processes or products, that is conducted by technically trained personnel under the supervision of a research director, and is not used in the manufacture of products for sale or exchange for commercial profit, other than the first-article deliverable product.

(22) "**Roll Coat**" means a coating application method accomplished by rolling a coating onto a flat surface using a roll applicator.

(23) "**Solvent**" means any organic solvent.

(24) "**Source**" means any article, machine, equipment, contrivance, operation or a group of such articles, machines, equipment, contrivances or operations that emits or may emit volatile organic compounds.

(25) "**Solvent Cleaning**" means the removal of uncured adhesives, inks, coatings, and other contaminants such as dirt, soil, and grease from parts, products, tools, machinery, equipment or general work area.

(26) "**Surface Preparation**" means the cleaning of surfaces by utilizing cleaning materials containing VOCs prior to coating, further treatment, sale or intended use.

(27) "**Surface Coating**" or "**Surface Coating Operation**" means all steps involved in the application, drying and curing of coatings.

(28) "**Touch-up Operation**" means the portion of a surface coating operation which is incidental to the main coating process but necessary to cover minor imperfections or minor mechanical damage incurred prior to intended use.

(29) "**Volatile Organic Compound (VOC)**" means the same as defined in Rule 2.

(30) "**VOC Content per Volume of Coatings, Less Water and Exempt Compounds**" means the weight of VOC per combined volume of VOC and coating solids and is calculated by the equation provided in Rule 2.

(31) "**VOC Content per Volume of Cleaning Material or Low-Solids Coating**" means the weight of VOC per volume of cleaning material or low-solids coating and is calculated by the equation provided in Rule 2.

(32) **"Wipe Cleaning"** means a method of surface preparation or solvent cleaning that is not conducted in a container but performed by physically rubbing the surface with a material such as a rag, paper, sponge or cotton swab moistened with a cleaning material.

(d) **STANDARDS**

(1) Surface Coating and Other Operations

A person shall not conduct any surface coating or other operation, excluding surface preparation and solvent cleaning operations, that may result in emissions of volatile organic compounds unless one of the following requirements is satisfied:

(i) VOC emissions from such operation are less than 5 tons per calendar year, excluding emissions from cleaning operations; or

(ii) VOC emissions are reduced by air pollution control equipment in compliance with all the applicable requirements of Section (e); or

(iii) a surface coating operation is conducted by using air-dried coatings with a VOC content not higher than 420 grams/liter (3.5 lbs/gal) of coating, less water and exempt compounds, as applied, or by using baked coatings with a VOC content not higher than 360 grams/liter (3.0 lbs/gal) of coating, less water and exempt compounds, as applied.

(2) Surface Preparation and Solvent Cleaning Operations

A person shall not conduct a surface preparation or solvent cleaning operation, including wipe cleaning but excluding cleaning of coating application equipment, unless the VOC content of cleaning material is 50 grams/liter (0.42 lbs/gal), or less as used, or the total VOC vapor pressure of cleaning material is 8 mm Hg at 20°C (68°F) or less.

(3) Application Equipment for Surface Coating Operations.

(i) Coating Application Methods.

No surface coatings shall be applied unless one of the following application methods is used:

(A) Hand application method, or

(B) Dip coat, or

(C) Roll coat, or

(D) Flow coat, or

(E) Electrostatic spray, or

(F) High-volume low-pressure (HVLP) spray. Facilities using HVLP spray shall have available on site pressure gauges in proper operating conditions to measure air pressure at the air cup, or have manufacturer's information regarding the correlation between the air cap pressure and the handle inlet pressure, or

(G) Other coating application methods that are demonstrated to have a transfer efficiency equal at a minimum to one of the above application methods, and which are used in such a manner that the parameters under which they were tested are permanent features of the method. Such coating application methods shall be approved in writing by the Air Pollution Control Officer prior to use.

(ii) **Cleaning of Coating Application Equipment**

A person shall not use VOC containing materials for the cleaning of coating application equipment used in operations subject to this rule unless:

(A) The cleaning material contains 50 grams or less of VOC per liter of material; or

(B) The cleaning material is flushed or rinsed through the application equipment in a contained manner that will minimize evaporation into the atmosphere; or

(C) The application equipment or equipment parts are cleaned in a container which is open only when being accessed for adding, cleaning, or removing application equipment or its parts and provided that the cleaned equipment or its parts are drained to the container until dripping ceases; or

(D) A system is used that totally encloses the component parts being cleaned during the washing, rinsing, and draining processes.

(e) **CONTROL EQUIPMENT**

(1) In lieu of complying with the provisions of Section (d) of this rule, an owner/operator may use an air pollution control system which:

(i) Has been installed in accordance with an Authority to Construct; and

(ii) Has a combined emissions capture and control device efficiency of at least 85% by weight.

(2) A person electing to use control equipment pursuant to Subsection (e)(1) shall submit to the Air Pollution Control Officer for approval an Operation and Maintenance plan for the proposed emission control device and emission collection system and receive approval prior to operation of the control equipment. Thereafter, the plan can be modified, with Air Pollution Control Officer approval, as necessary to ensure compliance. Such plan shall:

(i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(1)(ii), such as temperature, pressure and/or flow rate; and

(ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.

(3) Upon approval by the Air Pollution Control Officer, a person subject to the requirements of Section (e) shall implement the Operation and Maintenance plan and shall comply thereafter with the provisions of the approved plan.

**(f) RECORDKEEPING REQUIREMENTS**

(1) Any person conducting operations subject to this rule shall maintain a current list of each coating, solvent, or other VOC containing material in use, which provides the VOC content and all other data necessary to evaluate compliance, including but not limited to:

(i) Manufacturer name and identification for each material containing VOCs; and

(ii) For coatings, other than low-solid coatings, the VOC content expressed in grams per liter (lbs/gal), less water and exempt compounds, as applied and mix ratio of components, if applicable; and

(iii) Actual oven drying temperature, if applicable; and

(iv) For surface preparation and cleaning materials or for low-solid coatings, the VOC content expressed in grams per liter (lbs/gal) of cleaning material or low-solids coating as used, and density and mix ratio of components, if applicable; and

(v) For other materials containing VOCs, other than surface coatings, surface preparation or cleaning materials, the VOC concentration per weight or volume of material.

(2) In addition, any person conducting operations subject to this rule shall:

(i) Maintain monthly records of the amount of each coating used; and

(ii) Maintain monthly inventory, purchasing or dispensing records for each surface preparation and cleaning material or other VOC containing materials used.

(3) In addition, any person using control equipment pursuant to Section (e) of this rule shall maintain daily records of key system operating parameters as approved in the Operation and Maintenance plan pursuant to Subsection (e)(2). Such records shall be sufficient to document continuous compliance with Subsection (e)(1)(ii) during periods of emission producing activities.

(4) All records shall be retained onsite for at least three years and made available to the District upon request.

**(g) MANUFACTURER AND SUPPLIER INFORMATION**

Any person, who manufactures, sells, offers for sale, or supplies to users in San Diego County any coating, coating component, solvent cleaning material, or any other VOC containing material that is used in an operation that may be subject to this rule shall provide the following information to customers:

(1) The manufacturer's name and identification of each coating or coating component, surface preparation material, equipment cleaning material or any other material containing VOCs; and

(2) The VOC content of coatings, as supplied, expressed in grams per liter or pounds per gallon, less water and exempt compounds; and

(3) The VOC content of low-solid coatings, as supplied, surface preparation or solvent cleaning materials or any other materials containing VOCs in grams per liter or pounds per gallon; and

(4) Any other necessary information enabling a user to comply with the requirements of Section (d) of this rule.

**(h) TEST METHODS**

When more than one test method or set of test methods are specified in this Section, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule.

(1) The VOC content of coatings containing more than 50 grams of VOC per liter of material shall be determined by the Environmental Protection Agency (EPA) Reference Method 24 (Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, 40 CFR Part 60, Appendix A) or by the South Coast Air Quality Management District Method 304 (Determination of Volatile Organic Compounds in Various Materials) as they exist on February 24, 2010.

(2) The VOC content of solvents or coatings containing 50 grams of VOC per liter of material or less shall be determined by the South Coast Air Quality Management District (SCAQMD) Method 313 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry), SCAQMD Method 308 (Quantification of Compounds by Gas Chromatography) as they exist on February 24, 2010, or any other alternative test methods approved by EPA, California Air Resources Board, and the Air Pollution Control Officer.

(3) The content of methyl acetate, acetone and parachlorobenzotrifluoride shall be determined in accordance with the ASTM Test Method D6133-02 (2008) (Standard Test Method for Acetone, p-Chlorobenzotrifluoride, Methyl Acetate or t-Butyl Acetate Content of Solventborne and Waterborne Paints, Coatings, Resins, and Raw Materials by Direct Injection Into a Gas Chromatograph), or its most current version.

(4) Calculation of total VOC vapor pressure for materials subject to Subsection (d)(2) of this rule shall be conducted in accordance with the District's "Procedures for Estimating the Vapor Pressure of VOC Mixtures." If the vapor pressure of the liquid mixture, as calculated by this procedure, exceeds the limits specified in Subsection (d)(2), the vapor pressure shall be determined in accordance with ASTM Standard Test Method D2879-97(2007) (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), or its most current version.

(5) Measurements of transfer efficiency pursuant to Subsection (d)(3)(i)(G) of this rule shall be conducted in accordance with the SCAQMD "Spray Equipment Transfer Efficiency Test Procedure for Equipment User," as it exists on February 24, 2010. The equivalency of coating application equipment pursuant to Subsection (d)(3)(i)(G) shall be determined by the SCAQMD "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns" as they exist on February 24, 2010.

(6) The overall control efficiency of air pollution control equipment operated pursuant to Subsection (e)(1)(ii) shall be determined by multiplying the capture efficiency of the emission collection system by the control efficiency of the air pollution control device. The control efficiency of the air pollution control device shall be determined using EPA Test Methods 25A and/or 18 (40 CFR Part 60, Appendix A) and in accordance with a protocol approved by the Air Pollution Control Officer.

(7) Capture efficiency shall be determined according to EPA Test Method 204 and technical document, "Guidelines for Determining Capture Efficiency," dated January 9, 1995. Subsequent to the initial compliance demonstration period, appropriate key system operating parameters as approved by the Air Pollution Control Officer may be used as indicators of the performance of the emission control system.

(i) **COMPLIANCE SCHEDULE**

(1) All new operations or processes subject to this rule shall comply with all applicable requirements upon initial startup.

(2) All existing operations or processes subject to this rule shall comply with all applicable requirements no later than February 24, 2011.

(3) The owner or operator of an existing operation that chooses to comply with the rule by installing air pollution control equipment pursuant to Section (e) of this rule shall:

(i) By August 24, 2010, submit to the Air Pollution Control Officer an application for an Authority to Construct and a Permit to Operate an air pollution control system as specified in Section (e).

(ii) By August 24, 2011, comply with all applicable rule requirements.

**SAN DIEGO AIR POLLUTION CONTROL DISTRICT**

**RULE 67.0.1. ARCHITECTURAL COATINGS**

(Adopted June 24, 2015 & Effective January 1, 2016)

(a) **APPLICABILITY**

(1) Except as provided in Section (b), this rule is applicable to any person who manufactures, blends or repackages, supplies, sells, offers for sale, applies, or solicits the application of any architectural coating for use within San Diego County.

(2) Rule 66.1 shall not apply to any coating subject to this rule.

(b) **EXEMPTIONS**

This rule shall not apply to:

(1) Any architectural coating that is sold or manufactured for use outside of San Diego County or for shipment to other manufacturers for reformulation or repackaging.

(2) Any aerosol coating product.

(3) Emulsion-type bituminous pavement sealers subject to District's Rule 67.7 (Cutback and Emulsified Asphalts), and applied to roads.

(4) Any architectural coating sold in a container with a volume of one liter (1.057 quart) or less, provided that sales data of such coatings are submitted in accordance with the requirements of Subsection (f)(1), upon request of the Executive Officer of CARB or San Diego County Air Pollution Control Officer.

(c) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

(1) "**Adhesive**" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

(2) "**Aerosol Coating Product**" means a pressurized coating containing pigments or resins that dispenses coating product ingredients by means of a propellant, and is packaged in a disposable can either for hand-held application or for use in specialized equipment for ground traffic marking applications.

(3) "**Aluminum Roof Coating**" means 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 lbs/gallon) as determined in accordance with South Coast Air Quality Management District's (SCAQMD) Test Method 318-95, incorporated by reference in Subsection (f)(2)(ii)(G).



(4) “**Appurtenance**” means any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lampposts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, fire escapes and window screens.

(5) “**Architectural Coating**” means coating to be applied to stationary structures and/or their appurtenances at the site of installation (stationary source), to portable buildings including mobile homes at the site of installation, to pavements, or to curbs. Coatings applied in off-site shops or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings.

(6) “**ASTM**” means ASTM International.

(7) “**Basement Specialty Coating**” means 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:

(i) Be capable of withstanding at least 10 psi of hydrostatic pressure as determined in accordance with ASTM D7088-08 incorporated by reference in Subsection (f)(2)(ii)(H); and

(ii) Be resistant to mold and mildew growth determined in accordance with ASTM D3273-12 and achieve a microbial growth rating of 8 or more as determined in accordance with ASTM D3274-09(2013), both incorporated by reference in Subsection (f)(2)(ii)(H).

(8) “**Bitumens**” means black or brown materials including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

(9) “**Bituminous Roof Coating**” means a coating which incorporates bitumens and is labeled and formulated exclusively for roofing.

(10) “**Bituminous Roof Primer**” means a primer which incorporates bitumens, is labeled and formulated exclusively for roofing and intended for preparing a weathered or aged surface or improving the adhesion of subsequent surfacing components.

(11) “**Bond Breaker**” means a coating labeled and formulated for application between layers of concrete to prevent a freshly-poured top layer of concrete from bonding to the layer over which it is poured.

(12) “**CARB**” means the California Air Resources Board.

(13) “**Coating**” means 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.

(14) “**Colorant**” means a dispersion of a concentrated pigment in water, solvent and/or binder that is added to an architectural coating after packaging in sale units to produce the desired color.

(15) “**Concrete Curing Compound**” means a coating labeled and formulated for application to freshly poured concrete to perform the following functions:

- (i) Retard the evaporation of water; or
- (ii) Harden or dust proof the surface of freshly poured concrete.

(16) “**Concrete/Masonry Sealer**” means a clear or opaque coating labeled and formulated primarily for application to concrete and masonry surfaces to perform one or more of the following functions:

- (i) Prevent penetration of water;
- (ii) Provide resistance against abrasion, acids, alkalis, mildew, staining or ultraviolet light;
- (iii) Harden or dustproof the surface of aged or cured concrete.

(17) “**Driveway Sealer**” means a coating labeled and formulated for application to worn asphalt driveway surfaces to perform one or more of the following functions:

- (i) Fill cracks;
- (ii) Seal surface to provide protection;
- (iii) Restore or preserve the appearance.

(18) “**Dry Fog Coating**” means a coating labeled and formulated only for spray application to ensure that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

(19) “**Exempt Compound**” means the same as defined in Rule 2.

(20) “**Faux Finishing Coating**” means a coating labeled and formulated to use as:

- (i) A glaze or textured coating to create artistic effects including, but not limited to, dirt, old age, smoke damage, suede, simulated marble or wood grain; or

(ii) A decorative coating to create a metallic, iridescent, or pearlescent appearance that contains at least 48 g/liter (0.4 lbs/gallon) of pearlescent mica pigment or other pearlescent pigment as applied; or

(iii) A decorative coating to create a metallic appearance that contains less than 48 g/liter (0.4 lbs/gal) of elemental metallic pigment, as applied, determined by SCAQMD Test Method 318-95, incorporated by reference in Subsection(f)(2)(ii)(K); or

(iv) A decorative coating to create a metallic appearance that requires a clear topcoat to prevent the degradation of the finish under the normal use conditions. This coating must contain more than 48 g/liter (0.4 lbs/gal) of elemental metallic pigment, as applied, determined by SCAQMD Test Method 318-95, incorporated by reference in Subsection (f)(2)(ii)(K); or

(v) A clear topcoat to seal and protect a Faux Finishing coating defined in this Subsection (c)(20), sold and used solely as part of a Faux Finishing coating system and labeled in accordance with Subsection (e)(2)(i).

(21) “**Fire-Resistive Coating**” means a coating labeled and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials. This coating category includes sprayed fire-resistive materials and intumescent coatings that are used to bring structural materials into compliance with federal, state, and local building code requirements. The fire resistive coatings shall be tested in accordance with ASTM E119-14, incorporated by reference in Subsection (f)(2)(ii)(I). The fire-resistive coatings and the testing agency must also be approved by building code officials.

(22) “**Flat Coating**” means a coating that is not described 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 in accordance with ASTM D523-14 incorporated by reference in Subsection (f)(2)(ii)(J).

(23) “**Floor Coating**” means an opaque coating 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.

(24) “**Form-Release Compound**” means a coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may be made of wood, metal, or some material other than concrete.

(25) “**Graphic Arts Coating or Sign Paint**” means a coating labeled and formulated for hand application 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.

(26) “**High-Temperature Coating**” means a high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 400°F (204°C).

(27) “**Industrial Maintenance Coating**” means high performance architectural coatings, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to various substrates, including floors, labeled as specified in Subsection (e)(2)(ii) and exposed to one or more of the following extreme environmental conditions:

- (i) Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous), or chronic exposure of interior surfaces to moisture condensation; or
- (ii) Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, chemical mixtures or solutions; or
- (iii) Frequent exposure to temperature above 250°F (121°C); or
- (iv) Frequent heavy abrasion, including mechanical wear and frequent scrubbing with industrial solvents, cleansers, or scouring agents; or
- (v) Exterior exposure of metal structures and structural components.

(28) “**Intumescent**” is a material that swells as a result of heat exposure, thus increasing in volume and decreasing in density.

(29) “**Low-Solids Coating**” means a coating that contains one pound or less of solids per gallon (120 grams or less of solids per liter) of coating material. The VOC content of low-solids coatings shall be calculated as VOC content of material in accordance with Subsection (d)(6)(ii).

(30) “**Magnesite Cement Coating**” means a coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

(31) “**Manufacturer’s Maximum Thinning Recommendation**” means the maximum recommended thinning ratio that is indicated on the label or lid of the coating container.

(32) “**Mastic Texture Coating**” means a coating labeled and formulated to cover holes and minor cracks, conceal surface irregularities and applied in a single coat of at least 0.010 inch (10 mils) dry film thickness.

(33) “**Medium Density Fiberboard (MDF)**” means 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.

(34) “**Metallic Pigmented Coating**” means a coating labeled and formulated to provide a metallic appearance. The coating must contain at least 48 g/liter of coating (0.4 lbs/gallon) of elemental metallic pigment (excluding zinc), as applied and as tested by SCAQMD Test Method 318-95, incorporated by reference in Subsection (f)(2)(ii)(K). This coating category does not include Zinc-Rich Primers or coatings applied to roofs.

(35) “**Multi-Color Coating**” means a coating labeled and formulated to exhibit more than one color when applied in a single coat and packaged in a single container.

(36) “**Nonflat Coating**” means a coating that is not described by any other definition of this rule, and that registers a gloss of 15 or greater on an 85-degree meter and 5 or greater on a 60-degree meter as measured in accordance with ASTM D523-14, incorporated by reference in Subsection (f)(2)(ii)(J).

(37) “**Nonflat-High Gloss Coating**” means a nonflat coating that is not described in any other definition in this rule and that registers a gloss of 70 or above on a 60 degree meter as measured in accordance with ASTM D523-14, incorporated by reference in Subsection (f)(2)(ii)(J). Nonflat-High Gloss coatings must be labeled in accordance to Subsection (e)(2)(iii).

(38) “**Particle Board**” means a composite wood product panel, molding, or other building component composed of cellulosic material (usually wood) in the form of discrete particles, as distinguished from fibers, flakes, or strands, which are pressed together with resin.

(39) “**Pearlescent**” means exhibiting various colors depending on the angle of illumination and viewing, as observed in mother-of-pearl.

(40) “**Plywood**” means a panel consisting of layers of wood veneers or composite core pressed together with resin. Plywood includes panels made by either hot or cold pressing (with resin) veneers to a platform.

(41) “**Post-Consumer Coating**” means a finished coating generated by a business or a consumer that has served its intended end uses, and is recovered from or otherwise diverted from the waste stream for the purpose of recycling.

(42) “**Pretreatment Wash Primer**” means a primer that contains a minimum of 0.5 percent acid, by weight, and labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats. The acidity of a Pretreatment Wash Primer shall be measured by ASTM D1613-06(2012) incorporated by reference in Subsection (f)(2)(ii)(F).

(43) “**Primers, Sealers, and Undercoaters**” mean coatings labeled and formulated for one or more of the following purposes:

- (i) To provide a firm bond between the substrate and the subsequent coatings;

- (ii) To prevent subsequent coatings from being absorbed by the substrate;
- (iii) To prevent harm to subsequent coatings by materials in the substrate;
- (iv) To provide a smooth surface for the subsequent application of coatings;
- (v) To provide a clear finish coat to seal the substrate;
- (vi) To block materials from penetrating into or leaching out of the substrate.

(44) “**Reactive Penetrating Sealer**” means a clear or pigmented coating labeled and formulated for application to above-grade concrete and masonry 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. This coating lines the pores of concrete and masonry with hydrophobic coating, but does not form a surface film.

Reactive Penetrating Sealers must be labeled as such according to the requirements of Subsection (e)(2)(v) and also meet the following requirements:

- (i) Improve water repellency after application on concrete or masonry by at least 80% verified on standardized test specimens in accordance with ASTM C67-14, ASTM C97/C97M-09 or ASTM C140/C140M-14b, incorporated by reference in Subsection (f)(2)(ii)(M); and
- (ii) Not reduce the water transmission rate after application on concrete or masonry by more than 2% verified on standardized test specimens in accordance with ASTM E96/E96M-14, incorporated by reference in Subsection (f)(2)(ii)(M).

In addition, reactive penetrating sealers labeled and formulated for vehicular traffic surface chloride screening must meet the performance criteria in the National Cooperative Highway Research 244 (1981) incorporated by reference in Subsection (f)(2)(ii)(M).

(45) “**Recycled Coating**” means an architectural coating formulated to contain a minimum of 50% by volume of post-consumer coating, with a maximum of 50% by volume of secondary industrial or virgin materials.

(46) “**Residential**” means areas where people reside or lodge, including but not limited to, single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels and hotels.

(47) “**Roof Coating**” means a non-bituminous coating labeled and formulated for application to roofs for the primary purpose of preventing water penetration, reflecting ultraviolet light, or reflecting solar radiation.

(48) “**Rust Preventative Coating**” means a coating labeled and formulated to prevent the corrosion of metal surfaces for the following applications:

- (i) Direct-to-metal coating; or
- (ii) Coating intended for application over rusty, previously coated metal surfaces.

The Rust Preventative Coating category does not include coatings that are required to be applied as a topcoat over a primer, or coatings that are intended for use on wood or other non-metallic surfaces. Rust Preventative Coatings must be used only for metal surfaces and labeled as such in accordance to Subsection (e)(2)(iv).

(49) “**Secondary Industrial Materials**” mean products or by-products of the paint manufacturing processes that are of known composition and have economic value but can no longer be used for their intended purpose.

(50) “**Semitransparent Coating**” means a coating that contains binders and colored pigments and is formulated to change the color of the surface but not conceal its grain patterns or texture.

(51) “**Shellac**” means a clear or opaque coating formulated solely with the resinous secretions of the lac beetle (*Laccifer lacca*), and formulated to dry by evaporation without a chemical reaction.

(52) “**Shop Application**” means 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.

(53) “**Solicit**” means to require for use or to specify, by written or oral contract.

(54) “**Specialty Primers, Sealers, and Undercoaters**” mean coatings formulated for application to a substrate to block water-soluble stains resulting from fire damage, smoke damage, or water damage.

(55) “**Stain**” means a semitransparent or opaque coating labeled and formulated to change the color of a surface, but not to conceal the grain pattern or texture.

(56) “**Stone Consolidant**” means a coating labeled and formulated for application to stone substrates to repair historical structures that have been damaged by weathering or other decay mechanisms. Stone Consolidants penetrate into stone substrates to create bonds between particles and consolidate deteriorated material. Stone Consolidants are for professional use only and must be labeled according to the requirements of Subsection (e)(2)(vi). Stone Consolidants must be specified and used in accordance with ASTM E2167-01(2008), incorporated by reference in Subsection (f)(2)(ii)(N).

(57) “**Swimming Pool Coating**” means a coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals. Swimming pool coatings include coatings used for swimming pool repair and maintenance.

(58) “**Tint Base**” means an architectural coating to which colorant is added after packaging in sale units to produce a desired color.

(59) “**Traffic Marking Coating**” means a coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways. This coating category also includes Methacrylate Multicomponent Coatings used as traffic marking coatings. The VOC content of Methacrylate Multicomponent Coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR Part 59, Subpart D, Appendix A, incorporated by reference in Subsection (f)(2)(ii)(L).

(60) “**Tub and Tile Refinish Coating**” means a clear or opaque coating labeled and formulated exclusively for refinishing the surface of a bathtub, shower, sink, or countertop. Tub and Tile Refinish coatings must have all of the following properties:

(i) Scratch hardness of 3H or more and a gouge hardness of 4H or more. Scratch hardness must be determined on bonderite 1000, in accordance with ASTM D3363-05(2011)e2, incorporated by reference in Subsection (f)(2)(ii)(O).

(ii) Weight loss of 20 milligrams or less after 1000 cycles. Weight loss must be determined with CS 17 wheels on bonderite 1000, in accordance with ASTM D4060-14, incorporated by reference in Subsection (f)(2)(ii)(O).

(iii) Withstand 1000 hours of more of exposure, with few or no #8 blisters. This must be determined on unscribed bonderite, in accordance with ASTM D4585/D4585M-13 and ASTM D714-02(2009), incorporated by reference in Subsection (f)(2)(ii)(O).

(iv) Adhesion rating of 4B or better after 24 hours recovery. Adhesion rating must be determined by on unscribed bonderite, in accordance with ASTM D4585/D4585M-13 and ASTM D3359-09e2, incorporated by reference in Subsection (f)(2)(ii)(O).

(61) “**Veneer**” means 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.

(62) “**Virgin Materials**” mean materials that contain no secondary industrial materials or post-consumer coatings.

(63) “**Volatile Organic Compound (VOC)**” means the same as defined in Rule 2.



(64) “**VOC Content Actual**” means the weight of VOC per total volume of coating, including any water and exempt compounds, and calculated as specified in Subsection (d)(6)(ii).

(65) “**VOC Content Regulatory**” also known as “VOC content, less water and exempt compounds”, means the weight of VOC per volume of coating, excluding the volume of water and exempt compounds, and calculated as specified in Subsection (d)(6)(i).

(66) “**VOC Content of Material**” means the same as VOC content actual.

(67) “**Waterproofing Membrane**” means a clear or opaque coating labeled and formulated for application to concrete and masonry surfaces to provide a seamless coat that prevents any penetration of water into the substrate. These coatings are intended for the following waterproofing applications: below-grade surfaces, between concrete slabs, inside tunnels, inside concrete planters, and under flooring materials. Waterproofing Membranes must meet the following criteria:

(i) Coating must be applied in a single coat of at least 25 mils (0.025 inch) dry film thickness; and

(ii) Coating must meet or exceed the requirements of ASTM C836/C836M-12 incorporated by reference in Subsection (f)(2)(ii)(P).

The Waterproofing Membranes do not include topcoats that meet the definition of Concrete/Masonry Sealers (e.g., parking deck topcoats, pedestrian deck topcoats).

(68) “**Wood Coating**” means a coating labeled according to the requirements of Subsection (e)(2)(vii) and formulated only for application to wood substrates. The Wood Coating category includes the following clear and semitransparent coatings: lacquers, varnishes, sanding sealers, penetrating oils, clear stains and wood conditioners used as undercoats, and wood sealers used as topcoats. The Wood Coating category also includes the following opaque coatings: opaque lacquers, opaque sanding sealers and opaque lacquer undercoaters. The Wood Coating 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.

(69) “**Wood Preservative**” means 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 Section 136, *et seq.*) and with the California Department of Pesticide Regulation.

(70) “**Wood Substrate**” means a product made of wood, particleboard, plywood, medium density fiberboard, rattan, wicker, bamboo, or composite products with exposed wood grain. Wood Substrate does not include items comprised of simulated wood.

(71) “**Zinc-Rich Primer**” means a coating labeled according to the requirements of Subsection (e)(2)(viii) that also meets all of the following specifications:

- (i) Contains at least 65 weight percent of total solids as metallic zinc powder or zinc dust;
- (ii) Formulated for application to metal substrates to provide a firm bond between the substrate and subsequent coatings; and
- (iii) Intended for professional use only and labeled as such in accordance with the labeling requirements of Subsection (e)(2)(viii).

(d) **STANDARDS**

(1) VOC Content Limits

With the exception of low-solids coatings, VOC content limits of architectural coatings in Table 1 below are expressed as VOC content regulatory. VOC content limits of low-solids coatings are expressed as VOC content actual (material).

Except as provided in Section (b) and Subsections (d)(2), (d)(3) and (d)(4) no person shall:

- (i) manufacture, blend, or repackage for use within San Diego County;
- (ii) supply, sell, or offer for sale within San Diego County; or
- (iii) solicit for application or apply within San Diego County, any architectural coating with a VOC content in excess of the corresponding limits specified below:

**Table 1. VOC Content of Coatings\***

<b>Coating Categories</b>	<b>VOC</b>	<b>Content</b>
<b>General Coatings</b>	<b>Grams/liter</b>	<b>Lbs/gallon</b>
Flat Coatings	50	0.4
Nonflat Coatings	100	0.8
Nonflat-High Gloss Coatings	150	1.3
<b>Specialty Coatings</b>	<b>Grams/liter</b>	<b>Lbs/gallon</b>
Aluminum Roof Coatings	400	3.3
Basement Specialty Coatings	400	3.3
Bituminous Roof Coatings	50	0.4
Bituminous Roof Primers	350	2.9
Bond Breakers	350	2.9
Concrete Curing Compounds	350	2.9
Concrete / Masonry Sealers	100	0.8

<b>Coating Categories</b>	<b>VOC</b>	<b>Content</b>
<b>Specialty Coatings</b>	<b>Grams/liter</b>	<b>Lbs/gallon</b>
Driveway Sealers	50	0.4
Dry Fog Coatings	150	1.3
Faux Finishing Coatings	350	2.9
Fire Resistive Coatings	350	2.9
Floor Coatings	100	0.8
Form Release Compounds	250	2.1
Graphic Arts Coatings (Sign Paints)	500	4.2
High Temperature Coatings	420	3.5
Industrial Maintenance Coatings	250	2.1
Low-solids Coatings**	120	1.0
Magnesite Cement Coatings	450	3.8
Mastic Texture Coatings	100	0.8
Metallic Pigmented Coatings	500	4.2
Multi-color Coatings	250	2.1
Pretreatment Wash Primers	420	3.5
Primers, Sealers and Undercoaters	100	0.8
Reactive Penetrating Sealers	350	2.9
Recycled Coatings	250	2.1
Roof Coatings	50	0.4
Rust Preventative Coatings	250	2.1
Shellacs: Clear	730	6.1
Opaque	550	4.6
Specialty Primers, Sealers and Undercoaters	100	0.8
Stains	250	2.1
Stone Consolidants	450	3.8
Swimming Pool Coatings	340	2.8
Traffic Marking Coatings	100	0.8
Tub and Tile Refinish Coatings	420	2.9
Waterproofing Membranes	250	2.1
Wood Coatings	275	2.3
Wood Preservatives	350	2.9
Zinc-Rich Primers	340	2.8

\*Thinned to the manufacturer's maximum thinning recommendations excluding any colorant added to tint bases.

\*\*VOC content of low-solids coatings is calculated as VOC content actual (material).

## (2) Coatings Not Listed in Table I

For any coating that does not conform with any of the definitions for the specialty coating categories listed in Table I, the VOC content limit shall be determined by classifying this coating, based on its gloss, as either a flat coating, nonflat coating or a nonflat-high gloss coating, defined in Subsections (c)(22), (c)(36) or (c)(37), as applicable. The corresponding VOC content limit for a coating category classified by this determination shall apply.

(3) Most Restrictive VOC Content Limits

If a coating meets the definition in Section (c) for one or more specialty coating categories listed in Table 1, then that coating is not required to meet the VOC Content limits for Flat, Nonflat, or Nonflat-High Gloss coatings, but is required to meet the VOC content limit for the applicable specialty coating category listed in Table 1 then the most restrictive VOC content limits shall apply.

With the exception of the specialty category coatings specified below, if a coating is recommended for use in more than one specialty categories listed in Table 1, the most restrictive VOC content limit shall apply. This requirement applies to usage recommendations that appear anywhere on the coating container, or on any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by the manufacturer or anyone acting on his/her behalf.

This provision does not apply to the specialty coating categories specified below:

- (i) Aluminum roof coatings,
- (ii) Bituminous roof primers,
- (iii) High-temperature coatings,
- (iv) Industrial maintenance coatings,
- (v) Low-solids coatings,
- (vi) Metallic pigmented coatings,
- (vii) Pretreatment wash primers,
- (viii) Shellacs,
- (ix) Specialty primers, sealers, and undercoaters
- (x) Wood coatings,
- (xi) Wood preservatives, and
- (xii) Zinc-Rich primers.

(4) Sell-Through of Coatings

A coating manufactured prior to January 1, 2016 may be sold, supplied, or offered for sale for up to three years after January 1, 2016, provided that the coating complied with all applicable provisions of current Rule 67.0 (effective 12/12/01, incorporated by reference). Such coating may also be applied at any time, both before and after January 1, 2016.

This Subsection does not apply to any coating that does not display the date or date-code required by Subsection (e)(1)(i).

(5) Thinning

No person who applies or solicits the application of any architectural coating shall apply or specify the application of a coating that is thinned to exceed the applicable VOC limit specified in Table 1.

(6) Calculations of VOC Content of Architectural Coatings

For the purpose of determining compliance with the VOC content limits in Table I, the VOC content of a coating shall be calculated as follows:

(i) With the exception of low-solids coatings, the VOC content of architectural coatings, also referred to as VOC content regulatory, shall be calculated as weight of VOC per volume of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds, according to the following equation:

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

Where:

VOC content	=	grams of VOC per liter of coating
$W_s$	=	weight of all 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

(ii) For low-solids coatings, the VOC content, also referred to as VOC actual, shall be calculated as weight of VOC per volume of coating, thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compound:

$$\text{VOC content}_{ls} = (W_s - W_w - W_{ec}) / (V_m)$$

Where:  $VOC\ content_{ls}$  = grams of VOC per liter of coating  
 $W_s$  = weight of all 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

(iii) The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.

(iv) If the manufacturer does not recommend thinning, the VOC content must be calculated for the coating as supplied. If the manufacturer recommends thinning, the VOC content regulatory shall be calculated by including the maximum amount of thinning solvent as recommended by the manufacturer.

(v) The VOC content of a multicomponent coating shall be calculated as mixed or catalyzed.

(vi) If the coating contains silanes, siloxanes or other ingredients that generate ethanol or other VOCs during the curing process, the calculated VOC content must include the VOCs emitted during curing.

(7) Painting Practices

All persons using containers for storing, transferring or otherwise utilizing architectural coatings, thinners, cleanup solvents, or other materials which contain volatile organic compounds shall comply with the requirements of Rule 67.17 – Storage of Materials Containing Volatile Organic Compounds.

(e) **ADMINISTRATIVE REQUIREMENTS**

(1) General Container Labeling Requirements:

Each manufacturer of any architectural coating subject to this rule shall display the information listed in Subsections (e)(1)(i) through (e)(2)(viii) on the coating container (or its label) in which the coating is sold or distributed.

(i) **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 CARB and make it available on request to the Air Pollution Control Officer.

(ii) **Thinning Recommendations:** A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of 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.

(iii) **VOC Content:**

VOC content of coatings shall be calculated using equations in Subsection (d)(6), as applicable.

Each coating container subject to this rule shall display one of the following values in grams of VOC per liter of coating:

(A) Maximum VOC content as determined from all potential product formulations; or

(B) VOC content as determined from actual formulation data for this coating; or

(C) VOC content as determined using test methods specified in Subsection (f)(2);

(D) If the manufacturer does not recommend thinning, the container must display the VOC content, as supplied. If the manufacturer recommends thinning, the container must display the VOC content, including the maximum recommended amount of thinning solvent. This requirement does not apply to the thinning of coatings with water;

(E) For multicomponent coatings the container must display the VOC content as a mixture of all components including catalysts;

(F) If a coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the coating's curing process, the VOC content must include the amount of VOCs emitted during curing.

(2) Additional Container Labeling Requirements for Specified Coatings subject to this rule:

(i) **Faux Finishing Coatings:** The labels of all clear topcoat faux finishing coatings shall prominently display the following statement: "This product can only be sold or used as a part of a Faux Finishing coating system".

(ii) **Industrial Maintenance Coatings:** Each manufacturer of industrial maintenance coatings shall display on the label or lid of the container in which the coating is sold or distributed one or more of the statements listed below:

(A) "For industrial use only."

(B) "For professional use only."

(C) "Not for Residential Use" or "Not Intended For Residential Use."

(iii) **Nonflat–High Gloss Coatings:** The labels of nonflat–high gloss coatings shall prominently display the words “High Gloss.”

(iv) **Rust Preventative Coatings:** The labels of rust preventative coatings shall prominently display the statement “For Metal Substrates Only.”

(v) **Reactive Penetrating Sealers:** The labels of reactive penetrating sealers shall prominently display the statement “Reactive Penetrating Sealer”.

(vi) **Stone Consolidants:** The labels of Stone Consolidants shall prominently display the statement “Stone Consolidant – For Professional Use Only”.

(vii) **Wood Coatings:** The labels of Wood Coatings shall prominently display the statement “For Wood Substrates Only”.

(viii) **Zinc-Rich Primers:** The labels of Zinc Rich Primers shall prominently display one or more of the statements listed below:

(A) “For industrial use only.”

(B) “For professional use only.”

(C) “Not for Residential Use” or “Not Intended For Residential Use.”

(f) **REPORTING AND TESTING REQUIREMENTS**

(1) Sales Data

A responsible official from each coating manufacturer shall upon request of the Executive Officer of CARB, or his/her delegate, provide data concerning the distribution and sales of architectural coatings. The responsible official shall within 180 days provide the following information, including but not limited to:

(i) The name and mailing address of the manufacturer;

(ii) The name, mailing address and telephone number of a contact person;

(iii) The name of a coating product as it appears on the label and the applicable coating category;

(iv) Whether the product is marketed for interior or exterior use or both;

(v) The number of gallons of coatings sold in California in containers with a volume greater than one liter (1.057 quart) and in containers with a volume equal or smaller than one liter (1.057 quart);



(vi) The VOC content of coatings, both actual and regulatory, in grams per liter.

If thinning is recommended, list the VOC actual and regulatory content calculated using maximum recommended thinning. For a multicomponent coating, list the VOC content as mixed or catalyzed. If coating containers with a volume greater than one liter and those with a volume equal to or less than one liter have a different VOC content, list them separately;

(vii) The names and Chemical Abstract Service (CAS) numbers of the VOC constituents in the coating;

(viii) The names and CAS numbers of exempt compounds, as listed in District Rule 2;

(ix) Whether the product is marketed as containing 100% solids, or as solvent borne or waterborne;

(x) Description of resins or binders in the coating;

(xi) Whether the coating is single-component or multi-component;

(xii) The density of the coating in pounds per gallon;

(xiii) Weight percent of solids, all volatile materials, water and any exempt compounds, as applicable;

(xiv) Volume percent of solids, water and exempt compounds, as applicable.

All sales data listed in Subsection (f)(1) shall be maintained by a responsible official for a minimum of three years. Sales data submitted by the responsible official to the Executive Officer of CARB may be claimed as confidential and such information shall be handled in accordance to the procedures specified in Title 17, California Code of Regulations, Sections 91000 through 91022.

## (2) Test Procedures

The procedures and test methods listed below shall be used to demonstrate compliance with this rule.

### (i) **VOC Content of Coatings:**

Laboratory determination of the VOC content of coatings, with the exception of methacrylate multicomponent coatings, shall be conducted by the EPA Test Method 24, incorporated by reference in Subsection (f)(2)(ii)(A). To determine the physical properties of a coating the standard test methods incorporated by reference in the EPA Test Method 24 shall be used.

As an alternative, SCAQMD Method 304-91 (1996), incorporated by reference in Subsection (f)(2)(ii)(B) may be used.

The exempt compounds content shall be determined by SCAQMD Method 303-91 (revised in 1996) and incorporated by reference in Subsection (f)(2)(ii)(C), or BAAQMD Method 43 (revised in 2005) or BAAQMD Method 41 (revised in 2005), incorporated by reference in Subsections (f)(2)(ii)(D) and (E), correspondingly.

To calculate the VOC content of a coating, the manufacturer may also use formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Test Method 24 and any other means for determining VOC content, the Test Method 24 results will govern, except when an alternative method is approved as specified in Subsection (f)(2)(iii). The Air Pollution Control Officer may also require the manufacturer to conduct analysis according to EPA Test Method 24.

(ii) **Incorporated Test Methods:** The following test methods are incorporated by reference herein, and shall be used to test coatings subject to provisions of this rule. The most recent version of the ASTM incorporated test methods may be used instead of those specified below.

(A) VOC Content of Coatings: The VOC content of a coating shall be determined by EPA Test 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”.

(B) Alternative Test for VOC Content of Coatings: Alternatively, the VOC content of coatings may be determined by SCAQMD Method 304-91 (1996), “Determination of Volatile Organic Compounds (VOC) in Various Materials”, SCAQMD “Laboratory Methods of Analysis for Enforcement Samples”.

(C) Exempt Compounds: The content of compounds exempt under EPA Test Method 24 shall be analyzed by SCAQMD Method 303-91 (1996), “Determination of Exempt Compounds”, SCAQMD “Laboratory Methods of Analysis for Enforcement Samples”.

(D) Exempt compounds – Siloxanes: Cyclic, branched, or linear completely methylated siloxanes shall be analyzed by BAAQMD Test Method 43, “Determination of Volatile Methylsiloxanes in Solvent-based Coatings, Inks, and Related Materials”, BAAQMD Manual of Procedures, Volume III, adopted 05/18/2005.

(E) Exempt Compounds – Parachlorobenzotrifluoride (PCBTF): PCBTF shall be analyzed by BAAQMD Test Method 41, “Determination of Volatile Organic Compounds in Solvent-based Coatings and Related Materials Containing Parachlorobenzotrifluoride”, BAAQMD Manual of Procedures, Volume III, adopted 05/18/2005.

(F) Acid Content of Coatings: See Subsection (c)(42).  
The acid content of Pretreatment Wash Primer shall be determined by ASTM D1613-06(2012), “Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products”.

(G) Aluminum Roof Coatings: See Subsection (c)(3).  
Aluminum pigment content shall be determined in accordance with SCAQMD Test Method 318-95 (1996), “Determination of Weight Percent Elemental Metal in Coatings by X-ray Diffraction”, SCAQMD “Laboratory Methods of Analysis for Enforcement Samples”.

(H) Basement Specialty Coatings: See Subsection (c)(7).  
Hydrostatic Pressure Resistance of Basement Specialty Coatings shall be determined by ASTM D7088-08, “Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry”.

Mold and Mildew Growth Resistance of Basement Specialty Coatings shall be determined by ASTM D3273-12, “Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber”, and ASTM D3274-09(2013), “Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (fungal or algal) Growth, or Soil and Dirt Accumulation”.

(I) Fire Resistance Rating: See Subsection (c)(21).  
The fire resistance rating of fire-resistive coatings shall be determined by ASTM E119-14, “Standard Test Methods for Fire Tests of Building Construction and Materials”.

(J) Gloss Determination: See Subsections (c)(22), (c)(36), and (c)(37).  
The gloss of flat, nonflat and nonflat-high gloss coatings shall be determined by ASTM D523-14, “Standard Test Method for Specular Gloss”.

(K) Metal Content of Coatings: See Subsections (c)(20) and (c)(34).  
The metal content of a coating shall be determined by SCAQMD Test Method 318-95 (1996), “Determination of Weight Percent Elemental Metal in Coatings by X-ray Diffraction”, SCAQMD “Laboratory Methods of Analysis for Enforcement Samples”.

(L) Methacrylate Multicomponent Coatings: See Subsection (c)(59). The VOC content of Methacrylate Multicomponent Coatings used as traffic marking coatings shall be analyzed by the procedures described in 40 CFR Part 59, Subpart D, Appendix A, “Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coating”.

Please note that this method has not been approved for Methacrylate Multicomponent Coatings used for purposes other than traffic marking coatings or for other classes of multicomponent coatings.

(M) Reactive Penetrating Sealer: See Subsection (c)(44). The water repellency of Reactive Penetrating Sealers shall be determined by ASTM C67-14, “Standard Test Method for Sampling and Testing Brick and Structural Clay Tile”; or ASTM C97/C97M-09, “Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone”; or ASTM C140/C140M-14b “Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units”.

The water vapor transmission of Reactive Penetrating Sealers shall be determined by ASTM E96/E96M-14, “Standard Test Methods for Water Vapor Transmission of Materials”.

The chloride screening for Reactive Penetrating Sealers shall be determined using the National Cooperative Highway Research Report 244 (1981), “Concrete Sealers for the Protection of Bridge Structures”.

(N) Stone Consolidants: See Subsection (c)(56). Selection and use of Stone Consolidants shall be determined by ASTM E2167-01(2008), “Standard Guide for Selection and Use of Stone Consolidants”.

(O) Tub and Tile Refinish Coating: See Subsection (c)(60). The scratch hardness of Tub and Tile Refinish Coatings shall be measured by ASTM D3363-05(2011)e2, “Standard Test Method for Film Hardness by Pencil Test”.

The abrasion resistance of Tub and Tile Refinish Coatings shall be determined by ASTM D4060-14, “Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser”.

The adhesion of Tub and Tile Refinish Coatings shall be determined by ASTM D4585/D4585M-13, “Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation” and ASTM D3359-09e2, “Standard Test Methods for Measuring Adhesion by Tape Test”.

The water resistance of Tub and Tile Refinish Coatings shall be determined by ASTM D4585/D4585M-13, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation", and ASTM D714-02(2009), "Standard Test Methods for Evaluating Degree of Blistering of Paints".

(P) Waterproofing Membranes: See Subsection (c)(67). The properties of waterproofing membranes shall be determined by ASTM C836/C836M-12, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course".

(iii) **Alternative Test Methods:**

Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Subsection (f)(2) after review and approval in writing by the District, CARB, and EPA, may also be used.

(g) **COMPLIANCE SCHEDULE**

(1) All persons subject to this rule shall be in compliance with all the rule's provisions by January 1, 2016.

(2) Prior to January 1, 2016, any coating that meets all the requirements of this rule shall be exempt from the current Rule 67.0 (effective 12/12/01).

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 67.1 - ALTERNATIVE EMISSION CONTROL PLANS**

(Effective 5/21/91; Rev. Adopted & Effective 5/15/96)

### **(a) APPLICABILITY**

Except as provided for in Section (g), this rule is applicable to any stationary source conducting operations subject to any of the following rules, when an owner or operator elects to comply with the corresponding subsections of these rules by means of an alternative emission control plan (AECP):

67.3 - Coating of Metal Parts and Products, Subsection (d)(1),

67.4 - Metal Container, Metal Closure and Metal Coil Coating Operations, Section (d),

67.5 - Paper, Film and Fabric Coating Operations, Subsection (d)(1),

67.9 - Aerospace Coating Operations, Subsection (d)(1),

67.11 - Wood Products Coating Operations, Subsection (d)(2),

67.16 - Graphic Arts Operations, Section (d),

67.18 - Marine Coating Operations, Subsections (d)(1) and (d)(2).

### **(b) DEFINITIONS (Rev. Effective 5/15/96)**

For the purpose of this rule the following definitions shall apply:

1. **"Alternative Emission Control Plan (AECP)"** means a plan, which allows an owner or operator of a stationary source to demonstrate an alternative method of compliance with one or more volatile organic compound (VOC) content limits or VOC emission limits in the applicable District rule.
2. **"Baseline Emissions"** means VOC emissions expressed in pounds per day, calculated according to Subsection (c)(2)(vi) of this rule. Baseline emissions are the least of either:
  - (i) actual average VOC emissions from the affected operations per operating day during the two years prior to submittal of the AECP, or
  - (ii) allowable VOC emissions from the affected operations under the applicable District rule, or

- (iii) allowable VOC emissions from the affected operations under the applicable State Implementation Plan (SIP) provision.
3. **"Calendar Day"** means a day starting at twelve midnight and continuing through to the subsequent twelve midnight hour.
  4. **"Exempt Compounds"** means the same as defined in Rule 2.(Rev. Effective 5/15/96)
  5. **"Federally Enforceable"** means all limitations and conditions which are enforceable by the Administrator of the U.S. Environmental Protection Agency (EPA) including those requirements developed pursuant to 40 CFR Parts 60 and 61, those requirements within the applicable State Implementation Plan, and any permit conditions established pursuant to permits issued by EPA or permits issued in accordance with an EPA approved version of these Rules and Regulations.
  6. **"Modification"** means any physical change in the equipment subject to an AECF, including addition of any new equipment or deletion of existing equipment, or in the method of operation thereof, which would result in a change of the amount of VOC emissions from such equipment or operation and for which an Authority to Construct or modified Permit to Operate is required. Routine maintenance and/or repair shall not be considered a physical change. The following changes shall not be considered a change in the method of operation provided that such changes are not contrary to any permit conditions:
    - (i) an increase in production rate and/or increase in hours of operation, and
    - (ii) use of alternate materials containing VOC's provided that VOC emissions resulting from such use do not exceed limits allowable under the approved AECF.
  7. **"Permit Unit"** means an identifiable piece of air pollutant emitting equipment including associated air pollution control equipment, or any operation that produces and/or emits air pollutants, which:
    - (i) requires a written permit pursuant to Rule 10, and
    - (ii) is in operation, exempt from the permit requirements pursuant to the provisions of Rule 11 and is proposed to be included in the AECF. Such units will require permits to operate to be issued concurrently with the approved AECF.
  8. **"State Implementation Plan (SIP)"** means the State prepared plan, approved by the EPA, detailing how National Ambient Air Quality Standards will be achieved and maintained.
  9. **"Stationary Source"** means a unit or an aggregation of units of nonvehicular air contaminant emitting articles, machines, equipment or other contrivances, all of which are located on one property or adjoining properties under the same ownership or entitlement to use and operate. This includes any unit or aggregation of units in the California Coastal Waters off San Diego County.
  10. **"Transfer Efficiency"** means the ratio of the weight or volume of coating solids adhering to the surface being coated to the total weight or volume of coating solids used in an application step, expressed as a percentage.
  11. **"Volatile Organic Compound (VOC)"** means any volatile compound containing at least one atom of carbon,

excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and carbonates, ammonium carbonate and exempt compounds which can be emitted to the atmosphere during operations or activities subject to rules specified in Section (a).

**(c) REQUIREMENTS**

1. An owner or operator of a stationary source may demonstrate compliance with the VOC emission limitations of any of the District rules identified in Section (a) of this rule by means of an AECP, provided that the owner or operator:
  - (i) Submits an application for an AECP which:
    - (A) provides at least a 20 percent reduction in VOC emissions from the affected operations as compared to the baseline emissions on each and every calendar day of operation. Baseline emissions shall be calculated according to Subsection (c)(2)(vi) of this rule; and
    - (B) allows a determination of compliance on a daily basis.
  - (ii) Submits applications for new or modified permits to operate for all permit units to be included in the AECP;
  - (iii) Receives written approval of the AECP from the Air Pollution Control Officer prior to AECP implementation. Such approval shall include federally enforceable operating conditions applied to an permits to operate for permit units included in the approved AECP; and
  - (iv) Complies with all specified terms, conditions and/or requirements of the AECP.
2. The owner or operator of any source seeking to achieve compliance by use of an approved AECP shall provide all data, records, and other information necessary to determine the approvability of an alternative emission control plan including but not limited to:
  - (i) The applicable District rule;
  - (ii) A list of equipment subject to the alternative emission control plan located at the stationary source;
  - (iii) Daily hours of operations of affected equipment per every operating calendar day for the two years directly preceding the source's application for AECP.
  - (iv) Daily records of usage of each coating and thinner in accordance with Section (d) of this rule for a period of two years directly preceding the source's application for AECP;
  - (v) For all add-on VOC emission control equipment - operating records, key operating parameters including but



not limited to temperature, pressure and/or flow rates, source tests, laboratory analyses and monitoring data sufficient to demonstrate the claimed VOC emission reduction efficiency, for a period of two years directly preceding the source's application for AECP; and

(vi) Calculations showing baseline emissions for each piece of equipment included in the AECP. The baseline emissions (BE) shall be calculated according to the following:

$$\text{BE (lbs VOC/day)} = \text{EF (lbs VOC/gal solids)} \times \text{CU (gal solids/hr)} \times \text{HR (hrs/day)}$$

where:

EF - emission factor (EF) in pounds of VOC emitted per gallon (or pound) of coating solids as applied,

CU - average hourly capacity utilization in gallons (or pounds) of coating solids per hour,

H - number of hours of operation per operating day

Emission factor, capacity utilization and hours of operation used for baseline calculations shall be either actual values, values allowable by the applicable District rule or allowable VOC emissions under the applicable SIP provision, whichever is lowest. Actual values for CU and H shall be determined using average data for two years directly preceding the source's application for AECP.

Sources lacking records of operating hours may substitute the above calculations for VOC emissions with records of VOC emissions from usage of coatings, as applied, expressed as pounds VOC per day from each piece of equipment included in the AECP. VOC emissions shall be calculated on a solids basis per every operating calendar day for the two years directly preceding the source's application for AECP. Baseline emissions for each piece of equipment included in the AECP shall be the least of either actual VOC emissions, or allowable VOC emissions from the affected operations under the applicable District rule, or allowable VOC emissions from the affected operations under the applicable State Implementation Plan (SIP) provision.

Net baseline emissions included in the AECP are the sum of the baseline emissions from all equipment subject to AECP.

(vii) Calculations showing how the proposed 20 percent VOC emission reduction from the baseline emissions from affected operations will be achieved and maintained each calendar day of operation under an AECP.

3. Any emission reductions specified in an AECP shall meet the following criteria:

(i) Include VOC emissions only and result from activities governed by only one source-specific District rule;

(ii) Be enforceable. To meet this requirement, the operating conditions which qualify the AECP for approval shall be included in a Permit to Operate enforceable by the District, Air Resources Board (ARB) and Environmental Protection Agency (EPA);

(iii) Be permanent. To meet this requirement, the VOC emission reductions shall be below baseline emissions by at least 20% on each and every day of operation under the approved AECP;

(iv) Be quantifiable. To meet this requirement, the VOC emission reductions shall be determined using methods specified in Section (e) of this rule, shall be demonstrated through daily records and shall be based on a consistent averaging time, not to exceed 24 hours; and

(v) Be surplus. To meet this requirement, the VOC emission reductions in AECP shall not be mandated by current regulations incorporated in the SIP, not already relied upon for SIP planning purposes, not banked as an emission reduction credit, and not used by the source to meet any other regulatory requirement. Surplus emission reductions shall be determined using as a reference appropriate baseline emissions calculated pursuant to Subsection (c)(2)(vi); and

(vi) Be real. To meet this requirement, the VOC emission reductions pertaining to AECP shall not likely be replaced by the VOC emission increases within the District.

(vii) Be calculated on a mass or volume of solids basis. To meet this requirement, the VOC content of materials, the amount of VOC emissions and emission reductions shall be calculated and reported as pounds of VOC per pound or gallon of coating solids as applied, excluding water and exempt compounds.

4. Each AECP approved by the District shall be referred to ARB by the Air Pollution Control Officer for submittal to EPA as a source - specific revision to the State Implementation Plan. Sources which obtain an approved AECP from the District remain subject to federal enforcement of existing SIP limits pending federal approval of the AECP as a source - specific SIP revision pursuant to Section 110(a)(3)(A) of the Clean Air Act.
5. The owner or operator of a stationary source applying for approval of AECP shall be subject to the applicable rule's specific requirements pending District and EPA approval of a submitted AECP unless the source is operating under the provision of Subsection (g)(2).
6. Current permits to operate for any permit unit included in the AECP shall be modified and new permits shall be issued incorporating the provisions of the approved AECP. If the AECP encompasses operations or equipment not previously subject to permit, such operations or equipment shall require permits.
7. Applications for an authority to construct and permit to operate shall be submitted for any new or modified add-on control equipment to be installed under the AECP.
8. A new, modified or updated AECP shall be submitted:
  - (i) Prior to modification of equipment subject to the AECP which may result in the increase of VOC emissions; or
  - (ii) Within 60 days following the date the source-specific rule pertaining to Section (a) and relating to the AECP is amended or an applicable lower VOC content or VOC emission limit goes into effect; or
  - (iii) After equipment shutdown or production curtailment related to the equipment included in AECP, with the new baseline calculations reflecting such shutdown or curtailment.

9. Any new equipment at an existing stationary source, or any existing equipment at such source, which was not in operation for the two years directly preceding the source's application for AECP can be added to an approved AECP provided that, until two years of daily operating records for such new or existing equipment have been established, the daily VOC emission limit of the existing approved AECP is not exceeded. After two years of daily operating records such new or existing equipment have been established, the operator of such equipment may apply to modify the AECP to include the baseline emissions established for such equipment.

**(d) RECORDKEEPING**

1. The owner or operator of any permit unit that is achieving compliance with a District rule by using an approved AECP shall maintain records of all information necessary to demonstrate daily compliance, including but not limited to:
  - (i) a current list of coatings and thinners; and
  - (ii) type and/or category of coatings and thinners used; and
  - (iii) mix ratio of components; and
  - (iv) allowable and actual content of VOC, water and exempt compounds for each coating and thinner. VOC content of coatings shall be expressed in grams of VOC per liter of coating as applied, less water and less exempt compounds. VOC content of thinners shall be expressed in grams of VOC per liter of thinner.
2. The owner or operator of any permit unit that is achieving compliance with a District rule by using an approved AECP shall maintain daily records showing:
  - (i) The amount of coatings and thinners used for each operation; and
  - (ii) The calculations of allowable and actual VOC emissions and the VOC emission reduction compared to baseline.

All records pertaining to Subsection (c)(4) shall be retained on site for at least three years and shall be submitted to the District immediately upon request .

**(e) TEST METHODS**

1. Measurements of VOC content of coatings shall be conducted and reported in accordance with EPA Test Method 24 (40 CFR 60, Appendix A) as it exists on May 21, 1991, and ASTM Test Method D 4457-85.
2. Calculations of the VOC content of coatings less water and less exempt compounds shall be performed in accordance with ASTM Standard Practice D 3960-87 for determining VOC content of paints and related coatings.
3. Measurements of VOC emissions and collection efficiency of add-on control devices shall be conducted in accordance with EPA Methods 18 and 25 (40 CFR 60, Appendix A) and with EPA Guidelines for Developing Capture Efficiency Protocol, 55 FR 26865, June 29, 1990, as they exist on May 21, 1991.

The same test method and averaging time shall be used to quantify emission reductions both before and after add-on control device.

**(f) RESTRICTIONS**

1. An AECP shall not result in an increase in any baseline emission of an air pollutant regulated, proposed for regulation, listed, or the subject of a notice-of-intent to list under the Clean Air Act section 112, National Emission Standards for Hazardous Air Pollutants (NESHAPs). The AECP shall not be used to meet any NESHAPs requirements. The baseline emissions of a hazardous pollutant shall be determined by the lower of either actual or NESHAPs allowable emissions.
2. An AECP shall not include credits from emission reductions made prior to application for the AECP. This includes emission reductions from equipment shut down and production curtailment.
3. An AECP shall not include transfer efficiency as an alternative means of control, or as a means of demonstrating emission reductions.
4. Emission reductions required by an AECP shall not be used to meet requirements of New Source Performance Standards.
5. Emission averaging period shall not exceed 24 hours.
6. An AECP shall not include credits calculated through solvent usage for surface preparation, cleanup and/or stripping operations.
7. An AECP shall not include equipment located in classified areas where all the pertinent records specified in Section (d) of this rule cannot be made available to the District because of possible national security violations.
8. Any new stationary source, or any stationary source which was not in operation for the two years directly preceding the source's application for AECP, shall not be able to comply with District rules by means of AECP.

**(g) COMPLIANCE SCHEDULE**

1. A source operating under a District approved AECP at the time of this rule's adoption shall submit an AECP consistent with this rule's requirement to the District and EPA no later than 120 days after May 21, 1991.
2. A stationary source currently complying with the above District rules by means of an approved AECP may continue to achieve compliance through that existing approved AECP for a period until November 17, 1991. Any AECP that had been previously approved shall be void upon approval of an AECP pursuant to this rule or after November 17, 1991, whichever occurs first.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 67.2 - DRY CLEANING EQUIPMENT USING PETROLEUM- BASED SOLVENT**

(Effective 1/31/78: Rev. Adopted & Effective 5/15/96)

### **(a) APPLICABILITY**

1. Except as otherwise provided in Section (b), this rule is applicable to any dry cleaning facility which uses petroleum-based organic solvent.
2. Operations subject to this rule and in compliance with Section (d) of this rule shall not be subject to Rule 66.

### **(b) EXEMPTIONS**

The provisions of Subsection (d)(2) of this rule shall not apply to any dry cleaning facility which does not consume more than 600 gallons of petroleum-based organic solvent in any consecutive twelve-month period. It is the responsibility of any person claiming this exemption to maintain monthly records of usage of petroleum-based organic solvents. These records shall be retained on site for at least three years and shall be made available to the District upon request.

### **(c) DEFINITIONS (Rev. Effective 5/15/96)**

1. **"Dry Cleaning Facility"** means a stationary source where one or more pieces of equipment are used in the cleaning of fabrics or leather in petroleum-based organic solvents. The facility includes but is not limited to washers, extractors, dryers, filter and purification systems, waste disposal systems, holding tanks, pumps, and associated valves, fittings and piping in which petroleum-based organic solvent is employed, stored, evaporated, transported or processed.
2. **"Exempt Compound"** means the same as defined in Rule 2. (Rev. Effective 5/15/96)
3. **"Fugitive Liquid Leak"** is defined as:
  - (i) A leak of petroleum-based organic solvent at a rate in excess of three drops per minute; or
  - (ii) A visible mist of petroleum-based organic solvent.
4. **"Petroleum-Based Organic Solvent"** means petroleum distillate that exists as a liquid at standard conditions.
5. **"Volatile Organic Compound" (VOC)** means any volatile compound of carbon except methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds which may be emitted to the atmosphere during dry cleaning operations subject to this rule.

#### **(d) STANDARDS**

1. A person shall not operate any dry cleaning facility unless:
  - (i) There is no fugitive liquid leak from any portion of the dry cleaning facility.
  - (ii) Solvents are stored in closed containers only, which may be equipped with vents provided such vents are necessary to comply with applicable fire and safety codes.
  - (iii) All washer lint traps, button traps, access doors and other parts of the equipment where solvent may be exposed to the atmosphere are kept closed at all times except when required for proper operation or maintenance.
  - (iv) All wastes containing petroleum-based organic solvents, including cartridge filters, are stored in sealed metal containers or underground tanks and disposed of as set forth in California State Law regarding hazardous waste disposal as described in Title 22, Division 4, Chapter 30 of the California Administrative Code. Sealed containers other than metal may be used provided the containers are compatible with the waste and meet the requirements of the California Department of Health Services.
  - (v) All cartridge type filters are drained in the filter housing for at least 24 hours before discarding the cartridges or drained for at least 12 hours and dried in a closed dryer.
  - (vi) Articles which have been dry cleaned are transferred to the dryer within five minutes after they are removed from the washer, or are kept covered.
  - (vii) The dryer remains closed and the recovery phase continues until there is no visible flow in the sight glass of the condenser for at least one minute.
2. A person shall not operate a dry cleaning facility unless the total emissions of petroleum-based organic solvent to the atmosphere from all drying tumblers and drying cabinets, over each operating day, are reduced by at least 90 percent by weight.
3. A person shall not install and operate a new or replacement solvent filter and purification system unless the system employs cartridge filters containing paper or carbon or a combination thereof and the system does not include a diatomaceous earth filtering system.

#### **(e) RECORDKEEPING**

Any person operating a dry cleaning facility using petroleum-based solvents shall maintain purchase records showing the date and amount of petroleum-based solvents purchased, and shall maintain daily records of the total dry weight of fabric processed. These records shall be retained on site for at least three years and made available to the District upon request.

**(f) TEST METHODS**

1. Measurements of petroleum-based VOC emissions pursuant to Subsection (d)(2) shall be conducted in accordance with EPA Test Method 25 (40 CFR 60, Appendix A) as it exists on May 21, 1991.
2. Measurements of VOC content pursuant to this rule shall be conducted and reported in accordance with ASTM Standard Recommended Practices for General Gas Chromatography Procedures, E 260-85.

**(g) compliance schedule**

Any person operating a dry cleaning facility using more than 600 gallons of petroleum-based organic solvent in any consecutive twelve-month period that does not comply with the requirements of Subsection (d)(2) shall conform to the following increments of progress:

1. By November 1, 1991, submit to the Air Pollution Control Officer application for Authority to Construct and Permit to Operate an air pollution control system with the efficiency specified in Subsection (d)(2).
2. By February 1, 1992, issue purchase orders for the basic VOC control device and other long delivery time components necessary to comply with Subsection (d)(2).
3. By May 31, 1992, be in compliance with Subsection (d)(2).

## **RULE 67.3 METAL PARTS AND PRODUCTS COATING OPERATIONS**

(Effective 5/9/79; Rev. 5/15/96; Rev. 4/9/03)

### **(a) APPLICABILITY**

(1) Except as otherwise provided in Section (b), this rule is applicable to the surface coating of metal parts and products.

(2) Any coating operation subject to the requirements of Rules 67.0, 67.4, 67.9 or 67.18 shall not be subject to this rule.

(3) Rule 66 shall not apply to any coating operation which is subject to this rule.

(4) Equipment used for cleaning and/or surface preparation of metal parts and products and also used for cleaning of coating application equipment for metal parts and products shall be subject to the applicable requirements of both Rules 67.3 and 67.6.

### **(b) EXEMPTIONS (Rev. 4/9/03)**

Any person claiming an exemption pursuant to Subsections (b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(3)(i) and/or (b)(3)(iii) shall maintain monthly purchase and daily usage records of coatings and/or cleaning materials, as applicable, containing volatile organic compounds (VOC) in order to substantiate the applicability of the claimed exemption. These records shall be maintained on site for three years and made available to the District upon request.

(1) The provisions of Sections (d), (e) and (f) shall not apply to the following:

(i) Any coating operation where 20 gallons or less of coatings are applied per consecutive 12-month period.

(ii) Any powder coating operation which uses less than 0.5 gallons per day of any surface preparation or cleaning material containing volatile organic compounds.

(iii) Coatings applied to motor vehicles, excluding the application of coatings to component parts or accessories during original manufacture.

(iv) Coatings applied using non-refillable handheld aerosol spray containers.

(v) Coatings applied to metal surfaces for the specific purpose of protecting the metal substrate from corrosive attack by storage battery electrolytes.

(vi) The application of the following coatings:

(A) Cathode coatings.



- (B) Chemical milling maskants.
- (C) Magnetic tape storage disks coatings.
- (D) Safety indicating coatings.
- (E) Solid film lubricants.
- (F) Stencil coatings.
- (G) Wet fastener installation coatings.

(2) The provisions of Subsection (d)(1) shall not apply to the following:

(i) Any coating operation which applies one gallon or less of coatings during each day of operation.

(ii) Any coatings that are applied by the use of air brushes with a coating capacity of two ounces (59.1 ml) or less.

(iii) Any coatings that are applied for touch-up operations.

(3) The provisions of Subsections (d)(2) and (d)(3) shall not apply to the following:

(i) Pretreatment wash primers with a VOC content, as applied, of less than 780 grams of VOC per liter of coating, less water and exempt compounds, provided that not more than 500 gallons of all pretreatment wash primers are used at a stationary source in each consecutive 12-month period.

(ii) High performance architectural coatings with a VOC content, as applied, of less than 750 grams of VOC per liter of coating, less water and exempt compounds, used at a stationary source which has continuously maintained a District Permit to Operate for each high performance architectural coating operation since November 1, 1993.

(iii) Coatings with a VOC content, as applied, not to exceed 780 grams of VOC per liter of coating, less water and exempt compounds, used at a stationary source for specialty, custom-made signs or sign-related objects, including those fabricated either from metals or from the combination of metals with other substrates such as foam, wood, glass and/or plastics, where the coating of all substrates must match exactly in appearance and performance. Not more than an aggregate total of 20 gallons of all such coatings shall be used on metal parts at a stationary source in each consecutive 12-month period. In addition to the records required by this Section (b), any person claiming this exemption shall also maintain records describing the specialty, custom-made object or sign, the coating performance standard required, and the specifications to which the object or sign was produced.

(c) **DEFINITIONS** (Rev. 4/9/03)

For the purposes of this rule, the following definitions shall apply:

- (1) **"Adhesive"** means a substance applied to a metal surface for the sole purpose of bonding the metal surface with another metal or non-metal surface by attachment.
- (2) **"Air-Dried Coating"** means any coating which is not heated above 90° C (194° F) for the purpose of curing or drying.
- (3) **"Baked Coating"** means any coating which is cured or dried in an oven where the oven air temperature exceeds 90° C (194° F).
- (4) **"Cathode Coating"** means a functional coating applied to an electrical cathode.
- (5) **"Chemical Agent Resistant Coating (CARC)"** means a coating applied to military tactical equipment in order to protect the equipment from chemical warfare agents and to conceal the equipment from detection.
- (6) **"Chemical Milling Maskant"** means a coating applied directly to a metal part to protect surface areas during chemical milling, anodizing, aging, bonding, plating, etching, or other chemical surface operations.
- (7) **"Coating"** means a material containing more than 20 grams per liter of VOC as applied, less water and exempt compounds, which can be applied as a thin layer to a substrate, and which dries or cures to form a continuous solid film, including but not limited to any paint, primer, varnish, stain, lacquer, enamel, shellac, sealant, or maskant, and excluding any adhesives, or preservative oils.
- (8) **"Coating Operation"** means all steps involved in the application, drying and/or curing of surface coatings, including touch-up operations, and associated surface preparation and equipment cleaning.
- (9) **"Dip Coat"** means a coating application method accomplished by dipping an object into coating.
- (10) **"Electrostatic Spray"** means a coating application method accomplished by charging atomized paint particles for deposition by electrostatic attraction on a metal part or product.
- (11) **"Exempt Compound"** means the same as defined in Rule 2.
- (12) **"Flow Coat"** means a coating application method accomplished by flowing a stream of coating over an object.

(13) **"Hand Application Method"** means a coating application method accomplished by applying a coating by manually held, non-mechanically operated equipment. Such equipment includes paintbrushes, hand rollers, rags and sponges.

(14) **"Heat-Resistant Coating"** means any coating which during normal use must withstand a temperature of at least 204.4° C (400° F).

(15) **"High Gloss Coating"** means any coating which achieves at least 75% reflectance on a 60° meter.

(16) **"High Performance Architectural Coating"** means a coating used to protect architectural subsections which meets the specifications of the Architectural Aluminum Manufacturers Association publication AAMA 605.2-1992.

(17) **"High-Volume Low-Pressure (HVLP) Spray"** means a coating application method which uses pressurized air at a permanent pressure between 0.1 and 10.0 psig, not to exceed 10 psig, measured at the air cap of the coating application system.

(18) **"Magnetic Tape Storage Disk Coating"** means a coating used on a metal disk which stores data magnetically.

(19) **"Metallic Topcoat"** means a coating which contains more than 5 grams of elemental metal particles per liter of coating, as applied.

(20) **"Motor Vehicle"** has the same meaning as defined in Section 415 of the Vehicle Code.

(21) **"Powder Coating"** means any material applied as a dry (without a carrier) finely divided solid which, when melted and fused, adheres to the substrate as a paint film.

(22) **"Preservative Oils"** means any material which does not contain solids, and is applied to prevent corrosion or provide lubrication or both.

(23) **"Pretreatment Wash Primer"** means any coating which contains a minimum of 0.5 percent acid by weight and which is applied directly to bare metal surfaces and is necessary to provide surface etching and required adhesion for subsequent coatings.

(24) **"Primer"** means a coating applied for purposes of corrosion prevention, protection from the environment, functional fluid resistance and/or adhesion of subsequent coatings. A primer would also include a coating which is formulated to be used as a primer but which, in a specific application, is used as an initial and final coating without subsequent application of a topcoat.

(25) **"Roll Coat"** means a coating application method accomplished by rolling a coating onto a flat surface using a roll applicator.

(26) **"Safety Indicating Coating"** means a coating applied to pressurized air cylinders which undergoes a wide color change when exposed to a high temperature.

(27) **"Solar Absorbent Coating"** means a coating formulated for the sole purpose of absorbing solar radiation to produce heat.

(28) **"Solid Film Lubricant"** means a thin film coating of an organic binder system containing as its chief pigment material one or more of the following: molybdenum disulfide, graphite, polytetrafluoroethylene or other solids that act as a dry lubricant between meeting surfaces.

(29) **"Stationary Source"** has the same meaning as defined in Rule 20.1.

(30) **"Stencil Coating"** means any ink or coating which is rolled, brushed or applied by air brush or non-refillable handheld aerosol spray containers onto a template or stamp in order to add identifying letters and/or numbers to metal parts and products.

(31) **"Touch-up Operation"** means that portion of the coating operation which is incidental to the main coating process but necessary to cover minor imperfections or minor mechanical damage incurred prior to intended use, or to achieve coverage as required.

(32) **"Transfer Efficiency"** means the ratio of the weight of coating solids adhering to the part being coated to the weight of coating solids used in the application process expressed as a percentage.

(33) **"Volatile Organic Compounds (VOC)"** means any volatile compound of carbon, which may be emitted to the atmosphere during operations or activities subject to this rule, except methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and carbonates, ammonium carbonate, and exempt compounds.

(34) **"VOC Content Per Volume of Coating, Less Water and Exempt Compounds"** means the same as defined in Rule 2 and calculated as specified in Subsection (b)(51) of that rule.

(35) **"VOC Content Per Volume of Material"** means the same as defined in Rule 2 and is calculated as specified in Subsection (b)(52) of that rule.

(36) **"Wet Fastener Installation Coating"** means a primer or sealant applied by dipping, brushing or daubing to fasteners which are installed before the coating is cured.

(d) **STANDARDS**

(1) Application Equipment

Except as provided in Subsection (b)(2), no coatings shall be applied unless one of the following application methods is used:

- (i) Electrostatic spray application, or
- (ii) Flow coat application, or
- (iii) Dip coat application, or
- (iv) High-volume low-pressure (HVLP) spray application, or
- (v) Roll coat, or
- (vi) Hand application methods, or
- (vii) Other coating application methods that are demonstrated to have a transfer efficiency at least equal to one of the above application methods, and which are used in such a manner that the parameters under which they were tested are permanent features of the method. Such coating application methods shall be approved in writing prior to use by the Air Pollution Control Officer.

(2) VOC Limits

Except as provided in Subsection (d)(3), a person shall not apply any coating with a VOC content in excess of the following limits expressed as grams of VOC per liter of coating, as applied, excluding water and exempt compounds:

Air-Dried Coatings	340
Baked Coatings	275

(3) VOC Limits for Specialty Coatings

A person shall not apply any specialty coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter of coating, as applied, excluding water and exempt compounds:

<u>CATEGORY</u>	<u>AIR-DRIED</u>	<u>BAKED</u>
Chemical Agent Resistant	420	420
Heat Resistant	420	360
High Gloss	420	360
High Performance Architectural	420	420
Metallic Topcoat	420	360
Pretreatment Wash Primer	420	420
Solar Absorbent	420	360

The requirements of Subsections (d)(2) and (d)(3) may be met using an Alternative Emission Control Plan (AECPP) that has been approved pursuant to Rule 67.1.

(4) Surface Preparation and Cleanup Solvents

Except as provided in Subsection (d)(5), a person shall not use VOC-containing materials for surface preparation or cleanup unless:

- (i) The material contains 200 grams or less of VOC per liter of material; or
- (ii) The material has an initial boiling point of 190° C (374° F) or greater; or
- (iii) The material has a total VOC vapor pressure of 20 mm Hg or less, at 20° C (68° F).

(5) Cleaning of Application Equipment

A person shall not use VOC containing materials for the cleaning of application equipment used in operations subject to this rule unless:

- (i) The cleaning material contains 200 grams or less of VOC per liter of material; or
- (ii) The cleaning material has an initial boiling point of 190° C (374° F) or greater; or
- (iii) The cleaning material has a total VOC vapor pressure of 20 mm Hg or less, at 20° C (68° F); or
- (iv) The cleaning material is flushed or rinsed through the application equipment in a contained manner that will minimize evaporation into the atmosphere; or
- (v) The application equipment or equipment parts are cleaned in a container which is open only when being accessed for adding, cleaning, or removing application equipment or when cleaning material is being added, provided the cleaned equipment or equipment parts are drained to the container until dripping ceases; or
- (vi) A system is used that totally encloses the component parts being cleaned during the washing, rinsing, and draining processes; or
- (vii) Other application equipment cleaning methods that are demonstrated to be as effective as any of the equipment described above in minimizing the emissions of VOC to the atmosphere, provided that the device has been tested and approved prior to use by the Air Pollution Control Officer.

(6) No person shall require for use or specify the application of a coating subject to this rule if such use or application results in a violation of this rule. This prohibition shall apply to all written or oral contracts under the terms of which any coating is applied to any metal part or product at any location within San Diego County.

(7) Emission reduction credits that would otherwise be approvable pursuant to District Rule 26.0 et seq., shall not be granted for that portion of the emission reductions attributable to VOC contents of coatings which are subject to this rule, greater than 420 grams per liter or the applicable VOC content limit of this rule, whichever is less.

**(e) CONTROL EQUIPMENT**

(1) In lieu of complying with the provisions of Subsections (d)(2), (d)(3), (d)(4), and/or (d)(5) of this rule, a person may use an air pollution control system which:

(i) Has been installed in accordance with an Authority to Construct; and

(ii) Includes an emission collection system which captures organic gaseous emissions, including emissions associated with applicable coating, equipment cleaning, and surface preparation operations, and transports the captured emissions to an air pollution control device; and

(iii) Has a combined emissions capture and control device efficiency of at least 85 percent by weight.

(2) A person electing to use control equipment pursuant to Section (e)(1) shall submit to the Air Pollution Control Officer for approval an Operation and Maintenance plan for the proposed emission control device and emission collection system and receive approval prior to operation of the control equipment. Thereafter, the plan can be modified, with Air Pollution Control Officer approval, as necessary to ensure compliance. Such plan shall:

(i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(1)(iii), such as temperature, pressure, and/or flow rate; and

(ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.

(3) Upon approval of the Air Pollution Control Officer, a person subject to the requirements of Section (e) shall implement the Operation and Maintenance plan and shall comply with the provisions of the approved plan thereafter.

**(f) RECORDKEEPING**

All records shall be retained on site for at least three years, and shall be made available to the District upon request.

(1) Any person subject to the provisions of Subsections (d)(2), (d)(3), (d)(4) and/or (d)(5) of this rule shall maintain records in accordance with the following:

(i) Maintain a current list of coatings, surface preparation, and cleaning materials in use which provides all of the VOC data necessary to evaluate compliance, including but not limited to:

(A) manufacturer name and identification for each coating or coating component for multi-component coatings, (this includes any components such as bases, catalysts, thinners or reducers, when supplied in separate containers), surface preparation and cleaning material; and

(B) mix ratio of components; and

(C) VOC content, vapor pressure and/or initial boiling point, as applicable, for each coating, or coating component for multi-component coatings, surface preparation and cleaning material.

(ii) Maintain current documentation to demonstrate applicability of any specialty coating category pursuant to Subsection (d)(3) of this rule.

(iii) Maintain daily or monthly records of the amount of each coating or each coating component for multi-component coatings used. Maintain records of material additions to dip tanks used for dip coating applications.

(iv) Maintain daily or monthly records showing the amounts of each surface preparation and cleaning material used.

(v) Maintain records of the actual oven drying temperature, if applicable.

(2) Any person using control equipment pursuant to Section (e) of this rule shall:

(i) Maintain records in accordance with Subsection (f)(1); and

(ii) For all coating, cleaning, and/or surface preparation materials not in compliance with Subsections (d)(2), (d)(3), (d)(4), or (d)(5) of this rule, maintain daily records of the amount of each coating or each coating component for multi-component coatings, surface preparation and cleaning material used; and

(iii) Maintain daily records of key system operating parameters as approved in the Operation and Maintenance plan. Such records shall be sufficient to document continuous compliance with Subsection (e)(1)(iii) during periods of emission producing activities.

**(g) TEST METHODS**

(1) Measurement of heat resistance referenced in Subsection (c)(14) of this rule shall be conducted in accordance with ASTM Standard Test Method D2485-91.



(2) Measurement of coating reflectance referenced in Subsection (c)(15) of this rule shall be conducted in accordance with ASTM Standard Test Method D523-89.

(3) Measurement of elemental metal content referenced in Subsection (c)(19) of this rule shall be conducted and reported in accordance with the South Coast Air Quality Management District's Spectrographic Method 311.

(4) Measurement of pretreatment wash primer acid content referenced in Subsection (c)(23) of this rule shall be conducted in accordance with ASTM Standard Test Method D1613-91.

(5) Perfluorocarbon (PFC) compounds shall be assumed to be absent from a coating, cleaning, or surface preparation material subject to this rule unless a manufacturer of the material or a facility operator identifies the specific individual compound(s) and the amount(s) present in the material and provides an Environmental Protection Agency (EPA) and California Air Resources Board approved test method which can be used to quantify the specific compounds.

(6) Measurements of transfer efficiency subject to Subsection (d)(1)(vii) of this rule shall be conducted in accordance with the South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User" as it exists on November 1, 1994.

(7) Measurement of the VOC content of coatings, surface preparation and cleaning materials subject to Subsections (d)(2), (d)(3), (d)(4)(i) or (d)(5)(i) of this rule shall be conducted in accordance with EPA Test Method 24 (40 CFR 60, Appendix A) as it exists on November 1, 1994.

(8) Measurement of the VOC content of ultraviolet radiation-cured coatings subject to Subsections (d)(2) or (d)(3) of this rule shall be conducted in accordance with ASTM Standard Test Method D5403-93. Measurement of the water content and exempt solvent content, if applicable, shall be conducted and reported in accordance with ASTM Standard Test Methods D 3792-91 and D 4457-85.

(9) Measurement of the initial boiling point of cleaning and surface preparation materials subject to Subsection (d)(4)(ii) and/or (d)(5)(ii) of this rule shall be conducted in accordance with ASTM Standard Test Method D1078-86 for distillation range of volatile organic liquids.

(10) Calculation of total VOC vapor pressure for materials subject to Subsection (d)(4)(iii) and/or (d)(5)(iii) of this rule shall be conducted in accordance with the District's "Procedures for Estimating the Vapor Pressure of VOC Mixtures" as it exists on November 1, 1994. If the vapor pressure of the liquid mixture, as calculated by this procedure, exceeds the limits specified in Subsection (d)(4)(iii) and/or (d)(5)(iii), the vapor pressure shall be determined in accordance with ASTM Standard Test Method D2879-86, Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope. The fraction of water and exempt compounds in the liquid phase shall be determined by using ASTM Standard Test Methods D3792-

91 and D4457-85 and shall be used to calculate the partial pressure of water and exempt compounds. The results of vapor pressure measurements obtained using ASTM Test Method D2879-86 shall be corrected for partial pressure of water and exempt compounds.

(11) Measurement of solvent losses from alternative application cleaning equipment subject to Subsection (d)(5)(vii) shall be conducted and reported in accordance with the South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" as it exists on November 1, 1994.

(12) Measurement of control device efficiency subject to Subsection (e)(1) of this rule shall be conducted in accordance with EPA Methods 18 and/or 25A (40 CFR 60) as they exist on November 1, 1994 and in accordance with a protocol approved by the Air Pollution Control Officer.

(13) Measurement of the emission collection system capture efficiency subject to Subsection (e)(1) of this rule shall be conducted using a protocol approved by the Air Pollution Control Officer. Subsequent to the initial compliance demonstration period, applicable key system operating parameters, as approved by the Air Pollution Control Officer, shall be used as indirect verification that capture efficiency has not diminished.

SAN DIEGO AIR POLLUTION CONTROL DISTRICT

**RULE 67.4. METAL CONTAINER, METAL CLOSURE AND METAL COIL COATING OPERATIONS** (Effective 5/9/79; Rev. Adopted & Effective 5/15/96; Rev. Adopted and Effective 11/09/11)

(a) **APPLICABILITY**

(1) This rule applies to all metal container, metal closure and metal coil coating operations in which volatile organic compounds (VOCs) are employed.

(2) Operations subject to this rule shall not be subject to Rule 66.1 or 67.3.

(b) **RESERVED**

(c) **DEFINITIONS**

For the purpose of this rule, the following definitions shall apply:

(1) **"Cleaning Material"** means a VOC containing material used for cleaning hands, tools, application equipment and work area.

(2) **"Closure"** means any metal component which is used to close or seal a container.

(3) **"Coating Line"** means an operation or process for applying, drying or oven baking and/or curing surface coatings, together with associated equipment including a coating applicator, flash-off area and oven.

(4) **"Coil"** means any flat metal sheets or strips that have been formed into rolls or in concentric rings for further industrial or commercial use.

(5) **"Container"** means any can, pail or drum.

(6) **"Drum"** means any manufactured or reconditioned cylindrical metal container that has a capacity larger than 12 gallons but smaller than 110 gallons.

(7) **"End"** means a part of a container which is used for its closure after the container is filled with a product.

(8) **"End Sealing Compound"** means a compound which is coated onto a container closure and which functions as a gasket when the closure is assembled onto the container.

(9) **"Exempt Compound"** means the same as defined in Rule 2.

(10) **"Exterior Base Coating"** means a coating applied to the exterior of a container, body, closure or flat sheet to provide a protection to the metal or to provide background for any lithographic operation.

(11) **"Exterior Body Spray"** means a coating sprayed on the exterior of the container body to provide a decorative or protective finish.

(12) **"Food/Beverage Container"** means a metal container in which food or beverages intended for human consumption are packaged.

(13) **"High-Volume Low-Pressure (HVL) Spray"** means a coating application method using a spray applicator and pressurized air which is designed to be operated and which is operated at an atomizing pressure between 0.1 and 10.0 psig, measured dynamically at the center of the applicator's air cap and at the applicator's air horns.

(14) **"Interior Base Coating"** means a coating applied to the interior of a container body or end or flat sheet to provide a protective lining between the product and the container.

(15) **"Interior Body Spray"** means a coating sprayed on the interior of the container to provide a protective film between the product and the container.

(16) **"Letterpress Coating"** means an acrylate-based topcoat which is used for coating letterpress printing plates during the manufacture of such plates.

(17) **"Lid"** means a reusable closure.

(18) **"Metal Container, Metal Closure, and Metal Coil Coating"** means any coating containing VOCs applied by spray, roller or other means to the inside and/or outside of metal containers, drums, pails, lids, closures or to the surface of flat sheets, rolls, or coil for further industrial or commercial use.

(19) **"Overvarnish"** means a coating applied directly over a design coating to reduce the coefficient of friction, to provide gloss and to protect the finish against abrasion and corrosion.

(20) **"Pail"** means any manufactured or reconditioned cylindrical metal container with a capacity between one and 12 gallons, and constructed of 29 gauge material or heavier.

(21) **"Pet Food Container"** means a metal container in which food for animal (non-human) consumption is packaged.

(22) **"Stationary Source"** means the same as defined in Rule 2.

(23) **"Three-Piece Container Side-Seam Spray"** means a coating sprayed on the exterior and/or interior of a welded, cemented or soldered seam to protect the exposed metal.

(24) **"Two-Piece Container Exterior End Spray"** means a coating sprayed on the exterior bottom end of a container to provide protection to the metal.

(25) **"Volatile Organic Compound (VOC)"** means the same as defined in Rule 2.

(26) **"VOC Content per Volume of Coatings, Less Water and Exempt Compounds"** means the same as defined in Rule 2.

(27) **"VOC Content per Volume of Cleaning Material"** means the same as defined in Rule 2, "VOC Content per Volume of Material".

(d) **STANDARDS**

(1) VOC Limits

Except as provided for in Section (e), a person shall not use or apply coatings on any coating line of the type designated below which contains VOCs in excess of the following limits at the point of application:

(i)	Grams of VOC per liter of coating (less water and exempt compounds)
<u>Metal Container or Closure Coating Lines</u>	
Sheet base coat (exterior and interior) and overvarnish	180
Two-piece container exterior base coat and overvarnish, and end spray	250
Container exterior body spray and exterior closure spray	250
Three-piece container side seam spray	660
End sealing compound:	
Food/Beverage Container:	20
Pet Food Container	20
Non-Food Container	20
Container interior body spray:	
Two-piece container	420
Three-piece container	310
Reconditioned drums, pails and lids:	
Exterior spray	420
Interior spray	510
New drums, pails and lids:	
Exterior spray	340
Interior spray	420
(ii)	Grams of VOC per liter of coating (less water and exempt compounds)
<u>Coil Coating Line</u>	
(A) Letterpress coatings	200
(B) Other coil coatings	200

## (2) Coating Application Equipment

A person shall conduct coating operations subject to this rule by using only the following coating application methods:

- (i) Electrostatic spray application; or
- (ii) Flow coat application; or
- (iii) Dip coat application; or
- (iv) Roll coat; or
- (v) Hand application methods; or
- (vi) High-volume low-pressure (HVLP) spray. Facilities using an HVLP spray gun shall have available on site pressure gauges in proper operating condition to measure the air cap pressure or have available manufacturer's technical information regarding the correlation between the handle air inlet pressure and the air cap pressure. If the correlation option is used to demonstrate compliance, a handle air inlet pressure gauge will be required on site in proper operating condition to measure the handle air inlet pressure; or
- (vii) Other coating application methods that are demonstrated to have transfer efficiency at least equal to one of the above application methods, and which are used in such a manner that the operating parameters under which they were demonstrated to achieve such transfer efficiency are permanent features of the method. Such coating application methods shall be approved in writing by the Air Pollution Control Officer prior to use.

## (3) Cleaning of Coating Application Equipment

A person shall not use VOC containing materials for the cleaning of coating application equipment used in operations subject to this rule unless:

- (i) The VOC content of cleaning material is 25 grams or less per liter of material; or
- (ii) The cleaning material is flushed or rinsed through the application equipment in a contained manner that will minimize evaporation into the atmosphere; or
- (iii) The application equipment or equipment parts are cleaned in a container which is open only when being accessed for adding, cleaning, or removing application equipment or when cleaning solvent is being added, provided the cleaned equipment or equipment parts are drained to the container until dripping ceases; or
- (iv) A system is used that totally encloses the component parts being cleaned during the washing, rinsing, and draining processes.

**(e) CONTROL EQUIPMENT**

(1) In lieu of complying with the provisions of Subsection (d)(1) and (d)(3) a person may use an air pollution control system which:

- (i) has been installed in accordance with an Authority to Construct; and
- (ii) includes an emission collection system which captures and transports organic gaseous emissions to an air pollution control device; and
- (iii) has a combined VOC emissions capture and control device efficiency of at least 85 percent by weight.

(2) A person subject to the requirements of this section shall submit to the Air Pollution Control Officer for approval an Operation and Maintenance (O&M) plan for the proposed emission control device and emission collection system. Such plan shall:

- (i) identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(1)(iii) such as temperature, pressure, and/or flow rate, and
- (ii) include proposed inspection schedules, anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.

(3) The Operation and Maintenance plan must be submitted to the Air Pollution Control Officer and receive approval prior to operation of the air pollution control equipment. A person subject to the requirements of this section shall implement the plan on approval of the Air Pollution Control Officer.

**(f) RECORD KEEPING**

Any person subject to the requirements of this rule shall maintain records in accordance with the following:

**(1) Coating and Cleaning Materials**

Any person subject to the requirements of Subsections (d)(1) and/or (d)(3) shall:

- (i) Maintain a current list of coatings and cleaning materials in use. This list shall provide all the data necessary to evaluate compliance, including, but not limited to:
  - (A) Material name, manufacturer and manufacturer identification;
  - (B) Type and applicable coating category of each coating used as specified in Subsection (d)(1)(i) and (d)(1)(ii);
  - (C) VOC content, less water and exempt compounds, of coatings, as applied and VOC content of cleaning materials, as used.

(ii) Maintain monthly or daily records showing the amount of each coating, the applicable coating category and cleaning material used.

(2) Any person using control equipment pursuant to Section (e) of this rule shall:

(i) For all materials not in compliance with Subsection (d)(1) of this rule, maintain daily records of the amount of each material used; and

(ii) Maintain daily records sufficient to document continuous compliance with Subsection (e)(1)(iii), including records of key system operating parameters as approved in the Operation and Maintenance plan.

All records shall be retained on site for at least three years, and shall be made available to the District upon request.

**(g) TEST METHODS**

When more than one test method or set of test methods are specified in this Section, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule.

(1) The VOC content of coatings containing more than 50 grams of VOC per liter and subject to Subsections (d)(1)(i) and (d)(1)(ii)(B) shall be determined by the Environmental Protection Agency (EPA) Reference Method 24 (Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, 40 CFR Part 60, Appendix A), dated 9/11/1995, or by the South Coast Air Quality Management District (SCAQMD) Method 304 (Determination of Volatile Organic Compounds in Various Materials), dated February 1, 1996.

(2) Measurements of VOC content of coatings subject to Subsection (d)(1)(ii)(A) of this rule shall be conducted in accordance with San Diego Air Pollution Control District's Method 24D for Determination of Density, Total Volatile Matter Content, and Weight Solids of Surface Coatings Containing Photosensitive Reactive Diluents, dated July 1993.

(3) The VOC content of coatings containing 50 grams of VOC per liter or less, or cleaning materials shall be determined by the SCAQMD Method 313-91 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry), dated July 1991, or the SCAQMD Method 308-91 (Quantitation of Compounds by Gas Chromatography), dated February 1993.

(4) The content of methyl acetate, acetone and parachlorobenzotrifluoride shall be determined in accordance with the ASTM Test Method D6133-02 (2008) (Standard Test Method for Acetone, p-Chlorobenzotrifluoride, Methyl Acetate or t-Butyl Acetate Content of Solventborne and Waterborne Paints, Coatings, Resins, and Raw Materials by Direct Injection Into a Gas Chromatograph).



(5) Measurements of exempt compound content, other than determined in accordance with Subsection (g)(4), shall be conducted in accordance with the SCAQMD Test Method 303-91 (Determination of Exempt Compounds), dated August 1996.

(6) Measurements of transfer efficiency pursuant to Subsection (d)(2)(vii) of this rule shall be conducted in accordance with the SCAQMD "Spray Equipment Transfer Efficiency Test Procedure for Equipment User" approved by EPA on May 24, 1989. The equivalency of coating application equipment pursuant to Subsection (d)(2)(vii) shall be determined by the SCAQMD "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns", dated September 26, 2002.

(7) The overall control efficiency of air pollution control equipment operated pursuant to Subsection (e)(1)(iii) shall be determined by multiplying the capture efficiency of the emission collection system by the control efficiency of the air pollution control device. The control efficiency of the air pollution control device shall be determined using EPA Test Methods 25A and/or 18 (40 CFR Part 60, Appendix A) and in accordance with a protocol approved by the Air Pollution Control Officer. Capture efficiency of an emission collection system pursuant to Subsection (e)(1)(ii) shall be determined according to EPA Test Methods 204 and 204A through 204 F (51 CFR Appendix M), as applicable, and technical document, "Guidelines for Determining Capture Efficiency," dated January 9, 1995. Subsequent to the initial compliance demonstration period, appropriate key system operating parameters as approved by the Air Pollution Control Officer may be used as indicators of the performance of the emission control system.

(8) Other test methods which are determined to be equivalent to the test methods specified in this rule and approved, in writing, by the Air Pollution Control Officer, California Air Resources Board, and EPA may be used in place of the test methods specified in this rule.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 67.5 - PAPER, FILM AND FABRIC COATING OPERATIONS**

(Effective 5/9/79: Rev. Adopted & Effective 5/15/96)

### **(a) APPLICABILITY**

Except as otherwise provided in Section (d), this rule is applicable to any paper, fabric and/or film coating application process.

### **(b) EXEMPTIONS**

The provisions of Subsections (d)(1)(i) and (d)(1)(ii) of this rule shall not apply to:

1. Any coating application process which emits less than 14.3 lbs (6.5 kilograms) of volatile organic compounds per day;
2. Laboratory equipment used exclusively for research and development operations for any paper, fabric and/or film coating application process not involving the use of heating ovens, provided that emissions from such operations are less than 20.0 lbs (9.1 kilograms) of volatile organic compounds (VOC) per day.

### **(c) DEFINITIONS (Rev. Effective 5/15/96)**

1. **"Application Process"** means any portion of a paper, fabric, or film coating line where surface coatings are applied and/or cured, including the coating applicator and heating ovens.
2. **"Cleaning Materials"** are VOC containing materials used for cleaning hands, tools, application equipment and work area.
3. **"Exempt Compound"** means the same as defined in Rule 2. (Rev. Effective 5/15/96)
4. **"Fabric Coating"** means any decorative or protective coating or reinforcing material applied on or impregnated into textile fabric or vinyl coated textile fabric or vinyl sheets.
5. **"Film Coating"** means any coating applied in web coating process on any film substrate other than paper or fabric, including, but not limited to typewriter ribbons, photographic film, magnetic tape, and metal foil gift wrap, but excluding coatings applied to packaging used exclusively for food and health-care products for human or animal consumption.
6. **"Liquid Leak"** means any visible leak of liquid VOC at a rate in excess of three drops per minute.
7. **"Laboratory Equipment"** means equipment which: a) is under direct immediate and exclusive control of a laboratory director; and b) used for the sole purpose of conducting studies or tests to develop a new or improved product or service.

8. **"Paper Coating"** means any coating applied on or impregnated into paper, including, but not limited to, adhesive tapes and labels, book covers, post cards, office copier paper, drafting paper, and pressure sensitive tape.
9. **"Volatile Organic Compounds (VOC)"** for the purpose of this rule means any compound containing at least one atom of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds which may be emitted to the atmosphere during the application, drying and curing operations. VOC content of coatings is expressed in grams of VOC per liter of coating, as applied, less water and less exempt compounds. VOC content of cleaning materials is expressed in grams of VOC per liter of material.

**(d) EMISSION STANDARDS**

1. A person shall not use or apply any coating in any paper, fabric and/or film coating application process unless;
  - (i) The coating contains less than 265 grams of VOC per liter as applied, excluding water and excluding exempt compounds; or
  - (ii) The VOC emissions from coating application operations are controlled by an emission control system with the combined collection and abatement efficiency of at least 90% on a mass basis at all times during the operation.
  - (iii) Containers and mixing tanks for VOC containing materials are free from liquid leaks and are covered except when adding or removing materials, cleaning, or when the container is empty.
  - (iv) Any cleaning of equipment involved in paper, fabric and/or film operations using VOC containing materials is performed according to the following requirements:
    - (A) The cleaning material contains no more than 200 grams of VOC per liter; or
    - (B) A system is used that totally encloses the component parts being cleaned during the washing, rinsing, and draining processes, or
    - (C) The cleaning solvent is transferred through the application equipment, without exposure to air, into a container which has in place an apparatus or cover which completely covers the container and has no visible holes, breaks, openings or separations between adjoining components of the container or container cover.
2. Rule 66 shall not apply to any paper, fabric and/or film coating operation which is subject to and in compliance with Section (d) of this rule.
3. A person shall not sell, offer for sale, or apply any coating or cleaning solvent for use in paper, fabric and/or film coating operations that, after October 16, 1990, was newly formulated to contain or reformulated to increase the content of methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114) or chloropentafluoroethane (CFC-115).

4. After October 16, 1990, a person shall not manufacture, sell, offer for sale, or supply any coating or cleaning material for use in paper, fabric and/or film coating operations unless coating or cleaning material container displays the content of methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114) or chloropentafluoroethane (CFC-115).

**(e) recordkeeping**

Any person subject to this rule shall maintain records of operations containing the following:

1. A current list of coatings and VOCs in use which provides all of the coating and VOC data necessary to evaluate compliance; and
2. Daily records showing the types and amounts of each coating and VOC content of each coating used; and
3. Daily records showing the types and amounts of cleaning materials and VOC content of each cleaning material used.
4. Maintain records of the content of methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114) and chloropentafluoroethane (CFC-115) in any coating material or cleaning material used.

Such records shall be retained for at least three years, and shall be made available to the District immediately upon request.

**(f) test methods**

Measurements of VOC subject to Subsections (d)(1)(i) of this rule shall be conducted and reported in accordance with EPA Test Method 24 (40 CFR 60, Appendix A) as it exists on October 16, 1990.

Calculations of the VOC content of coatings less water and less exempt compounds shall be performed in accordance with ASTM Standard Practice D 3960-87 for determining VOC content of paints and related coatings.

Measurements of the VOC content subject to Subsection (d)(1)(iv) of this rule shall be conducted in accordance with the most recent revisions of ASTM Test Methods D 4457-85 and D 3792-86.

Measurements of VOC content subject to Subsection (d)(1)(ii) of this rule shall be conducted and reported in accordance with EPA Guidelines for Capture Efficiency Determination, with EPA Test Methods 18 and 25 (40 CFR 60, Appendix A) as it exists on October 16, 1990.

**(g) COMPLIANCE SCHEDULE**

Any person conducting operations subject to this rule prior to October 16, 1990 that does not have an approved air pollution control system capable of complying with Subsection (d)(1)(ii) shall conform to the following increments of progress.

1. By February 1, 1991, submit to the Air Pollution Control Officer applications for Authority to Construct and Permit to Operate an air pollution control system providing the emission reduction specified in Subsection (d)(1)(ii).
2. By May 31, 1991, issue purchase orders for the basic VOC control device and other long delivery time components necessary to comply with Subsection (d)(1)(ii).
3. By December 31, 1991, be in compliance with Subsection (d)(1)(ii).

**RULE 67.6.1 COLD SOLVENT CLEANING AND STRIPPING OPERATIONS**  
(Adopted & Effective 5/23/07)

(a) **APPLICABILITY**

(1) Except as provided in Section (b), this rule is applicable to all cold solvent cleaning and all stripping operations.

(2) Any cleaning of application equipment is not subject to this rule.

(3) Any dry cleaning operation subject to or exempt from the *Airborne Toxic Control Measure for Emissions of Perchloroethylene from Dry Cleaning Operations* or subject to or exempt from Rule 67.2 is not subject to this rule.

(4) Wipe cleaning operations are not subject to this rule.

(5) Rule 66 shall not apply to any cold solvent cleaning or stripping operation.

(b) **EXEMPTIONS**

(1) This rule shall not apply to the following:

(i) Non-immersion stripping operations subject to or exempt from Rules 67.9, 67.11, or 67.11.1.

(ii) Solvent cleaning operations regulated by the *National Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning*, 40 CFR Part 63, Subpart T.

(iii) Cold solvent cleaning or stripping operations conducted in any cold solvent tank or stripping tank with a liquid surface area of one square foot (0.09 square meters) or less, or with a capacity of one gallon (3.8 liters) or less.

(iv) Cold solvent cleaning operations conducted in any remote reservoir cleaner with a sink cross-sectional area of 1 square foot (0.09 square meters) or less.

(v) Cold solvent degreasers used exclusively for educational purposes. This exemption does not apply to degreasers used for other purposes at an educational institution.

(vi) Except for requirements for waste solvent disposal in Subsections (d)(4)(xii) or (d)(6)(x), as applicable, cold solvent cleaning or stripping operations that exclusively utilize water-based materials with a volatile organic compound (VOC) content of 50 grams per liter (g/l) of material (0.42 pounds per gallon) or less, as used.

It shall be the responsibility of any person conducting such operations to keep a current list of all cleaning materials and the VOC content of each material, as applied, to substantiate this exemption.

(2) Subsection (d)(1) shall not apply to cold solvent cleaning of electronic components, electrical components, medical devices, aerospace components, or precision optics components.

(c) **DEFINITIONS**

(1) **"Aerospace Component"** means any raw material, partial or completed fabricated part, assembly of parts, or completed unit of any aircraft, helicopter, missile, or space vehicle, including mockups, test panels and prototypes.

(2) **"Airless/Air-Tight Cleaning System"** means a system that consists of a sealed cold solvent cleaner and the devices to condense and recover solvent and emission control devices to remove solvent from all gas streams that vent to the atmosphere. The system must have no open solvent-air interface, and be designed and operated in such a manner as to prevent the discharge or leakage of solvent emissions to the atmosphere during all cleaning and drying operations.

(3) **"Application Equipment"** means equipment used to apply coatings, inks, adhesives, or resins including, but not limited to: spray guns, rollers, brushes, and printing presses.

(4) **"Batch-loaded Solvent Cleaner"** means a degreaser in which any material is placed in solvent for cleaning and removed as a single batch after the cleaning is finished. This does not include remote reservoir cleaners.

(5) **"CFR"** means Code of Federal Regulations.

(6) **"Cold Solvent Cleaning (Degreasing) Operation"** means any solvent cleaning that is conducted in a tank, drum, or other container and that uses non-boiling solvent to remove contaminants.

(7) **"Cured"** means the coating, ink, adhesive, or resin is dry to the touch.

(8) **"Degreaser"** means a tank, drum, or other container in which objects to be cleaned are exposed to a solvent, in order to remove contaminants. This includes batch-loaded solvent cleaners and remote reservoir cleaners.

(9) **"Electrical Components"** means internal components such as wires, windings, stators, rotors, magnets, contacts, relays, energizers, and connections in an apparatus that generates or transmits electrical energy including, but not limited to, generators, transformers, and electric motors.

(10) **"Electronic Components"** means components or assemblies of components including, but not limited to, circuit card assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and other electrical fixtures, except for the cabinet in which the components are to be housed.

(11) **"Exempt Compounds"** means the same as defined in Rule 2.

(12) **"Existing Cold Solvent Cleaning or Stripping Operation"** means any cold solvent cleaning or stripping operation that is not new.

(13) **"Freeboard Height"** means:

(i) For batch-loaded solvent cleaners, the distance from the solvent-air interface to the top of the degreaser tank, based on inside tank dimensions.

(ii) For remote reservoir cleaners, the height from the bottom of the sink or work area to the top of the sink or work area.

(14) **"Freeboard Ratio"** means the freeboard height divided by the smaller of the interior length or width of the degreaser tank.

(15) **"Liquid Leak"** means any visible leak of a VOC-containing liquid at a rate in excess of three drops per minute.

(16) **"Liquid Surface Area"** means the area of interface between the liquid solvent available for dipping and the air which is contiguous with the outside of the solvent degreaser or stripping tank.

(17) **"Medical Device"** means an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar article including any component or accessory, that is intended for use in the diagnosis of disease or other conditions or in the cure, mitigation, treatment, or prevention of disease, or is intended to affect the structure or any function of the body.

(18) **"New Cold Solvent Cleaning or Stripping Operation"** means any cold solvent cleaning or stripping operation for which a complete application for an Authority to Construct in San Diego County was submitted after May 23, 2007.

(19) **"Precision Optics Components"** means the components used to create high resolution images in optical devices. This does not include eye glasses.

(20) **"Remote Reservoir Cleaner"** means a degreaser that consists of a sink or working area and a separate solvent tank that is not accessible for soaking parts and is completely enclosed except for a solvent return opening, which allows used solvent to drain into it from the sink or work area.

(21) **"Sealing Fluid"** means a fluid that prevents evaporation of a stripping solvent by forming a liquid or solid layer on the solvent's surface.



(22) **"Solvent"** means any substance containing an organic compound or combination of organic compounds which is liquid at atmospheric pressure and ambient temperature and which is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or for other similar purposes.

(23) **"Solvent-Air Interface"** means the area of contact between the solvent and air that is contiguous with the air outside the degreaser.

(24) **"Solvent Carry-Out"** means solvent carried out of a degreaser that adheres to or is entrapped in the part being cleaned.

(25) **"Solvent Cleaning Operation"** means any solvent cleaning activity including subsequent drying that is conducted in a degreaser to remove contaminants from parts, products, tools, machinery, and/or equipment.

(26) **"Stripping Operation"** means a removal of cured coatings, inks, resins, or adhesives conducted with the use of solvents by immersion into a container such as tank or drum.

(27) **"Water-Based Material"** means any solvent that consists only of water and VOC and does not contain exempt compounds.

(28) **"Wipe Cleaning"** means the method of cleaning a surface, not conducted in a container, by physically rubbing it with a material or device such as a rag, paper, or cotton swab moistened with a solvent.

(29) **"Volatile Organic Compound (VOC)"** means any volatile compound containing at least one atom of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds.

(d) **STANDARDS**

(1) **VOC Content Requirements for Cold Solvent Cleaning Operations**

Except as specified in Subsection (b)(2), each solvent utilized in a cold solvent cleaning operation subject to this rule shall have a VOC content of 50 g/l (0.42 lbs/gal) of material or less, as used.

(2) **General Equipment Requirements for Cold Solvent Cleaning Operations**

A person shall not conduct a cold solvent cleaning operation unless a degreaser is equipped with all of the following.

(i) A cover that completely covers the solvent when work is not being performed in the degreaser. This includes covers for the sink or basin of a remote reservoir cleaner.

(ii) A facility for draining parts such that the drained solvent returns to the degreaser.

(3) Equipment Specific Requirements for Cold Solvent Cleaning Operations

(i) A person shall not operate a batch-loaded cold solvent cleaner unless it has:

(A) a freeboard ratio greater than or equal to 0.5,

(B) a cover easily operable with one hand or mechanically assisted, and

(C) a readily visible, permanent mark or line indicating the maximum allowable solvent level that conforms to the freeboard ratio.

(ii) A person shall not operate a remote reservoir cleaner unless it has:

(A) a freeboard height of at least 6 inches (15 cm), and

(B) a sink-like work area for draining cleaned parts, which is sloped sufficiently towards the drain to preclude pooling of solvent.

(4) Operating Requirements for Cold Solvent Cleaning Operations

A person shall not conduct a cold solvent cleaning operation without meeting all of the following requirements.

(i) A permanent, conspicuous, legible label listing the applicable operating requirements is posted on or near the degreaser.

(ii) The solvent degreaser and any emission control system are properly installed and maintained in proper working order.

(iii) Any emission control system is properly operating at all times when parts are being cleaned.

(iv) The required cover is not removed except to process work or to perform maintenance.

(v) There are no liquid leaks from any portion of the degreaser. Upon detection of a liquid leak, the leak shall be repaired immediately, or the degreaser shall be shut down and drained in a manner that minimizes emissions.

(vi) No porous or absorbent materials, such as cloth, leather, wood, or rope are cleaned in the degreaser.

(vii) Solvent spraying, when necessary, is conducted by using only a continuous liquid stream (not a fine, atomized, fan, or shower type spray) at a pressure which does not cause liquid solvent to splash outside of the solvent container.

(viii) Solvent agitation, where necessary, is achieved exclusively through pump circulation or by means of a mechanical mixer or ultrasonic agitation. Air or gas agitation shall not be used.

(ix) For batch-loaded cleaners the actual solvent level is not above the marked maximum solvent level line at any time.

(x) The degreaser is not exposed to drafts greater than 131 feet (40 meters) per minute.

(xi) Solvent carry-out is minimized by all of the following methods:

(A) allowing for full drainage by racking parts or other means;

(B) tipping out any pools of solvent from the cleaned parts before removal; and

(C) allowing parts to dry within the degreaser until visually dry or dripping ceases.

(xii) Waste solvent and contaminated residue, if any, shall be recycled or disposed of according to requirements based on the California Health and Safety Code, Division 20, Chapter 6.3 (beginning at Section 25100) concerning hazardous waste disposal.

#### (5) Equipment Requirements for Stripping Operations

A person shall not operate stripping equipment unless it is equipped with all of the following.

(i) A cover that completely covers the solvent when work is not processed in the tank.

(ii) A facility for draining parts such that the drained solvent returns to the container.

(iii) A readily visible, permanent mark or line indicating the maximum allowable solvent level that conforms to the freeboard ratio in Subsection (d)(5)(iv) below, unless a sealing fluid is used.

(iv) Stripping equipment has:

(A) a freeboard ratio greater than or equal to 0.75; or

(B) a sealing fluid.

(6) Operating Requirements for Stripping Operations

A person shall not conduct a stripping operation without meeting all of the following requirements.

(i) A permanent, conspicuous, legible label listing the applicable operating requirements is posted on or near the stripping operation.

(ii) The stripping equipment and any emission control system are properly installed and maintained in proper working order.

(iii) Any emission control system is properly operating at all times when parts are being stripped.

(iv) The required cover is not removed except to process work or to perform maintenance.

(v) There are no liquid leaks from any portion of the stripping equipment. Upon detection of a liquid leak, the leak shall be repaired immediately, or the stripping tank drained and taken out of service, in a manner that minimizes emissions.

(vi) Solvent is not above the marked maximum solvent level line, unless a sealing fluid is used.

(vii) Solvent carry-out is minimized by all of the following methods:

(A) allowing for full drainage by racking parts or by other means;

(B) tipping out any pools of solvent from the stripped parts before removal; and

(C) allowing parts to dry within the stripping equipment until visually dry or dripping ceases.

(viii) Solvent agitation, where necessary, is achieved exclusively through pump circulation or by means of a mechanical mixer or ultrasonic agitation. Air or gas agitation shall not be used.

(ix) Solvent spraying, when necessary, is conducted by using only a continuous fluid stream (not a fine, atomized, fan, or shower type spray) at a pressure which does not cause liquid solvent to splash outside of the solvent container.

(x) Waste solvent and contaminated residue, if any, shall be recycled or disposed of according to requirements based on the California Health and Safety Code, Division 20, Chapter 6.3 (beginning at Section 25100) concerning hazardous waste disposal.

(e) **CONTROL EQUIPMENT**

(1) In lieu of complying with the requirements in Subsections (d)(1), (d)(2), and (d)(3) an owner/operator may use an airtight/airless cold solvent cleaner provided that all of the following requirements are met:

(i) The equipment is operated in accordance with the manufacturer's specifications and with a door or other pressure sealing apparatus in place during all cleaning and drying cycles;

(ii) All associated pressure relief devices do not allow liquid solvents to drain out. Spills during any solvent transfer shall be cleaned up immediately;

(iii) A differential pressure gauge is installed to indicate the sealed chamber pressure;

(iv) The equipment complies with all applicable operating requirements of Subsection (d)(4).

(2) In lieu of complying with the requirements of Subsections (d)(1), (d)(2), (d)(3), and (d)(5) a person conducting a cold solvent cleaning or stripping operation may use an air pollution control system which:

(i) Has been installed in accordance with an Authority to Construct; and

(ii) Has a combined emissions capture and control efficiency of at least 85% by weight.

(3) A person electing to use control equipment pursuant to Subsection (e)(2) shall submit to the Air Pollution Control Officer for approval an Operation and Maintenance plan for the proposed emission control and collection system and receive approval prior to operation of the control equipment. Thereafter, the plan can be modified, with Air Pollution Control Officer approval, as necessary to ensure compliance. Such a plan shall:

(i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(2)(ii), such as temperature and/or pressure;

(ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters; and

(iii) Upon approval by the Air Pollution Control Officer, a person subject to the requirements of Subsection (e)(2) shall implement the Operation and Maintenance plan and shall comply with all the provisions of the approved plan.

**(f) RECORDKEEPING REQUIREMENTS**

(1) Any person conducting a cold solvent cleaning or stripping operation subject to this rule shall maintain the following records:

(i) A current list of solvents and sealing fluids in use, which provides all of the data necessary to evaluate compliance, including but not limited to:

(A) Manufacturer name and identification for each solvent, and

(B) VOC content of solvent expressed in g/l (lbs/gal) of material as used, and density and mix ratios for each solvent.

(2) Any person using control equipment pursuant to Section (e) of this rule shall:

(i) Maintain records in accordance with the requirements of Subsection (f)(1); and

(ii) Maintain daily records of key system operating parameters as approved in the Operation and Maintenance plan pursuant to Subsection (e)(3). Such records shall be sufficient to document continuous compliance with Subsection (e)(2)(ii) during periods of emission producing activities.

All records shall be retained on site for at least three years and shall be made available to the District upon request.

**(g) TEST METHODS**

(1) The VOC content of cleaning materials shall be determined by the South Coast Air Quality Management District (SCAQMD) Method 313 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry), SCAQMD Method 308 (Quantitation of Compounds by Gas Chromatography), or any other test methods approved by the Environmental Protection Agency (EPA), California Air Resources Board (ARB), and the Air Pollution Control District.

(2) The overall control efficiency of air pollution control equipment operated pursuant to Subsection (e)(2)(ii) shall be determined by multiplying the capture efficiency of the emission collection system by the control efficiency of the air pollution control device. The control efficiency of the air pollution control device shall be determined using EPA Test Methods 18 and 25 or 25A (40 CFR 60, Appendix A) and in accordance with a protocol approved by the Air Pollution Control Officer. Capture efficiency shall be determined according to EPA Test Method 204. Subsequent to the initial compliance demonstration period, appropriate key system operating parameters as determined by the Air Pollution Control Officer may be used as indicators of the performance of the emission control system.

**(h) COMPLIANCE SCHEDULE**

(1) All new cold solvent cleaning or stripping operations shall comply with the applicable requirements of this rule upon initial startup.

(2) All existing cold solvent cleaning or stripping operations shall comply with the applicable requirements of this rule not later than May 23, 2008.

(3) The owner or operator of existing cold solvent cleaning or stripping equipment that will require modifications pursuant to the requirements of Subsections (d)(1), (d)(3), and/or (d)(5), except for those switching to a water-based solvent with a VOC content 50 g/l or less shall:

(i) By November 23, 2007, submit to the Air Pollution Control Officer an application to modify a Permit to Operate for complying with the applicable requirements of Subsections (d)(1), (d)(3), and/or (d)(5).

(ii) By May 23, 2008, comply with all applicable rule requirements.

(4) The owner or operator of existing cold solvent cleaning or stripping equipment that chooses to comply with the rule by installing air pollution control equipment pursuant to Section (e) of this rule shall comply with the following increments of progress:

(i) By November 23, 2007, submit to the Air Pollution Control Officer an application for an Authority to Construct and a Permit to Operate an air pollution control system as specified in Section (e).

(ii) By May 23, 2008, comply with all applicable rule requirements.

## **RULE 67.6.2 VAPOR DEGREASING OPERATIONS**

(Adopted & Effective 5/23/07)

### **(a) APPLICABILITY**

- (1) Except as provided in Section (b), this rule is applicable to all vapor degreasing operations.
- (2) Rule 66 shall not apply to any vapor degreasing operation.

### **(b) EXEMPTIONS**

- (1) This rule shall not apply to the following:

- (i) Except for requirements for waste solvent disposal in Subsection (d)(4)(xiii), vapor degreasing operations that exclusively utilize water-based cleaning materials with a volatile organic compound (VOC) content of 50 grams per liter (g/l) of material (0.42 pounds per gallon) or less, as used

It shall be the responsibility of any person conducting such operations to keep a current list of all cleaning materials and the VOC content of each material, as applied, to substantiate this exemption.

- (ii) Vapor-phase solder reflow units.

- (iii) Vapor degreasing operations conducted in a container with a vapor-air interface area of one square foot (0.09 square meters) or less or with a maximum solvent capacity of one gallon (3.8 liters) or less.

### **(c) DEFINITIONS**

- (1) "**Airless/Air-Tight Vapor Degreaser**" means a system that consists of a sealed vapor degreaser and the devices to condense and recover solvent and emission control devices to remove solvent from all gas streams that vent to the atmosphere. The system must have no open vapor-air interface, and be designed and operated in such a manner as to prevent the discharge or leakage of solvent emissions to the atmosphere during all cleaning and drying operations.

- (2) "**Batch-loaded Solvent Degreaser**" means a degreaser in which any material is placed for cleaning and removed as a single batch after the cleaning is finished.

- (3) "**CFR**" means Code of Federal Regulations.

- (4) "**Degreaser**" means a tank, drum, or other container in which objects to be cleaned are exposed to a solvent or solvent vapors, in order to remove contaminants.

- (5) "**Exempt Compounds**" means the same as defined in Rule 2.



- (6) **"Existing Vapor Degreasing Operation"** means any vapor degreasing operation that is not new.
- (7) **"Freeboard Height"** means the distance from the solvent vapor-air interface to the top of the degreaser tank, based on inside tank dimensions.
- (8) **"Freeboard Ratio"** means the freeboard height divided by the smaller of the interior length or width of the degreaser tank.
- (9) **"Liquid Leak"** means any visible leak of a VOC-containing liquid at a rate in excess of three drops per minute.
- (10) **"New Vapor Degreasing Operation"** means any vapor degreasing operation for which a complete application for an Authority to Construct in San Diego County was submitted after May 23, 2007.
- (11) **"Open-top Vapor Degreaser"** means any batch loaded vapor degreaser.
- (12) **"Perimeter Trough"** means a receptacle within the vapor degreaser located below the primary condenser that conveys condensed solvent and atmospheric moisture to a water separator.
- (13) **"Primary Condenser"** means a series of circumferential cooling coils on the inside of walls of a vapor degreaser through which a chilled substance is circulated or recirculated to provide continuous condensation of rising solvent vapors, thereby creating a concentrated solvent vapor zone.
- (14) **"Refrigerated Freeboard Chiller"** means an emission control device which is mounted above the degreaser's water jacket or primary condenser coils, and which consists of secondary coils that carry a refrigerant to provide a chilled air blanket above the solvent vapor.
- (15) **"Solvent"** means any substance containing an organic compound or combination of organic compounds which is liquid at atmospheric pressure and ambient temperature and which is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent, or for other similar purposes.
- (16) **"Solvent Carry-Out"** means solvent carried out of a degreaser that adheres to or is entrapped in the part being cleaned.
- (17) **"Vapor-Air Interface"** means the area of contact between the solvent vapors and air that is contiguous with the air outside the degreaser. The area of the vapor-air interface shall be calculated as the product of the lengths between internal solvent cleaner walls behind the condensing coils.

(18) **"Vapor-Phase Solder Reflow Unit"** means a device in which parts are immersed in VOC-rich vapor generated by boiling a liquid for heating to melt or soften solder connections of electronic components.

(19) **"Vapor Degreaser"** means a degreaser in which objects to be cleaned are exposed to a boiling solvent or solvent vapors.

(20) **"Vapor Degreasing Operation"** means a cleaning operation that is conducted by immersing parts, products, tools or other items in a boiling solvent or in solvent vapors generated by boiling solvent.

(21) **"Volatile Organic Compound (VOC)"** means any volatile compound containing at least one atom of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds.

(22) **"Water-Based Cleaning Material"** means cleaning material that consists only of water and VOC and does not contain any exempt compounds.

(23) **"Water Separator"** means a device that isolates water from a solvent or a mixture of solvents through mechanical or chemical means.

(d) **STANDARDS**

(1) General Equipment Requirements

A person shall not operate any vapor degreaser unless it is equipped with all of the following:

(i) A cover that can be easily operated without disturbing the vapor layer and that completely covers the solvent tank when work is not performed in the degreaser;

(ii) A primary condenser situated above the boiling solvent;

(iii) A water separator that does not operate by means of evaporation or distillation;

(iv) A perimeter trough;

(v) For vapor degreasers employing sprays:

(A) spray nozzles having a pressure low enough to prevent liquid splashing outside of the tank, and

(B) spray nozzles which produce continuous liquid flow, rather than fine atomized or shower type sprays; or

(C) spray nozzles which are located below the vapor-air interface.

## (2) Additional Equipment Requirements

All vapor degreasers shall have one of the following:

- (i) A freeboard ratio of at least 1.0; or
- (ii) A refrigerated freeboard chiller, where the chilled air blanket temperature measured in degrees Fahrenheit at the center of the air blanket is not greater than 40% of the initial boiling point of the solvent; or
- (iii) Be designed in such a manner that its cover or door opens only when the dry part is entering or exiting the degreaser.

## (3) Safety Devices

Vapor degreasers shall be equipped with the following safety devices:

- (i) A device which shuts off the sump heat if the condenser's coolant stops circulating. This requirement does not apply to vapor degreasers equipped with refrigerated condensers; and
- (ii) A device which shuts off the sump heat if the condenser's coolant or refrigerant temperature becomes higher than the designed operating temperature; and
- (iii) A device which is only manually resettable and which shuts off the sump heat if the vapor level rises above the designed operating level;
- (iv) For vapor degreasers employing sprays, a device that prevents spray pump operation if the solvent vapor-air interface temperature falls below the designed operating level.

## (4) Operating Requirements

A person shall not operate a vapor degreaser unless all of the following requirements are met:

- (i) A permanent, conspicuous, legible label listing the applicable operating requirements is posted on or near the degreaser;
- (ii) The degreaser and any emission control equipment are installed and maintained in proper working order. The emission control equipment shall be properly operating at all times when parts are being cleaned or solvent is being heated in the degreaser;
- (iii) The cover is not removed except to process workload or to perform maintenance;

- (iv) There are no liquid leaks from any portion of the degreaser. Upon detection of a liquid leak, the leak shall be repaired immediately, or the degreaser shall be shut down and drained in a manner that minimizes emissions;
- (v) Ventilation fans are not positioned near the degreaser openings in such a way as to disturb the vapor zone;
- (vi) At startup, the primary condenser and the refrigerated freeboard chiller, if required, are turned on before the sump heater is turned on. At shutdown, the sump heater is turned off before the primary condenser and refrigerated freeboard chiller are turned off;
- (vii) No porous or absorbent materials, such as cloth, leather, wood, or rope are cleaned in a vapor degreaser;
- (viii) Solvent is not sprayed above the vapor-air interface;
- (ix) Exhaust ventilation rate does not exceed 65 cubic feet per minute per square foot (20 cubic meters per minute per square meter) of the degreaser vapor-air interface area, unless necessary to meet OSHA requirements;
- (x) Workloads placed in the degreaser occupy a horizontal cross-sectional area that is less than one half of the vapor-air interface area;
- (xi) The water separator is maintained to prevent water from returning to the surface of the boiling solvent sump or from becoming visibly detectable in the solvent exiting the water separator; and
- (xii) Solvent carry-out is minimized by all of the following methods:
  - (A) racking parts for full drainage;
  - (B) moving parts in and out of the degreaser at a speed of less than 11 feet per minute (3.3 meters per minute);
  - (C) cleaning the workload in the vapor zone until condensation ceases;
  - (D) tipping out any pools of solvent on the cleaned parts before removal;and
  - (E) not removing parts from the degreaser until they are visually dry.
- (xiii) Waste solvent and contaminated residue, if any, shall be recycled, or disposed of according to requirements based on the California Health and Safety Code, Division 20, Chapter 6.3 (beginning at section 25100) concerning hazardous waste disposal.

(e) **CONTROL EQUIPMENT**

(1) In lieu of complying with the equipment requirements in Subsections (d)(1), (d)(2), and (d)(3), an owner/operator may use an airtight/airless vapor degreaser provided that all of the following requirements are met:

(i) The degreaser is operated in accordance with the manufacturer's specifications and is equipped with a door or other pressure sealing apparatus in place during all cleaning and drying cycles;

(ii) All associated pressure relief devices do not allow liquid solvents to drain out. Spills during any solvent transfer shall be wiped up immediately;

(iii) A differential pressure gauge is installed to indicate the sealed chamber pressure;

(iv) The applicable operating requirements of Subsection (d)(4) are met.

(2) In lieu of complying with the requirements of Subsections (d)(1), (d)(2), and (d)(3), an owner/operator of a vapor degreaser may use an air pollution control system which:

(i) Has been installed in accordance with an Authority to Construct; and

(ii) Has a combined emissions capture and control efficiency of at least 85% by weight.

(3) A person electing to use control equipment pursuant to Subsection (e)(2) shall submit to the Air Pollution Control Officer for approval an Operation and Maintenance plan for the proposed air pollution control system and receive approval prior to operation of the control equipment. Thereafter, the plan can be modified, with Air Pollution Control Officer approval, as necessary to ensure compliance. Such plan shall

(i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(2)(ii), such as temperature and/or pressure;

(ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters; and

(iii) Upon approval of the Air Pollution Control Officer, a person subject to the requirements of Subsection (e)(2) shall implement the Operation and Maintenance plan and shall comply with the all the provisions of the approved plan.

(f) **RECORDKEEPING REQUIREMENTS**

(1) Any person conducting vapor degreasing operations subject to this rule shall maintain the following records:

(i) A current list of cleaning materials in use, which provides all of the data necessary to evaluate compliance, including but not limited to:

(A) Manufacturer name and identification for each material;

(B) VOC content expressed in g/l (lb/gal) of material as used, and density and mixed ratios for each component; and

(C) Initial boiling point of a cleaning material if a refrigerated freeboard chiller is used.

(2) Any person using control equipment pursuant to Section (e) of this rule shall:

(i) Maintain records in accordance with the requirements of Subsection (f)(1); and

(ii) Maintain daily records of key system operating parameters as approved in the Operation and Maintenance plan pursuant to Subsection (e)(3). Such records shall be sufficient to document continuous compliance with Subsection (e)(2)(ii) during periods of emission producing activities.

All records shall be retained on site for at least three years and shall be made available to the District upon request.

(g) **TEST METHODS**

(1) The VOC content of cleaning materials shall be determined by the South Coast Air Quality Management District (SCAQMD) Method 313 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry), SCAQMD Method 308 (Quantitation of Compounds by Gas Chromatography), or any other test methods approved by the Environmental Protection Agency (EPA), California Air Resources Board (ARB), and the Air Pollution Control District.

(2) Measurement of initial boiling point of solvents shall be conducted in accordance with ASTM Standard Test Method D1078-03 for distillation range of volatile organic liquids, or its most current version,

(3) Hoist speed shall be determined by measuring the distance traveled by the hoist per unit of time.

(4) Temperatures in the vapor zone shall be measured with the use of a properly calibrated temperature probe, with an accuracy of  $\pm 1^\circ$  F.

(5) The overall control efficiency of air pollution control equipment operated pursuant to Subsection (e)(2)(ii) shall be determined by multiplying the capture efficiency of the emission collection system by the control efficiency of the air pollution control device. The control efficiency of the air pollution control device shall be determined using

EPA Test Methods 18 and 25 or 25A (40 CFR Part 60, Appendix A) and in accordance with a protocol approved by the Air Pollution Control Officer. Capture efficiency shall be determined according to EPA Test Method 204. Subsequent to the initial compliance demonstration period, appropriate key system operating parameters as determined by the Air Pollution Control Officer may be used as indicators of the performance of the emission control system.

**(h) COMPLIANCE SCHEDULE**

(1) All new vapor degreasing operations shall comply with the applicable requirements of this rule upon initial startup.

(2) All existing vapor degreasing operations, except for those specified in Subsection (h)(3) or (h)(4), shall comply with the applicable requirements of this rule after May 23, 2007.

(3) An owner or operator of any existing vapor degreaser that currently does not comply with one of the requirements of Subsection (d)(2) shall:

(i) By November 23, 2007, submit to the Air Pollution Control Officer an application to modify a Permit to Operate for complying with the applicable requirements of Subsections (d)(2);

(ii) By May 23, 2008, comply with all applicable rule requirements.

(4) An owner or operator of an existing vapor degreaser that chooses to comply with the rule by installing air pollution control equipment pursuant to Section (e) of this rule shall comply with the following increments of progress:

(i) By November 23, 2007, submit to the Air Pollution Control Officer an application for an Authority to Construct and a Permit to Operate an air pollution control system as specified in Section (e);

(ii) By May 23, 2008, comply with all applicable rule requirements.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 67.7 - CUTBACK AND EMULSIFIED ASPHALTS** (Effective 8/29/79: Rev. Adopted & Effective 5/15/96)

### (a) **APPLICABILITY**

The provisions of this rule apply to the application and sale of cutback and emulsified asphalt materials for the paving, construction or maintenance of parking lots, driveways, streets and highways.

### (b) **EXEMPTION**

1. The provisions of this rule shall not apply to any asphalt material sold in San Diego County for shipment and use outside San Diego County.

It shall be the responsibility of any person claiming the above exemption to clearly label each container of materials subject to this exemption or provide shipping records to demonstrate that the asphalt material is not for use within San Diego County.

2. The provisions of Section (e) shall not apply to any person who uses or applies asphalt materials utilized exclusively in connection with any structure which is designed and used exclusively as a dwelling for not more than four families.

### (c) **DEFINITIONS** (Rev. Effective 5/15/96)

1. "**Asphalt**" means a brownish-black cementitious material (solid or semi-solid mixture) of which the main constituents are bitumens which occur naturally or obtained by distillation from coal or petroleum.
2. "**Cutback Asphalt**" means paving grade asphalt liquified with petroleum distillate and as further defined by American Society for Testing and Materials (ASTM) specifications as follows:

*Rapid cure type: ASTM D2028*

*Medium cure type: ASTM D2027*

*Slow cure type: ASTM D2026*

3. "**Dust Palliative**" means any light application of liquified asphalt (cutback or emulsified asphalt) for the express purpose of controlling loose dust.



4. **"Emulsified Asphalt"** means any asphalt liquified with water containing an emulsifier. The two kinds of emulsions most pertinent are the anionic and cationic types.
5. **"Exempt Compound"** means the same as defined in Rule 2. (Rev. Effective 5/15/96)
6. **"Penetrating Prime Coat"** means any application of asphalt to an absorptive surface to penetrate and bind the aggregate surface and promote adhesion between it and the new superimposed construction. Prime coats do not include palliatives or tack coats.
7. **"Road Oils"** shall be synonymous with slow cure asphalts.
8. **"Tack Coat"** means any application of asphalt applied 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.
9. **"Volatile Organic Compounds (VOC)"** means any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, ammonium carbonate, metallic carbides, metallic carbonates, and exempt compounds which may be emitted to the atmosphere during the application of asphalt materials subject to this rule.

#### (d) STANDARDS

1. A person shall not sell, offer for sale, use or apply for paving, construction or maintenance of parking lots, driveways, streets or highways any cutback asphalt material or road oils which contain more than 0.5 percent by volume VOC which evaporate at 260° C (500° F) or less.
2. A person shall not sell, offer for sale, use or apply for paving, construction or maintenance of parking lots, driveways, streets or highways any emulsified asphalt material which contains more than 3.0 percent by volume VOC which evaporate at 260° C (500° F) or less.

#### (e) RECORDKEEPING

Any person who sells, offers for sale, uses or applies for paving, construction or maintenance of parking lots, driveways, streets or highways any asphalt material subject to this rule shall maintain 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 (d)(1) or (d)(2) of this rule, as applicable. These records shall be kept on site for at least three years and made available to the District upon request.

#### (f) test methods

1. Measurement of VOC content in cutback asphalts pursuant to Subsection (d)(1) of this rule shall be conducted and reported in accordance with ASTM Test Method D 402-76.
2. Measurement of VOC content in cutback asphalts pursuant to Subsection (d)(2) of this rule shall be conducted and reported in accordance with ASTM Test Method D 244-89.
3. Measurement of exempt compound content in cutback asphalts pursuant to Subsections (d)(1) and (d)(2) of this

rule shall be conducted and reported in accordance with ASTM Test Method D 4457-85.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 67.9 - AEROSPACE COATING OPERATIONS**

(Effective 8/24/83; Rev. Effective 4/30/97)

### **(a) APPLICABILITY**

1. This rule is applicable to the coating, masking, bonding, and paint stripping of aerospace components in operations where aerospace coatings are used, to surface cleaning related to these aerospace coating operations, and to the cleanup of application equipment associated with these operations.
2. Any coating, surface cleaning or equipment cleaning operation which is exempt from all or a portion of this rule pursuant to Section (b), shall comply with the provisions of Rule 66, 67.6 and/or Rule 67.12 as applicable.

### **(b) EXEMPTIONS**

1. The provisions of Subsections (d)(1) through (d)(6), (d)(9), (f)(2), (f)(3), and (f)(4) shall not apply to the following:
  - (i) Touch-up coatings and stencil coatings.
  - (ii) A stationary source where not more than 50 gallons per consecutive 12-month period of aerospace coating is used. This amount does not include coatings specified in Subsections (b)(1)(i), (b)(1)(v) and (b)(1)(vi).
  - (iii) Coatings that are used in volumes of less than 200 gallons per consecutive 12-month period provided a total of not more than 200 gallons per consecutive 12-month period of all such non-compliant coatings are used at any stationary source. This amount shall not include coatings specified in Subsections (b)(1)(i), (b)(1)(iv), (b)(1)(v) and (b)(1)(vi).
  - (iv) Coatings used exclusively for purposes of research and development, including coatings applied to mock-ups and prototypes, provided not more than 50 gallons per consecutive 12-month period of all such non-compliant coatings are used at the stationary source.
  - (v) Coatings applied using non-refillable aerosol spray containers.

(vi) Prepreg composite materials.

It shall be the responsibility of any person claiming any of the above exemptions to maintain calendar month records of coating usage. Such records shall show the amount of each coating used in accordance with information required by Subsection (f)(1) of this rule. These records shall be retained on site for at least three years and shall be made available to the District upon request.

2. The provisions of Subsection (d)(2) shall not apply to the use of air brushes with a capacity of three ounces (188.6 ml) or less.
3. The provisions of Subsections (d)(9), (f)(2), and (f)(4) shall not apply to adhesives, sealants and caulking and smoothing compounds, which have a VOC content, as applied, of less than 250 grams of VOC per liter of coating, less water and less exempt compounds.
4. The provisions of Subsections (d)(9), (f)(2), and (f)(4) shall not apply to adhesives and sealants which are applied outside application stations required to have a District Permit to Operate.

It shall be the responsibility of any person claiming exemptions (b)(3) or (b)(4) above to maintain calendar **month** usage records. Such records shall show the amount of each adhesive and sealant used in accordance with information required by Subsection (f)(1) of this rule. These records shall be retained on site for at least three years and shall be made available to the District upon request.

1. Provisions of Subsection (d)(2) shall not apply to a stationary source where not more than one gallon per day of aerospace coating is used. It shall be the responsibility of any person claiming this exemption to maintain daily records of coating usage according to Section (f) of this rule. These records shall be retained on site for at least three years and shall be made available to the District upon request.
2. The provisions of Subsections (d)(6)(ii), (iii), and (v) shall not apply to any maskant application dip tank where 20 gallons or less of coating are used per consecutive 12-month period.
3. The provisions of Subsections (d)(6)(i), (ii), (iii), and (v) shall not apply to any maskant application dip tank that contains an aqueous coating with a volatile organic compound (VOC) content of 10% by weight or less.

4. The provisions of Subsection (d)(4) shall not apply to surface cleaning or stripping of aerospace components in equipment that is subject to the requirements of Rule 67.6.

### (c) DEFINITIONS

For the purposes of this rule the following definitions shall apply:

1. "**Adhesive**" means a material that is used to bond one surface to another surface by attachment.
2. "**Adhesive Bonding Primer**" means a coating applied in a very thin film to aerospace adhesive bond detail components for corrosion inhibition and adhesion of the subsequently applied adhesive.
3. "**Adhesive Bonding Primer, Structural**" means an adhesive bonding primer used in conjunction with structural adhesives to form load carrying aircraft components.
4. "**Adhesive Bonding Primer for Elastomers and Elastomeric Adherends**" means an adhesive bonding primer applied to elastomers or nonmetallic substrates for adhesion of the subsequently applied adhesive.
5. "**Aerospace Coatings**" means materials including but not limited to those specified in the table in Subsection (d) (1)(i) of this rule, which contain more than 20 grams of VOC per liter of coating, as applied, less water and less exempt compounds. Preservative oils and compounds, form release agents not containing solids, and greases and waxes are not aerospace coatings.
6. "**Aerospace Component**" means any raw material, partial or completed fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle, including mockups, test panels and prototypes.
7. "**Antichafe Coating**" means a coating applied to aerospace components' moving surfaces which may rub other aerospace components' surfaces during normal operation. A material shall not be classified as an antichafe coating if it can also be classified as a dry lubricative material or a solid film lubricant.

8. **"Application Equipment"** means equipment used for applying coatings to a substrate. Application equipment includes coating distribution lines, coating hoses, equipment used in hand application methods, and equipment used in mechanically operated application methods, including but not limited to spray guns, spinning disks, and pressure pots.
  
9. **"Bearing Coating"** means a coating applied to an anti-friction bearing, a bearing housing or the area adjacent to such a bearing in order to facilitate bearing function or to protect base material from excessive wear. A material shall not be classified as a bearing coating if it can also be classified as a dry lubricative material or a solid film lubricant.
  
10. **"Caulking and Smoothing Compounds"** means semi-solid materials which are applied by hand application methods and are used to aerodynamically smooth exterior vehicle surfaces or fill cavities such as bolt hole accesses. A material shall not be classified as a caulking and smoothing compound if it can also be classified as a sealant.
  
11. **"Chemical Surface Operation"** means formation or removal of a metallic or metallic oxide film by chemical or electrochemical means including, but not limited to, aging, anodizing, conversion coating, electroplating, electropolishing, etching, and chemical milling.
  
12. **"Conformal Coating"** means a coating applied to electrical conductors and circuit boards to protect them against electrical discharge damage and/or corrosion.
  
13. **"Dry Lubricative Material"** means a coating consisting of lauric acid, cetyl alcohol, waxes, or other non-cross linked or resin-bound materials which act as a dry lubricant.
  
14. **"Elastomeric Adhesive"** means a rubber or silicone based adhesive used to bond elastomeric materials to metal substrates or to provide a flexibility to the bond formed.
  
15. **"Electromagnetic Radiation Effect Coatings"** means coatings primarily applied to prevent radar detection; detection by ultraviolet, visible, or infrared reflectance or emittance; and electromagnetic interference.

16. **"Exempt Compound"** means the same as defined in Rule 2.
17. **"Flight Test Coating"** means a coating applied to an aircraft prior to flight testing to protect the aircraft from corrosion and to provide the required markings during flight test evaluation.
18. **"Form or Mold Release Agent"** means a coating applied to molds to prevent galling and/or to keep parts from being held by a mold or die during forming or molding.
19. **"Freeboard Height"** means the distance from the maximum coating level to the top of a coating application dip tank.
20. **"Freeboard Ratio"** means the freeboard height divided by the smaller of the interior length or width of a coating application dip tank.
21. **"Fuel Tank Adhesive"** means an adhesive used in conjunction with a fuel tank coating to bond aerospace components exposed to fuel and must be compatible with fuel tank coatings.
22. **"Fuel Tank Coating"** means a coating applied to the interior of a fuel tank, fuel fill and drainage tracks, or surfaces frequently wetted by fuel of an aircraft or space vehicle to protect them from corrosion, including corrosion due to acidic by-products of bacterial growth.
23. **"Hand Application Method"** means the application of coatings by manually held non-mechanically operated equipment. Such equipment includes paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags and sponges.
24. **"High Temperature Coating"** means a coating that must withstand temperatures higher than 350; F (177;C).
25. **"High Temperature Resistant, Thermal Flash Resistant, Rain Erosion Resistant Coating"** means a fluoroelastomeric coating that is designed specifically to protect aerospace vehicles from thermonuclear flash,

erosion from airborne particles such as rain, ice, sand, etc., and temperatures above 450° F (232°C).

26. **"High-Volume Low-Pressure (HVL) Spray"** means a coating application method using a spray applicator and pressurized air which is designed and operated with a permanent atomizing pressure between 0.1 and 10.0 psig, measured dynamically at the center of the applicator's air cap.
27. **"Heat Treatment Scale Inhibitor"** means a coating that is applied to the surface of a part prior to thermal processing to inhibit the formation of scale.
28. **"Hot Melt Sealant"** means a solid sealant that is liquefied in a heat gun prior to application to a joint.
29. **"Impact Resistant Coating"** means a flexible coating that protects aerospace components, such as aircraft landing gear, landing gear compartments and other under fuselage surfaces, subject to abrasion from impact from runway debris.
30. **"Line Sealer Maskant"** means a maskant used to cover scribe lines in maskant, or repair damage to a maskant, in order to protect against chemical milling or chemical processing solutions.
31. **"Maskant for Bonding"** means a temporary coating applied directly to aerospace components during bonding processes to protect surface areas during chemical surface operations.
32. **"Maskant for Chemical Milling"** means a coating or a multi-stage maskant applied directly to a metal aerospace component to protect a portion of the component's surface area only during chemical milling operations. Chemical milling maskants do not include line sealer maskants or maskants for bonding.
33. **"Maskant for Chemical Processing"** means a coating or a multi-stage maskant applied directly to an aerospace component to protect a portion of the component's surface area during a single chemical surface operation, not including chemical milling, or during multiple chemical surface operations that include chemical milling. Chemical processing maskants do not include line sealer maskants or maskants for bonding.
34. **"Multi-Stage Maskant"** means a system employing two or more component coatings that together function as a Type I chemical milling maskant or a maskant for chemical processing.



35. **"Optical Anti-Reflective Coating"** means a coating with a low reflectance in the infrared and visible wavelength range used for anti-reflection on or near optical laser hardware.
36. **"Prepreg Composite Material"** means a reinforcing material impregnated with partially polymerized organic resins and ready for application.
37. **"Preservative Oils and Compounds"** means coatings which are applied on areas that are not intended to be painted such as cables and exterior surfaces to prevent corrosion and/or to provide lubrication.
38. **"Pretreatment Coating"** means a coating which contains at least one-half percent by weight of acid to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion and ease of stripping.
39. **"Primer"** means a coating usually applied for purposes of corrosion prevention, protection from the environment, functional fluid resistance and adhesion of subsequent coatings. A primer would include a coating which is formulated to be used as a primer but which, in a specific application, is used as an initial and final coating on interior areas without subsequent application of a topcoat.
40. **"Rain Erosion Resistant Coating"** means a coating that protects leading edges of an aircraft from erosion due to rain, dust and other particles during flight, take-off or landing.
41. **"Research and Development"** means aerospace coating operations, including operations performed for purposes of testing and quality control, which are not used for production purposes to directly produce a deliverable product or service, other than the first-article product or service.
42. **"Sealant"** means a viscous semisolid material that fills voids in order to seal out water, fuel, other liquids, solids, or in some cases air currents, and is applied with brushes, syringes, caulking guns, spray guns or spatulas or is applied by fill and drain method.

43. **"Solid-Film Lubricant"** means a very thin coating consisting of a binder system containing as its chief pigment material one or more of the following: molybdenum disulfide, graphite, polytetrafluoroethylene, or other solids that act as a dry lubricant between tightly fitting surfaces.
44. **"Space Vehicle Coating"** means a coating applied to vehicles designed for use beyond the earth's atmosphere.
45. **"Stationary Source"** means the same as defined in Rule 20.1.
46. **"Stencil Coating"** means an ink or coating which is rolled, sprayed with an airbrush or a touch-up gun with capacity of 8 ounces (236.4 ml) or less, or brushed using a template to add identifying letters and/or numbers to aerospace components.
47. **"Stripper"** means a volatile liquid applied to remove a maskant, paint, paint residue or temporary protective coating.
48. **"Structural Adhesive - Autoclavable"** means an adhesive used to bond load-carrying aircraft components which is cured by heat and pressure in an autoclave or a press.
49. **"Structural Adhesive - Non-Autoclavable"** means an adhesive not cured in an autoclave or a press which is used to bond load-carrying aircraft components or to perform other critical functions, such as bonding near engines.
50. **"Structural Adhesive - Epoxy"** means a liquid or paste adhesive consisting of an epoxy resin and a curing agent used to bond aerospace components.
51. **"Temporary Protective Coating"** means a pigmented coating applied to an aerospace component to protect it from mechanical and/or environmental damage during manufacturing or shipping.
52. **"Thermocontrol Coating"** means a coating applied to space vehicle components to reflect heat and formulated to give specific heat reflectance, absorption and emissivity properties, or is a coating required for aerospace engine components to delay component failure due to fire.

53. **"Topcoat"** means a coating applied over a primer as the final coat for purposes such as appearance, identification, or protection.
  
54. **"Touch-up Coating"** means a coating that is used for that portion of the coating operation which is incidental to the main coating process but necessary to cover minor imperfections or to achieve coverage as required, or a coating operation which is necessary to repair minor mechanical damage prior to intended use. A touch-up coating may include small amounts of solvent, applied by hand, used to attach coating patches exhibiting inadequate adhesion.
  
55. **"Transfer Efficiency"** means the ratio of the weight or volume of coating solids adhering to the part being coated to the weight or volume of coating solids used in the application process, expressed as a percentage.
  
56. **"Type I Chemical Milling Maskant"** means a maskant used for a Type I chemical milling operation.
  
57. **"Type II Chemical Milling Maskant"** means a maskant used for a Type II chemical milling operation.
  
58. **"Type I Chemical Milling Operation"** means chemical milling of aluminum or aluminum alloys using milling solutions containing less than 0.1 weight % amines.
  
59. **"Type II Chemical Milling Operation"** means chemical milling of aluminum or aluminum alloys using milling solutions containing 0.1 weight % amines or more.
  
60. **"Unicoat"** means a coating which is applied directly to an aerospace component, to a chemically treated and unpainted aerospace component, or over an old coating system in lieu of stripping the old coating system, for purposes of corrosion protection, environmental protection and/or functional fluid resistance and which is not subsequently topcoated.
  
61. **"Volatile Organic Compounds (VOC)"** means the same as defined in Rule 2.

62. **"VOC Content Per Volume of Coating, Less Water and Exempt Compounds"** means the same as defined in Rule 2.
63. **"VOC Content Per Volume of Material"** means the same as defined in Rule 2.
64. **"Wet Fastener Installation Coating"** means a primer or sealant applied by dipping, brushing, or daubing to fasteners which are installed before the coating is cured.

(d) **STANDARDS**

1. VOC Limits.

(i) Except as provided in Subsection (b)(1), a person shall not use in aerospace coating operations any coating which contains VOC in excess of the following limits:

	<u><b>VOC content, grams per liter of coating as Coating Category applied, less water and less exempt compounds</b></u>
Adhesive Bonding Primers:	
Structural	850
For Elastomers and Elastomeric	850
Adherends	850
All Other Adhesive Bonding	
Primers	850
Adhesives:	
Structural Autoclavable	50
Structural Epoxy	50
Structural Non-Autoclavable	250
Elastomeric	850
Fuel Tank Adhesives	620
All Other Adhesives	250
Antichafe Coatings	600
Bearing Coatings	620
Caulking and Smoothing Compounds	850
Conformal Coatings	750
Dry Lubricative Materials:	
Fasteners Lubrication	250
Non-Fasteners Lubrication	880
Electromagnetic Radiation Effect Coatings	800
Flight Test Coatings:	

Use on Missiles, Targets	420
All Others	840
Form Release Agents	800
Fuel Tank Coatings	720
Heat Treatment Scale Inhibitors	880
High Temperature Coatings	850
High Temperature Resistant, Thermal Flash	800
Resistant, Rain Erosion Resistant Coatings	
Impact Resistant Coatings	420
High Temperature Coatings	850
High Temperature Resistant, Thermal Flash	800
Resistant, Rain Erosion Resistant Coatings	
Impact Resistant Coatings	420
Line Sealer Maskants	650
High Temperature Coatings	850
High Temperature Resistant, Thermal Flash	800
Resistant, Rain Erosion Resistant Coatings	
Impact Resistant Coatings	420
Line Sealer Maskants	650
Maskants for Bonding	600
Maskants for Chemical Milling	
Type I including Multi-Stage Maskants	250
Type II	160
All Other Chemical Milling	250
Maskants for Chemical Processing Chemical Processing including	250
Multi-Stage Maskants	
Optical Anti-Reflective Coatings	700
Pretreatment Coatings	780
Primers	350
Primers Compatible with Rain Erosion Resistant Coatings	850
Rain Erosion Resistant Coatings	690
Sealants	600
Hot Melt Sealants	100
Solid Film Lubricants:	
Fasteners Lubrication	250
Non-Fasteners Lubrication	880
Space Vehicle Coatings:	
Electrostatic Discharge Protection	800
Other Space Vehicle Coatings	1000
Adhesives	800
Temporary Protective Coatings	250
Thermocontrol Coatings	600
Topcoats	420
Unicoats	420
Wet Fastener Installation Coatings	675
All Other Coatings	420

(ii) If each coating comprising a multi-stage maskant complies with the applicable VOC limit, then the multi-

stage maskant is deemed compliant. Otherwise the compliance of a multi-stage maskant with the VOC limits in Subsection (d)(1)(i) shall be determined pursuant to Subsection (d)(1)(iii) in the following manner:

(A) For a multi-stage maskant for which all component coatings are applied by methods other than dip coating, the VOC content of the multi-stage coating shall be calculated either each day of operation using that calendar day as the averaging period or each calendar month using that calendar month as the averaging period; or

(B) For a multi-stage maskant for which some component coatings are applied by dip coating, the VOC content of the multi-stage coating shall be calculated each calendar month using that calendar month as the averaging period or that calendar month and the previous two consecutive calendar months as the averaging period.

(iii) The following formula shall be used to determine the VOC content per volume of coating less water and exempt compounds, as applied, of a multi-stage maskant over a given averaging period:



where:

$VOC_m$  = the VOC content per volume of coating less water and exempt compounds, as applied, of a multi-stage maskant.

$VOC_i$  = the VOC content per volume of coating less water and exempt compounds, as applied, of the  $i^{\text{th}}$  component coating of the multi-stage maskant.

$V_i$  = the total coating volume of the  $i^{\text{th}}$  coating component less water and exempt compounds, as applied, used at an application station or added to a dip tank, as applicable, during the averaging period.

$n$  = the total number of component coatings that comprise the multi-stage coating.

(iv) If a multi-stage maskant is determined to exceed the VOC limits of Subsection (d)(1)(i), then the owner or operator shall be deemed in violation of this rule for each day of the averaging period used to determine compliance pursuant to Subsection (d)(1)(iii) except for each day the owner or operator can demonstrate that no such noncompliant coatings were used.

The requirements of Subsection (d)(1) may be met using an Alternative Emission Control Plan (AECPP) that has been approved pursuant to Rule 67.1.

## 2. Application Methods

Except as provided in Subsections (b)(1), (b)(2), and (b)(5), a person shall not apply aerospace coatings in aerospace coating operations subject to this rule except by means of the following application methods:

- (i) Electrostatic spray application, or
- (ii) Flow coat application, or
- (iii) Dip coat application, or
- (iv) Hand application methods, or
- (v) Airless spray application for use with maskants and temporary protective coatings only, or
- (vi) High-volume low-pressure (HVLP) spray application, or
- (vii) Other coating application methods that are demonstrated to have transfer efficiency at least equal to one of the above application methods, and which are used in such a manner that parameters under which they were tested are permanent features of the method. Such coating application methods shall be approved in writing by the Air Pollution Control Officer prior to use.

### 3. Stripping Operations.

Except as provided in Subsection (b)(1), a person shall not use a stripper in aerospace coating operations unless the stripper:

- (i) Contains 400 grams of VOC per liter of material or less as applied, or
- (ii) Has a total vapor pressure of VOC of 9.5 mm Hg or less at 68°F (20°C).

### 4. Surface Cleaning Operations.

Except as provided in Subsections (b)(1) and (b)(8), a person shall not use a material for surface cleaning or surface preparation of an aerospace component unless:

- (i) The material contains 200 grams of VOC per liter of material or less as applied, or
- (ii) The material has a total vapor pressure of VOC of 45 mm Hg or less at 68°F (20°C), or

(iii) The material has an initial boiling point of 190° C (374° F) or greater at 760 mm Hg total pressure; or

(iv) The aerospace component is cleaned in an enclosed cleaning material container which is only opened when accessing parts or adding surface cleaning materials.

#### 5. Cleaning of Application Equipment.

Except as provided in Subsection (b)(1), a person shall not clean aerospace coating application equipment unless the cleaning material:

(i) Contains 200 grams or less of VOC per liter of material; or

(ii) Has a total vapor pressure of VOC of 20 mm Hg or less at 68°F (20° C); or

(iii) Has an initial boiling point of 190° C (374° F) or greater at 760 mm Hg total pressure; or

(iv) The cleaning material is flushed or rinsed through the application equipment in a contained manner that will minimize evaporation into the atmosphere; or

(v) The application equipment or equipment parts are cleaned in a container which is open only when being accessed for adding, cleaning, or removing application equipment or when cleaning material is being added, provided the cleaned equipment or equipment parts are drained to the container until dripping ceases; or

(vi) A system is used that totally encloses the component parts being cleaned during washing, rinsing and draining; or

(vii) Other application equipment cleaning methods are used that are demonstrated to be as effective as any of the equipment described above in minimizing the emissions of VOC to the atmosphere, provided that the method has been tested and approved by the Air Pollution Control Officer prior to use.

#### 6. Maskant Dip Coating Application Equipment.

Except as provided in Subsections (b)(1), (b)(6), and (b)(7), a person shall not use a dip tank to apply Type I chemical milling maskants or maskants for chemical processing or component coatings of a multi-stage maskants to aerospace parts unless:

(i) The dip tank is covered except when being accessed to add or remove materials; take samples; visually inspect the maskant level; clean, maintain or repair the tank; or apply maskant; and

(ii) The dip tank has a readily visible, permanent mark or line indicating the maximum allowable maskant level; and



(iii) The dip tank has a freeboard ratio greater than or equal to 0.5; and

(iv) Maskant agitation is achieved by means other than gas agitation; and

(v) Material is added to the dip tank by means of submerged filling; and

(vi) Any dip tank lip exhaust ventilation system with an inlet located below the cover of the maskant application dip tank is turned off and the ventilation duct closed when the maskant application dip tank is covered.

#### 7. Disposal of Waste Materials into the Air.

A person shall not use spray application equipment or any other means to dispose of waste coatings, coating components, surface preparation materials, or cleaning materials into the air, except when momentarily purging coating material from a spray applicator cap immediately before or after applying the coating material.

#### 8. Prohibition of Specification.

A person shall not specify the application of a coating subject to this rule for any aerospace coating operation in San Diego County if such application results in a violation of any provision of this rule. This prohibition is applicable to any written or oral contract under the terms of which any coating is applied to any aerospace component within San Diego County.

#### 9. Coating Lists.

Except as provided in Subsections (b)(1), (b)(3), and (b)(4), a person using aerospace coatings subject to this rule shall provide to the Air Pollution Control Officer a list of all coatings applied in each affected facility. Such list shall contain all information required by Subsection (f)(1). The list shall also identify, for each aerospace coating, all applicable coating category uses, including allowable VOC content, specified in Subsection (d)(1)(i). The list shall be revised before any aerospace coating is used for purposes other than those previously identified on the list. The revised list shall be retained on site and provided to the Air Pollution Control Officer upon request. Information necessary to demonstrate that the intended use of a coating is consistent with the applicable definition of the coating use contained in Section (c) shall be provided to the District upon request.

A person shall not use any aerospace coating unless the coating is included on such list and is used only as the coating category specified on the list for that specific coating. If the intended use of a coating has been determined in writing by the Air Pollution Control Officer to be inconsistent with the applicable definition of the coating use contained in Section (c) or if the VOC content of a coating does not comply with the applicable limits specified in Subsection (d)(1), the coating shall be deleted from the list and shall not be used. Such determinations by the Air Pollution Control Officer shall not relieve the person using any aerospace coating from complying with the applicable definitions and VOC content limits of this rule.

#### **(e) CONTROL EQUIPMENT**

1. Any person subject to this rule may comply with the provisions of Subsections (d)(1) through (d)(6) by using air pollution control equipment which has been approved in writing by the Air Pollution Control Officer provided that the air pollution control equipment:

- (i) Has been installed in accordance with an Authority to Construct; and
  - (ii) Includes an emission collection system which captures organic gaseous emissions, including emissions associated with applicable coating, equipment cleaning, and surface preparation operations, and transports the captured emissions to an air pollution control device; and
  - (iii) Has a combined emissions capture and control device efficiency of at least 85 percent by weight.
2. A person electing to use an air pollution control system pursuant to Subsection (e)(1) of this rule shall submit an Operation and Maintenance Plan for the air pollution control device and emission collection system to the Air Pollution Control Officer for approval and receive such approval prior to operation of the air pollution control equipment. Thereafter, the plan can be modified, with Air Pollution Control Officer approval, as necessary to ensure compliance. The Operation and Maintenance Plan shall:
- (i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(1)(iii), such as temperature, pressure, and/or flow rate; and
  - (ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.
3. Upon approval of the Air Pollution Control Officer, a person electing to use an air pollution control system pursuant to this Section (e) shall implement the Operation and Maintenance plan and shall comply with the provisions of the approved plan thereafter.

**(f) RECORDKEEPING**

Except as provided in Subsections (b)(1), (b)(3), and (b)(4), any person using coatings, strippers, thinners, surface cleaning materials or equipment cleaning materials in aerospace coating operations shall maintain records in accordance with the following requirements:

1. Maintain a current list of coatings, strippers, thinners, surface cleaning and equipment cleaning materials in use. This list shall provide the data necessary to evaluate compliance, including, but not limited to:
  - (i) Type and/or applicable category specified in Subsections (d)(1), (d)(3), (d)(4), and d(5) of each coating, stripper, thinner, surface cleaning and equipment cleaning material used, including manufacturer identification; and
  - (ii) Mix ratio of components; and
  - (iii) VOC content per volume of coating less water and exempt compounds, as applied; and
  - (iv) VOC content per volume of material, total vapor pressure of VOC, or initial boiling point of each stripper, surface cleaning material, and equipment cleaning material, as applied; and
  - (v) For each multi-stage maskant, the applicable maskant category specified in Subsection (d)(1), and the

manufacturer identification of the component coatings that comprise the multi-stage maskant.

2. At a minimum, for each material that is in compliance with Subsections (d)(1), (d)(3), (d)(4) or (d)(5), as applicable, maintain records for each calendar month that show:
  - (i) For any materials not applied by dip coating, the amount of each coating, stripper, and thinner used; and
  - (ii) Inventory (dispensing) records for solvents used for equipment cleaning and surface cleaning operations; and
  - (iii) Material additions to coating application dip tanks.
3. For each material that is not in compliance with Subsections (d)(1) maintain daily usage records for all coatings, thinners, and VOC containing materials.
4. A person using control equipment specified in Section (e) of this rule shall:
  - (i) Maintain records in accordance with Subsections (f)(1) and (f)(2);
  - (ii) Maintain daily usage records for all coatings, strippers, cleaning and/or surface preparation materials not in compliance with Subsections (d)(1), (d)(3), (d)(4) or (d)(5) of this rule; and
  - (iii) Maintain daily records of key system operating parameters as approved in the Operation and Maintenance plan. Such records must be sufficient to document continuous compliance with Subsection (e)(1)(iii) during periods of emission producing activities.

All records shall be retained on site for at least three years and shall be made available to the District upon request.

#### **(g) TEST METHODS**

1. Measurements of the VOC content of coatings, strippers and cleaning materials subject to Section (d) of this rule shall be conducted and reported in accordance with EPA Test Method 24 (40 CFR 60, Appendix A).
2. Perfluorocarbon (PFC) compounds and cyclic, branched, or linear completely methylated siloxanes (VMS) shall be assumed to be absent from aerospace coatings, strippers and cleaning materials subject to this rule unless a manufacturer of the material or a facility operator identifies the specific individual compound(s) and the amount(s) present in the material and provides an approved test method which can be used to quantify the specific compounds.
3. The overall control efficiency of air pollution control equipment operated pursuant to Subsection (e)(1)(iii) shall be determined by multiplying the capture efficiency of the emission collection system by the control efficiency of the air pollution control device. The control efficiency of the air pollution control device shall be determined using EPA Methods 18 and 25 or 25A (40 CFR 60, Appendix A) and in accordance with a protocol approved by the Air Pollution Control Officer. Capture efficiency shall be determined according to EPA's technical document, "Guidelines for Determining Capture Efficiency," January 9, 1995. Subsequent to the initial compliance demonstration period, appropriate key system operating parameters as determined by the Air Pollution Control Officer may be used as indicators of the performance of the emission collection system.
4. Measurements of transfer efficiency pursuant to Subsection (d)(2)(vii) of this rule shall be conducted in accordance with the South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User".

5. Total vapor pressure of VOC containing materials subject to Subsections (d)(3)(ii), (d)(4)(ii) and (d)(5)(ii) of this rule shall be calculated by using the District's "Procedure for Estimating the Vapor Pressure of VOC Mixtures". If the vapor pressure of the liquid mixture exceeds the limits specified in Subsections (d)(3)(ii), (d)(4)(ii) and (d)(5)(ii), as applicable, the vapor pressure shall be determined in accordance with ASTM Standard Test Method D2879-86, Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope. The fraction of water and exempt compounds in the liquid phase shall be determined by using ASTM Standard Test Methods D 3792-91 and D 4457-85 and shall be used to calculate the partial pressure of water and exempt compounds. The results of vapor pressure measurements obtained using ASTM Standard Test Method D2879-96 shall be corrected for the partial pressure of water and exempt compounds.
6. Measurements of acid content of pretreatment coating as defined in Subsection (c)(38) of this rule shall be conducted in accordance with ASTM Standard Test Method D 1613-91 for Determination of Acidity in Volatile Solvents and Intermediates used in Paint, Varnish, Lacquer and Related Products or in accordance with the test procedure specified in MIL-C-8514C(ASG).
7. Measurement of the initial boiling point of cleaning and surface preparation materials subject to Subsection (d)(4)(iii) and/or (d)(5)(iii) of this rule shall be conducted in accordance with ASTM Standard Test Method D1078-86 for distillation range of volatile organic liquids.
8. Measurement of solvent losses from alternative application cleaning equipment subject to Subsection (d)(5)(vii) shall be conducted and reported in accordance with the South Coast Air Quality Management District's General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems dated October 3, 1989.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 67.10 - KELP PROCESSING AND BIO-POLYMER MANUFACTURING OPERATIONS**

(Effective: 1/30/85; Rev. Effective 6/25/97)

### **(a) APPLICABILITY**

1. Except as otherwise provided in Section (b), this rule is applicable to any kelp processing or bio-polymer manufacturing line, or associated pilot plant facility, where volatile organic compounds (VOC's) are used as reactants, solvents or extractants or used to separate or purify the products of kelp processing or bio-polymer manufacturing line operations.
2. Kelp processing and bio-polymer manufacturing operations subject to, or exempt from, this rule shall not be subject to Rule 66.

### **(b) EXEMPTIONS**

The provisions of Sections (d), (e), and (g) of this rule shall not apply to:

1. Any kelp processing or bio-polymer manufacturing line where emissions of VOC's, at the maximum design capacity of the line, are no greater than 15 pounds in any one day, provided total emissions of VOC's from all kelp processing or bio-polymer manufacturing equipment located at a stationary source are no greater than 100 pounds in a day. It shall be the responsibility of a person claiming this exemption to maintain daily records necessary for the District to determine the applicability of such an exemption; and
2. Fuel oil; and
3. Laboratory facilities used exclusively for research and development provided that monthly records are kept of the usage of VOC-containing materials; and
4. Any temporary equipment installed in a pilot plant facility and resulting in an emissions increase not exceeding 10 pounds of VOC's per day. It shall be the responsibility of a person claiming this exemption to maintain daily records necessary for the District to determine the applicability of such an exemption.

All records pursuant to Subsections (b)(1), (b)(3), and (b)(4) shall be retained on site for at least five years and shall be submitted to the District upon request.

### **(c) DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

1. **"Approved Air Pollution Control Device"** means a single piece of equipment or combination of pieces of equipment which is designed to reduce the emissions of air contaminants and which is approved, in writing, by

the Air Pollution Control Officer.

2. **"Bio-polymer Manufacturing Line"** means one or more pieces of equipment linked by a process flow in which a bio-polymer or any of its precursors is dried, extracted, filtered, mixed or reacted with any VOC where the end product cannot be produced if any piece of equipment is removed or not functioning.
3. **"Dryer"** means a device used to remove water and/or VOC's from a material by applying heat, by flowing unsaturated air, or by subjecting the material to vacuum, or any combination thereof.
4. **"Exempt Compound"** means the same as defined in Rule 2.
5. **"Fugitive Liquid Leak"** means a visible leak of liquid, containing greater than 10 percent by weight VOC, at a rate in excess of three drops per minute, or a visible mist. For the purposes of this rule, a liquid leak dropping into a capture system which is connected to an air pollution control device shall not be considered a fugitive liquid leak.
6. **"Incorporator"** means a device in which a solid and a VOC introduced into the device are mixed, where it is not intended that the VOC chemically modify the solid.
7. **"In-Process Tank"** means a tank, which is part of a kelp processing or bio-polymer manufacturing line or pilot plant facility and which is used to handle or transfer VOC-containing material. In-process tanks include spent pots, but exclude stationary storage tanks.
8. **"Kelp Processing Line"** means one or more pieces of equipment linked by a process flow in which kelp or any of its derivatives is dried, extracted, filtered, mixed, or reacted with any VOC where the end product cannot be produced if any piece of equipment is removed or not functioning.
9. **"Laboratory Facility"** means a facility which uses bench-scale or small-scale equipment for the purpose of conducting studies or tests for the research, development or evaluation of a product, process, or service.
10. **"Pilot Plant Facility"** means a facility which uses small-scale or intermediate-scale process equipment.
11. **"Press"** means a mechanical device for separating liquids from solids.
12. **"Reactor"** means a device in which a chemical reaction takes place between two or more materials introduced into the device, where a VOC chemically modifies one or more materials.
13. **"Research and Development"** means bench-scale or small-scale kelp and/or bio-polymer processing operations, including operations performed for purposes of testing and quality control, which are not used for production purposes to produce a salable product or service, other than the first-article product or service.
14. **"Spent Pot"** means the container where VOC-containing liquid is initially collected after being discharged from a press.
15. **"Stationary Source"** means the same as is defined in Rule 2.
16. **"Stationary Storage Tank"** means any tank, reservoir, or other container used to store, but not transport, VOC. Stationary storage tanks do not include tanks used to separate solids from process streams or spent pots.
17. **"Still"** means a device designed to separate, in whole or in part, the constituents of a mixture of miscible liquids by heating the liquid mixture and preferentially condensing and collecting the vapors.
18. **"Temporary Equipment"**, for the purposes of the exemption in Subsection (b)(5), means equipment located at a pilot plant facility for a period not exceeding 90 days in any consecutive 12-month period.

19. **"Volatile Organic Compound (VOC)"** means any volatile compound containing at least one atom of carbon excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonates, and exempt compounds which may be emitted to the atmosphere during operations subject to any provision of this rule.

(d) **STANDARDS**

1. A person shall not operate any bio-polymer manufacturing line unless the total emissions of VOC's to the atmosphere from all dryers used in conjunction with all lines are reduced by at least 95 percent by weight by means of an approved air pollution control device. This requirement shall not apply to dryers whose exhaust contains VOC at an average concentration of 200 ppmv or less over a complete batch or cycle. Emissions of VOC occurring during the transfer of materials containing VOC into or out of a dryer shall be included when determining emissions from that dryer.
2. A person shall not operate a kelp processing line unless the total emissions of VOC to the atmosphere from all dryers and reactors used in conjunction with all affected lines are reduced by means of an approved air pollution control device as follows:

(i) For all dryers in kelp processing lines or portions of lines where the primary VOC being emitted is not a process reactant or byproduct of a process reaction, by a total of at least 95 percent by weight.

(ii) For all reactors and dryers associated with those reactors in kelp processing lines or portions of lines where the primary VOC being emitted is a process reactant or byproduct of a process reaction, except propylene glycol, by a total of at least 80 percent by weight.

(iii) For all dryers in kelp processing lines where propylene glycol is being emitted, by a total of at least 90 percent by weight.

Emissions of VOC occurring during the transfer of materials containing VOC into or out of a dryer or reactor shall be included when determining emissions from the dryer or reactor.

3. A person shall not operate any pilot plant facility unless the total emissions of VOC's to the atmosphere from all dryers used in conjunction with all lines are reduced by at least 95 percent by weight by means of an approved air pollution control device. This requirement shall not apply to dryers whose exhaust contains VOC at an average concentration of 200 ppmv or less over a complete batch or cycle. Emissions of VOC occurring during the pneumatic transfer of materials containing VOC into or out of a dryer shall be included when determining emissions from that dryer. Emissions of VOC occurring during manual transfer of materials containing VOC into or out of a dryer shall not be included when determining emissions from that dryer, provided the containers used to transfer the materials are covered after filling and prior to discharge.
4. A person shall not operate any kelp processing or bio-polymer manufacturing line or pilot plant facility unless:
  - (i) The uncontrolled emissions of VOC to the atmosphere from presses and spent pots are captured by an emission collection system and the captured emissions are transported to an air pollution control device, and the combined emissions capture and control device efficiency is at least 75% by weight; and
  - (ii) The uncontrolled emissions of VOC to the atmosphere from incorporators are captured by an emission

collection system and the captured emissions are transported to an air pollution control device, and the combined emissions capture and control device efficiency is at least 80% by weight; and

(iii) Pumps processing VOC-containing material are equipped with dual mechanical seals, or equipped with other leak-free technology that has been approved in writing by the Air Pollution Control Officer and provided that the equipment complies with Subsection (d)(8); and

(iv) Liquid process mixtures containing VOCs are maintained at a temperature not higher than 115°F (46°C) before entering a press; and

(v) Presses are equipped with sealing door covers.

Subsections (d)(4)(i) and (d)(4)(v) shall not apply during maintenance, cleaning, repair, or back flushing of the press systems.

5. A person shall not operate any kelp processing or bio-polymer manufacturing line or pilot plant facility unless each in-process tank for material containing VOC is equipped with an apparatus or cover which completely covers the tank but not necessarily provides a vapor tight seal, and which is closed or in place at all times except as necessary to meet operating requirements or for maintenance.
6. A person shall not operate any kelp processing or bio-polymer manufacturing line unless all aboveground stationary storage tanks, having capacities greater than 20,000 gallons, containing VOC used in conjunction with the line are equipped with pressure-vacuum relief valves which have minimum relief settings of 5 oz/sq. in. (pressure) and 0.5 oz/sq. in. (vacuum). Tanks with capacities greater than 50,000 gallons shall have minimum relief settings of 0.5 oz/sq. in. (pressure) and 0.5 oz/sq. in. (vacuum).
7. Equipment, devices and systems in use to transport and control VOC emissions pursuant to Subsections (d)(1), (d)(2), (d)(3), and (d)(4) shall be maintained so as to be free of visible holes, breaks, openings or separations between adjoining components, that are not consistent with their design and intended operating function, from which fugitive VOC vapors would be emitted to the atmosphere.
8. A person shall not operate any kelp processing or bio-polymer manufacturing line or pilot plant facility unless all piping, valves, fittings, tanks, stills, process equipment and other devices used to transport, store, react or process VOC or materials containing VOC are free of fugitive liquid leaks, except for leaks which have been identified, recorded and tagged and are repaired in accordance with the schedule specified in this subsection. A visual inspection of these components shall also be performed at least monthly. A record of these inspections shall be maintained and made available to the District upon request. An alternative inspection schedule and program may be used provided such schedule and program have been approved, in advance, by the Air Pollution Control Officer.

Repair of a fugitive liquid leak may be delayed until the leaking equipment is next scheduled to be off-line, or a production cycle is completed, or within 72 hours of detection, whichever occurs first, provided:

(i) The time, date and location of the leak are recorded promptly following detection;

(ii) All practicable steps to minimize the magnitude of the leak are taken as soon as possible following detection; and



(iii) The record required by Subsection (d)(8)(i) is made available to the Air Pollution Control Officer upon request.

An unrecorded leak identified at the time of the District compliance inspection shall be considered a violation of this rule.

This subsection shall not apply to liquid losses occurring during maintenance, cleaning, repair or back flushing of process and storage equipment.

9. An operation and maintenance program shall be submitted to the Air Pollution Control Officer for approval for new equipment required by Subsections (d)(1), (d)(2), (d)(3), (d)(4)(i), and (d)(4)(ii). An existing operation and maintenance program that has been approved by the Air Pollution Control Officer need not be resubmitted for approval as a result of amendments to this rule unless such approved operation and maintenance program is revised. Each program shall be implemented and maintained on approval of the Air Pollution Control Officer.

Each operation and maintenance program submitted for approval shall:

(i) Maintain the VOC emission reduction efficiency required under Subsections (d)(1), (d)(2), (d)(3), (d)(4)(i), and (d)(4)(ii); and

(ii) Identify and maintain all key system operating parameters. Key system operating parameters are those parameters, such as temperature, pressure, and/or flow rate, necessary to maintain the VOC emission reduction efficiency required under Subsections (d)(1), (d)(2), (d)(3), (d)(4)(i), and (d)(4)(ii); and

(iii) Include proposed inspection schedules, anticipated ongoing maintenance steps and proposed daily recordkeeping practices regarding the key system operating parameters.

Each program will apply only to the equipment necessary to meet the requirements of Subsections (d)(1), (d)(2), (d)(3), (d)(4)(i), and (d)(4)(ii), and need not include inspection, maintenance or recordkeeping relevant to compliance with Subsection (d)(7).

A copy of the most recent District-approved operation and maintenance program shall be maintained on site and made available to the Air Pollution Control Officer upon request.

10. Compliance with Subsections (d)(1), (d)(2), (d)(3), (d)(4)(i), and (d)(4)(ii) shall be determined based upon tests or observations of the process equipment and air pollution control system during a period of at least 16 hours, but not more than 24 hours. Affirmative determination of compliance may be demonstrated through tests or observations for a shorter period of time provided such period of time has been determined appropriate in writing by the Air Pollution Control Officer.

## (e) RECORDKEEPING

Any person subject to the requirements of Section (d) of this rule shall maintain the following records:

1. A current list of VOC's, subject to this rule that are in use, and
2. For air pollution control equipment, maintain records sufficient to document compliance, such as daily records of process and key system operating parameters and maintenance performed pursuant to Subsections (d)(1), (d)(2), (d)(3), (d)(4)(i), and (d)(4)(ii), and (d)(9) which will demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities.

All records shall be retained on site for at least five years, and shall be made available to the District upon request.

#### **(f) VOC TEST METHODS**

1. The VOC content of fluids subject to Subsections (c)(5) of this rule shall be determined in accordance with ASTM Standard Recommended Practices for General Gas Chromatography Procedures, E 260-73, General Techniques of Infrared Quantitative Analysis, E 168-67, or General Techniques of Ultraviolet Quantitative Analysis, E 169-63.
2. Measurements of VOC emissions subject to Subsections (d)(1), (d)(2), (d)(3), (d)(4)(i), and (d)(4)(ii) of this rule shall be determined in accordance with EPA Test Methods 18 and 25 or 25A (40 CFR, Appendix A). Test procedures shall be performed in accordance with a protocol approved by the Air Pollution Control Officer. An alternative method to EPA Test Method 18 may be used provided such method has been approved, in advance, by the Air Pollution Control Officer and U.S. Environmental Protection Agency for the specific processes being tested. Subsequent to an initial compliance demonstration, appropriate parameters as determined by the Air Pollution Control Officer may be used as indicators of the performance of an emission control system.
3. The capture efficiency of the emission collection systems subject to Subsections (d)(4)(i), and (d)(4)(ii) of this rule shall be determined according to EPA's technical document, "Guidelines for Determining Capture Efficiency", January 9, 1995. Test procedures shall be performed in accordance with a protocol approved by the Air Pollution Control Officer. EPA Test Method 204 may be used if it is demonstrated to the satisfaction of the Air Pollution Control Officer that all criteria of the test applicability are met. An alternative method to "Guidelines for Determining Capture Efficiency" may be used provided such method has been approved, in advance, by the Air Pollution Control Officer and U.S. Environmental Protection Agency for the specific processes being tested. Subsequent to an initial compliance demonstration, appropriate parameters as determined by the Air Pollution Control Officer may be used as indicators of the performance of an emission collection system.

#### **(g) COMPLIANCE SCHEDULE**

1. Any person operating an existing kelp processing line which is subject to Subsection (d)(4)(i) shall demonstrate compliance with Subsection (d)(4)(i) by June 15, 1997, except for the spent pots. Compliance with Subsection (d)(4)(i) for the spent pots shall be demonstrated by November 24, 1999.
2. Any person operating an existing kelp processing line which is subject to Subsection (d)(2)(iii) shall demonstrate compliance with Subsection (d)(2)(iii) by November 24, 1999.
3. Any person operating an existing kelp processing line which is subject to Subsection (d)(4)(ii) shall demonstrate

compliance with Subsection (d)(4)(ii) by November 24, 1999.

4. Any person operating an existing kelp processing line or bio-polymer manufacturing line which is subject to Subsection (d)(8) shall comply with the provisions of that subsection on June 25, 1997, except for incorporators. Compliance with Subsection (d)(8) for incorporators shall be demonstrated by November 24, 1999.
5. Any person installing a new kelp processing or bio-polymer manufacturing line or pilot plant facility which is subject to the provisions of Section (d) shall have equipment necessary to comply with the provisions of Section (d) installed and operating upon startup of the line or facility and shall demonstrate compliance within 180 days of startup.

**RULE 67.11 WOOD PRODUCTS COATING OPERATIONS**

(Adopted & Effective 3/14/89; Rev. Effective 8/13/97;  
Rev. Effective 9/25/02; Rev. Adopted 6/27/12 & Effective 6/27/13)

(a) **APPLICABILITY**

(1) Except as otherwise provided in Section (b), this rule is applicable to all wood products coating operations.

(2) Any coating operation subject to the requirements of Rules 67.0 or 67.18 shall not be subject to this rule.

(3) Rule 66.1 shall not apply to any wood products coating operation which is subject to or exempt from this rule.

(b) **EXEMPTIONS**

(1) The provisions of Sections (d), (e) and (f) shall not apply to the following:

(i) Coatings applied using non-refillable handheld aerosol spray containers.

(ii) Any wood products coating operation at a stationary source where 20 gallons or less of coatings are applied to wood products per consecutive 12-month period. The volume of materials applied using non-refillable handheld aerosol spray containers shall not be included when determining the applicability of this exemption.

(iii) Any wood products coating operation at a stationary source where the VOC emissions from such operation are 150 pounds or less per consecutive 12-month period, excluding surface preparation, cleanup, and stripping materials. The volume or VOC content of materials applied using non-refillable handheld aerosol spray containers shall not be included when determining the applicability of this exemption.

(iv) Any wood products coating operation where not more than 20 gallons of non-complying coatings are used per consecutive 12-months, provided that the total amount of non-complying coatings used at the stationary source does not exceed 20 gallons in any consecutive 12-month period.

It is the responsibility of any person claiming an exemption pursuant to Subsections (b)(1)(ii), (b)(1)(iii) and (b)(1)(iv) to maintain monthly purchase and monthly or daily usage records and all records necessary to calculate VOC emissions. These records shall be maintained onsite for three years and made available to the District upon request.

- (2) The provisions of Subsection (d)(1) shall not apply to the following:
- (i) Any coatings applied by air brushes with a capacity of two ounces (59.1 ml) or less.
  - (ii) Any coatings applied during touch-up operations.
- (3) The provisions of Subsections (d)(2) and (d)(3) shall not apply to coatings applied to wooden musical instruments.

(c) **DEFINITIONS**

For the purposes of this rule the following definitions shall apply:

- (1) "**Adhesive**" means a material applied to a wood surface for the sole purpose of bonding the wood surface with another wood or non-wood surface by attachment.
- (2) "**Application Equipment**" means equipment used to apply coatings, inks, and adhesives, including, but not limited to spray guns, rollers, and brushes.
- (3) "**Binder**" means a non-volatile polymeric organic material, such as a resin, which forms a surface film during coating applications.
- (4) "**Cleaning Material**" means any VOC containing substance which is liquid at atmospheric pressure and ambient temperature and which is used as a cleaning agent, surface preparation agent, or for other similar purposes.
- (5) "**Clear Topcoat**" means a final coating which contains binders, but not opaque pigments, and is specifically formulated to form a transparent or translucent solid protective film. Clear topcoats include clear lacquers and varnishes but exclude conversion varnishes.
- (6) "**Coating**" means a VOC containing material, which can be applied as a thin layer to a substrate, and which either dries or cures to form a continuous solid film or impregnates a substrate for protection, decorative, or functional purposes. Such materials include, but are not limited to paints, varnishes, sealers, lacquers, inks, fillers, washcoats, toners, and stains but exclude adhesives.
- (7) "**Coating Operation**" means all steps involved in the application, drying and/or curing of surface coatings, including touch-up operations, and associated stripping, surface preparation and coating application equipment cleaning.
- (8) "**Conversion Varnish**" means a topcoat or sealer which is comprised of an alkyd or other resin blended with amino resin in a homogeneous liquid that, when acid catalyzed and applied, hardens by evaporation and polymerization.

(9) "**Dip Coat**" means a coating application method accomplished by dipping an object into the coating material.

(10) "**Electrostatic Spray**" means a coating application method accomplished by charging atomized paint particles for deposition by electrostatic attraction.

(11) "**Exempt Compound**" means the same as defined in Rule 2.

(12) "**Filler**" means a material used to fill in cracks, grains and imperfections of wood before applying a coating.

(13) "**Flow Coat**" means a coating application method accomplished by flowing a stream of coating over an object and draining off any excess coatings.

(14) "**Hand Application Method**" means a coating application method accomplished by applying a coating by manually held, non-mechanically operated equipment. Such equipment includes, but is not limited to, paintbrushes, hand rollers, rags and sponges.

(15) "**High-Solids Stain**" means a stain containing more than one pound of solids per gallon of material.

(16) "**High-Volume Low-Pressure (HVL) Spray**" means a coating application method using a spray applicator and pressurized air which is designed to be operated and which is operated at an atomizing pressure between 0.1 and 10.0 psig, measured dynamically at the center of the applicator's air cap and the applicator's air horns.

(17) "**Ink**" means a liquid that contains dyes and/or colorants and is used to make markings, but not to protect surfaces.

(18) "**Low-Solids Coating**" means a coating containing one pound of solids or less per gallon of material.

(19) "**Low-Solids Stain**" means a stain containing one pound of solids or less per gallon of material.

(20) "**Medium Density Fiberboard (MDF) Coating**" means the initial coating which is applied directly to the surface of MDF. MDF is a wood product composed of tightly compressed wood fibers bonded with resins, and has a density greater than 45 pounds per cubic foot.

(21) "**Multi-Colored Coating**" means a coating which exhibits more than one color when applied and which is packaged in a single container and applied in a single coat.

(22) **"New Wood Product"** means a wood product which has not been previously coated. A wood product from which coatings have been removed to repair flaws in initial coating applications is a new wood product.

(23) **"Pigmented Coating"** means an opaque coating containing binders and colored pigments, and formulated to hide the wood surfaces either as an undercoat or topcoat.

(24) **"Refinished Wood Product"** means a post-consumer wood product which has had some or all of the coatings removed, and to which new coatings are applied in order to preserve or restore the post-consumer wood product to its original condition. A wood product from which coatings have been removed to repair flaws in initial coatings applications is not a refinished wood product.

(25) **"Roll Coat"** means a coating application method accomplished by rolling a coating onto a flat surface using a roll applicator.

(26) **"Sealer"** means a coating which contains binders and which seals wood surfaces prior to the application of subsequent coatings.

(27) **"Stationary Source"** means the same as defined in Rule 2.

(28) **"Stripping Material"** means a liquid containing VOC and applied to remove a coating, coating residue or adhesives.

(29) **"Toner"** means a coating which contains not more than one pound of binders and dyes or pigments per gallon of material and which is used to add tint to a coated surface.

(30) **"Touch-up Operation"** means the portion of a coating operation which is incidental to the main coating process but necessary to cover minor imperfections or minor mechanical damage incurred prior to intended use, or to achieve coverage as required.

(31) **"Transfer Efficiency"** means the ratio of the weight of coating solids adhering to the part being coated to the weight of coating solids used in the application process expressed as a percentage.

(32) **"Volatile Organic Compound" (VOC)** means the same as defined in Rule 2.

(33) **"VOC Content Per Volume of Coating, Less Water and Exempt Compounds"** means the same as defined in Rule 2.

(34) **"VOC Content Per Volume of Material"** means the weight of VOC per volume of low-solids coating, cleaning or stripping material and is calculated by the equation provided in Rule 2.

(35) "**Washcoat**" means a low-solids coating containing not more than one pound of solids per gallon of material, which is used to seal wood surfaces, prevent undesired staining and control penetration. A washcoat may also be used to provide a barrier coat when paper laminates are applied to the wood surface, or when glazes are applied during the coating operation.

(36) "**Wood Products**" means any objects that are made of or primarily fabricated with solid wood, wood composition, bamboo and/or rattan, including, but not limited to furnishings, art objects, tables, chairs, beds, sofas, shutters, and cabinets.

(d) **STANDARDS**

(1) Coating Application Equipment

Except as provided in Subsection (b)(2), no coatings shall be applied unless one of the following coating application methods is used:

(i) Hand application method; or

(ii) Dip coat; or

(iii) Roll coat; or

(iv) Flow coat; or

(v) Electrostatic spray; or

(vi) High-volume low-pressure (HVLP) spray. Facilities using an HVLP spray gun shall have available on site pressure gauges in proper operating condition to measure the air cap pressure or have available manufacturer's technical information regarding the correlation between the handle air inlet pressure and the air cap pressure. If the correlation option is used to demonstrate compliance, a handle air inlet pressure gauge will be required on site in proper operating condition to measure the handle air inlet pressure; or

(vii) Other coating application methods that are demonstrated to have a transfer efficiency at least equal to one of the above application methods, and which are used in such a manner that the operating parameters under which they were demonstrated to achieve such transfer efficiency are permanent features of the method. Such coating application methods shall be approved in writing by the Air Pollution Control Officer prior to use.

(2) VOC Coating Limits for New Wood Products



(i) Except as provided in Subsection (d)(2)(ii) below, a person shall not apply any coating to a new wood product with a VOC content in excess of the following limits expressed as either grams of VOC per liter of coating (g/L) or pounds of VOC per gallon of coating (lb/gal), as applied, less water and exempt compounds:

<u>CATEGORY</u>	<u>VOC LIMITS</u>	
	<u>g/L</u>	<u>lb/gal</u>
Clear Topcoats	275	2.3
Conversion Varnishes	550	4.6
Fillers	275	2.3
High-Solids Stains	350	2.9
Inks	500	4.2
Medium Density Fiberboard (MDF) Coatings	550	4.6
Multi-Colored Coatings	275	2.3
Pigmented Coatings	275	2.3
Sealers	275	2.3
Any Other Coatings	275	2.3

(ii) A person shall not apply a low-solids coating, including toners and washcoats, to a new wood product with a VOC content in excess of 120 grams of VOC per liter of material or 1.0 pound of VOC per gallon of material, as applied.

The requirements of Subsection (d)(2) may be met using an Alternative Emission Control Plan (AECPP) that has been approved pursuant to Rule 67.1.

### (3) VOC Coating Limits for Refinished Wood Products

(i) Except as provided in Subsection (d)(3)(ii) below, a person shall not apply any coating to a refinished wood product with a VOC content in excess of the following limits expressed as either grams of VOC per liter of coating (g/L) or pounds of VOC per gallon of coating (lb/gal), as applied, less water and exempt compounds:

<u>CATEGORY</u>	<u>VOC LIMITS</u>	
	<u>g/L</u>	<u>lb/gal</u>
Clear Topcoats	680	5.7
Conversion Varnishes	550	4.6
Fillers	500	4.2
High-Solids Stains	700	5.8
Inks	500	4.2
Medium Density Fiberboard (MDF) Coatings	680	5.7
Multi-Colored Coatings	680	5.7
Pigmented Coatings	600	5.0
Sealers	680	5.7
Any Other Coatings	420	3.5

(ii) A person shall not apply low-solids coatings to a refinished wood product with a VOC content in excess of the following limits expressed as either grams of VOC per liter of material (g/L) or pounds of VOC per gallon of material (lb/gal), as applied:

<u>CATEGORY</u>	<u>VOC LIMITS</u>	
	<u>g/L</u>	<u>lb/gal</u>
Low-Solids Stains, Toners or Washcoats	700	5.8
Any Other Low-Solids Coatings	480	4.0

The requirements of Subsection (d)(3) may be met using an Alternative Emission Control Plan (AECPP) that has been approved pursuant to Rule 67.1.

(4) Surface Preparation Materials

A person shall not use VOC containing materials for surface preparation unless the material contains 25 grams or less of VOC per liter of material.

(5) Stripping Materials

A person shall not use VOC containing materials for stripping unless:

- (i) The material contains 200 grams or less of VOC per liter of material; or
- (ii) The material has a total VOC vapor pressure of 2 mm Hg or less, at 20°C (68°F).

(6) Cleaning of Application Equipment

A person shall not use VOC containing materials for the cleaning of coating application equipment used in operations subject to this rule unless:

- (i) The cleaning material contains 25 grams or less of VOC per liter of material; or
- (ii) The cleaning material is flushed or rinsed through the application equipment in a contained manner that will minimize evaporation into the atmosphere; or
- (iii) The application equipment or equipment parts are cleaned in a container which is open only when being accessed for adding, cleaning, or removing application equipment or when cleaning material is being added, provided the cleaned equipment or equipment parts are drained to the container until dripping ceases; or
- (iv) A system is used that totally encloses the component parts being cleaned during the washing, rinsing, and draining processes.

(7) No person shall require for use or specify the application of a coating subject to this rule if such use or application results in a violation of this rule. This prohibition shall apply to all written or oral contracts under the terms of which any coating is applied to any wood product at any location within San Diego County.

(8) Spray application equipment shall not be used to dispose of waste coatings or solvents into the air.

**(e) CONTROL EQUIPMENT**

(1) In lieu of complying with the provisions of Subsections (d)(2), (d)(3), (d)(4), (d)(5) and/or (d)(6) of this rule, an owner/operator may use an air pollution control system which:

(i) Has been installed in accordance with an Authority to Construct; and

(ii) Includes an emission collection system which captures and transports VOC emissions generated by wood products coating operations to an air pollution control device; and

(iii) Has a combined VOC emissions capture and control device efficiency of at least 85% by weight.

(2) A person electing to use control equipment pursuant to Subsection (e)(1) shall submit to the Air Pollution Control Officer for approval an Operation and Maintenance plan for the proposed emission control device and emission collection system and receive approval prior to operation of the control equipment. Thereafter, the plan can be modified, with Air Pollution Control Officer approval, as necessary to ensure compliance. Such plan shall:

(i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(1)(iii), such as temperature, pressure, and/or flow rate; and

(ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed record keeping practices regarding the key system operating parameters.

(3) Upon approval of the Air Pollution Control Officer, a person subject to the requirements of Section (e) shall implement the Operation and Maintenance plan and shall comply with the provisions of the approved plan thereafter.

**(f) RECORD KEEPING REQUIREMENTS**

(1) Any person conducting operations subject to this rule shall maintain records in accordance with the following:

(i) Maintain a current list of coatings, and stripping, surface preparation and cleaning materials in use which provides all of the VOC data necessary to evaluate compliance, including, but not limited to:

(A) Manufacturer's name and identification for each coating or coating component for multi-component coatings (such as bases, catalysts, thinners or reducers, when supplied in separate containers), and stripping, surface preparation and cleaning material; and

(B) For coatings, other than low-solids coatings, the VOC content expressed in grams per liter (or lbs/gal), as applied, less water and exempt compounds; and mix ratio of components, if applicable; and

(C) For surface preparation, cleaning and stripping materials or for low-solids coatings, the VOC content expressed in grams per liter (or lbs/gal) of material, as used; and density, mix ratio of components and/or vapor pressure, if applicable.

(ii) Maintain current documentation to demonstrate applicability of any coating category pursuant to Subsection (d)(2) or (d)(3) of this rule.

(iii) Maintain monthly or daily records of the amount of each coating or each coating component for multi-component coatings used.

(iv) Maintain monthly inventory, purchasing or dispensing records of the amount of each stripping, surface preparation and cleaning material used.

(v) Maintain records of the dates and amounts of material added to coating dip tanks as applicable.

(2) Any person using control equipment pursuant to Section (e) of this rule shall:

(i) Maintain records in accordance with Subsection (f)(1); and

(ii) For all coatings, and stripping, surface preparation and/or cleaning materials not in compliance with Subsections (d)(2), (d)(3), (d)(4), (d)(5), or (d)(6) of this rule, maintain daily records of the amount of each coating or each coating component for multi-component coatings, and stripping, surface preparation and cleaning material used; and

(iii) Maintain daily records of key system operating parameters as approved in the Operation and Maintenance plan. Such records shall be sufficient to document continuous compliance with Subsection (e)(1)(iii) during periods of emission producing activities.

(3) All records shall be retained onsite for at least three years and made available to the District upon request.

**(g) TEST METHODS**

When more than one test method or set of test methods are specified in this Section, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of this rule.

(1) Measurements of transfer efficiency pursuant to Subsection (d)(1)(vii) of this rule shall be conducted in accordance with the South Coast Air Quality Management District (SCAQMD) "Spray Equipment Transfer Efficiency Test Procedure for Equipment User," May 24, 1989. The equivalency of coating application equipment pursuant to Subsection (d)(1)(vii) shall be determined by the SCAQMD "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns," September 26, 2002.

(2) The VOC content of coatings containing more than 50 grams of VOC per liter shall be determined by the Environmental Protection Agency (EPA) Reference Method 24 (40 CFR Part 60, Appendix A) (Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings), September 11, 1995, or by the SCAQMD Method 304-91 (Determination of Volatile Organic Compounds in Various Materials), February 1996.

(3) Measurement of the VOC content of ultraviolet radiation-cured coatings subject to Subsections (d)(2) or (d)(3) shall be conducted in accordance with ASTM Standard Test Method D5403-93(2007) (Standard Test Methods for Volatile Content of Radiation Curable Materials) or its most current version. Measurement of the water content and exempt compound content, if applicable, shall be conducted and reported in accordance with ASTM Standard Test Methods D3792-05(2009), D4017-02(2008)e1 and D4457-02(2008), or their most current versions.

(4) The VOC content of surface preparation, cleaning or stripping materials containing 50 grams of VOC per liter or less shall be determined by the SCAQMD Method 313-91 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry), June 1993, or by the SCAQMD Method 308-91 (Quantitation of Compounds by Gas Chromatography), February 1993.

(5) The content of methyl acetate, acetone and parachlorobenzotrifluoride shall be determined in accordance with the ASTM Standard Test Method D6133-02(2008) (Standard Test Method for Acetone, p-Chlorobenzotrifluoride, Methyl Acetate or t-Butyl Acetate Content of Solventborne and Waterborne Paints, Coatings, Resins, and Raw Materials by Direct Injection Into a Gas Chromatograph), or its most current version.

(6) Measurements of exempt compound content, other than determined in accordance with Subsection (g)(5), shall be conducted in accordance with the SCAQMD Test Method 303-91 (Determination of Exempt Compounds), August 1996.

(7) Calculation of total VOC vapor pressure for materials subject to Subsection (d)(5) of this rule shall be conducted in accordance with the District's "SD 1, Procedures for Estimating the Vapor Pressure of VOC Mixtures," dated June 20, 1990. If the vapor pressure of the liquid mixture, as calculated by this procedure, exceeds the limits specified in Subsection (d)(5), the vapor pressure shall be determined in accordance with ASTM Standard Test Method D2879-10 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), or its most current version.

(8) The overall control efficiency of air pollution control equipment operated pursuant to Subsection (e)(1)(iii) shall be determined by multiplying the capture efficiency of the emission collection system by the control efficiency of the air pollution control device. The control efficiency of the air pollution control device shall be determined using EPA Reference Methods 25A and/or 18, (40 CFR Part 60, Appendix A) and in accordance with a protocol approved by the Air Pollution Control Officer. Capture efficiency shall be determined according to EPA Test Methods 204 and 204A through 204F (51 CFR Appendix M), as applicable, and technical document, "Guidelines for Determining Capture Efficiency," dated January 9, 1995. Subsequent to the initial compliance demonstration period, appropriate key system operating parameters as approved by the Air Pollution Control Officer may be used as indicators of the performance of the emission control system.

(9) Other test methods which are determined to be equivalent to the test methods specified in this rule and approved, in writing, by the Air Pollution Control Officer, California Air Resources Board, and EPA may be used in place of the test methods specified in this rule.

## **SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT>**

### **RULE 67.12 - POLYESTER RESIN OPERATIONS (Effective 3/14/89: Rev. Adopted & Effective 5/15/96)**

#### **(a) APPLICABILITY**

Except as otherwise provided in Section (b), this rule is applicable to polyester resin operations.

Polyester resin operations subject to this rule shall not be subject to Rule 66.

#### **(b) EXEMPTIONS**

1. Except for marine vessel repair operations, the provisions of this rule shall not apply to any polyester resin operations where the combined consumption of polyester resins, including corrosion resistant resin, fire retardant resin, gel coat, and cleaning materials is less than 1 gallon for each operating day.
2. The provisions of this rule shall not apply to any marine vessel repair operation using polyester resin materials where the combined consumption of polyester resins, including corrosion resistant resin, fire retardant resin, gel coat, and cleaning materials is less than 0.5 gallon for each operating day.

It shall be the responsibility of any person claiming either of the exemptions specified in Subsections (b)(1) or (b)(2) to maintain daily records necessary for the District to determine the applicability of such an exemption. The records shall be maintained on site for at least three years and shall be made available to the District upon request.

3. The provisions of this rule shall not apply to coatings subject to Rules 67.3, 67.0 or 67.11.

#### **(c) DEFINITIONS (Rev. Effective 5/15/96)**

For the purpose of this rule, the following definitions shall apply:

1. "Catalyst" means a substance added to the resin to accelerate the rate of curing.
2. "Cleaning Materials" means materials containing volatile organic compounds (VOCs) used for the cleaning of hands, tools, molds and spray equipment associated with polyester resin operations.
3. "Closed Mold Operation" means a method of forming objects from polyester resins by placing the material in a confining mold cavity and applying pressure and/or heat.
4. "Controlled Enclosure" means a structure having at least three sides and a roof and which is designed to capture process emissions to meet the requirements of all District prohibitory standards (e.g., Rules 50, 51, 52, 71, etc.).
5. "Controlled Process" means a modification to a dry sanding, grinding or cutting operation which uses water sprays, vacuum devices or other techniques to control the emission of particulates to the atmosphere to meet the requirements of all District prohibitory standards (e.g., Rules 50, 51, 52, 71, etc.).
6. "Corrosion Resistant Resin" means a halogenated, furan, bisphenol A, vinyl ester, or isophthalic resin which is used to make products for exposure to corrosive, caustic and/or acidic agents.
7. "Cross-Linking" means the process of joining two or more polymer chains together.

8. **"Cure" means the polymerization, i.e. the transformation from a liquid to a solid state, to achieve desired product physical properties, including hardness.**
9. **"Exempt Compound" means the same as defined in Rule 2. (Rev. Effective 5/15/96)**
  - (i) **cyclic, branched, or linear, completely fluorinated alkanes;**
  - (ii) **cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;**
  - (iii) **cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and**
  - (iv) **sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.**
10. **"Fiberglass" means a fiber similar in appearance to wool or cotton fiber but made from glass.**
11. **"Fire Retardant Resin" means a resin designed for the purpose of delaying the spread of combustion.**
12. **"Gel Coat" means a polyester resin surface coat, either colored or clear, providing a cosmetic enhancement and improvement to exposure resistance.**
13. **"High-Volume Low-Pressure (HVLP) Spray" means a coating application method using pressurized air at a permanent pressure between 0.1 and 10.0 psig, not to exceed 10.0 psig, measured at the air cap of the coating application system, and a permanent liquid coating pressure of not more than 50 psig.**
14. **"Inhibitor" means a substance designed to slow down or prevent a chemical reaction.**
15. **"Monomer" means an organic compound that combines with itself or other similar compounds by a cross-linking reaction to become a part of a cured thermosetting resin.**
16. **"Polyester" means a complex polymeric ester, derived from difunctional acids and alcohols, which is dissolved in a monomer.**
17. **"Polyester Resin Operation" means any of the following: mixing, pouring, hand lay-up, injection, forming, spraying, and curing of polyester resin materials excluding injection molding.**
18. **"Polyester Resin Materials" means unsaturated polyesters, cross-linking agents, catalysts, gel coats, inhibitors, and any other material containing VOC used in a polyester resin operation.**
19. **"Polymer" means a large chemical chain composed of identical cross-linked groups, such as polystyrene.**
20. **"Reclamation System" means equipment capable of reclaiming spent cleaning materials for reuse. Reclamation may be done onsite or by using an offsite commercial reclamation facility.**
21. **"Repair" means the addition of polyester resin to portions of a previously fabricated product in order to mend mechanical damage which occurs after the normal fabrication process.**
22. **"Resin" means any of a class of organic polymers of natural or synthetic origin used in reinforced products to surround and hold fibers, and is solid or semi-solid in the cured state.**
23. **"Touch-up" means that portion of the polyester resin operation that is necessary to cover minor imperfections.**



24. **"Vapor Suppressed Resin"** means a resin which has been modified to minimize the weight loss from VOC emissions during polymerization.
25. **"Volatile Organic Compound (VOC)"** means any compound of carbon, which may be emitted to the atmosphere during polyester resin operations, except methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds. For purposes of calculating VOC content of polyester resin material to determine compliance with this rule, any water or any exempt compounds shall not be considered to be part of the polyester resin material. VOC content of cleaning materials is expressed in grams of VOC per liter of material.
26. **"Waste Material"** means any waste material containing VOC including, but not limited to, any paper or cloth used for cleaning operations, waste resins, and any spent cleaning materials containing VOC.

**(d) STANDARDS**

**1. Any person operating a polyester resin operation subject to this rule shall:**

- (i) Use polyester resin material which contains no more than 35 percent by weight of monomer, as applied and as indicated in the manufacturer's specifications for application, or use a vapor suppressed resin such that the weight loss from VOC emissions does not exceed 60 grams per square meter of exposed surface area during resin polymerization, or use a closed mold system. The provisions of this subsection shall not apply to the use of gel coats, corrosion resistant resins or fire retardant resins; and,**
- (ii) Use gel coats with a monomer content of not more than 45 percent by weight for pigmented gel coats or 50 percent by weight for clear gel coats, as applied and as indicated in the manufacturer's specifications for application; and,**
- (iii) Use a corrosion-resistant or fire retardant resin with a monomer content of no more than 50 percent by weight, as applied and as indicated in the manufacturer's specifications for application; and,**
- (iv) Use self-closing containers for storing, except during the transfer of resin or solvent, all polyester resin, VOC containing cleaning materials and solvent-laden rags, including waste materials; and,**
- (v) Conduct all dry sanding, grinding and cutting operations of polyester resin which contains fiberglass either inside a controlled enclosure or using a controlled process. For marine vessel repair operations this requirement shall apply only for sanding, grinding or cutting operations conducted on the exterior of a vessel hull. This requirement shall not apply to any portable drilling operations; and,**
- (vi) Use a VOC reclamation system for cleaning materials, unless**
  - (A) the materials contain less than 200 grams of VOC per liter (1.7 lb/gal); or**
  - (B) the materials have initial boiling points greater than 190; C (374; F); or**
  - (C) the combined usage of materials not complying with (A) or (B) above, is less than 0.5 gallons average per operating day, calculated from monthly records maintained in accordance with Section (f).**

**The solvent residue from the reclamation system shall not contain more than 20 percent VOC by weight; and,**
- (vii) Use only airless, air-assisted airless, high-volume low-pressure spray equipment or electrostatic spray equipment for spray operations except for touch-up and repair operations using a hand held air atomized**

spray gun which has a container for the resin as part of the gun; and,

(viii) Not use a polyester resin or cleaning material subject to this rule that, after December 4, 1990, was newly formulated to contain or reformulated to increase the content of, methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114) or chloropentafluoroethane (CFC-115).

2. A person shall not sell or, offer for sale, a polyester resin or cleaning material subject to this rule that, after December 4, 1990, was newly formulated to contain or reformulated to increase the content of, methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114) or chloropentafluoroethane (CFC-115).
3. A person shall not manufacture, sell, offer for sale, or supply any coating or cleaning materials for use in polyester resin operations unless polyester resin or cleaning material container displays the content of methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), or chloropentafluoroethane (CFC-115).

**(e) RESERVED**

**(f) RECORDKEEPING**

Any person subject to the requirements of Subsections (d)(1) of this rule shall maintain records of VOC-containing materials in accordance with the following:

1. Maintain a current records of polyester resin materials and gel coats used, which provide the manufacturer identification, material specifications, monomer content, content of any catalysts, fillers, and/or diluents, including thinners, and type of each resin (i.e. regular, vapor-suppressed, corrosion-resistant, or fire retardant) or gel coat (i.e. pigmented or clear). For vapor suppressed resins, also maintain records showing manufacturer's information on the weight loss during resin polymerization.
2. Maintain current records of the manufacturer's identification and VOC content of the cleaning materials used.
3. Maintain records on a daily or monthly basis showing the manufacturer's identification and amount of each polyester resin material and cleaning material used.
4. Maintain records of the content of methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114) and chloropentafluoroethane (CFC-115) contained in any polyester resin material or cleaning material used.

Such records shall be retained on site for at least three years, and shall be made available to the District upon request.

**(g) TEST METHODS**

1. Measurement of the monomer content of resins subject to Subsections (d)(1)(i), (d)(1)(ii), or (d)(1)(iii) of this rule shall be conducted and reported in accordance with SCAQMD Method 312-91 for determination of percent monomer in polyester resin.
2. Measurement of the polyester resin material weight loss per square meter subject to Subsection (d)(1)(i) of this rule shall be conducted and reported in accordance with SCAQMD Method 309-91 for determination

**of static volatile emissions.**

- 3. Measurement of the VOC content of cleaning materials subject to Subsection (d)(1)(vi)(A) of this rule shall be conducted and reported in accordance with EPA Method 24 (40 CFR 60, Appendix A) as it exists on April 6, 1993.**
- 4. Measurement of the initial boiling point of cleaning materials subject to Subsection (d)(1)(vi)(B) of this rule shall be conducted and reported in accordance with ASTM test method D1078-86 (Distillation Range of Volatile Organic Liquids).**
- 5. Measurement of the VOC content in solvent residue subject to Subsection (d)(1)(vi) of this rule shall be conducted and reported in accordance with EPA Method 25D as referenced in 56FR 33494.**
- 6. Perfluorocarbon compound(s) shall be recognized as exempt compounds pursuant to Subsection (c)(9) only if the presence of such compounds is claimed by the manufacturer of the material containing the compound, and if the manufacturer identifies a test method for quantifying the identified compounds which has been approved by the Air Pollution Control Officer, the Air Resources Board, and the Environmental Protection Agency.**

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 67.15 - PHARMACEUTICAL AND COSMETIC MANUFACTURING OPERATIONS**

(Effective 10/18/88: Rev. Adopted & Effective 5/15/96)

### **(a) APPLICABILITY**

Except as otherwise provided in Section (b), this rule is applicable to any person who:

1. Manufactures pharmaceutical or cosmetic products;
2. Formulates ointments or cosmetics into configurations intended for sale and/or use;
3. Produces and/or separates medicinal chemicals such as antibiotics and vitamins from micro-organisms;
4. Manufactures botanical and/or biological products by the extraction of organic chemicals from vegetative materials or animal tissues; or
5. Formulates pharmaceutical products into various dosage forms such as tablets, capsules or injectable solutions that can be taken by a patient immediately and in an accurate amount.

### **(b) EXEMPTIONS**

The provisions of this rule shall not apply to:

1. Any stationary source, as defined in Rule 20.1, which emits less than 15.0 pounds (6.8 kg) of volatile organic compounds (VOC) on each day at design production rate, provided the operator of such equipment maintains daily records necessary to establish maximum emission levels. These records shall be maintained for a minimum of three years and be made available to the District immediately upon request. For purposes of this exemption all process emissions, including those from equipment cleanup, shall be summed to determine maximum emission rate.
2. Any manufacturing processes subject to the requirements of Rule 67.10, including storage tanks for such processes.

### **(c) DEFINITIONS** (Rev. Effective 5/15/96)

For the purpose of this rule the following definitions shall apply:

1. **"Cosmetic Manufacturing Plant"** means any plant producing or blending chemicals for use in cosmetic products and/or manufacturing cosmetic products by chemical processes.
2. **"Cosmetic Products"** means any material for external use for the beautification of the complexion and/or skin.

3. **"Exempt Compounds"** means the same as defined in Rule 2. (Rev. Effective 5/15/96)
4. **"Fugitive Liquid Leak"** means a visible leak of liquid, containing VOC, at a rate in excess of three drops per minute.
5. **"Fugitive Vapor Leak"** means any VOC vapor leak which results in a concentration of 500 ppmv or more measured as propane at a distance of 1/2 inch (1.3 cm) from the vapor path, other than non-repeatable, momentary readings.
6. **"Pharmaceutical Manufacturing Plant"** means any plant producing or blending chemicals for use in pharmaceutical products and/or manufacturing pharmaceutical products by chemical processes.
7. **"Pharmaceutical Products"** means any substances resulting from preparing, preserving or compounding of medicinal drugs, vitamins or other materials used to enhance personal health.
8. **"Process Tanks"** means containers used for mixing, blending, folding, crystallizing or cleaning operations in the manufacture of pharmaceuticals and/or cosmetics.
9. **"Volatile Organic Compounds (VOC)"** means any volatile compound or combination of volatile compounds of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, ammonium carbonate, metallic carbides, metallic carbonates, and exempt compounds which may be emitted to the atmosphere during the manufacturing, mixing and/or subsequent drying of pharmaceutical and/or cosmetic products subject to this rule. (Rev. Effective 5/15/96)

## STANDARDS

A person shall not produce, manufacture, mix, blend, formulate, dry or encapsulate any pharmaceutical or cosmetic product subject to this rule unless the requirements of (d)(1) through (d)(8) are met:

1. Reactors, distillation columns, crystallizers or centrifuges emitting more than 15.0 pounds (6.8 kg) of VOC on any day shall not be used unless all vent points for such devices are equipped with surface condensers which have an outlet exhaust gas temperature no greater than the maximum shown in the following table:

<b>Absolute</b>	<b>Maximum Condenser</b>
<b>Vapor Pressure of VOC at 20° C</b>	<b>Outlet Gas Temperature</b>
0.5 psia to 1.0 psia	25° C (77° F)
1.0 psia to 1.5 psia	10 (50° F)
1.5 psia to 2.9 psia	0 (32° F)
2.9 psia to 5.8 psia	-15 ( 5° F)
over 5.8 psia	-25 (-13° F)

When blends of more than one VOC are used, the absolute vapor pressure of the most volatile component (i.e., that with the highest absolute vapor pressure) shall be used to determine the required maximum condenser outlet

gas temperature.

Alternative control devices may be used with the approval of the Air Pollution Control Officer provided their combined VOC collection and abatement efficiency is at least 90 percent by weight.

2. Centrifuges, rotary vacuum filters, or any other filters or devices having an exposed liquid surface where the liquid contains VOC having a total absolute vapor pressure of 0.5 psia or more at 20° C shall not be used unless a VOC collection and abatement system which reduces VOC emissions by a minimum of 90 percent by weight, and is approved by the Air Pollution Control Officer, is used.
3. Process tanks for material containing VOC having a total absolute vapor pressure of 0.5 psia or more at 20° C shall not be used unless the tank is covered or otherwise sealed at all times except while loading, unloading or during maintenance of such tanks.
4. Air dryers or other production equipment that, in combination, emit 33 pounds (15 kg) on any day or more of VOC shall not be used unless the emissions from such equipment are reduced by at least 90 percent by weight.
5. VOC having a total absolute vapor pressure greater than 1.5 psia at 20° C shall not be transferred into a stationary storage tank with a capacity greater than 2000 gallons, unless such tank is equipped with all the following controls:
  - (i) A permanent submerged fill pipe which discharges at not more than six inches from the bottom of the tank; and,
  - (ii) A vapor return line which transfers at least 90 percent by weight of displaced VOC vapor from the stationary storage tank being filled back to the mobile or stationary supply tank; and,
  - (iii) A pressure-vacuum relief valve with relief settings of not less than  $\pm 0.03$  psig; or
  - (iv) An alternative VOC emission control system approved by the Air Pollution Control Officer which achieves at least 90 percent by weight combined collection and abatement efficiency of VOC emissions during liquid transfer.
6. Fugitive liquid leaks in equipment storing, mixing, blending or transferring VOC shall be promptly repaired. This repair shall be completed the first time the equipment is off-line for a period of time long enough to complete the repair, but in no case longer than 72 hours after such leak was first detected and recorded. This record shall specify the time, date and location of each observed leak. An unrecorded leak shall be considered a violation of this rule.
7. Fugitive vapor leaks from equipment storing, mixing, blending, reacting or transferring materials containing VOC shall be immediately recorded and promptly repaired. This repair shall be completed the first time the equipment is off-line for a period of time long enough to complete the repair, but in no case longer than 72 hours after such leak was first detected and recorded. This record shall specify the time, date and location of each observed leak. An unrecorded leak shall be considered a violation of this rule. For purposes of this subsection, the emission of VOC vapor from process tanks which are uncovered because of loading, unloading or maintenance shall not be considered a fugitive vapor leak. The emission of VOC vapor from process locations which, when in compliance with the provisions of this rule, have such emissions during normal operation and from controlled vents shall not

be considered a fugitive vapor leak.

8. An operation and maintenance program shall be submitted to the Air Pollution Control Officer for approval for VOC collection and control equipment required by Subsections (d)(1), (d)(2), (d)(4) and (d)(5). Each submittal shall be made within sixty days of installation of such equipment. Each program shall be implemented on approval of the Air Pollution Control Officer.

Each operation and maintenance program submitted for approval shall:

- (i) Seek to maintain the emission control efficiency required to comply with this rule,
- (ii) Identify all key system operating parameters. Key system operating parameters are those the Air Pollution Control Officer determines are necessary to maintain the required emission control efficiency, and
- (iii) Include proposed daily inspection schedules, anticipated ongoing maintenance steps and proposed daily recordkeeping practices regarding the key system operating parameters.

Daily records to demonstrate compliance with this subsection shall be kept for three years and be provided upon request to the Air Pollution Control Officer.

#### **(e) VOC TEST METHODS**

Total absolute vapor pressure of VOC containing compounds pursuant to Subsections (d)(2), (d)(3) and (d)(5) of this rule shall be calculated using the District's "Procedure for Estimating the Vapor Pressure of a Solvent Mixture" as it exists on December 18, 1990. If the vapor pressure of the liquid mixture exceeds the limits specified in Subsections (d)(2), (d)(3) and (d)(5), as applicable, the vapor pressure shall be determined in accordance with ASTM Test Method D 2879-83, Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.

Measurements of VOC content pursuant to Subsections (d)(1) thru (d)(5) of this rule shall be conducted and reported in accordance with EPA Test Method 25 (40 CFR 60, Appendix A), as it exists on December 18, 1990. Measurements of collection efficiency subject to Subsections (d)(2), (d)(4) and (d)(5) of this rule shall be conducted in accordance with the EPA Guidelines for Capture Efficiency Determination.

The VOC content of fluids subject to Subsection (d)(6) of this rule shall be determined in accordance with ASTM Standard Recommended Practices for General Gas Chromatography Procedures E 260-73, General Techniques of Infrared Quantitative Analysis E 168-67, and General Techniques of Ultraviolet Quantitative Analysis





**RULE 67.16. GRAPHIC ARTS OPERATIONS** (Effective 10/18/88; Rev. Adopted & Effective 5/15/96; Rev. Adopted 11/09/11 & Effective 05/09/12)

(a) **APPLICABILITY**

(1) This rule is applicable to all continuous web or single sheet fed graphic arts printing, processing, laminating or drying operations and digital printing operations.

(2) This rule is not applicable to printing operations on ceramic or circuit boards. These operations are subject to Rule 66.1.

(3) Graphic arts operations subject to or exempt from this rule shall not be subject to Rule 66.1 or Rule 67.5.

(b) **EXEMPTIONS**

(1) The provisions of Sections (d) and (e) of this rule shall not apply to stationary sources which emit less than an average of 15 lbs (6.8 kg) of volatile organic compounds (VOCs) from all graphic arts operations per day of operation, excluding digital printing operations, for each calendar month. It is the responsibility of any person claiming this exemption to maintain daily or monthly records as specified in Section (f) of this rule necessary to establish average daily emissions and to make this information available to the District upon request. The average daily emission levels shall be determined by recording and taking into account the number of operational days per given month.

(2) The provisions of Sections (d) and (e) shall not apply to large digital printing operations provided that any facility claiming this exemption maintains applicable records as specified in Subsection (f)(4).

(3) The provisions of this rule shall not apply to:

(i) All proofing systems.

(ii) Manufacture of:

(A) Solar control window film,

(B) Heat applied transfer decals,

(C) Ceramic decals manufactured for firing above 800°F, or

(D) Water slide decals.

(iii) Embossing and foil stamping which do not use materials containing VOCs.

(iv) Development process associated with the preparation of lithographic printing plates.

(v) Blanket repair material applied from non-refillable aerosol containers of four ounces or less.

(vi) Digital printing operations that are not large operations as defined in Subsection (c)(12).

(vii) Stripping of cured inks, coatings and adhesives.

(viii) Research and development operations.

(ix) Preservative oils application using hand-held non-refillable aerosol containers.

(x) Cleaning of ultraviolet lamps and reflectors and electron beam processors.

(c) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

(1) **“Adhesive”** means a substance that is used to bond one surface to another by attachment.

(2) **“Cleaning Material”** means a VOC containing material used for cleaning hands, tools, printing presses, ink or coating application equipment and work area.

(3) **"Coating"** in the graphic arts operation means a layer of material applied to a substrate in a relatively unbroken film.

(4) **“Digital Printing Operation”** means an operation that uses a printing device guided by a computer-driven machine to transfer an electronic image to a substrate through the use of inks, toners, or other graphic arts materials. Digital printing operation also includes associated surface preparation, solvent cleaning, and the cleaning of application equipment.

(5) **“Precision Electro-optical Component”** is an optical element used in an electro-optical device and is designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes in light energy levels.

(6) **"Exempt Compound"** means the same as defined in Rule 2.

(7) **"Exterior Marking"** means any outdoor sign printed, coated or laminated by any of the graphic arts methods.

(8) "**Flexographic Printing**" means a letterpress method utilizing flexible rubber or other elastomeric plate.

(9) "**Fountain Solution**" means the solution which is applied to the image plate to maintain the hydrophilic properties of the non-image areas.

(10) "**Graphic Arts Operations**" means all screen, gravure, letterpress, flexographic, lithographic and digital printing operations, or related coating, or laminating processes including coating of flexible packaging materials for food or health care products and laboratory or experimental processes.

(11) "**Graphic Arts Material**" means any ink, coating, adhesive or thinner used in printing or related coating or laminating processes.

(12) "**Gravure Printing**" means an intaglio process in which the ink is carried in minute etched or engraved wells on a roll or cylinder, with excess ink being removed from the surface by doctor blade.

(13) "**Large Commercial Digital Printing Operation**" means a commercial digital printing operation where a print capacity of any individual printer that uses solvent based inks is 1,000 ft<sup>2</sup>/hr or higher; or an operation where a print capacity of any individual printer that uses water based or UV inks is 10,000 ft<sup>2</sup>/hr or higher.

(14) "**Lamination**" means a process of composing two or more layers of material to form a single multiple layer sheet by using adhesive.

(15) "**Letterpress Printing**" means a method where the image area is raised relative to the non-image area and the ink is transferred to the paper directly from the image surface.

(16) "**Lithographic Printing**" means a plane-o-graphic method in which the image and non-image areas are on the same plane, and the ink is offset from a plate to a rubber blanket, and then from the blanket to the substrate.

(17) "**Preservative Oil**" means any liquid material which does not contain any solids, and is applied to rollers or ink wells to prevent them from drying when the graphic arts equipment is stopped for an extended time or to provide lubrication, or both.

(18) "**Printing**" means any operation that imparts color, design, alphabet or numerals on a substrate.

(19) "**Printing Ink**" means any fluid or viscous composition used in printing, impressing or transferring an image onto a substrate.

(20) "**Proofing System**" means a system used only to check the quality or print color reproduction and editorial content and includes proof presses and/or off-press proofing lines.

(21) "**Publication Gravure**" means a gravure printing on paper substrate which is subsequently used to form books, magazines, catalogues, brochures, directories, and newspaper supplements or other printed material.

(22) "**Screen Printing**" means a process where the printing ink passes through a web or a fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of imprint.

(23) "**Stationary Source**" means the same as defined in Rule 2.

(24) "**Thinner**" means a solvent used to reduce viscosity of printing inks.

(25) "**Volatile Organic Compound (VOC)**" means the same as defined in Rule 2.

(26) "**VOC Content per Volume of Graphic Arts Materials, Less Water and Exempt Compounds**" (excluding thinners) means the same as defined in Rule 2, "VOC Content per Volume of Coatings, Less Water and Exempt Compounds."

(27) "**VOC Content per Volume of Thinner or Cleaning Material**" means the same as defined in Rule 2, "VOC Content per Volume of Material."

(28) "**Web-fed**" means an automatic system which supplies substrate from a continuous roll or from an extrusion process.

(d) **STANDARDS**

(1) Graphic Arts Materials and Fountain Solutions.

A person shall not conduct any printing or graphic arts operation unless the following materials are used:

(i) Graphic arts materials, except adhesives, containing less than 300 grams of VOC per liter (2.5 lbs/gal) as applied, less water and exempt compounds.

(ii) Adhesives containing not more than 150 grams of VOC per liter (1.25 lb/gal), as applied, less water and less exempt compounds.

(iii) Fountain solutions containing not more than 5% VOC by volume; or

(iv) Fountain solutions containing not more than 8.5% VOC by volume refrigerated to a temperature below 60°F.

(2) Cleanup of Equipment

A person shall not use materials containing VOCs for the cleanup of equipment used in graphic arts operations unless:

- (i) The cleaning material has a VOC content of less than 100 grams per liter; or
- (ii) The total VOC vapor pressure of the cleaning material is 5 mm of Hg at 20°C or less.

(e) **CONTROL EQUIPMENT**

(1) In lieu of complying with the provisions of Subsection (d)(1) or (d)(2), a person may use an air pollution control system which:

- (i) Has been installed in accordance with an Authority to Construct; and
- (ii) Includes an emission collection system which captures and transports emissions generated by an applicable graphic arts operation to an air pollution control device; and
- (iii) Has a combined VOC emissions capture and control device efficiency of at least 85 percent by weight.

(2) A person subject to the requirements of this section shall submit to the Air Pollution Control Officer for approval an Operation and Maintenance (O&M) plan for the proposed emission control device and emission collection system. Such plan shall:

- (i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(1)(iii), such as temperature, pressure, and/or flow rate.
- (ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.

(3) The Operation and Maintenance plan must be submitted to the Air Pollution Control Officer and receive written approval prior to operation of the air pollution control equipment. A person subject to the requirements of this section shall implement the plan on approval of the Air Pollution Control Officer.

(f) **RECORDKEEPING**

Any person conducting a graphic arts operation subject to this rule shall maintain records in accordance with the following requirements:

(1) Maintain a current list of graphic arts materials, fountain solutions and cleaning materials used containing VOCs which provides data necessary to evaluate compliance, including, but not limited to:

(i) Type of graphic arts materials, fountain solutions or cleaning materials used;

(ii) Dilution ratio of mixed components, if applicable;

(iii) VOC content, less water and exempt compounds of each graphic arts material (excluding thinner), as applied; volume percent of VOC in fountain solution; and VOC content of each thinner and cleaning material and/or total VOC vapor pressure, as used.

(2) Maintain daily or monthly records showing the amount of each graphic arts material, and each fountain solution and cleaning material used.

(3) Any person using control equipment pursuant to Section (e) of this rule shall:

(i) For all graphic arts materials, fountain solutions and cleaning materials not in compliance with Subsection (d)(1) or (d)(2) of this rule, maintain daily records of the amount of each material used; and

(ii) Maintain daily records sufficient to document continuous compliance with Subsection (e)(1)(iii), including records of key system operating parameters as approved in the Operation and Maintenance plan.

(4) Any person claiming an exemption pursuant to Subsection (b)(2) for large commercial digital printing operations shall:

(i) Maintain a current list of graphic arts materials and cleaning materials used;

(ii) Provide documentation containing the VOC content, less water and exempt compounds of each graphic arts material (excluding thinner), as applied and the VOC content of each thinner and cleaning material and/or total VOC vapor pressure, as used;

(iii) Keep monthly records of the type and amount of each graphic arts material and cleaning material used.

All records shall be retained on site for at least three years and shall be made available to the District upon request.

(g) **TEST METHODS**

When more than one test method or set of test methods are specified in this Section, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of this rule.

(1) Measurements of VOC content of graphic arts materials subject to Section (d) of this rule shall be conducted and reported in accordance with the Environmental Protection Agency (EPA) Test Method 24 (40 CFR 60, Appendix A), dated 9/11/1995, or by the South Coast Air Quality Management District (SCAQMD) Method 304, dated 2/1/1996, as applicable.

(2) Measurements of VOC content of rotogravure publication inks subject to Section (d) of this rule shall be conducted and reported in accordance with EPA Test Method 24A (40 CFR 60, Appendix A), dated 8/6/1993.

(3) The VOC content of cleaning materials shall be determined by the SCAQMD Method 313-91 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry), dated 2/1/1993, or SCAQMD Method 308-91 (Quantification of Compounds by Gas Chromatography), dated 2/1/1993.

(4) Calculations of total VOC vapor pressures of cleaning materials pursuant to Subsection (d)(2)(ii) of this rule shall be calculated using the District's "SD1-Procedure for Estimating the Vapor Pressure of VOC Mixtures", dated 6/20/1990. If the vapor pressure of the liquid mixture is in excess of the limit specified in Subsection (d)(2)(ii), the vapor pressure shall be determined in accordance with ASTM Test Method D 2879-10, "Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope".

(5) The content of methyl acetate, acetone and parachlorobenzotrifluoride shall be determined in accordance with the ASTM Test Method D6133-02 (2008) (Standard Test Method for Acetone, p-Chlorobenzotrifluoride, Methyl Acetate or t-Butyl Acetate Content of Solventborne and Waterborne Paints, Coatings, Resins, and Raw Materials by Direct Injection Into a Gas Chromatograph).

(6) Measurements of exempt compounds content, except for those determined in accordance with Subsection (g)(5), shall be conducted in accordance with the SCAQMD Test Method 303-91 (Determination of Exempt Compounds), dated 8/1/1996.

(7) The overall control efficiency of air pollution control equipment operated pursuant to Subsection (e)(1)(iii) shall be determined by multiplying the capture efficiency of the emission collection system by the control efficiency of the air pollution control device. The control efficiency of the air pollution control device shall be determined using EPA Test Methods 25A and/or 18 (40 CFR Part 60, Appendix A), both dated 9/25/1996, and in accordance with a protocol approved by the Air Pollution Control Officer. Capture efficiency of an emission collection system pursuant to Subsection (e)(1)(iii) shall be

determined according to EPA Test Methods 204 and 204A through 204 F (51 CFR Appendix M), dated 6/4/97, as applicable, and technical document, "Guidelines for Determining Capture Efficiency," dated January 9, 1995. Subsequent to the initial compliance demonstration period, appropriate key system operating parameters as approved by the Air Pollution Control Officer may be used as indicators of the performance of the emission control system.

(8) Other test methods which are determined to be equivalent to the test methods specified in this rule and approved, in writing, by the Air Pollution Control Officer, California Air Resources Board, and EPA may be used in place of the test methods specified in this rule.



# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 67.17 - STORAGE OF MATERIALS CONTAINING VOLATILE ORGANIC COMPOUNDS**

(Effective 3/7/90: Rev. Adopted & Effective 5/15/96)

### **(a) APPLICABILITY**

This rule applies to any person who stores, transfers, applies or otherwise uses materials which contain volatile organic compounds.

### **(b) EXEMPTIONS**

1. This rule is not applicable to equipment subject to District Rules 61.1, 61.2, 61.3, 61.4, 67.2, 67.6, 67.8, 67.10 and 67.15.
2. This rule is not applicable to any containers utilized exclusively in connection with any structure, which is designed and used exclusively as a dwelling for not more than four families.
3. Section (d) of this rule is not applicable to any asphaltic material which contains volatile organic compounds and which, if distilled, has a volume percent evaporated at 360°C (680°F) of 20% or less, provided such material is stored at a temperature not higher than 49°C (120°F).
4. Section (d) of this rule is not applicable to any material which contains volatile organic compounds and which has an initial boiling point of 204°C (400°F) or more, provided that such material is stored at a temperature not higher than 49°C (120°F).
5. Section (d) of this rule is not applicable to any aqueous material which contains less than 10 percent by weight of volatile organic compounds.
6. Section (d) of this rule is not applicable to any material containing volatile organic compounds with an initial boiling point of 60°C (140°F) or higher, stored in a container having a maximum capacity of one pint (473 ml) or less, provided that the material is stored at a temperature not higher than 49°C (120°F).

It is the responsibility of any person claiming exemptions (b)(3), (b)(4), (b)(5) and/or (b)(6) to maintain current manufacturers' specifications or analyses which substantiate this claim. For materials currently in use, the claimant shall keep these records on site and make them available to the Air Pollution Control District upon request.

### **(c) DEFINITIONS (Rev. Effective 5/15/96)**

For the purposes of this rule, the following definitions shall apply:

1. **"Volatile Organic Compound (VOC)"** means any volatile compound containing at least one atom of carbon,

except: methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds which may be emitted to the atmosphere during the storage or use of the compound or of any materials containing the compound.

2. **"In Use"** means:

(A) being accessed, or

(B) being filled or emptied, or

(C) being cleaned, maintained or repaired.

3. **"Closed"** means:

(A) having in place an apparatus or cover which completely covers the container and which is designed to retard VOC emissions but not necessarily provide a vapor tight seal, and

(B) having no visible holes, breaks, openings or separations between adjoining components of the container or container cover. Plastic squeeze bottles, wash bottles, spray bottles, dispensing plunger cans, and dispensers with press down caps and/or with narrow tips constitute closed containers.

4. **"Container"** means a receptacle used for storing materials containing volatile organic compounds included but not limited to cans, drums, pails, bottles or jars. This definition does not include drip pans or reservoirs used for collecting cutting and lubricating oils in machining equipment.

5. **"Empty"** means containing no materials which can be further drained or removed by gravity.

6. **"Exempt Compound"** means the same as defined in Rule 2. (Rev. Effective 5/15/96)

7. **"Waste"** means a material which is intended to be discarded, is marked for disposal, or is no longer usable.

**(d) STANDARDS**

Any person subject to this rule shall comply with the following:

1. All containers used to store, transfer, apply or otherwise employ materials containing VOC shall be closed when not in use.
2. All containers used to store or transfer wastes containing VOC shall be closed except when being accessed or when empty.
3. Containers specified above may be equipped with vents provided such vents are necessary to comply with applicable fire and safety codes.
4. All wastes containing VOC (including paper or cloth impregnated with VOC) shall be stored in closed containers.

#### **(e) VOC TEST METHODS**

1. The VOC content of materials exempt pursuant to Subsection (b)(3) of this rule shall be determined in accordance with the ASTM Standard Test Method for Distillation of Cut-back Asphaltic (Bituminous) Products, D402-76.
2. The initial boiling point of materials exempt pursuant to Subsections (b)(4) and (b)(6) of this rule shall be determined in accordance with the ASTM Test Method 1078-86 for Distillation Range of Volatile Organic Liquids.
3. The VOC content of materials exempt pursuant to Subsection (b)(5) of this rule shall be determined in accordance with the EPA Test Method 24 (40 CFR 60, Appendix A) as it exists on September 21, 1993.
4. Perfluorocarbon (PFC) compounds shall be assumed to be absent from a material subject to this rule unless a manufacturer of the material or a facility operator identifies to the satisfaction of the Air Pollution Control Officer that specific individual compound(s) and the amount(s) are present in the material and provides an appropriate test method which can be used to quantify the specific compounds.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **Rule 67.18 - MARINE COATING OPERATIONS**

(Effective 7/3/90: Rev. Adopted & Effective 5/15/96)

### **(a) APPLICABILITY**

1. Except as otherwise provided in Section (b), this rule is applicable to marine coating operations including the coating of marine and fresh water vessels, oil drilling platforms, navigational aids and component parts; and structures intended for exposure to a marine environment.
2. Rule 66 shall not apply to any marine coating operation which is subject to this rule.

### **(b) EXEMPTIONS**

The provisions of this rule shall not apply to:

1. Coating operations employing non-refillable hand held aerosol cans.
2. Solid film lubricants.
3. Polyester resin materials used in operations subject to or specifically exempt from Rule 67.12.
4. Touch-up operations of thermoplastic coatings on marine and fresh water vessels.
5. Antifoulant coatings applied to aluminum hulls, outboard motors, lower drive shafts, and aluminum running gear below waterline provided records are maintained to substantiate that the antifoulant coatings are applied to aluminum hull, outboard motors, lower drive shafts, and aluminum running gear, and provided the recordkeeping requirements of Section (f) are met.
6. Architectural coatings subject to Rule 67.0, applied to installed bridges, piers or other stationary structures.
7. Noncommercial marine coating operations performed by individuals at their personal residence for the purpose of coating their own pleasure craft(s).
8. Marine coatings used at a permitted stationary source in volumes of less than 20 gallons per year, provided not more than 20 gallons per year of all such non-compliant coatings are used and provided records are maintained to substantiate the total annual usage of such coatings. These records shall be retained on site for at least three years and shall be made available to the District upon request.
9. Solvent cleaning equipment subject to Rule 67.6 and used for surface preparation.

### **(c) DEFINITIONS (Rev. Effective 5/15/96)**

For the purposes of this rule, the following definitions shall apply:

1. **"Air Dried Coating"** means any coating which is not heated above 90°C (194°F) for the purpose of curing or drying.
2. **"Air Flask Coating"** means a special composition coating applied to interior surfaces of high pressure breathing air flasks to provide corrosion resistance and which is certified safe for use with breathing air supplies.
3. **"Antenna Coatings"** means any coating applied to equipment on a vessel exterior which is used to receive or transmit electromagnetic signals.
4. **"Antifoulant Coating"** means any coating which is applied to the under-water portion of a vessel to prevent or reduce the attachment of biological organisms and which is registered with the Environmental Protection Agency (EPA) as a pesticide.
5. **"Baked Coating"** means any coating which is cured or dried in an oven where the oven air temperature exceeds 90°C (194°F).
6. **"Coating"** means a material containing more than 20 grams per liter of VOC as applied, less water and exempt compounds, which can be applied as a thin layer to a substrate and which dries or cures to form a continuous solid film, including but not limited to any paint, primer, varnish, stain, lacquer, enamel, shellac, sealant, or maskant, and excluding adhesives.
7. **"Coating Operation"** means all steps involved in the application, drying and/or curing of surface coatings, and associated equipment cleaning and surface preparation.
8. **"Exempt Compound"** means the same as defined in Rule 2. (Rev. Effective 5/15/96)
9. **"Finish Primer"** means any coating up to 5 mils thick (dry) applied prior to the application of a pleasure craft topcoat for the purpose of corrosion resistance, adhesion of the topcoat, and which promotes a uniform surface by filling in surface imperfections.
10. **"Heat Resistant Coating"** means any coating which during normal use must withstand temperatures of at least 204°C (400°F).
11. **"High Gloss Coating"** means any coating which achieves at least 85% reflectance on a 60° meter.
12. **"High Solids Epoxy Coating"** means an epoxy coating which is applied over a preconstruction zinc primer, or to a metal surface from which preconstruction zinc primer has been removed, or over earlier coats of high solids epoxy coating, in ship structural modification or initial ship construction.
13. **"High Temperature Coating"** means any coating which during normal use must withstand temperatures of at least 426°C (800°F).
14. **"Impregnating Sealer"** means a coating formulated for and applied to wood and fiberglass surfaces to impregnate these surfaces to prevent further deterioration of these surfaces prior to applying subsequent coatings.
15. **"Inorganic Zinc Coating"** means a coating derived from zinc dust incorporated into an inorganic silicate binder, which contains more than eight pounds of elemental zinc per gallon of coating, as applied, and which is used for the express purpose of providing corrosion protection.
16. **"Low Activation Interior Coating"** means a special composition coating used on interior surfaces aboard

marine vessels to minimize the activation of pigments on painted surfaces within a nuclear radiation environment.

17. **"Military Exterior Topcoat"** means an exterior topcoat applied to military vessels, including U.S. Coast Guard vessels subject to specified chemical, biological, and radiological washdown requirements.
18. **"Mist Coating"** means a thin film epoxy coating up to 2 mils thick (dry) applied to an inorganic or organic zinc primer to promote adhesion of subsequent coatings.
19. **"Navigational Aids Specialty Coating"** means a coating applied to Coast Guard buoys or other Coast Guard waterway markers when they are recoated at their usage site and immediately returned to the water.
20. **"Organic Zinc Coating"** means a coating derived from zinc dust incorporated into an organic binder, which contains more than eight pounds of elemental zinc per gallon of coating, as applied, and which is used for the express purpose of providing corrosion protection.
21. **"Pleasure Craft"** means a privately owned vessels used for non-commercial purposes. Vessels rented exclusively to individuals for non-commercial, recreational purposes shall be considered pleasure craft.
22. **"Pleasure Craft Topcoat"** means any coating applied to a pleasure craft exterior above the waterline and below the waterline when stored out of water, and which achieves at least 95% reflectance on a 60j meter.
23. **"Polyester Resin Materials"** means unsaturated polyesters, cross-linking agents, catalysts, gel coats, inhibitors, and any other material used in a polyester resin operation.
24. **"Preconstruction Zinc Primer"** means a coating which contains more than one pound of elemental zinc per gallon of coating as applied, and is applied in a thin layer to metal surfaces prior to use in ship structural modification or initial ship construction, for the purposes of providing initial corrosion protection and compatibility with the welding process.
25. **"Pretreatment Wash Primer"** means any coating which contains a minimum of 0.5 percent acid by weight and which is applied directly to fiberglass and bare metal surfaces and is necessary to provide surface etching and required adhesion for subsequent coatings.
26. **"Primer Surfacer"** means any coating between 5 and 10 mils thick (dry) applied prior to the application of a pleasure craft topcoat for the purpose of corrosion resistance, adhesion of the topcoat, and which promotes a uniform surface by filling in surface imperfections.
27. **"Radar Exterior Topcoat"** means a polyurethane topcoat with no electrically or magnetically conductive pigmentation, which is used on an isoprene rubber substrate aboard U.S. military vessels on radar equipment and meeting retention requirements for flexibility and color.
28. **"Repair and Maintenance Coating Operation"** means the partial recoating of marine and fresh water vessels with thermoplastic coatings, applied over the same type of existing coatings.
29. **"Rubber Camouflage Coating "** means a specially formulated epoxy coating, used as a camouflage topcoat for exterior submarine hulls and sonar domes lined with elastomeric material, which provides resistance to chipping and cracking of the rubber substrate.
30. **"Sealant Coat for Thermal Spray Aluminum"** means an epoxy coating, thinned at a ratio of not greater than one for one with appropriate solvent, and applied to thermal spray aluminum surfaces at approximately a one mil thickness.
31. **"Solid Film Lubricant"** means a thin film coating of an organic binder system, containing as its chief pigment material, one or more of the following: molybdenum disulfide, graphite, polytetrafluoroethylene, or other solids

that act as a dry lubricant between meeting surfaces.

32. **"Specialty Interior Coating"** means a coating used on interior surfaces aboard U.S. military vessels, pursuant to a coating specification which requires that the coating have fire retardant properties and a toxicity index of less than 0.03, in addition to existing military physical and performance requirements.
33. **"Special Marking Coating"** is a coating used specifically for items such as flight decks, ships numbers and other demarcations for safety or identification.
34. **"Stationary Source"** means the same as defined in Rule 20.1.
35. **"Tack Coat"** means an epoxy coat up to two mils thick (dry) applied to allow adhesion of a subsequent coating during the coating process where the existing epoxy coating has aged beyond the time limit specified by the manufacturer for the application of the next coat.
36. **"Thermal Spray Aluminum"** means a process of applying a molten aluminum coating to a steel substrate using a thermal spray system.
37. **"Thermoplastic Coating"** means vinyl, acrylic, chlorinated rubber or bituminous resin coatings.
38. **"Touch-up Operation"** means that portion of the coating operation which is incidental to the main coating process but necessary to cover minor imperfections or minor mechanical damage incurred prior to intended use.
39. **"Undersea Weapons System Coating"** means a coating applied to any component of a weapons system intended for exposure to a marine environment and intended to be launched or fired undersea.
40. **"Volatile Organic Compound" (VOC)** means any volatile compound of carbon, which may be emitted to the atmosphere during operations or activities subject to this rule, except methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds.
41. **"VOC Content Per Volume of Coating, Less Water and Exempt Compounds"** means the weight of VOC per combined volume of VOC and coating solids, and is calculated by the following equation:



where:

$C_{voc}$  = VOC content less water and exempt compounds

$W_s$  = weight of volatile compounds including water and exempt compounds

$W_w$  = weight of water

$W_{es}$  = weight of exempt compounds

$V_m$  = volume of material including water and exempt compounds

$V_w$  = volume of water

$V_{es}$  = volume of exempt compounds

42. **"VOC Content Per Volume of Material"** means the weight of VOC per volume of material, and is calculated by the following equation:



where:

$C_{mvoc}$  = VOC content

$W_s$  = weight of volatile compounds including water and exempt compounds

$W_w$  = weight of water

$W_{es}$  = weight of exempt compounds

$V_m$  = volume of material including water and exempt compounds

43. **"Wood Sealer"** means a coating formulated for and applied to wood to prevent subsequent coatings from being absorbed into the wood.

#### (d) STANDARDS

##### 1. VOC Limits

Except as provided in Subsection (d)(2), a person shall not apply any marine coating with a VOC content in excess of the following limits expressed as grams of VOC per liter of coating, as applied, excluding water and exempt compounds:

Air Dried Coatings - 340

Baked Coatings - 275

##### 2. VOC Limits for Specialty Coatings

A person shall not apply any marine specialty coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter of coating, as applied, excluding water and exempt compounds:

	Effective December 13, 1994	
	Air Dried	Baked
Air Flask	340	
Antenna Coating	340	
Antifoulant Coating (except for pleasure craft)	400	
Antifoulant Coating (for pleasure craft)	330	(Effective June 13, 1995)
Finish Primer	600	
Heat Resistant Coating	420	360
High Gloss Coating	420	360
High Solids Epoxy Coating	280	



High Temperature Coating	500	
Impregnating Sealer	700	
Inorganic Zinc Coating	340	
Low Activation Interior Coating	420	
Military Exterior Topcoat	340	
Mist Coating	610	
Navigational Aids Speciality Coating	550	
Organic Zinc Coating	340	
Pleasure Craft Topcoat	650	
Preconstruction Zinc Primer	650	
Pretreatment Wash Primer	420	
Primer Surfacer	340	
Radar Exterior Topcoat	340	
Rubber Camouflage Coating	340	
Sealing Coat for Thermal Spray Aluminum	610	
Special Marking Coating	420	
Specialty Interior Coating	340	
Tack Coat	610	
Thermoplastic Coatings used in a Repair and Maintenance Coating Operation	550	
Underwater Weapons System Coating	340	275
Wood Sealer	340	

The requirements of Subsections (d)(1) and (d)(2) may be met using an Alternative Emission Control Plan (AECPL) that has been approved pursuant to Rule 67.1.

### 3. Cleaning of Equipment

A person shall not use VOC-containing materials for the cleaning of equipment used in marine coating operations unless:

- (i) a system is used that totally encloses the component parts being cleaned during the washing, rinsing, and draining processes; or
- (ii) the cleaning material is flushed or rinsed through the equipment in a contained manner that will minimize evaporation into the atmosphere; or
- (iii) the equipment or equipment parts are cleaned in a container which is open only when being accessed for adding, cleaning, or removing application equipment or when cleaning material is being added, provided the cleaned equipment or equipment parts are drained to the container until dripping ceases; or
- (iv) other application equipment cleaning methods that are demonstrated to be as effective as any of the equipment described above in minimizing the emissions of VOC to the atmosphere, provided that the method and/or device has been approved by the Air Pollution Control Officer; or
- (v) the cleaning material contains 200 grams or less of VOC per liter of material; or

(vi) the cleaning material has an initial boiling point of 190; C (374; F) or greater; or

(vii) the cleaning material has a total vapor pressure of VOC of 20 mm Hg or less, at 20; C (68; F).

#### 4. Surface Preparation

After June 13, 1995, a person shall not use VOC containing materials for surface preparation in marine coating operations unless:

(i) the material contains 200 grams or less of VOC per liter of material; or

(ii) the material has an initial boiling point of 190; C (374; F) or greater; or

(iii) the material has a total vapor pressure of VOC of 45 mm Hg or less, at 20; C (68; F).

5. No person shall require for use or specify the application of a coating subject to this rule if such use or application results in a violation of any provision of this rule. This prohibition shall apply to all written or oral contracts under the terms of which any coating is applied to any marine vessel, component or structure intended for exposure to a marine environment at any physical location within San Diego County.

6. The manufacturer shall provide on the coating container or on separate data sheets a designation of VOC expressed in grams per liter or pounds per gallon, less water and exempt compounds, for all coatings which are offered for sale in San Diego County to be used on marine vessels, components and structures intended for exposure to a marine environment.

#### (e) CONTROL EQUIPMENT

1. In lieu of complying with provisions of Subsections (d)(1), (d)(2), (d)(3), and/or (d)(4) of this rule, a person may use an air pollution control system which:-

(i) has been installed in accordance with an Authority to Construct; and

(ii) includes an emission collection system which captures organic gaseous emissions, including emissions associated with applicable coating, equipment cleaning, and surface preparation operations, and transports the captured emissions to an air pollution control device; and

(iii) has a combined emissions capture and control device efficiency of at least 85 percent by weight.

2. A person subject to the requirements of this section shall submit to the Air Pollution Control Officer for approval an Operation and Maintenance plan for the proposed emission control device and emission collection system and receive approval prior to operation of the control equipment. Thereafter, the plan can be modified, with Air

Pollution Control Officer approval, as necessary to ensure compliance. Such plan shall:

(i) identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(1)(iii) such as temperature, pressure, and/or flow rate; and

(ii) include proposed inspection schedules and anticipated ongoing maintenance regarding the key system operating parameters.

3. Upon approval of the Air Pollution Control Officer, a person subject to the requirements of this section shall implement the Operation and Maintenance plan, and shall comply with the provisions of the approved plan thereafter.

#### **(f) RECORDKEEPING**

All records shall be retained on site for at least three years and shall be made available to the District upon request.

1. Any person subject to the provisions of Subsections (d)(1), (d)(2), (d)(3) and/or (d)(4) of this rule shall maintain records in accordance with the following:

(i) Maintain a current list of coatings and VOC containing materials in use which provides all of the coating, cleaning, and/or surface preparation material VOC data necessary to evaluate compliance, including but not limited to:

(A) Manufacturer name and identification of coatings or each coating component for multi-component coatings (this includes any components such as bases, catalysts, thinners or reducers, when supplied in separate containers), and each cleaning and surface preparation material;

(B) Mix ratio of components; and

(C) VOC content, initial boiling point, and/or total vapor pressure of VOC of each coating, or coating component for multi-component coatings, cleaning and surface preparation material.

(ii) Maintain current documentation to demonstrate applicability of any specialty coating category pursuant to Subsection (d)(2) of this rule.

(iii) At a minimum, maintain records on a monthly basis showing:-

(A) the amount of each coating, or each coating component for multi-component coatings, used; and

(B) the maximum operating temperature of any ovens used to bake marine coatings, if applicable; and

(C) the type and amount of each cleaning and surface preparation material used; and

(D) material additions to dip tanks used for dip coating operations.

2. A person using control equipment in accordance with Section (e) of this rule shall:

(i) maintain records in accordance with Subsection (f)(1); and

(ii) for all coating, cleaning, and/or surface preparation materials not in compliance with Subsections (d)(1), (d)(2), (d)(3), or (d)(4) of this rule, maintain daily records of the amount of each coating or each coating component for multi-component coatings, surface preparation and cleaning material used; and

(iii) maintain daily records of key system operating parameters as approved in the Operation and Maintenance plan. Such records shall be sufficient to document continuous compliance with Subsection (e)(1)(iii) during periods of emission producing activities.

#### **(g) TEST METHODS**

1. Measurement of VOC content of the marine coatings, cleaning and surface preparation materials subject to Subsections (d)(1), (d)(2), (d)(3)(v) or (d)(4)(i) of this rule shall be conducted in accordance with EPA Test Method 24 (40 CFR 60, Appendix A) as it exists on December 13, 1994.
2. Perfluorocarbon (PFC) compounds shall be assumed to be absent from a coating, cleaning, or surface preparation material subject to this rule unless a manufacturer of the material or a facility operator identifies the specific individual compound(s) and the amount(s) present in the material and provides an EPA and ARB approved test method which can be used to quantify the specific compounds.
3. Measurement of coating reflectance referenced in Subsections (c)(11) or (c)(22) of this rule shall be conducted in accordance with ASTM Standard Test Method D523-89.
4. Measurement of pretreatment wash primer acid content referenced in Subsection (c)(25) of this rule shall be conducted in accordance with ASTM Standard Test Method D1613-91.
5. Measurement of the initial boiling point of cleaning and surface preparation materials subject to Subsection (d)(3)(vi) and/or (d)(4)(ii) of this rule shall be conducted in accordance with ASTM Standard Test Method D1078-86.
6. Measurement of control device efficiency subject to Subsection (e)(1) of this rule shall be conducted in accordance with EPA Methods 18 and/or 25A (40 CFR 60) as they exist on December 13, 1994 and in accordance with a protocol approved by the Air Pollution Control Officer.
7. Measurement of elemental zinc content referenced in Subsections (c)(15), (c)(20) and (c)(24) of this rule shall be conducted and reported in accordance with the South Coast Air Quality Management District Spectrographic Method 311-91.
8. Calculation of total vapor pressure of VOC in materials subject to Subsection (d)(3)(vii) and/or (d)(4)(iii) of this rule shall be conducted in accordance with the District's "Procedures for Estimating the Vapor Pressure of VOC Mixtures" as it exists on December 13, 1994. If the vapor pressure of the liquid mixture exceeds the limits

specified in Subsection (d)(3)(vii) and/or (d)(4)(iii), the vapor pressure shall be determined in accordance with ASTM Standard Test Method D2879-86, Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope. The fraction of water and exempt compounds in the liquid phase shall be determined by using ASTM Standard Test Methods D3792-91 and D4457-85 and shall be used to calculate the partial pressure of water and exempt compounds. The results of vapor pressure measurements obtained using ASTM Test Method D2879-86 shall be corrected for partial pressure of water and exempt compounds.

9. Measurement of the emission collection system capture efficiency subject to Subsection (e)(1) of this rule shall be conducted using a protocol approved by the Air Pollution Control Officer. Subsequent to the initial compliance demonstration period, applicable key system operating parameters, as approved by the Air Pollution Control Officer, can be used as indirect verification that capture efficiency performance has not diminished.
10. Measurement of solvent losses from alternative application cleanup equipment subject to Subsection (d)(3)(iv) shall be conducted and reported in accordance with the South Coast Air Quality Management District's General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems as it exists on December 13, 1994.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 67.19 - COATINGS AND PRINTING INKS MANUFACTURING**

**Operations** (Adopted & Effective: 6/7/94; Rev. Adopted & Effective 5/15/96)

### (a) **APPLICABILITY**

Except as otherwise provided in Section (b), this rule is applicable to any person who manufactures coatings or printing inks. Mixing, blending, and compounding operations subject to Section (d) of this rule shall not be subject to Rule 67.17. Manufacturing operations and equipment cleaning operations subject to this rule shall not be subject to Rule 66 or 67.6.

### (b) **EXEMPTIONS** (Rev. Effective 3/7/95)

1. The provisions of this rule shall not apply to any stationary source where emissions of volatile organic compounds (VOCs) from all coating and/or printing ink manufacturing operations are less than an average of 15.0 pounds (6.8 kg) per day of operation for each calendar month, provided the owner or operator of the stationary source maintains monthly usage and production records of VOC containing materials necessary to establish average daily VOC emission levels. The average daily emission levels shall be determined by taking into account the number of operational days per given month. The monthly records of VOC containing materials shall be retained on site for at least three years and made available to the District upon request.
2. The requirements of Subsection (d)(2) of this rule shall not apply to a stationary source where the combined uncontrolled emissions of VOC's from all coating and/or ink manufacturing operations, including emissions from equipment cleaning, are less than 50 tons in each calendar year.
3. The requirements of Subsection (d)(3) of this rule shall not apply to any stationary storage tank with a capacity of less than 550 gallons (2080 liters) or to any stationary storage tank used exclusively for storage of epoxy resins, water-based coatings or inks, or paste inks.
4. The requirements of Subsections (d)(1) and (d)(2) of this rule shall not apply to mixing vats that are used exclusively for mixing water-based coatings or inks.

### (c) **DEFINITIONS** (Rev. Effective 5/15/96)

For the purposes of this rule, the following definitions shall apply:

1. **"Coating"** means a material which can be applied to a surface and which forms a solid continuous film in order to beautify and/or protect the surface. This includes, but is not limited to, any primer, paint, varnish, stain, lacquer, enamel, shellac, sealer, or maskant, but excludes adhesive.
2. **"Exempt Compound"** means the same as defined in Rule 2. (Rev. Effective 5/15/96)

3. **"Existing Equipment"** means any coating or printing ink manufacturing equipment for which a District Authority to Construct or Permit to Operate was issued before June 7, 1994.
4. **"Fugitive Liquid Leak"** means a visible leak of material containing more than 10 percent of VOC by weight, at a rate in excess of three drops per minute.
5. **"Magie Oil"** means any hydrocarbon petroleum distillate which has an initial boiling point between 510-630°F (266-333°C).
6. **"Manufacturing Operations"** means mixing, blending, and/or compounding operations, including the addition of materials in such operations, associated with the production of coatings and/or printing inks for sale for off-site use.
7. **"Mixing Vat"** means any vat used to grind, disperse, mix, blend, and/or compound coating or printing ink ingredients.
8. **"New Equipment"** means any coating or printing ink manufacturing equipment for which an Authority to Construct was issued after June 7, 1994.
9. **"Paste Ink"** means a printing ink that contains, primarily, Magie oil or diethylene glycol as solvent.
10. **"Printing Ink"** means any fluid or viscous composition used in printing, impressing, or transferring an image onto a substrate.
11. **"Production Cycle"** means an interval of time between the start and the finish of a coatings or printing inks manufacturing process during which the entire sequence of operations necessary for the production of a specific coating or printing ink is completed.
12. **"Stationary Source"** as defined in Rule 20.1.
13. **"Stationary Storage Tank"** means any tank, reservoir, or other container used to store, but not transport, VOC containing materials.
14. **"Submerged Fill Pipe"** means any fill pipe which has its discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank. "Submerged fill pipe," when applied to a tank which is loaded from the side, means any fill pipe which has its discharge opening entirely submerged when the liquid level is 18 inches above the bottom of the tank.
15. **"Uncontrolled VOC Emissions"** means VOC emissions from a coating and/or printing ink manufacturing operation which occurred or would have occurred in the absence of any air pollution control equipment added or process modifications made on or after November 15, 1990.
16. **"Volatile Organic Compound (VOC)"** means any volatile compound containing at least one atom of carbon excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonates, and exempt compounds which may be emitted to the atmosphere during the production of coatings and/or printing inks subject to this rule.
17. **"Water-Based Coating or Ink"** means a water miscible or water reducible coating or ink that contains more than five percent of water by weight.
18. **"Wipe Cleaning"** means a method of cleaning by physically rubbing a surface with a material such as a rag or paper wetted with a cleaning solvent to remove contaminants or coating or printing ink residues from the surface.

(d) **STANDARDS**

1. A person shall not manufacture coatings and/or printing inks containing VOCs unless all mixing vats used for such manufacture are kept covered, except when adding materials, taking samples, visually inspecting the fluid level, or wipe cleaning the vats, with lids which satisfy the following conditions:

(i) Lids are maintained in good condition such that, when in place, they maintain contact with the rim with gaps less than or equal to 1/2 inch in width for at least 90 percent of the circumference of the rim of the vat. The cumulative length of gaps between the lid and the rim of the vat exceeding 1/2 inch in width shall not exceed 10 percent of the circumference; and

(ii) There are no holes, tears, or openings in the lid, except the slit specified in Subsection (d)(1)(iii) and openings for adding materials, taking samples, or visually inspecting the fluid level. The openings shall be equipped with covers which do not have any holes or tears. All openings shall be covered when the mixing vat is not being accessed; and

(iii) The lid may have a slit to allow clearance for insertion of a mixer shaft if so equipped. The width of the slit in the lid for the mixer shaft shall be no more than 2 inches greater than the diameter of the mixing shaft, or no more than 4 inches greater than the diameter of the mixing shaft for lids on mixing vats subject to Subsection (d)(2). For any mixing vat with a capacity of more than 55 gallons (208 liters), the slit shall be covered after insertion of the mixer, except to allow safe clearance for the mixer shaft.

In lieu of complying with the provisions of Subsection (d)(1), a person may elect to use an air pollution control system which meets the requirements of Sections (e) and (h).

2. Except as provided in Subsection (b)(2), a person shall not conduct any coating and/or printing ink manufacturing operations unless uncontrolled VOC emissions from mixing vats used for such operations are reduced by at least 90 percent by weight.

3. Except as provided in Subsection (b)(3) a person shall not transfer or allow the transfer of resins, coatings, printing inks, or solvents containing VOCs into any stationary storage tank unless such tank is:

(i) Equipped with a submerged fill pipe; or

(ii) Vented to an air pollution control system which meets the requirements of Sections (e) and (h).

4. A person shall not manufacture coatings and/or printing inks unless fugitive liquid leaks in equipment storing, mixing, blending, or transferring materials containing more than 10 percent of VOC by weight are promptly recorded and repaired. Repair shall be completed the first time the leaking equipment is off-line for a period of time long enough to complete the repair, but in no case more than 72 hours after a leak was first detected and recorded. The record shall specify the time, date, and location of each observed leak and the time and date of repair. Records shall be retained on site for at least three years and made available to the District upon request. An unrecorded leak shall be considered a violation of this rule.

5. A person shall not clean any equipment used in the manufacturing of coatings and/or printing inks unless:

(i) The cleaning material contains 200 grams or less of VOC per liter of material or has a total vapor pressure of



VOC of 20 mm Hg or less at 68°F (20°C); or

(ii) Cleaning is conducted using an enclosed system which includes a container that completely encloses the equipment being cleaned during cleaning, except to place or remove the equipment. The cleaned equipment shall be completely drained of excess cleaning material before the container is opened for removal of the equipment. The drained cleaning material shall be returned to a closed container. The cleaning device shall be kept closed during the intervals between cleaning cycles unless access is required for maintenance or repair. The cleaning device may be equipped with vents provided that such vents are necessary to comply with applicable fire and safety codes; or

(iii) Cleaning is conducted using an enclosed system which has in place an apparatus or lid which completely covers the equipment being cleaned during washing, rinsing, and draining and has no visible holes, breaks, openings, or separations. The drained cleaning material shall be returned to a closed container. The system may be equipped with vents provided that such vents are necessary to comply with applicable fire and safety codes; or

(iv) The cleaning material is collected in a manner to minimize emissions and is reclaimed on site, and all fresh cleaning materials used at the facility, excluding cleaning materials used in enclosed systems which satisfy the requirements of Subsection (d)(5)(ii) or (d)(5)(iii), are in compliance with the requirements of Subsection (d)(5)(i). The resulting wastes from on site reclamation systems shall not contain more than 20 percent VOC by weight; or

(v) The equipment or equipment parts are cleaned in a container which is open only when being accessed or when cleaning material is being added, and clean equipment and/or equipment parts are drained to the container until dripping ceases; or

(vi) The cleaning material is flushed through the equipment, provided that the supplying and receiving vessels are covered with lids meeting the requirements of Subsection (d)(1).

#### **(e) CONTROL EQUIPMENT**

1. A person who elects to comply with the provisions of Subsection (d)(2) by using an air pollution control system shall use a system which:

(i) Has been installed in accordance with an Authority to Construct; and

(ii) Includes an emission collection system which captures VOC emissions generated from coating and/or ink manufacturing operations, and transports the captured emissions to an air pollution control device; and

(iii) Has an overall emissions control efficiency of at least 90 percent by weight.

Emissions over an entire production cycle, not exceeding five hours, shall be used to determine compliance with the control efficiency requirements of Subsection (e)(1)(iii).

2. A person subject to the provisions of Subsection (e)(1) shall submit an Operation and Maintenance Plan for the air pollution control device and emission collection system to the Air Pollution Control Officer for approval. Thereafter, the plan can be modified, with written Air Pollution Control Officer approval, as necessary to ensure compliance. Such plan shall:
  - (i) Identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (e)(1) such as temperatures, pressures, and flow rates; and
  - (ii) Include proposed inspection schedules, anticipated ongoing maintenance, and proposed recordkeeping practices regarding the key system operating parameters.
3. The Operation and Maintenance Plan must be submitted to the Air Pollution Control Officer and receive approval prior to operation of the air pollution control equipment. A person subject to the requirements of this section shall implement the plan on the approval of the Air Pollution Control Officer, and shall comply with the provisions of the approved plan thereafter.

#### **(f) RECORDKEEPING**

Any person who manufactures coatings and/or printing inks shall maintain records in accordance with the following requirements:

1. Maintain records necessary to establish calendar year emission levels for all coating and/or printing ink manufacturing operations at the stationary source. These records shall include, but shall not be limited to, the type and amount of each coating or printing ink produced during each calendar year.
2. Maintain a current list showing the VOC content or total vapor pressure of VOC, as applicable, for each cleaning material used.
3. Maintain records of the amounts of cleaning materials used during each calendar year.
4. For air pollution control equipment, maintain records sufficient to demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities, including daily records of the control equipment's key system operating parameters specified in Subsection (e)(2)(i).

These records shall be retained on site for at least three years and made available to the District upon request.

#### **(g) TEST METHODS**

1. Uncontrolled VOC emission rates from coating and/or ink manufacturing operations shall be determined using emission factors specified in EPA Publication AP-42, Compilation of Air Pollutant Emission Factors, as it exists on June 7, 1994. An alternative method for determining VOC emissions may be used provided such method has been approved, in advance, by the Air Pollution Control Officer, the Air Resources Board (ARB), and U.S. Environmental Protection Agency (EPA).
2. Measurement of VOC content of reclamation wastes pursuant to Subsection (d)(5)(iv) shall be conducted and reported in accordance with EPA Method 25D as referenced in 56 Federal Register 33494, July 22, 1991.

3. The overall control efficiency pursuant to Subsection (e)(1)(iii) shall be determined by multiplying the capture efficiency of the emission collection system by the control efficiency of the air pollution control device. The control efficiency of the air pollution control device shall be determined using EPA Methods 18, 25 and/or 25A (40 CFR 60, Appendix A), as they exist on June 7, 1994, and test procedures shall be performed in accordance with a protocol approved by the Air Pollution Control Officer. The capture efficiency shall be determined using a protocol approved by the Air Pollution Control Officer. Subsequent to the initial compliance demonstration period, applicable key system operating parameters, as approved by the Air Pollution Control Officer, shall be used as indirect verification that capture efficiency performance has not diminished.
4. Total vapor pressure of VOC in cleaning materials subject to Subsection (d)(5)(i) shall be calculated by using the District's Procedure for Estimating the Vapor Pressure of a Solvent Mixture as it exists on June 7, 1994. If the calculated vapor pressure of the liquid mixture exceeds the limit specified in Subsection (d)(5)(i), the vapor pressure shall be determined in accordance with ASTM Standard Test Method D 2879-83, Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope. The fraction of water and exempt compounds in the liquid phase shall be determined using ASTM Standard Test Methods D 3792-86 and D 4457-85, respectively, and shall be used to calculate the partial pressure of water and exempt compounds. The fraction of VOCs shall be determined by using manufacturer specification data. The results of vapor pressure measurements obtained using ASTM Standard Test Method D2879-83 shall be corrected for the partial pressure of water and exempt compounds.
5. The VOC content of liquids pursuant to Subsection (c)(4) and cleaning materials subject to Subsection (d)(5)(i) shall be determined in accordance with EPA Test Method 24 or 24A (40 CFR 60, Appendix A), as applicable, as they exist on June 7, 1994.
6. Perfluorocarbon (PFC) compounds shall be assumed to be absent from a coating, printing ink, or cleaning material subject to this rule unless a manufacturer of the material or a facility operator identifies the specific individual compound(s) and the amount(s) present in the material and provides an EPA and ARB approved test method which can be used to quantify the specific compounds.
7. Measurements of the initial boiling point of Magic oils pursuant to Subsection (c)(5) shall be conducted in accordance with ASTM Standard Test Method D 1078-86.
8. The water content of coatings pursuant to Subsection (c)(17) shall be determined in accordance with ASTM Standard Test Method D 3792-86.

#### (h) COMPLIANCE SCHEDULE

Except as otherwise provided in this section, the requirements of this rule shall be effective on and after June 7, 1995.

1. Any person operating existing equipment, who is subject to the provisions of Subsection (d)(2), except for existing equipment manufacturing coatings containing 1,1,1-trichloroethane, and who installs air pollution control equipment to meet the requirements of that subsection shall meet the following increments of progress:
  - (i) By December 7, 1994, submit to the Air Pollution Control Officer an application for Authority to Construct and Permit to Operate an air pollution control system meeting the requirements of Section (e).
  - (ii) By June 7, 1995, install air pollution control equipment pursuant to Subsections (d)(1) and (d)(2).

2. Any person operating existing equipment, except for existing equipment manufacturing coatings containing 1,1,1-trichloroethane, who is subject to the provisions of Subsection (d)(2), and implements process modifications to meet the requirements of that subsection shall meet the following increments of progress:
  - (i) By December 7, 1994, submit a process modification plan for meeting the requirements of Subsection (d)(2) to the Air Pollution Control Officer for approval. Thereafter, the plan can be modified with the approval of the Air Pollution Control Officer as necessary to ensure compliance.
  - (ii) By June 7, 1995, fully implement the plan that has been approved by the Air Pollution Control Officer pursuant to Subsection (h)(2)(i).
3. Any person operating existing equipment which manufactures coatings containing 1,1,1-trichloroethane who is subject to the provisions of Subsection (d)(2) shall submit to the Air Pollution Control Officer a phase-out schedule for such coating manufacture with a final termination date not later than January 1, 1996.
4. Any person operating existing equipment who is electing to use enclosed cleaning systems pursuant to Subsection (d)(5)(ii) or (d)(5)(iii) shall comply with Subsection (d)(5)(ii) or (d)(5)(iii) by June 7, 1995.
5. Any person installing new equipment subject to this rule shall comply with the provisions of this rule upon startup.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 67.24. BAKERY OVENS** (Adopted & Effective: 6/7/94: Rev. Adopted & Effective 5/15/96)

### (a) **APPLICABILITY**

Except as provided in Section (b), this rule is applicable to bakery ovens which emit volatile organic compounds (VOC's) during the baking of yeast-leavened products.

Bakery ovens subject to this rule shall not be subject to Rule 66.

### (b) **EXEMPTIONS** (Rev. Effective 3/7/95)

1. The provisions of this rule shall not apply to bakery ovens which are located at a stationary source where the combined rated heat input capacity of all bakery ovens is less than 2 million British Thermal Units (BTU) per hour.

It shall be the responsibility of any person claiming the exemption in Subsection (b)(1) to provide information necessary for the District to determine the combined rated heat input capacity of all bakery ovens. Such information may include oven or burner manufacturer specifications, or may include fuel or energy consumption rates for oven start-up period(s) in cases where manufacturer specifications are unavailable.

2. The provisions of this rule shall not apply to ovens used exclusively for the baking of products leavened chemically without yeast.
3. The provisions of Sections (d) and (g) of this rule shall not apply to bakery ovens which are located at a stationary source where the uncontrolled emissions of VOC's from all bakery ovens combined is less than 50 tons per calendar year.

### (c) **DEFINITIONS** (Rev. Effective 5/15/96)

For the purposes of this rule, the following definitions shall apply:

1. **Bakery Oven** means an oven which bakes yeast-leavened products, including but not limited to breads, buns, and rolls.
2. **Combustion Stack** means a stack on a bakery oven which emits exclusively combustion exhaust gases which do not pass through the oven's baking chamber.
3. **Comfort Hood Vent** means a vent or hood used to control air flow outside the entrance or exit of a bakery oven.

4. **Exempt Compound** means the same as defined in Rule 2. (Rev. Effective 5/15/96)
5. **Fermentation Time** means the elapsed time between adding yeast to dough or sponge and placing the dough or sponge into a bakery oven, excluding retardation time, expressed in hours.
6. **Purge Stack** means a bakery oven stack used exclusively for evacuation of residual gases from the bakery oven during burner ignition.
7. **Retardation Time** means any portion(s) of the elapsed time between adding yeast to dough or sponge and placing the dough or sponge into a bakery oven, where the dough or sponge is refrigerated at temperatures of less than 10<sub>i</sub> C (50<sub>i</sub> F), for the specific purpose of retarding the fermentation process.
8. **Stationary Source** means the same as defined in Rule 20.1.
9. **Uncontrolled VOC Emissions** means VOC emissions from a bakery oven, before application of add-on air pollution control equipment or process modification.
10. **Volatile Organic Compound (VOC)** means any compound of carbon, which may be emitted to the atmosphere during bakery oven operations, except methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds.
11. **Yeast Percentage** means the pounds of yeast added to a hundred pounds of total flour in the recipe.

**(d) STANDARDS**

1. No person shall operate a bakery oven subject to this rule, unless uncontrolled VOC emissions are reduced by at least 90 percent by weight.
2. A person may comply with the requirements of Subsection (d)(1) of this rule by using an air pollution control system which:
  - (i) has been installed in accordance with an Authority to Construct; and
  - (ii) includes an emission collection system(s) which ducts the exhaust gases from all stacks, except purge stacks, combustion stacks, and comfort hood vents, on all bakery ovens to VOC emission control device(s). Such ducting shall be maintained so as to be free of visible holes, breaks, openings or separations between adjoining components from which VOC's may be emitted to the atmosphere; and
  - (iii) has one or more VOC emission control devices, each with reduction efficiency of at least 90 percent by weight.
3. A person subject to the requirements of Subsection (d)(2) shall submit an Operation and Maintenance Plan for the proposed emission control device and emission collection system to the Air Pollution Control Officer for approval, and receive such approval prior to the operation of the control equipment. Thereafter, the plan can be modified, with Air Pollution Control Officer approval, as necessary to ensure compliance. Such plan shall:
  - (i) identify all key system operating parameters. Key system operating parameters are those necessary to ensure compliance with Subsection (d)(2)(iii) such as temperature, pressure, and/or flow rate; and

(ii) include proposed inspection schedules and anticipated ongoing maintenance regarding the key system operating parameters.

4. A person subject to the requirements of Subsection (d)(3) shall implement the plan upon approval of the Air Pollution Control Officer, and shall comply with the provisions of the approved plan thereafter.

#### (e) RECORDKEEPING

After December 7, 1994, a person operating a bakery oven(s) subject to this rule shall maintain records in accordance with the following:

1. Maintain current records necessary to determine VOC emissions for all bakery ovens including, but not limited to, type of each yeast-leavened baked product, yeast percentage for each product, and fermentation time for each product; and
2. Maintain annual records based on calendar year production rates, by weight, of finished baked product for each yeast-leavened product.
3. For control equipment, maintain daily records of key system operating parameters specified in Subsection (d)(3) (i), which will demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities.

Records maintained in accordance with Subsection (e)(2) are subject to District verification after 60 days following the end of a calendar year. These records shall be maintained on site for at least three years and shall be made available to the District upon request.

#### (f) TEST METHODS

1. For the purposes of determining the total annual uncontrolled VOC emissions from a stationary source, VOC emission factors for each yeast-leavened bakery product shall be determined in accordance with both Table 67.24 and the following formula:

$$EF = 0.95 Y_i + 0.19 t_i - 0.51S - 0.86 t_s + 1.90$$

where:

$Y_i$  = initial yeast percentage

$t_i$  = total fermentation time

$S$  = second (spiking) yeast percentage, if applicable

$t_s$  = fermentation time for second yeast percentage, if applicable, and

$EF$  = emission factor, pounds of VOC emissions per ton of baked product

Annual uncontrolled emission rates shall be calculated by multiplying emission factors and the annual production rate for each yeast-leavened finished bakery product. The highest of the two calculated emission rates for a stationary source shall be used for the purposes of this rule. In cases where annual emissions for a stationary source, as determined using the highest emission rate, exceed 80 percent of the annual emissions specified in Subsection (b)(3), or other cases as deemed appropriate by the Air Pollution Control Officer, emission factors shall instead be determined in accordance with Subsection (f)(2).

Instead of using calculated emission factors, an owner or operator may elect to use VOC emission factors determined according to Subsection (f)(2).

2. VOC emission factors for yeast-leavened bakery products may be determined by EPA Methods 18, 25, and/or 25A (40 CFR 60) as they exist on June 7, 1994, together with exhaust flow rates and oven throughputs. Test procedures shall be performed in accordance with a protocol approved by the Air Pollution Control Officer. An alternative test method may be used provided such method has been approved, in advance, by the Air Pollution Control Officer, ARB and EPA.
3. Measurement of emission control device reduction efficiency subject to Subsection (d)(2)(iii) of this rule shall be conducted in accordance with EPA Methods 18, 25, and/or 25A (40 CFR 60) as they exist on June 7, 1994. Test procedures shall be performed in accordance with a protocol approved by the Air Pollution Control Officer.

#### **(g) COMPLIANCE SCHEDULE**

A person operating a bakery oven(s) subject to Subsection (d)(2) of this rule shall meet the following increments of progress:

1. For an oven which commenced operation prior to June 7, 1994, or for a replacement of such an oven:
  - (i) By December 7, 1994, submit to the Air Pollution Control Officer any necessary application for Authority to Construct and Permit to Operate an air pollution control system meeting the requirements of Subsection (d)(2);
  - (ii) By June 7, 1995, install an air pollution control system pursuant to Subsection (d)(2).
2. For an oven which commences operation on or after June 7, 1994, be in compliance with Subsection (d)(1) by the date of commencement of oven operation.
3. For an existing stationary source having a calculated annual emission rate pursuant to Subsection (f)(1) exceeding 80 percent of the emission rate specified in Subsection (b)(3), by August 7, 1994, submit to the Air Pollution Control Officer for approval a plan for emissions testing pursuant to Subsection (f)(2). Such plan shall provide for emissions testing to be completed, and test report(s) submitted, by December 7, 1994.

Stationary sources electing to comply with Subsections (d)(2) and (g)(1) shall not be subject to Subsection (g)(3).



**TABLE 67.24**

<b>Yt*</b>	<b>Emission Factor**</b>	<b>Yt*</b>	<b>Emission Factor**</b>	<b>Yt*</b>	<b>Emission Factor**</b>
1.0	0.8488	11.0	5.2947	21.0	9.7405
1.5	1.0711	11.5	5.5170	21.5	9.9628
2.0	1.2934	12.0	5.7393	22.0	10.1851
2.5	1.5157	12.5	5.9616	22.5	10.4074
3.0	1.7380	13.0	6.1839	23.0	10.6297
3.5	1.9603	13.5	6.4061	23.5	10.8520
4.0	2.1826	14.0	6.6284	24.0	11.0743
4.5	2.4049	14.5	6.8507	24.5	11.2966
5.0	2.6272	15.0	7.0730	25.0	11.5189
5.5	2.8495	15.5	7.2953	25.5	11.7412
6.0	3.0718	16.0	7.5176	26.0	11.9635
6.5	3.2941	16.5	7.7399	26.5	12.1857
7.0	3.5163	17.0	7.9622	27.0	12.4080
7.5	3.7386	17.5	8.1845	27.5	12.6303
8.0	3.9609	18.0	8.4068	28.0	12.8526
8.5	4.1832	18.5	8.6291	28.5	13.0749
9.0	4.4055	19.0	8.8514	29.0	13.2972
9.5	4.6278	19.5	9.0737	29.5	13.5195
10.0	4.8501	20.0	9.2959	30.0	13.7418
10.5	5.0724	20.5	9.5182		

\*Yt = (Yeast Percentage) x (Fermentation Time)

If yeast is added in two steps,

Yt = (percentage of initial yeast addition) x (time from initial yeast addition to placement in oven)

+ (percentage of second yeast addition) x (time from second yeast addition to placement in oven)

\*\* Emission Factor = pounds of VOC per ton of finished baked product



# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 68 - FUEL-BURNING EQUIPMENT - OXIDES OF NITROGEN

(Effective 7/1/71: Rev. Effective 9/20/94)

### (a) APPLICABILITY

Except as provided in Section (b), this rule is applicable to any non-vehicular, fuel-burning equipment which has a maximum heat input rating of 50 million British Thermal Units (Btu) (12.6 x 10<sup>6</sup> kcal) per hour (gross) or more.

### (b) EXEMPTIONS

The provisions of this rule shall not apply to:

1. Any article, machine, equipment, facility, or other contrivance used exclusively for the testing of turbine engines or their components.
2. Any equipment or other contrivance used exclusively for the processing and combustion of municipal solid waste provided that emissions of nitrogen oxides (NO<sub>x</sub>), calculated as nitrogen dioxide (NO<sub>2</sub>) at three percent oxygen (O<sub>2</sub>) on a dry basis, meet the requirements of Lowest Achievable Emission Rate (LAER) as defined in Rule 20.1.
3. Turbine engines during a continuous 30-minute period for startup, a continuous 30-minute period for shutdown and a continuous 30-minute period during a fuel change.
4. Diesel-fired internal combustion engines at nuclear generating stations when used only for safety compliance testing of emergency electrical power generation as required by the Nuclear Regulatory Commission .
5. Boiler-steam turbine generator sets installed prior to January 1, 1966, with a maximum heat input of 2200 million Btu per hour or less, during startup, fuel change, low load, or pre- or post-overhaul tests, provided that their operation conforms to an operating condition described in Table 1 and that NO<sub>x</sub> emissions concentration does not exceed an applicable exemption limit specified in Table 1.

Compliance with exemption limits specified in Table 1 shall be determined by the method described in Section (g).

It is the responsibility of any person claiming an exemption, pursuant to Subsection (b)(5), to maintain records in accordance with Section (e) of this rule.

**Table 1: Exemption Limits**

	Maximum Gross Heat Input Rate (Million Btu Per Hour)			
	Less than 1200		1200 to 2200	
	Exemption Limit (ppm)	Maximum Number of Allowable Exceedances (Clock-Hours)	Exemption Limit (ppm)	Maximum Number of Allowable Exceedances

				(Clock-Hours)
Operating Condition:				
Cold Startup (Gas)	175	8	250	8
Cool Startup (Gas)	175	5	250	5
Warm Startup (Gas)	175	3	200	3
Hot Startup (Gas)	175	2	200	2
Fuel Change *	225	no maximum	250	1
Low Load (Gas)	125	no maximum	175	no maximum
Low Load (Liquid)	225	no maximum	300	no maximum
Overhaul Test (Gas) **	125	no maximum	200	3

\* For the purposes of this Subsection, a fuel change shall be considered a liquid fuel operation.

\*\* The exemption limit for Overhaul Test shall not be used more than two times per calendar year per each boiler-steam turbine generator set.

### (c) DEFINITIONS

For the purposes of this rule, the following definitions shall apply:

1. **"Boiler"** means any combustion equipment, excluding gas turbines, fired with liquid, gaseous and/or solid fuel and used to produce steam or to heat water. A duct burner/heat exchanger combination installed in the exhaust duct of a gas turbine or internal combustion engine shall not be considered a boiler.
2. **"Boiler Steam-Turbine Generator Set"** means any combination of equipment consisting of a boiler used to produce steam to be expanded in a turbine generator for the generation of electric power.
3. **"Clock-Hour"** means every 60-minute period starting on the hour.
4. **"Cold Startup"** means that, in a boiler-steam turbine generator set, the initial steam turbine metal temperature is less than 300°F (149°C).
5. **"Cool Startup"** means that in a boiler-steam turbine generator set, the initial steam turbine metal temperature is greater than 300°F (149°C).
6. **"Exemption Limit"** means the maximum, allowable concentration of oxides of nitrogen, by volume, specified in Table 1, and expressed as nitrogen dioxide, calculated at three percent oxygen on a dry basis.
7. **"Exceedance"** means an occurrence when the average clock-hour NO<sub>x</sub> emissions concentration is greater than a NO<sub>x</sub> emissions limit specified in Section (d). Such an exceedance may qualify for compliance with the exemption limits specified in Subsection (b)(5).
8. **"Fuel Change"** means a transitory period when a switch occurs between oil, gas or any combination of liquid or gaseous fuels.
9. **"Hot Startup"** means that, in a boiler-steam generator turbine generator set, the initial steam turbine metal temperature is greater than 800°F (427°C).
10. **"Low Load"** means boiler operation at less than 25 percent of rated capacity, when not performing an overhaul

test.

11. **"Municipal Solid Waste"** means solid waste disposable in a Class II landfill pursuant to Section 2520 of Title 23 of the California Code of Regulations.
12. **"Overhaul Test"** means testing of turbine-control and protective devices, which are conducted at varying load conditions. Nothing in this rule shall be construed to limit the number, type or load conditions of overhaul tests conducted in compliance with the emission limits of Section (d).
13. **"Warm Startup"** means that, in a boiler-steam turbine generator set, the initial steam turbine metal temperature is greater than 600°F (316°C).

**(d) STANDARDS**

Emissions of nitrogen oxides, from any non-vehicular fuel burning equipment subject to this rule, calculated as nitrogen dioxide at three percent oxygen on a dry basis, shall not exceed the following levels:

<u>Type of Fuel</u>	<b>Nitrogen Oxides, Concentration</b>	
	<b>Volume</b> <b>(parts per million [ppm])</b>	<b>Mass</b> <b>(mg/m<sup>3</sup>, at [20°C])</b>
(i) Gaseous	125	240
(ii) Liquid or Solid	225	430

When more than one type of fuel is used, the allowable NO<sub>x</sub> concentration shall be determined by proportioning the gross heat input for each fuel to its respective allowable concentration.

**(e) RECORDKEEPING REQUIREMENTS**

1. When continuous emission monitors are installed on equipment subject to the provisions of this rule, pursuant to Rule 19.2, the operator shall record, at a minimum, the following information:
  - (i) Unit identification
  - (ii) Time of measurement
  - (iii) Fuel type burned
  - (iv) Measured oxygen level (%)

- (v) Uncorrected NO<sub>x</sub> emission concentration (ppm) at the measured oxygen level
  - (vi) Corrected NO<sub>x</sub> emission concentration (ppm) at 3% O<sub>2</sub>
2. Notwithstanding provisions of subsection (e)(1), fuel-burning equipment subject to the requirements of 40 CFR 75 (Continuous Emission Monitoring) shall comply with all applicable provisions of that regulation.
  3. When a boiler-steam turbine generator set is operating under the criteria of Subsection (b)(5), the following information, at a minimum, shall be recorded:
    - (i) Unit identification
    - (ii) Heat input or calculated heat input (Btu/hr)
    - (iii) Operating conditions as specified in Table 1 and defined in Section (c)
    - (iv) Operating condition start and finish times and date(s)
    - (v) Duration of the operating condition
    - (vi) Initial steam turbine metal temperature (°F or °C)
    - (vii) Unit load (megawatts)
    - (viii) Fuel type burned at start of operating condition
    - (ix) Fuel type burned at end of operating condition
    - (x) Total time each fuel type was burned during operating condition
    - (xi) Measured oxygen level (%)
    - (xii) Uncorrected NO<sub>x</sub> emission concentration (ppm) at the measured oxygen level
    - (xiii) Each clock-hour emission concentration (ppm) over the duration of the operating condition, corrected to 3% O<sub>2</sub>
    - (xiv) Average of all clock-hour emission concentrations (ppm) over the duration of the operating condition, corrected to 3% O<sub>2</sub>
  4. The owner or operator of any unit exempt from the requirements of this rule, pursuant to Subsection (b)(3), shall maintain records of the hours of operation during the operating conditions described therein.
  5. The owner or operator of any unit subject to this rule shall maintain all records required by Section (e) for a minimum of three years. These records shall be maintained on the premises and made available to the District upon request.

**(f) TEST METHODS**

1. Measurement of the average NO<sub>x</sub> emissions concentration subject to Section (d) shall be conducted in accordance with District Method 7 or 20, as approved by EPA, or ARB Method 100, as approved by EPA, or with continuous emission monitors which are installed on equipment pursuant to District Rule 19.2, or to 40 CFR 75, as

applicable. An exceedance detected by any of the methods described above shall be considered a violation of this rule.

2. When District Method 7 or 20, or ARB Test Method 100 is used to determine compliance with Section (d), the averaging period to calculate the average NOx emissions concentration shall be any sixty consecutive minute period.
3. When continuous emissions monitors are installed on equipment pursuant to Rule 19.2 or to 40 CFR 75, as applicable, and are used to determine compliance with Section (d), the averaging period to calculate the average NOx emissions concentration shall be every clock-hour. The average NOx emissions concentration shall be computed from four or more data points equally spaced over the clock-hour.
4. Measurements of emissions concentrations shall not include calibration or span check measurements of the emissions testing equipment.
5. As specified in Subsection (b)(5) and defined in Section (c), startup conditions shall be determined by using pre-calibrated thermocouples to measure the initial steam turbine metal temperature at the first stage of the steam turbine. Other methods to measure this temperature can be used provided that they are approved in advance by the Air Pollution Control Officer and the Environmental Protection Agency.
6. A source test protocol shall be submitted prior to testing, and approved in writing by the Air Pollution Control Officer.

**(g) PROCEDURE FOR COMPLIANCE DETERMINATION WITH THE EXEMPTION LIMITS IN TABLE 1**

The following procedure shall be used to determine compliance with the exemption limits specified in Subsection (b) (5), Table 1:

1. Determine if boiler-steam turbine generator set operation conforms to an operating condition specified in Table 1.
2. Determine the average NOx emissions concentration,  $C_{av}$ , over such operating condition using the following equation:



where,

$C_i$  = the actual clock-hour NOx emissions concentration which was an exceedance of the standards specified in Section (d) during an operating condition specified in Table 1.

$1$  = the first clock-hour during the operating condition when an exceedance of the standards specified in Section (d) occurred; and

$n$  = the actual number of clock-hours during the operating condition when an exceedance of the standards specified in Section (d) occurred. " $n$ " shall not be greater than the maximum number of allowable exceedances of the standards of Section (d) as specified in Table 1, and shall be in chronological order following  $C_1$ .

3. Compare  $C_{av}$  to the exemption limit corresponding to the operating condition specified in Table 1. If  $C_{av}$  is less than or equal to the exemption limit in Table 1, then the operation is in compliance with the exemption limits specified in Subsection (b)(5).

**RULE 69.2 - INDUSTRIAL AND COMMERCIAL BOILERS, PROCESS HEATERS AND STEAM GENERATORS**

(Adopted and Effective 9/27/94)

**(a) APPLICABILITY**

This rule shall apply to any boiler, process heater, or steam generator with a heat input rating of 5 million Btu per hour or more.

**(b) EXEMPTIONS**

1. The provisions of this rule shall not apply to the following:

(i) Electricity-generating steam boilers with a heat input rating of 100 million Btu per hour or more including auxiliary boilers used in conjunction with such boilers.

(ii) Waste heat recovery boilers that are used to recover heat from the exhaust of gas turbines or internal combustion engines.

(iii) Furnaces, kilns, and any combustion equipment where the material being heated is in direct contact with the products of combustion.

(iv) Thermal oxidizers and associated waste heat recovery equipment.

(v) Boilers, process heaters and steam generators used exclusively in connection with a structure that is designed for and used exclusively as a dwelling for not more than four families.

(vi) Boilers, process heaters and steam generators used in agricultural operations in the growing of crops or the raising of fowl or animals.

2. The provisions of Subsection (d)(1)(ii) and (e)(1) shall not apply to any unit which burns liquid fuel only during periods of natural gas curtailment, during emergencies, or during equipment testing for the purpose of maintaining the fuel oil back-up system, provided that both of the following conditions are met:

(i) Total cumulative operation during curtailment periods or emergencies shall not exceed 168 hours per calendar year. It is the responsibility of any person claiming this exemption to keep records in accordance with Subsection (e)(4) of this rule.

(ii) Liquid fuel firing for equipment testing shall not exceed 48 hours per calendar year. It is the responsibility of any person claiming this exemption to keep records in accordance with Subsection (e)(5) of this rule.



3. The provisions of Subsections (d)(2)(iii) and (g)(4) shall not require the firing of liquid fuel for any unit which otherwise burns liquid fuel only during periods of natural gas curtailment, during emergencies, or during equipment testing for the purpose of maintaining the fuel oil back-up system, provided that operation on liquid fuel complies with Subsections (b)(2)(i) and (ii).

### (c) DEFINITIONS

For the purposes of this rule, the following definitions shall apply:

1. **"Annual Capacity Factor"** means the ratio of the amount of fuel burned by a unit in a calendar year to the amount of fuel it could have burned if it had operated at the heat input rating for 8,760 hours during the calendar year.
2. **"Annual Heat Input"** means the actual, total heat input of fuels burned by a unit in a calendar year, as determined from the higher heating value and cumulative annual usage of each fuel. Annual heat input shall not include the heat input from fuels used during natural gas curtailment, during an emergency, or during equipment testing for the purpose of maintaining the fuel oil back-up system.
3. **"Boiler" or "Steam Generator"** means any combustion equipment fired with gaseous and/or liquid fuel and used to produce steam or to heat water. "Boiler" or "Steam Generator" shall not include waste heat recovery boilers that are used to recover heat from the exhaust of gas turbines or internal combustion engines, or any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.
4. **"Btu"** means British thermal unit.
5. **"Emergency"** means an unforeseen disruption or interruption in the supply of gaseous fuel to the unit.
6. **"Existing Unit"** means any unit which was installed and operating on or before September 27, 1994.
7. **"Heat Input"** means the heat derived from combustion of a fuel in a unit, calculated using the higher heating value, excluding the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, including but not limited to, gas turbines, internal combustion engines and kilns.
8. **"Heat Input Rating"** means the maximum steady state heat input capacity of a unit, in Btu per hour, as specified by the manufacturer, or as limited by a District Authority to Construct or a Permit to Operate.
9. **"Higher Heating Value"** means the total heat liberated, including the heat of condensation of water, 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 standard conditions.
10. **"Major Stationary Source"** means a stationary source that emits or has the potential to emit 25 tons or more of oxides of nitrogen (NO<sub>x</sub>) per year. If the San Diego County Air Pollution Control District is reclassified to a "serious" ozone non-attainment area by the federal Environmental Protection Agency (EPA), then a major stationary source of NO<sub>x</sub> will mean a stationary source that emits or has the potential to emit 50 tons or more of NO<sub>x</sub> per year.
11. **"Natural Gas Curtailment"** means a shortage in the supply of natural gas, due solely to limitations or restrictions in distribution pipelines by the utility supplying the gas, and not due to the cost of natural gas.
12. **"New Unit"** means a unit installed after September 27, 1994.
13. **"Process Heater"** means any combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from the combustion gases to water or process streams. Heaters used for swimming pools, spas and/or therapy pools shall be considered process heaters. "Process Heater" shall not include any combustion equipment where the material being heated is in direct contact with the products of combustion, such as furnaces or kilns, or any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment.
14. **"Stack-Gas Oxygen Trim System"** means a system of monitors that is used to maintain excess air at the desired level. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller.
15. **"Stationary Source"** means the same as is defined in Rule 20.1.
16. **"Therm"** means 100,000 Btu.

17. **"Thermal Oxidizer"** means combustion equipment fired with gaseous fuel and used to control emissions of air contaminants from industrial or commercial processes.
18. **"Unit"** means any boiler, steam generator or process heater.

(d) **STANDARDS**

1. For any unit with a heat input rating less than or equal to 50 million Btu/hr and an annual heat input of 220,000 therms or more, or for any unit with a heat input rating greater than 50 million Btu/hr and an annual capacity factor 10% or greater, emissions of oxides of nitrogen, calculated as nitrogen dioxide at 3% oxygen on a dry basis, shall not exceed the following levels:
  - (i) 30 parts per million by volume when operated on a gaseous fuel.
  - (ii) 40 parts per million by volume when operated on a liquid fuel.
  - (iii) The heat-input weighted average of the limits specified in Subsections (d)(1)(i) and (d)(1)(ii) when operated on combinations of a gaseous and a liquid fuel. The heat-input weighted average is calculated using the following equation:

$$\text{Heat-input weighted average, ppmv} = \{(Hg) (30 \text{ ppmv}) + (Hl) (40 \text{ ppmv})\} / (Hg + Hl)$$

where:

Hg = the actual heat input of gaseous fuel to a unit, in Btu per hour.

Hl = the actual heat input of liquid fuel to a unit, in Btu per hour.

2. Any unit with a heat input rating less than or equal to 50 million Btu/hr and an annual heat input of less than 220,000 therms, or any unit with a heat input rating greater than 50 million Btu/hr and an annual capacity factor less than 10%, shall comply with one of the following provisions:
  - (i) The unit shall be operated in a manner to maintain stack-gas oxygen concentration at less than or equal to 3.00 percent by volume on a dry basis; or
  - (ii) The unit shall be operated with a stack-gas oxygen trim system to maintain stack-gas oxygen concentration at  $3.00 \pm 0.15$  percent by volume on a dry basis; or
  - (iii) The unit shall be tuned at least once per year in accordance with the tuning procedure in Section (j), or in accordance with the manufacturer's recommended tuning procedure, provided such procedure has been approved in advance by the Air Pollution Control Officer; or
  - (iv) The unit shall be operated in compliance with the applicable emission standards of Subsections (d)(1) and (d)(3).
3. For any unit with a heat input rating less than or equal to 50 million Btu/hr and an annual heat input of 220,000 therms or more, or for any unit with a heat input rating greater than 50 million Btu/hr and an annual capacity factor 10% or greater, emissions of carbon monoxide shall not exceed 400 parts per million by volume, calculated at 3% oxygen on a dry basis.

## **(e) MONITORING AND RECORDKEEPING REQUIREMENTS**

1. An owner or operator of a unit which is capable of burning both gaseous and liquid fuel and is subject to the requirements of Subsection (d)(1) except as specified in Subsection (b)(2), and an owner or operator of a unit which is subject to the requirements of Subsection (d)(2) shall install one of the following:
  - (i) A non-resettable, totalizing meter in each fuel line to measure the mass flow rate of each fuel to the unit; or
  - (ii) A non-resettable, totalizing meter in each fuel line to measure the volumetric flow rate, temperature and pressure of each fuel to the unit.
  
2. An owner or operator of a unit which is subject to the requirements of Subsection (d)(1) shall install continuous monitors to allow for instantaneous monitoring of the operational characteristics of the unit and of the flue-gas NO<sub>x</sub> reduction system, as applicable. Examples of operational characteristics include, but are not limited to, the following:
  - (i) Stack-gas oxygen content.
  - (ii) Percentage of flue gas recirculated.

Continuous monitors shall be installed, calibrated and maintained in accordance with all applicable local, state and federal regulations, and procedures approved by the Air Pollution Control Officer.
  
3. An owner or operator of a unit which is subject to the requirements of Subsection (d)(2) shall monitor and record the higher heating value and annual usage of each fuel.
4. An owner or operator of any unit which is burning liquid fuel during natural gas curtailment or an emergency shall monitor and record the cumulative annual hours of operation on liquid fuel. At a minimum, these records shall include the dates and times of operation on liquid fuel and any corresponding totalizer readings.
5. An owner or operator of any unit which is burning liquid fuel for equipment testing purposes shall monitor and record the cumulative annual hours of operation on liquid fuel. At a minimum, these records shall include the dates and times of operation on liquid fuel and any corresponding totalizer readings.
6. An owner or operator of a unit complying with Subsection (d)(2)(iii) shall maintain documentation verifying the required annual tuneups including the data required in Section (j).
7. The owner or operator of any unit subject to this rule shall maintain all records required by Section (e) for a minimum of three calendar years. These records shall be maintained on the premises and made available to the District upon request.

## **(f) TEST METHODS**

1. To determine compliance with Section (d), measurement of oxides of nitrogen, carbon monoxide, and stack-gas oxygen content shall be conducted in accordance with ARB Test Method 100 as approved by the EPA.
2. Certification of the higher heating value of a fuel as required by Subsection (e)(3), if not provided by a third party fuel supplier, shall be determined by one of the following methods:
  - (i) ASTM Test Method D240-87 or D2382-88 for liquid hydrocarbon fuels.

(ii) ASTM Test Method D1826-88, or D1945-81, in conjunction with ASTM D3588-89 for gaseous fuels.

3. Certification of continuous monitors shall be conducted in accordance with all applicable local, state and federal regulations, and procedures approved by the Air Pollution Control Officer.

#### **(g) SOURCE TEST REQUIREMENTS**

1. Source testing shall be performed at no less than 80% of the heat input rating.
2. Source testing shall be preceded by a minimum of two hours of combustion in the unit. Interruptions in combustion within the two hours shall be allowed provided that interruptions total less than 30 cumulative minutes.
3. Measurement of emission concentrations shall be based on a 15 continuous minute sampling period. For the purpose of averaging, a minimum of five data sets with averaging intervals no greater than three minutes shall be used.
4. A unit subject to the requirements of Subsections (d)(1), (d)(2)(i), (d)(2)(ii), (d)(2)(iv), or (d)(3) shall be tested for compliance at least once every 12 months, unless otherwise approved in writing by the Air Pollution Control Officer. Testing shall be conducted in accordance with Section (f) and a source test protocol approved in writing by the Air Pollution Control Officer. Test reports shall include the operational characteristics, as listed in Subsection (e)(2), of the unit and of all flue-gas NO<sub>x</sub> control systems.

#### **(h) COMPLIANCE SCHEDULE**

1. No later than May 31, 1995 for an existing unit subject to the provisions of this rule and located at a major stationary source, or no later than September 27, 1996 for an existing unit not located at a major stationary source, an owner or operator shall submit an application for an Authority to Construct the air pollution control and monitoring equipment and any unit modification(s) necessary to meet the requirements of Sections (d) and (e) of this rule. The following information shall be submitted with the application:
  - (i) A list of all units, the anticipated annual heat input of each unit, the heat input rating as specified by the manufacturer, and the heat input rating as stated in a District Authority to Construct or a Permit to Operate.
  - (ii) For each unit listed, the selected method for meeting the applicable requirements of Section (d).
2. For an existing unit located at a major stationary source, an owner or operator shall be in compliance with all applicable provisions of this rule as follows:
  - (i) No later than May 31, 1997 for a unit subject to the provisions of Subsection (d)(1); or
  - (ii) No later than May 31, 1996 for a unit subject to the provisions of Subsection (d)(2).
3. An owner or operator of an existing unit not located at a major stationary source shall be in compliance with all applicable provisions of this rule no later than September 27, 1998.
4. Any person installing a new unit subject to the provisions of this rule shall comply with all applicable provisions of this rule upon initial installation and startup.

#### **(j) TUNING PROCEDURE**

The owner or operator of a unit subject to Subsection (d)(2)(iii) of this rule shall comply with the following tuning procedure.

1. Operate the unit at the firing rate most typical of normal operation. If the unit experiences significant load variations during normal operation, operate it at its average firing rate.
2. At this firing rate, record stack gas temperature, oxygen concentration, and CO concentration (for gaseous fuels) or smoke-spot number (for liquid fuels), and observe flame conditions after unit operation stabilizes at the firing rate selected. If the excess oxygen in the stack gas is at the lower end of the range of typical minimum excess oxygen values, 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.

(i) 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.

(ii) Typical minimum oxygen levels for boilers at high firing rates are:

1. For natural gas: 0.5 - 3%
2. For liquid fuels: 2 - 4%

3. Increase combustion air flow to the furnace until stack gas oxygen levels increase by one to two percent over the level measured in Step 2. As in Step 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 boiler operation stabilizes.
4. Decrease combustion air flow until the stack gas oxygen concentration is at the level measured in Step 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 these limits is reached:

(i) Unacceptable flame conditions - such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability.

(ii) Stack gas CO concentrations greater than 400 ppm.

(iii) Smoking at the stack.

(iv) Equipment-related limitations - such as low windbox/furnace pressure differential, built in air-flow limits, etc.

6. Develop an O<sub>2</sub>/CO curve (for gaseous fuels) or O<sub>2</sub>/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 Step 6, find the stack gas oxygen levels where the CO emissions or smoke-spot number equal the following values:

<b><u>Fuels</u></b>	<b><u>Measurement</u></b>	<b><u>Value</u></b>
Gaseous	CO Emissions	400 ppm
#1 and #2 oils	smoke-spot number	number 1
#4 oil	smoke-spot number	number 2
#5 oil	smoke-spot number	number 3

The above conditions are referred to as the CO or smoke 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 combustion unit 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 Step 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 Steps 1-8 for 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 best performance over the range of firing rates. If one firing rate predominates, setting should optimize 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 Step 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.

Nothing in this Tuning Procedure 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.

10-19-94

**RULE 69.3 STATIONARY GAS TURBINE ENGINES**  
(Adopted and Effective 9/27/94)

**(a) APPLICABILITY**

This rule shall apply to any existing stationary gas turbine engine with a power rating of 1.0 megawatt (MW) or greater, or to any new stationary gas turbine engine with a power rating of 0.3 MW or greater. Any unit subject to this rule shall not be subject to Rule 68.

**(b) EXEMPTIONS**

(1) The provisions of this rule shall not apply to the following:

(i) Any gas turbine engine when operated exclusively for the research, development or testing of gas turbine engines or their components.

(ii) Any portable gas turbine engine located at a stationary source 180 days or less in a consecutive 12-month period. It is the responsibility of any person claiming this exemption to maintain records indicating the dates that such turbine was located at a stationary source. These records shall be maintained for a minimum of two calendar years by the owner of such turbine and made available to the District upon request.

(iii) New gas turbines with a power rating less than or equal to 0.4 MW used in conjunction with military tactical deployable equipment operated at military sites, provided that operations do not exceed 1000 hours per calendar year. It is the responsibility of any person claiming this exemption to maintain records indicating the hours that such turbine was operated. These records shall be maintained for a minimum of two calendar years by the owner of such turbine and made available to the District upon request.

(2) The provisions of Section (d) shall not apply to the following:

(i) Any emergency unit provided that operation for maintenance purposes to ensure operability in the event of an emergency situation does not exceed 80 hours per calendar year. It is the responsibility of any person claiming this exemption to maintain records in accordance with Subsections (e)(2) and (e)(6) of this rule.

(ii) Any unit during startup, shutdown or a fuel change for a period not to exceed 120 continuous minutes. It is the responsibility of any person claiming this exemption to maintain records in accordance with Subsections (e)(3) and (e)(6) of this rule. Nothing in this rule shall be construed to limit the actual time needed to conduct a startup, shutdown or fuel change.

**(c) DEFINITIONS**

For the purposes of this rule, the following definitions shall apply:

(1) "Emergency Situation" means any one of the following:

(i) an unforeseen electrical power failure of the serving utility or of onsite electrical transmission equipment; or

- (ii) an unforeseen flood, fire or life-threatening situation.

Emergency situation shall not include operation of any unit for training purposes or other foreseeable event, or operation of any peaking unit for the purpose of supplying power for distribution to an electrical grid.

(2) "Emergency Unit" means a stationary gas turbine engine used only in the event of an emergency situation. A peaking unit shall not be considered an emergency unit.

(3) "Existing" or "Existing Unit" means any stationary gas turbine engine which was installed and operating in San Diego County on or before September 27, 1994.

(4) "Fuel Change" means the transitory operating period when a switch occurs between liquid or gaseous fuels, or any combination thereof.

(5) "Gaseous Fuel" means natural gas, digester gas, landfill gas, methane, ethane, propane, butane, or any gas stored as liquids at high pressure such as liquefied petroleum gas.

(6) "Liquid Fuel" means distillate oils, kerosene and jet fuel.

(7) "Military Tactical Deployable Equipment" means equipment operated by the United States armed forces or National Guard which is designed specifically for military use in an off-road, dense terrain and/or hostile environment or on board military combat vessels and is capable of being moved from one location to another. This equipment requires the ability to perform in a uniform manner with a minimum amount of maintenance which has been standardized throughout the United States military and/or NATO forces.

(8) "New" or "New Unit" means a stationary gas turbine engine installed in San Diego County after September 27, 1994.

(9) "Peaking Unit" means a stationary gas turbine engine that is operated intermittently for generation of electric power during periods of high energy demand.

(10) "Portable Gas Turbine Engine" means a gas turbine which is designed and equipped to be easily movable and, as installed, easily capable of being moved from one stationary source to another, as determined by the Air Pollution Control Officer. Portable gas turbine engines are periodically moved and may not be located more than 180 days at any one stationary source within any consecutive 12-month period. Days when portable gas turbine engines are stored in a designated holding or storage area shall not be counted towards the 180-day limit, provided the gas turbine engine was not operated on that calendar day except for maintenance and was in the designed holding area the entire calendar day.

(11) "Power Augmentation" means an increase in the gas turbine engine shaft output, or a decrease in turbine fuel consumption, by the addition of energy recovered from exhaust heat.

(12) "Power Rating" means the maximum, continuous power output of a unit, in megawatts (MW) or equivalent, as certified by the manufacturer unless limited by a condition in a District Authority to Construct or a Permit to Operate. Power augmentation shall not be included in power rating.



(13) "Shutdown" means to cease operation of a unit and includes the amount of time needed to safely do so.

(14) "Stationary Gas Turbine Engine" means any gas turbine engine system, with or without power augmentation, which is permanently attached to a foundation, or is not a portable gas turbine. Two or more gas turbines powering a common shaft shall be treated as one gas turbine.

(15) "Stationary Source" means the same as is defined in Rule 20.1.

(16) "Startup" means to begin operation of a unit and includes the amount of time needed for a unit and ancillary equipment to achieve stable operation.

(17) "Unit" means any stationary gas turbine engine.

**(d) STANDARDS**

(1) The emissions concentration of oxides of nitrogen (NO<sub>x</sub>) from any unit subject to this rule, calculated as nitrogen dioxide at 15% oxygen on a dry basis, shall not exceed the following:

(i) 42 parts per million by volume (ppmv) when operated on a gaseous fuel.

(ii) 65 parts per million by volume (ppmv) when operated on a liquid fuel.

**(e) MONITORING AND RECORDKEEPING REQUIREMENTS**

(1) An owner or operator of a unit which is subject to the requirements of Section (d) shall install continuous monitors to allow for monitoring of the operational characteristics of the unit and of any NO<sub>x</sub> emissions reduction system, as applicable, to demonstrate continuous compliance, such as:

(i) exhaust gas flow rate;

(ii) exhaust gas temperature;

(iii) ammonia injection rate;

(iv) water injection rate; and

(v) stack-gas oxygen content.

(2) An owner or operator of an emergency unit shall maintain an operating log and record the hours of operation for maintenance purposes and during an emergency situation. At a minimum, these records shall include the dates and actual times and duration of all startups and shutdowns, total cumulative annual hours of operation for maintenance purposes, and a description of any emergency situation.

(3) An owner or operator of any unit subject to this rule shall maintain an operating log and record actual times and duration of all startups, shutdowns and fuel changes, and the type of fuel used.

(4) Continuous monitors shall be installed, calibrated and maintained in accordance with applicable federal regulations and a protocol approved in writing by the Air Pollution Control Officer.

(5) For any existing unit, continuous emissions monitors which have been installed to measure NOx emissions pursuant to any federal regulation shall be certified, calibrated and maintained in accordance with applicable federal regulations and a protocol approved in writing by the Air Pollution Control Officer.

(6) The owner or operator of any unit subject to this rule shall maintain all records required by Section (e) for a minimum of three calendar years. These records shall be maintained on the premises and made available to the District upon request.

**(f) TEST METHODS**

(1) To determine compliance with Section (d), measurement of oxides of nitrogen and stack-gas oxygen content shall be conducted in accordance with ARB Test Method 100, as approved by the U.S. Environmental Protection Agency (EPA).

(2) The averaging period to calculate NOx emissions concentration shall be any thirty consecutive minute period.

(3) Measurements of emissions concentrations shall not include calibration or span check measurements of the emissions testing equipment.

**(g) SOURCE TEST REQUIREMENTS**

(1) Source testing shall be performed at no less than 80% of the power rating. If an owner or operator of an existing turbine demonstrates to the satisfaction of the Air Pollution Control Officer that the turbine cannot operate at these conditions, then emissions sources testing shall be performed at the highest achievable continuous power rating.

(2) A unit subject to the requirements of Section (d) shall be tested for compliance at least once every 12 months, unless otherwise specified in writing by the Air Pollution Control Officer. Testing shall be conducted in accordance with Section (f) and a source test protocol approved in writing by the Air Pollution Control Officer. Test reports shall include the operational characteristics, as described in Subsection (e)(1), of the unit and of all add-on NOx control systems.

**(h) COMPLIANCE SCHEDULE**

(1) An owner or operator of an existing unit shall be in compliance with all applicable provisions of this rule no later than May 31, 1995.

(2) Any person installing a new unit subject to the provisions of this rule shall comply with all applicable provisions of this rule upon initial installation and commencement of operation.

**RULE 69.4. STATIONARY RECIPROCATING INTERNAL COMBUSTION  
ENGINES - REASONABLY AVAILABLE CONTROL TECHNOLOGY**

(Adopted 9/27/94; Rev. Effective 11/15/00; Rev. Effective 7/30/03)

**(a) APPLICABILITY**

(1) Except as provided in Section (b), this rule shall apply to stationary internal combustion engines with a brake horsepower (bhp) rating of 50 or greater located at a stationary source which emits or has a potential to emit 50 tons per year or more of oxides of nitrogen (NO<sub>x</sub>).

(2) An engine subject to this rule or specifically exempt by Subsection (b)(1) of this rule shall not be subject to Rule 68.

**(b) EXEMPTIONS**

(1) This rule shall not apply to the following:

(i) Engines used exclusively in connection with a structure designed for and used as a dwelling for not more than four families.

(ii) Engines used exclusively in agricultural operations for the growing of crops or the raising of fowl or animals.

(iii) Any engine when operated exclusively within a permitted test cell solely for the research, development, or testing of gas turbine engines or their components.

(iv) Any engine when operated exclusively within a permitted test cell solely for the research, development, or testing of reciprocating internal combustion engines or their components.

(2) The provisions of Section (d) of this rule shall not apply to the following:

(i) Any engine which operates less than 200 hours per calendar year.

(ii) Any emergency standby engine provided that operation of the engine for non-emergency purposes does not exceed 52 hours per calendar year.

(iii) Any emergency standby engine at a nuclear power generating station subject to the requirements of the Nuclear Regulatory Commission provided that operation of the engine for non-emergency purposes does not exceed 200 hours per calendar year.

(iv) Any engine used exclusively in conjunction with military tactical support equipment.

An owner or operator of an engine who is claiming an exemption pursuant to Subsection (b)(2) shall conduct annual maintenance of the engine as recommended by the engine manufacturer or as specified by any other maintenance procedure approved in writing by the Air Pollution Control Officer and shall maintain records in accordance with Subsections (e)(1) and (e)(2) of this rule.

(3) The provisions of Subsections (e)(3), (e)(4), and (e)(5) of this rule shall not apply to any engine which is equipped with a continuous emission monitoring system (CEMS) pursuant to Subsections (e)(7) or (e)(8).

(c) **DEFINITIONS**

For the purposes of this rule, the following definitions shall apply:

(1) **"Add-on Control Equipment"** means any technology that is used to reduce emissions from the exhaust gas stream of an engine and is installed downstream of the engine.

(2) **"Brake Horsepower Rating, bhp"** means the maximum continuous brake horsepower output rating as specified by the engine manufacturer and listed on the engine nameplate, if available, regardless of any de-rating.

(3) **"Emergency Standby Engine"** means an engine used exclusively in emergency situations, except as provided in Subsections (b)(2)(ii) and (b)(2)(iii), to drive an electrical generator, an air compressor or a water pump.

(4) **"Emergency Situation"** means any one of the following:

(i) An unforeseen electrical power failure from the serving utility or of on-site electrical transmission equipment.

(ii) An unforeseen flood or fire, or a life-threatening situation.

(iii) Operation of emergency generators for Federal Aviation Administration licensed or military airports for the purpose of providing power in anticipation of a power failure due to severe storm activity.

Emergency situation shall not include operation for purposes of supplying power for distribution to an electrical grid, operation for training purposes, or other foreseeable events.

(5) **"Fossil Derived Gaseous Fuel"** means gaseous fuel including, but not limited to, natural gas, methane, ethane, propane, butane, and gases stored as liquids at high pressure such as liquefied petroleum gas, but excluding waste derived gaseous fuel.

(6) **"Lean-Burn Engine"** means an engine that is designed to operate with an air-to-fuel ratio that is more than 1.1 times the Stoichiometric air-to-fuel ratio.

(7) **"Military Tactical Support Equipment"** means the same as defined in Rule 2.

(8) **"Portable Emission Unit"** means the same as defined in Rule 20.1.

(9) **"Reasonably Available Control Technology (RACT)"** means the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.

(10) **"Rich-Burn Engine"** means an engine that is designed to operate with an air-to-fuel ratio less than or equal to 1.1 times the Stoichiometric air-to-fuel ratio.

(11) **"Stationary Internal Combustion Engine" or "Engine"** means a spark or compression ignited, reciprocating internal combustion engine which is not a portable emission unit.

(12) **"Stationary Source"** means the same as is defined in Rule 2.

(13) **"Stoichiometric Air-to-Fuel Ratio"** means the chemically balanced air-to-fuel ratio at which all fuel and all oxygen in the air and fuel mixture are theoretically consumed by combustion.

(14) **"Uncontrolled NO<sub>x</sub> Emissions"** means NO<sub>x</sub> emissions from an engine before application of add-on control equipment.

(15) **"Waste Derived Gaseous Fuel"** means gaseous fuel including, but not limited to, digester gas and landfill gas, but excluding fossil derived gaseous fuel.

(d) **STANDARDS**

(1) A person shall not operate a stationary internal combustion engine subject to this rule unless:

(i) Uncontrolled NO<sub>x</sub> emissions from the following engines are reduced with add-on control equipment by not less than the following:

<u>Engine Category</u>	<u>Weight Percent Reduction</u>
Rich-burn engines using fossil derived gaseous fuel or gasoline	90
Lean-burn engines using fossil derived gaseous fuel	80
Engines using exclusively waste derived gaseous fuel	80

or

(ii) The emission concentration of NO<sub>x</sub>, in parts per million by volume (ppmv), calculated as nitrogen dioxide at 15% oxygen on a dry basis, or in grams of NO<sub>x</sub> per brake horsepower-hour, are not greater than the following:

<u>Engine Category</u>	<u>Concentration of NOx g/bhp-hr (ppmv)</u>
Rich-burn engines using fossil derived gaseous fuel or gasoline	0.9 (50)
Lean-burn engines using gaseous fuel	2.3 (125)
Engines using exclusively waste derived gaseous fuel	2.3 (125)
Engines using diesel or kerosene fuel	9.0 (700)

(2) For all engines subject to Subsection (d)(1) of this rule, the emission concentration of carbon monoxide (CO), calculated at 15% oxygen on a dry basis, shall not exceed 4,500 ppmv.

(3) An owner or operator of an engine subject to this rule shall conduct annual maintenance of the engine as recommended by the engine manufacturer or as specified by any other maintenance procedure approved in writing by the Air Pollution Control Officer.

**(e) MONITORING AND RECORDKEEPING REQUIREMENTS**

(1) An owner or operator of an engine subject to this rule shall keep the following records and shall maintain these records on-site for at least the same period of time as the engine to which the records apply is located at the site:

- (i) engine manufacturer name and model number;
- (ii) brake horsepower output rating;
- (iii) combustion method (i.e. rich-burn or lean-burn);
- (iv) fuel type;
- (v) a manual of recommended maintenance as provided by the engine manufacturer, or other maintenance procedure as approved in writing by the Air Pollution Control Officer; and
- (vi) records of annual engine maintenance, including dates maintenance was performed.

(2) In addition to the records required by Subsection (e)(1), an owner or operator of an engine exempt pursuant to Subsection (b)(2) from the requirements of Section (d) shall maintain an operating log containing, at a minimum, the following:

- (i) dates and times of engine operation. If applicable, indicate whether the operation was for non-emergency purposes or during an emergency situation and the nature of the emergency, if available; and

(ii) total cumulative hours of operation per calendar year, based on actual readings of the engine hour or fuel meter.

The records specified in Subsection (e)(2)(i) are not required if total engine operations for any purpose, including emergency situations, do not exceed 52 hours in a calendar year.

(3) In addition to the records required by Subsection (e)(1), an owner or operator of a rich-burn engine subject to the requirements of Section (d) shall measure and record at least once each calendar month those operating parameters determined necessary to ensure compliance by the Air Pollution Control Officer. Such operating parameters shall include but are not limited to:

- (i) temperature of the inlet and outlet of the control equipment; or
- (ii) engine air-to-fuel ratio; or
- (iii) engine inlet manifold temperature and pressure.

(4) In addition to the records required by Subsection (e)(1), an owner or operator of a lean-burn engine using gaseous fuel subject to the requirements of Section (d) shall also measure and record at least once each calendar month those operating parameters determined necessary to ensure compliance by the Air Pollution Control Officer. Such operating parameters shall include but are not limited to:

- (i) engine air-to-fuel ratio or automatic air-to-fuel ratio control signal voltage; or
- (ii) engine exhaust gas temperature; or
- (iii) engine inlet manifold temperature and pressure.

(5) In addition to the records required by Subsection (e)(1), an owner or operator of an engine using diesel fuel subject to the requirements of Section (d) shall also measure and record at least once each calendar month those operating parameters determined necessary to ensure compliance by the Air Pollution Control Officer. Such operating parameters shall include but are not limited to:

- (i) engine air-to-fuel ratio; or
- (ii) engine exhaust gas temperature; or
- (iii) engine inlet manifold temperature and pressure.

(6) Except for engines exempt under Subsection (b)(1), an owner or operator of an engine subject to this rule shall install a non-resettable totalizing fuel meter or non-resettable totalizing engine operating hours meter.

(7) An owner or operator of a gaseous-fueled engine rated at 1,000 bhp or greater and operated more than 2,000 hours per calendar year and first installed in San Diego County after July 30, 2003, shall continuously monitor operating parameters necessary to ensure compliance with the emission standards specified in Section (d) of this rule. Alternatively, an owner or operator of such engine may install, operate, and maintain in calibration a continuous emission monitoring system (CEMS) to continuously measure and record oxygen concentration and NO<sub>x</sub> emissions concentration corrected to 15 percent oxygen. The CEMS shall be certified, calibrated, and maintained in accordance with all applicable federal regulations including reporting requirements of Sections 60.7(c), 60.7(d), and 60.13 of 40 CFR Part 60, performance specifications of Appendix B of 40 CFR Part 60, quality assurance procedures of Appendix F of 40 CFR Part 60, and a protocol approved in writing by the Air Pollution Control Officer.

(8) An owner or operator of a gaseous-fueled engine rated at 5,000 bhp or greater and operated more than 6,000 hours per calendar year and first installed in San Diego County after July 30, 2003, shall install, operate, and maintain in calibration a continuous emission monitoring system (CEMS) to continuously measure and record oxygen concentration and NO<sub>x</sub> emissions concentration corrected to 15 percent oxygen, or an alternative system such as a Parametric Emission Monitoring System approved by the Air Pollution Control Officer and Environmental Protection Agency (EPA). The CEMS shall be certified, calibrated, and maintained in accordance with all applicable federal regulations including reporting requirements of Sections 60.7(c), 60.7(d), and 60.13 of 40 CFR Part 60, performance specifications of Appendix B of 40 CFR Part 60, quality assurance procedures of Appendix F of 40 CFR Part 60, and a protocol approved in writing by the Air Pollution Control Officer.

(9) All records required by Subsections (e)(2) through (e)(7) shall be retained on-site for at least three years and made available to the District upon request.

**(f) TEST METHODS**

To determine compliance with Section (d) during a source test, measurements of NO<sub>x</sub>, CO, carbon dioxide (CO<sub>2</sub>) and oxygen content of exhaust gas shall be conducted in accordance with San Diego County Air Pollution Control District Test Method 100, Air Resources Board (ARB) Test Method 100 or equivalent EPA test method and a source test protocol approved in writing by the Air Pollution Control Officer.

**(g) SOURCE TEST REQUIREMENTS AND COMPLIANCE DETERMINATION**

Source tests shall be conducted according to the following:

(1) After initial compliance has been determined, any engine subject to the requirements of Subsection (d), except for engines described in Subsection (g)(2) below, shall be tested at least once every 24 months, unless more frequent testing is specified in writing by the Air Pollution Control Officer.



(2) Any gaseous-fueled engine rated at 1,000 bhp or greater and operated more than 2,000 hours per calendar year shall be tested at least once every 12 months, unless more frequent testing is specified in writing by the Air Pollution Control Officer.

(3) Emissions source testing shall be conducted using the test methods specified in Section (f) and a source test protocol approved in writing by the Air Pollution Control Officer prior to testing.

(4) Emissions source testing shall be performed at no less than 80 percent of the brake horsepower rating. If an owner or operator of an engine demonstrates to the satisfaction of the Air Pollution Control Officer that the engine does not operate at these conditions, then emissions source testing shall be performed at the highest achievable continuous brake horsepower rating, or under the typical duty cycle or operational mode of the engine.

(5) The averaging period to calculate NO<sub>x</sub> and CO emission concentrations and to determine compliance shall be at least 30 minutes and not more than 60 minutes. NO<sub>x</sub> and CO emission concentrations shall be calculated as an average of three subtests.

(6) For the purposes of a compliance determination based on CEMS data, the averaging period to calculate NO<sub>x</sub> emissions concentration shall be one clock hour.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## **RULE 70 - ORCHARD HEATERS** (Effective 1/17/72)

(a) Effective January 1, 1973, no person shall use any orchard heater as defined in Rule 2(s), unless such orchard heater is approved by the State of California Air Resources Board or does not produce more than one gram per minute of unconsumed solid carbonaceous material.

(b) Effective immediately, no person shall sell or offer for sale any orchard heater, as defined in Rule 2(s) of these rules, unless such orchard heater is approved by the State of California Air Resources Board or does not produce more than one gram per minute of unconsumed solid carbonaceous material.

(c) This rule does not apply to contrivances commonly known as wind machines.

SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT>

**RULE 71 - ABRASIVE BLASTING** (Effective 3/30/77)

(a) No person shall operate any nonpermanent abrasive blasting equipment unless it meets the performance and emission standards set forth in the State of California Administrative Code: Title 17, Part III, Chapter 1, Subchapter 6, Abrasive Blasting, beginning with Section 92000.

(b) For the purposes of this rule, "**permanent abrasive blasting**" means abrasive blasting operations conducted, or abrasive blasting equipment located, in a building which is used, in whole or in part, for abrasive blasting operations.

**REGULATION VI. BURNING CONTROL** (Effective 1/17/73; Rev. September 25, 2002)

**RULE 101. BURNING CONTROL** Adopted and effective 9/25/02

The purpose of this rule is to require that open burning in San Diego County be conducted in a manner that minimizes emissions and smoke, and is managed consistent with state and federal law.

(a) **APPLICABILITY**

This rule is applicable to any person conducting or allowing any open burning including, but not limited to:

- (1) Agricultural Burning
- (2) Prescribed Burning
- (3) Disposal of Russian Thistle (*Salsola Kali* or “tumbleweed”)
- (4) Fire Prevention or Fire Suppression Training
- (5) Fire Hazard Reduction Burning
- (6) Testing of materials, equipment, or techniques related to research or development of new or improved methods to abate or suppress fire
- (7) Residential Burning

(b) **EXEMPTIONS**

- (1) The provisions of this rule shall not apply to:
  - (i) The setting of backfires when conducted by a fire protection agency or when necessary to save life or property, in accordance with Public Resources Code Section 4426.
  - (ii) Recreational, ceremonial, and cooking fires, provided that clean dry fuel (limited to wood or charcoal), natural gas, propane, or cooking fuel is used and the fire is set in such manner as not to create a nuisance as defined in Rule 51.
  - (iii) Fireworks displays.
  - (iv) Pyrotechnics used for creation of special effects.
  - (v) Fires set in the remediation of oil spills pursuant to Government Code Section 8670.7.

(2) Subsections (d)(4) and (d)(5) shall not apply to authorized residential burning in the Eastern Section of the Air Pollution Control District of San Diego County.

(3) Fires set for Firefighter Training and Aviation Firefighting Training are not subject to the burning hour restrictions in (d)(6).

(4) Prescribed burning under an approved Smoke Management Plan may be conducted outside the burning hour restrictions in (d)(6) with daily consultation and approval by the Air Pollution Control Officer.

(c) **DEFINITIONS**

For the purposes of this regulation, the following definitions shall apply:

(1) **“Agricultural Burning”** means open burning of vegetation produced wholly from the growing and harvesting of crops in agricultural operations; including the burning of grass and weeds in fence rows, ditch banks, and berms in non-tillage orchard operations, fields being prepared for cultivation, agricultural wastes, and the operation or maintenance of a system for the delivery of water for agricultural operations.

(2) **“Agricultural Operation”** means any operation occurring on a ranch or farm directly related to the growing of crops, or raising of fowl or animals for the primary purpose of making a profit or for a livelihood, or conducting agricultural research or instruction by an educational institution.

(3) **“Agricultural Waste”** means unwanted or non-salable materials produced wholly from agricultural operations directly related to the growing of crops or raising animals for the primary purpose of making a profit or for a livelihood. The term does not include items such as diseased or dead animals, animal fur, feathers, pesticide and fertilizer containers, manure, plastic, rubber, ornamental or landscape vegetation, shop wastes, construction and demolition material, garbage, oil filters, discarded home and industrial appliances, tires, tar paper, broken boxes, pallets, sweat boxes, packaging or processing of agricultural products, orchard or vineyard waste, or any material generated as a result of land use conversion to nonagricultural purposes.

(4) **“Air Pollution Control Officer (APCO)”** means the same as defined in Rule 2.

(5) **“Approved Ignition Devices”** means those devices, instruments, or materials approved by a designated agency or the Air Pollution Control Officer that will ignite open fires without the production of black smoke by the ignition device, including, but not limited to, liquid petroleum gas, butane, propane, pressurized diesel fuel oil burners, and flares. Tires, tarpaper, oil, and other similar materials are not approved ignition devices.

(6) **“ARB”** means the California Air Resources Board.

(7) **“Aviation Firefighting Training”** means a series of fires ignited with aviation fuel and/or any other fuel consistent with published Federal or State training requirements, conducted for the purpose of training firefighters on proper response and extinguishment techniques for fires involving hazards unique to aviation.

(8) **“Backfire”** means a burn ignition technique where an auxiliary fire is ignited at the downwind side of a burn area and intended to burn into the wind towards the fuel source.

(9) **“Class I Area”** means the same as defined in Rule 20.1.

(10) **“Contraband”** means any property which is unlawful to produce or possess.

(11) **“Designated Agency”** means any agency designated by the ARB as having authority to issue agricultural burning, including prescribed burning, permits. The U.S. Department of Agriculture (USDA) Forest Service and the California Department of Forestry and Fire Protection (CDF) are so designated within their respective areas of jurisdiction.

(12) **“Eastern Section of the Air Pollution Control District of San Diego County”** means the same as defined in Rule 2.

(13) **“Firefighting Training”** means a series of fires ignited with liquid fuel and/or other fuel consistent with published Federal or State requirements conducted for the purpose of training firefighters on proper response and extinguishment techniques for fires.

(14) **“Fire Protection Agency”** means any agency with the responsibility and authority to protect people, property, and the environment from fire.

(15) **“Fire Hazard Reduction Burning”** means the burning of flammable vegetation that has been removed and cleared away from buildings or structures in compliance with local ordinances to reduce fire hazard pursuant to California Public Resources Code Section 4291.

(16) **“Infectious Waste”** means a waste generated from a type of microorganism, such as, bacteria, mold, parasite, or virus that normally causes, or significantly contributes to the cause of increased morbidity or mortality of human beings or animals.

(17) **“Land Manager”** means any federal, state, local, or private entity that administers, directs, oversees, or controls the use of public or private land, including the application of fire to the land.

(18) **“National Ambient Air Quality Standards”** means the same as defined in Rule 20.1.

(19) **“No-burn Day”** means any day on which the District prohibits open burning.

(20) **“Open Burning”** means the ignition and subsequent burning, or ignition, decomposition and subsequent burning of solid, liquid, or gaseous materials, outside of a combustion chamber with or without a visible flame and not vented through a chimney or flue. A burn barrel is considered open burning.

(21) **“Open Outdoor Fire”** means any fire ignited in the open, including in a burn barrel, or in any device other than a multiple-chamber incinerator, as defined in Rule 2.

(22) **“Permissive-burn Day,” or “Burn Day”** means any day on which the District does not prohibit agricultural burning and prescribed burning.

(23) **“Prescribed Burning”** means planned open burning to achieve the specific objectives identified by a land manager on lands selected in advance for removal of:

(i) vegetation from land predominantly covered with chaparral, trees, grass, or standing brush; or

(ii) forest vegetation or debris for the purposes of forest protection; or

(iii) brush, weeds, or vegetation to promote a healthier environment for plant or animal species or to re-establish native plant species; or

(iv) disease and pest prevention.

(24) **“Residential Burning”** means an open outdoor fire for the disposal of the combustible or flammable solid waste from a single- or two-family dwelling on its premises. Residential burning does not include hospital waste, tires, tarpaper, paint cans, plastics, pallets, construction or demolition debris, paper, oily waste materials, flammable solid or liquid waste, feathers, animal fur, diseased or dead animals, organic fertilizer, and non-combustible containers.

(25) **“San Diego Air Basin”** means, for the purpose of burn permit decision making, all of San Diego County, except for that portion in the Salton Sea Air Basin. Burn decisions for this excepted portion in the Salton Sea Air Basin are specified by the ARB.

The eastern portion of San Diego County is geographically in the Salton Sea Air Basin. For purposes of outdoor burning, those portions of San Diego County included in the Salton Sea Air Basin must abide by the burn day declaration made for the Salton Sea Air Basin. When the ARB declares a Marginal Burn Day in the Salton Sea Air Basin, the District will declare a No Burn Day for that portion of San Diego County included in the Salton Sea Air Basin. This decision is made daily by the ARB and is conveyed to the public through the District’s Agricultural Burn forecast system.

The San Diego Air Basin is defined as follows: except that portion which lies east of a line beginning at the U.S.-Mexico border and running north along the range line common to R. 7 E and R. 6 E, San Bernardino Base and Meridian; to the southeast corner of T. 16 S, R. 6 E; then west along the township line common to T. 16 S and T. 17 S to the southwest corner of T. 16 S, R. 6 E; then north along the range line common to R. 6 E and R. 5 E to the southeast corner of T. 14 S, R. 5 E; then west along the township line common to T. 14 S and T. 15 S to the point of intersection with the east boundary of Cuyamaca Park; then north along the east boundary of Cuyamaca Park to the point of intersection with the range line common to R. 5 E and R. 4 E; then north along this range line to the point of intersection with the south boundary of the San Felipe Land Grant; then east and north along the land grant boundary to the easternmost corner; then continuing west and north along the land grant boundary to the point of intersection with the range line common to R. 5 E and R. 4 E; then north along this range line to the point of intersection with the township line common to T. 10 S and T. 9 S; then west along this township line to the point of intersection with the range line common to R. 4 E and R. 3 E; then north along this range line to the San Diego-Riverside County boundary.

(26) **“Smoke Management Plan”** means a document prepared for each fire by a land manager that provides the information and procedures required in such plans by Title 17, of the California Code of Regulations Section 80160.

(27) **“Smoke Sensitive Areas”** means areas where the Air Pollution Control Officer determines that smoke and air pollutants can adversely affect public health or welfare. Such areas can include, but are not limited to, cities, towns, villages, campgrounds, trails, populated recreational areas, hospitals, nursing homes, schools, roads, airports, public events, shopping centers, and mandatory Class I areas.

(28) **“State Ambient Air Quality Standards”** means the same as defined in Rule 20.1.

(29) **“Western Section of the Air Pollution Control District of San Diego County”** means the same as defined in Rule 2.

(30) **“Wildland”** means an area where development is generally limited to roads, railroads, power lines, and widely scattered structures. Such land is not cultivated (i.e., the soil is disturbed less frequently than once in ten years), is not fallow, and is not in the United States Department of Agriculture (USDA) Conservation Reserve Program. The land may be neglected altogether or managed for such purposes as wood or forage production, wildlife, recreation, wetlands, or protective plant cover.

For CDF only, “Wildland” as specified in California Public Resources Code Section 4464(a) means any land that is classified as a state responsibility area pursuant to Article 3 (commencing with Section 4125) of Chapter 1, Part 2 of Division 4 of that Code and includes any such land having a plant cover consisting principally of grasses, forbs, or shrubs that are valuable for forage. “Wildland” also means any lands that are contiguous to lands classified as a state responsibility area if wildland fuel accumulation



is such that a wildland fire occurring on this land would pose a threat to the adjacent state responsibility area.

(31) **“Wildland Fire”** means any non-structural fire, other than prescribed fire, that occurs in the wildland.

(d) **STANDARDS**

(1) Prohibited Open Burning

A person shall not conduct or allow open burning for:

(i) Residential burning in the Western Section of the Air Pollution Control District of San Diego County.

(ii) Disposal or reduction of materials generated as a result of land use conversion for non-agricultural purposes.

(iii) Disposal of military ordnances or propellants by detonation unless the open detonation is conducted on permissive burn days, providing such burning is conducted in compliance with Subsection (d)(3)(ii) and the local fire protection agency having jurisdiction determines immediate detonation is the only safe means of disposal.

(iv) The setting of backfires except those set by a fire protection agency or when necessary to save life or property, in accordance with Public Resources Code Section 4426.

(v) Disposal of containers used for pesticides, fertilizers, or other chemicals, and other similar materials.

(vi) The disposal of drugs and illegal contraband.

(vii) Salvage of metal or motor vehicle parts or bodies.

(viii) Disposal of waste including, but not limited to, hospital or infectious waste, diseased or dead animals, animal fur, feathers, manure, rubber, ornamental or landscape vegetation, shop waste, oil filters, discarded home and industrial appliances, tires, tar paper, broken boxes, paint cans, plastics, pallets, sweat boxes, construction or demolition debris, paper, oily waste materials, flammable solid or liquid waste, and non-combustible containers.

(ix) Fire hazard reduction burning unless the local fire protection agency determines the materials cannot be abated by an economically, ecologically, and logistically viable option; and unless all of the following conditions are met:

(A) Only vegetation is burned;

(B) The amount of material to be burned shall be cleared from a single property and cut and piled in a safe manner as specified by the designated agency having jurisdiction;

(C) The material is burned on the property where it has grown without being moved offsite.

(2) Written Permits Required

A written permit from a designated agency or the Air Pollution Control Officer must be obtained prior to the following types of open burning:

(i) Agricultural burning.

(ii) Prescribed burning.

(iii) Disposal of Russian Thistle (*Salsola Kali* or “tumbleweed”), and such burning must be authorized by a fire protection agency, the San Diego County Agricultural Commissioner, or the Air Pollution Control Officer.

(iv) Fire hazard reduction burning.

(v) Disposal of waste infected with an agricultural pest or disease hazardous to agricultural operations, such burning must be upon the order of the San Diego County Agricultural Commissioner.

(vi) Fires set for the purpose of training public or industrial employees in the methods of fighting fires.

(vii) Firefighting training involving the burning of existing structures conducted in compliance with all requirements of Rule 361.145, National Emission Standard for Asbestos.

(viii) Aviation Firefighting Training.

(ix) Residential burning located in the Eastern Section of the Air Pollution Control District of San Diego County.

(x) Right-of-way clearing by a public entity or utility or for levee and ditch bank maintenance by such entities.

(xi) Fires set for the purpose of researching or testing fire retardant properties of materials (or enclosures) or the efficacy of fire suppression techniques or devices.

(3) A person shall not conduct or allow open burning unless:

(i) The Air Pollution Control Officer has declared the day a permissive burn day and such burning is not prohibited by a fire protection agency. The Air Pollution Control Officer will base the declaration of a permissive/prohibited burn day as follows.

A permissive-burn day will be declared when the following meteorological criteria are met:

(A) Above 3,000 feet mean sea level (msl)\*:

(1) Near 4:00 a.m., the inversion top is less than 3,000 feet msl or the temperature difference through the inversion is less than seven degrees Fahrenheit; and

(2) The expected daytime resultant wind speed between 3,000 and 6,000 feet msl is at least five miles per hour.

(B) Below 3,000 feet msl\*:

(1) The maximum mixing depth is expected to be at least 1,500 feet msl; and

(2) The expected daytime resultant wind direction in the marine layer has a westerly component; and

(3) The expected daytime resultant wind speed in the marine layer is at least five miles per hour.

\*In place of the standard 3,000 feet msl threshold, the elevation may be specified in increments of 500 feet on a day-to-day basis as determined from vertical temperature soundings.

(ii) A written open burning permit has first been obtained from a designated agency or the Air Pollution Control Officer; and

(iii) For prescribed burning, all conditions of the District Smoke Management Program (described in Subsection (e)) are met.

(4) Open burn permits pursuant to this rule shall be valid for a maximum of fifteen (15) consecutive days, unless the designated agency or the Air Pollution Control Officer authorizes, in writing, a longer period.

(5) A person shall not conduct or allow open burning unless the designated agency is notified on the day of the burn prior to the ignition of any fire set in accordance with this rule.

(6) Open burning pursuant to this rule shall be conducted during daylight hours specified by the designated agency or the Air Pollution Control Officer. Criteria for daylight burns are as follows: During winter months, no ignition shall be allowed before 8:00 a.m., local time. This definition of winter months shall coincide with those days when the local time is set to Pacific Standard Time (i.e., last Sunday in October through first Saturday in April). During summer months, no ignition shall be allowed before 7:00 a.m., local time. This definition of summer months shall coincide with those days when the local time is set to Pacific Daylight Time (i.e., first Sunday in April through last Saturday in October). No material shall be added to the fire that would cause it to burn beyond sunset of each day. All fires subject to this rule shall be extinguished at sunset of each day. The designated agency or the Air Pollution Control Officer may allow fires set by or under the supervision of governmental agencies administering formal prescribed burning programs to burn beyond sunset, provided it is impractical to extinguish such fires at sunset and burning beyond sunset will not result in a nuisance as defined in Rule 51.

(7) A person shall ignite the material to be burned as rapidly as practicable within applicable fire control regulations using only approved ignition devices.

(8) Additional requirements for agricultural burning:

(i) The material to be burned shall be sufficiently dry to allow for maximum combustion efficiency.

(ii) A person shall not conduct or allow the open burning of agricultural waste unless it has been allowed to dry for the following minimum times:

(A) Trees and large branches (4" or more in diameter): 60 days.

(B) Prunings and small branches (less than 4" in diameter): 30 days.

(C) Field crop waste and other similar agricultural wastes: 15 days.

(D) For all other agricultural wastes not specifically listed above: 10 days. However, the designated agency or the Air Pollution Control Officer may stipulate other drying times for any of the above items where such drying times can be reasonably expected to substantially reduce smoke, which would otherwise be produced. The designated agency or the Air Pollution Control Officer, upon written request, may grant an exception to the drying time limits if vegetation is pest infested and requires immediate treatment by order of the San Diego County Agricultural Commissioner.

Drying time starts from the date the material was felled or cut.

(iii) A person shall not conduct or allow the open burning of agricultural waste unless it is reasonably free of dirt, soil, and visible moisture and arranged so that it will burn with a minimum amount of smoke.

(9) Open burning shall be prohibited when meteorological conditions, as determined by the Air Pollution Control Officer, would result in the burn causing or contributing to an exceedance of a state or national ambient air quality standard or causing a public nuisance.

(10) Suspension of Burn Permits.

Burn permits issued in accordance with this rule shall be automatically suspended for any of the following reasons:

(i) The Air Pollution Control Officer declares a “no-burn day.” (Note that pursuant to Subsection (d)(3), open burning is never allowed on no-burn days.)

(ii) The designated agency having jurisdiction over the site of the burn notifies the permittee the burn is prohibited for purposes of fire control or prevention.

(iii) The designated agency or the Air Pollution Control Officer notifies the permittee that a fire would result in excessive smoke drifting into a smoke sensitive area.

(iv) When the Air Pollution Control Officer announces smog alerts or health advisories.

(11) A person shall not conduct or allow residential burning (when otherwise allowed) unless the material is reasonably free of dirt, soil, and visible moisture and arranged so that it will burn with a minimum amount of smoke.

**(e) DISTRICT SMOKE MANAGEMENT PROGRAM**

The District Smoke Management Program provides for the continuation of agricultural burning, including prescribed burning, as a resource management tool while minimizing smoke impacts on the public. The District's Smoke Management Program sets forth procedures and other requirements mandated by Title 17, California Code of Regulations, Section 80145.

The Air Pollution Control Officer may revise and update the Smoke Management Program to reflect changes in required forms, daily forecast procedures and dissemination protocols, and other communication requirements between land managers and the District.

(1) When prescribed burning will be set under a Smoke Management Plan, the land manager shall register all planned burn projects annually, including areas for potential naturally-ignited wildland fires managed for resource benefits, with updates as they occur. Copies of all forecasted burns and annual summaries of activities for the past year, including emissions information, shall be made available to the Air Pollution Control Officer upon request. If the Smoke Management Plan is for range improvement and the burn is conducted primarily for improvement of land for wildlife and game habitat, the land manager shall file a statement from the Department of Fish and Game

with the Air Pollution Control Officer as part of his/her Smoke Management Plan certifying that the burn is desirable and proper.

(2) The land manager conducting a prescribed burn shall ensure that all conditions and requirements stated in the Smoke Management Plan are met on the day of the burn event and prior to ignition, and must contact the Air Pollution Control District at least 24 hours prior to ignition to obtain authorization.

(3) The land manager shall conduct or allow prescribed burning only when the fires are set by, under the jurisdiction of, or pursuant to the orders or requirements of a fire protection agency.

(4) Prior to conducting or allowing prescribed burning for any project greater than ten acres or estimated by the land manager to produce more than one ton of particulate matter with aerodynamic diameter of 10 microns or less, the land manager shall have a Smoke Management Plan approved in writing by the Air Pollution Control Officer. At a minimum, the Smoke Management Plan shall contain the following information:

- (i) Location, types, and amounts of material to be burned;
- (ii) Expected duration of the fire from ignition to extinction;
- (iii) Identification of responsible personnel, including telephone contacts;  
and
- (iv) Identification and location of all smoke sensitive areas.

(5) Prior to conducting or allowing prescribed burning for any project greater than 100 acres, or estimated by the land manager to produce more than 10 tons of particulate matter with aerodynamic diameter of 10 microns or less, the Smoke Management Plan shall contain, at a minimum, the following information:

- (i) Location, types, and amounts of material to be burned;
- (ii) Expected duration of the fire from ignition to extinction;
- (iii) Identification of responsible personnel, including telephone contacts;
- (iv) Identification and location of all smoke sensitive areas;
- (v) Identification of meteorological conditions necessary for burning;
- (vi) The smoke management criteria the land manager or his/her designee will use for making burn ignition decisions;
- (vii) Projections, including a map, of where the smoke from the burn is expected to travel, both day and night;

(viii) Specific contingency actions (such as fire suppression or containment) that will be taken if smoke impacts occur or meteorological conditions deviate from those specified in the Smoke Management Plan;

(ix) Alternatives to burning; and

(x) Discussion of public notification procedures as required in Title 17, California Code of Regulations, Section 80160, including appropriate signage at burn sites, and reporting of public smoke complaints.

(6) The land manager shall specify in the Smoke Management Plan appropriate smoke monitoring, which may include visual, ambient particulate matter, or other monitoring approved by the Air Pollution Control Officer, if a prescribed burn of any of the following types may impact a smoke sensitive area:

(i) Projects greater than 250 acres;

(ii) Projects that will continue burning or produce smoke overnight; or

(iii) Other projects as determined by the Air Pollution Control Officer.

(7) The land manager shall coordinate daily with the designated agency and the Air Pollution Control Officer for multi-day burns which may impact smoke sensitive areas to affirm that the burn project remains in compliance with conditions specified in the Smoke Management Plan.

(8) The land manager shall submit to the Air Pollution Control Officer a post-burn smoke management evaluation for fires greater than 250 acres.

(9) The Air Pollution Control Officer shall prioritize the issuance of burn permits related to Subsections (e)(4), (e)(5), and (e)(6) if such action is necessary to maintain suitable air quality.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 126. APPLICABILITY

(Rev. Effective 5/25/77)

(a) This regulation sets forth the requirements for the San Diego Air Pollution Emergency Plan. The Plan shall set forth the actions to be taken in San Diego County to prevent air pollution concentrations from reaching levels which could endanger or cause significant harm to the public health, or to abate such concentrations should they occur, and to notify the public.

(b) This Plan shall consist of this Regulation, the Stationary Source Curtailment Plan developed pursuant to Rule 131, the Traffic Abatement Plan developed pursuant to Rule 132, and the Administration Procedures developed pursuant to Rule 137.

(c) Notwithstanding other provisions of these Rules and Regulations, the provisions of this regulation shall apply separately to each area of the County declared by the Air Pollution Control Officer an episode emission source or receptor area, as meteorological and air pollution data may dictate. This plan is based on the State Air Resources Board's California Air Pollution Emergency Plan, and particularly the episode criteria levels therein.



SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

**RULE 127. EPISODE CRITERIA LEVELS**

(Rev. Effective 9/17/91)

The concentrations of air pollutants at which the various episode stages are declared are given in the table below:

Pollutant	Averaging Time	Health Advisory*	Stage 1*	Stage 2*	Stage 3*
Ozone	1 hr.	0.15 ppm  (295 $\mu\text{g}/\text{m}^3$ )  or more	0.20 ppm  (399 $\mu\text{g}/\text{m}^3$ )  or more	0.35 ppm  (698 $\mu\text{g}/\text{m}^3$ )  or more	0.50 ppm  (998 $\mu\text{g}/\text{m}^3$ )  or more
Carbon Monoxide	1 hr.	40 ppm  (47 $\text{mg}/\text{m}^3$ )  or more	40 ppm  (47 $\text{mg}/\text{m}^3$ )  or more	75 ppm  (87 $\text{mg}/\text{m}^3$ )  or more	100 ppm  (116 $\text{mg}/\text{m}^3$ ) or more for 1 hr and predicted to persist for at least 1 additional hr.
Carbon Monoxide	4 hrs	25 ppm  (29 $\text{mg}/\text{m}^3$ ) or more	25 ppm  (29 $\text{mg}/\text{m}^3$ ) or more	45 ppm  (50 $\text{mg}/\text{m}^3$ )  or more	60 ppm  (70 $\text{mg}/\text{m}^3$ )  or more
Carbon Monoxide	8 hrs	15 ppm  (17 $\text{mg}/\text{m}^3$ )  or more	15 ppm  (17 $\text{mg}/\text{m}^3$ )  or more	30 ppm  (35 $\text{mg}/\text{m}^3$ )  or more	40 ppm  (47 $\text{mg}/\text{m}^3$ )  or more

\* ppm means parts of pollutant per million parts of air, by volume.

$\mu\text{g}/\text{m}^3$  means micrograms of pollutant per cubic meter of air at standard conditions.

$\text{mg}/\text{m}^3$  means milligrams of pollutant per cubic meter of air at standard conditions.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 128. EPISODE DECLARATION

(Rev. Effective 9/17/91)

Listed below, in order of increasing severity, are episode stages. Specific actions for each episode stage are contained in Rule 130.

(a) **HEALTH ADVISORY.** A Health Advisory shall be declared by the Air Pollution Control Officer when the concentration of pollutants specified in Rule 127 for this episode level is predicted or reached. People in receptor areas, including exercising individuals, those with respiratory or coronary artery disease and the chronically ill, will be notified through the media to take precautions against exposure. Schools will be notified to curtail student participation in strenuous activities.

(b) **STAGE 1.** A Stage 1 Episode shall be declared by the Air Pollution Control Officer when the concentration of pollutants specified in Rule 127 of this stage is predicted or reached. In addition to notifications, Stage 1 administrative and abatement actions shall be undertaken.

(c) **STAGE 2.** A Stage 2 Episode Advisory shall be declared by the Air Pollution Control Officer when the concentration of pollutants specified in Rule 127 for this stage is predicted or reached. Stage 2 administrative and abatement actions shall be undertaken; however, abatement actions needed will vary depending on the duration of the episode, the maximum concentrations expected and the location of pollutant emission source areas.

(d) **STAGE 3.** A Stage 3 Episode shall be declared when the conditions specified in Rule 127 for this stage are predicted or reached. Extensive actions shall be taken to prevent exposure of people to pollutant concentrations of the levels indicated for this stage. Stage 3 administrative and abatement actions shall be undertaken. If further action is necessary, the Chairperson of the Air Pollution Control Board or his designee may, in accordance with guidelines determined by the Emergency Action Committee and after consulting with and receiving approval from the Emergency Action Committee, Office of Emergency Services and the California Air Resources Board, request the Governor to take action in accordance with the California Emergency Services Act.

(e) **AIR POLLUTION DISASTER** (State of Emergency)

When it is determined by medical authorities or local officials that a substantial number of persons are suffering or are likely to suffer incapacitating effects from air pollution, regardless of measured pollutant concentrations, and analysis of meteorological and air quality data by the Air Pollution Control District or the California Air Resources Board indicates that the condition is likely to continue or recur, the Chairperson of the Air Resources Board shall confer with the Director of the California Office of Emergency Services, and they shall jointly recommend to the Governor that an air pollution disaster (State of Emergency) be declared.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 129. EPISODE TERMINATION

(Rev. Effective 5/25/77)

An episode shall be terminated whenever the concentration of the pollutant(s) which caused the declaration of such episode stage has fallen below the criteria level for the episode, or has not reached the criteria level for the episode, and analysis of meteorological and air quality data indicates that the pollutant concentration is expected to decrease or not to reach the expected level. An episode shall be terminated only by the official that declared it or his authorized representative.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 130. EPISODE ACTIONS

(Rev. Effective 9/17/91)

When an episode is predicted or reached, the Air Pollution Control Officer shall identify receptor areas which will experience episode levels and emission source areas which will cause or contribute to the episode levels in the receptor areas. On declaration of an episode, the Air Pollution Control Officer shall notify receptor areas of the magnitude and duration of the episode and shall require initiation of abatement actions in applicable areas as outlined below.

(a) **OZONE EPISODES.** The following actions shall be taken by the Air Pollution Control Officer when an episode is reached or predicted, appropriate to the episode.

### 1. HEALTH ADVISORY

(i) Issue health warnings in accordance with the California Air Pollution Emergency Plan to the public in receptor areas. This will be done through the County radio communications system, electronic news media, the District's Public Information Office, and through other means as appropriate.

(ii) Advise schools in receptor areas that sustained rigorous outdoor exercise for more than one hour by students must be discontinued during the episode.

(iii) Notify officials, news media, and organizations listed in Appendix A.

### 2. STAGE 1.

(i) Notify officials, news media, and organizations listed in Appendix A.

News media notification will include a request for voluntary motor vehicle traffic curtailment by the public in emission source areas until the episode terminates.

(ii) When an episode is predicted more than eight hours in advance or is reached and predicted to last more than eight hours:

(A) Ask participants in the traffic abatement plan in emission source areas to implement Stage 1 abatement plan provisions.

(B) Ask stationary sources in emission source areas to implement Stage 1 curtailment plan provisions.

(iii) Request the public to avoid emission source and receptor areas.

(iv) Monitor and evaluate meteorological and air quality data until the episode is terminated.

(v) Implement source inspection plans, pursuant to Rule 134.

3. **STAGE 2.** The following actions shall be taken by the Air Pollution Control Officer in addition to those taken in Stage 1:

(i) Issue a health warning in accordance with the California Air Pollution Emergency Plan to the public in receptor areas. This will be done through the County radio communications system, electronic news media, the District's APPRISE telephone system, and through other means as appropriate.

(ii) Suspend programs in receptor areas which involve outdoor physical exertion by participants using public parks or recreational facilities during the episode. Such programs which are for adult participants in scheduled athletic events with paid attendance are excepted.

(iii) Inform the State Air Resources Board at each third increment (0.05 ppm) between Stages 2 and 3.

(iv) When an episode is predicted more than eight hours in advance or reached and predicted to last more than four hours:

(A) Instruct participants in the traffic abatement plan in emission source areas to implement Stage 2 abatement plan provisions, except operations necessary for the health and welfare of the public.

(B) Instruct participants in the stationary source curtailment plan in emission source areas to initiate Stage 2 curtailment plan provisions, except for operations necessary for the health and welfare of the public.

(C) Prohibit the burning of combustible refuse in the emission source and receptor areas until the episode is terminated.

(D) Prohibit in emission source areas the loading and ballasting resulting in hydrocarbon emissions of ships and barges containing as cargo petroleum products with a Reid vapor pressure greater than 1.5 until the episode is terminated.

(v) Continue source inspection plans, pursuant to Rule 134.

4. **STAGE 3.** The following actions shall be taken in addition to those taken in Stages 1 and 2:

(i) Issue warnings to describe protective measures to be taken in accordance with the California Air Pollution Emergency Plan.

(ii) Continue source inspection plans, pursuant to Rule 134.

(iii) When an episode is predicted more than eight hours in advance, or reached and predicted to last more than four hours:

(A) Instruct participants in the traffic abatement plan in emission source areas to implement Stage 3 abatement plan provisions except for operations required for emergency reasons.

(B) Instruct participants in the stationary source curtailment plan in source emission areas to implement such plans except for operations required for emergency reasons.

(C) Prohibit in emission source areas commercial and industrial spray painting, and other activities such as tar roofing, asphalt mixing and pouring and surface coating involving use of substantial quantities of volatile organic material.

(b) **CARBON MONOXIDE (CO) EPISODES.** The following actions shall be taken at the direction of the Air Pollution Control Officer when an episode is reached or predicted, appropriate to the episode:

1. **HEALTH ADVISORY**

(i) Issue health warnings in accordance with the California Air Pollution Emergency Plan to the public in receptor areas. This will be done through the County radio communications system, electronic news media, the District's Public Information Office, and through other means as appropriate.

(ii) Advise schools in receptor areas that sustained rigorous outdoor exercise for more than one-hour by students must be discontinued during the episode.

(iii) Notify officials, news media, and organizations listed in Appendix A.

2. **Stage 1.**

(i) Issue a health warning in accordance with the California Air Pollution Control Emergency Plan to sensitive persons in receptor areas. This will be done through the County radio communications system, the electronic news media, the District's APPRISE telephone system and through other means as appropriate.

(ii) Advise schools in receptor areas that strenuous activities by students must be discontinued during the episode.

(iii) Notify officials, news media and organizations listed in Appendix C. News media notification will include a request for voluntary motor vehicle curtailment by the public in emission source and receptor areas until the episode terminates.

(iv) Abatement Actions.

(A) Ask participants in the traffic abatement plan in emission source and receptor areas to implement Stage 1 abatement plan provisions.

(B) Ask participants in the stationary source curtailment plan to implement Stage 1 curtailment plan provisions in emission source and receptor areas.

(v) Monitor and evaluate meteorological and air quality data until the episode is terminated.

3. **Stage 2.** The following actions shall be taken by the Air Pollution Control Officer in addition to the actions taken for Stage 1:

(i) Suspend programs which involve outdoor physical exertion by participants using public parks or public recreational facilities in receptor areas. Such programs which are for adult participants in scheduled athletic events with paid attendance are excepted.

(ii) Inform the ARB at each third increment (12 ppm) of the CO concentration difference between Stages 2 and 3.

(iii) Abatement Actions.

(A) Implement the APCD traffic curtailment plan, in emission source and receptor areas, including measures for reducing traffic congestion or turning off motor vehicle engines, when appropriate. Operations which are necessary for the health and welfare of the public are excepted.

(B) Request the public to avoid all but emergency use of motor vehicles in emission source and receptor areas.

(C) Prohibit the burning of combustible refuse in emission source and receptor areas during episodes.

(D) Request the public to avoid receptor areas.

(E) Instruct participants in the traffic abatement plan in emission source and receptor areas to implement Stage 2 abatement plan provisions.

(F) Instruct participants in the stationary source curtailment plan to implement Stage 2 curtailment plan provisions in emission source and receptor areas.

(iv) Inspect as many stationary sources as possible, pursuant to Rule 134.

4. **Stage 3.** The following actions shall be taken by the Air Pollution Control Officer in addition to the actions taken for Stages 1 and 2:

(i) Issue warnings describing protective measures to be taken in accordance with the California Air Pollution Emergency Plan.

(ii) Implement APCD source inspection plans, pursuant to Rule 134.

(iii) Abatement Action.

(A) Instruct participants in the traffic abatement plan in emission sources and receptor areas to implement Stage 3 abatement plan provisions, except for operations required for emergency reasons.

(B) Instruct participants in the stationary source curtailment plan in emission source and receptor areas to implement Stage 3 curtailment plan provisions, except for operations necessary for emergency reasons.

(C) Instruct combustion sources of CO emissions to shut down in emission source and receptor areas.

(D) If appropriate and feasible, request the public to evacuate the receptor area.

(c) **AIR POLLUTION DISASTER** (State of Emergency)

1. Notwithstanding the episode actions required of the Air Pollution Control Officer in this Regulation only the Governor of the State of California shall declare an air pollution disaster and order the institution of any health protection and abatement actions he considers necessary.

2. On declaration of an air pollution disaster (State of Emergency), the Air Pollution Control Officer shall continue maximum Stage 3 abatement actions in accordance with this Regulation; the Air Pollution Control District shall commit all its available resources to the service of the Governor.
3. The Emergency Action Committee shall meet as soon as possible after the adoption of this Regulation, and thereafter as often as necessary to plan for implementation of possible local administrative and abatement actions, as listed in the California Air Pollution Emergency Plan, that may be required by the Governor on declaration of an air pollution disaster.

(e) After notice from the Air Pollution Control Officer pursuant to the first paragraph of this rule 130, failure to take abatement actions in accordance with traffic abatement and stationary source curtailment plans as approved by the Air Pollution Control Officer shall constitute a violation of these Rules and Regulations.



# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 131. STATIONARY SOURCE CURTAILMENT PLAN

(Rev. Effective 5/1/81)

(a) The Stationary Source Curtailment Plan shall be in two parts, source curtailment plans prepared by the operators of the sources, pursuant to subdivision (c), and a curtailment plan for other sources prepared by the Air Pollution Control Officer .

(b) Stationary source subject to curtailment include the following:

1. Any facility or plant emitting more than 100 tons per year of hydrocarbons and
2. Any facility or plant emitting more than 100 tons per year of carbon monoxide.

(c) Persons operating sources specified in (b) above shall submit to the Air Pollution Control Officer, on request, plans for the immediate curtailment of emissions on declaration of an episode within 45 days after notification that such plans are required. The plans shall be in three parts, one part for each episode. Implementation of the Stage 1 plan shall be voluntary. The plans shall be reviewed by the Air Pollution Control Officer within an additional 45 day and approved, or disapproved, or disapproved and returned to the person for revision within a specified time, or modified by the Air Pollution Control Officer to comply with this rule. Any disapproval or modification by the Air Pollution Control Officer is reviewable by the Hearing Board pursuant to Regulation V. Plans required by this rule shall include the following:

1. Name and location of the facility.
2. Type of equipment that emits air pollutants and number of units of each type.
3. Total emissions of each pollutant in pounds per operating day from each type of equipment including any significant variations occurring seasonally and on weekends and holidays.
4. Procedures for briefing employees regarding the curtailment plan requirements.
5. Procedures for notifying employees and individuals responsible for emissions curtailment actions to be taken at each episode stage.
6. The names and telephone numbers of a person and alternates to contact in case curtailment is necessary.
7. The name of the official responsible for implementation of the plan.
8. As a minimum, the following information regarding abatement actions:
  - (i) Identification of equipment for which emissions are to be curtailed at each episode stage and expected reduction of emissions of each pollutant in pound per operating day.
  - (ii) Time required to accomplish the emission curtailment at each stage.

(iii) Reductions in fuel oil, gas and electrical consumption at each stage.

9. Provisions for a report, upon the Air Pollution Control Officer's request, after an episode or Air Pollution Control Disaster, of the plan's effectiveness, to include the following:

(i) An estimate of the source emission reductions and the basis for the estimate.

(ii) Identification of problems encountered in implementing the plan.

(iii) Comments on the effectiveness of the plan actions implemented and recommendations for improved effectiveness.

10. Other information that may be required by the Air Pollution Control Officer to improve the source's plan effectiveness.

(d) All electrical utilities that file plans for energy conservation, load reduction or load shedding with the Public Utilities Commission or the Energy Resources Conservation and Development Commission shall file copies of such plans with the Air Pollution Control Officer and the Air Resources Board. Consumers requested by an electrical utility company to prepare electrical load reduction plans shall file such plans with the Air Pollution Control Officer and the Air Resources Board.

(e) "Stationary source" as used in this Regulation means nonvehicular sources as defined in Section 39043 of the Health and Safety Code.

(f) Plans submitted to the Air Pollution Control Officer, pursuant to Section (c) of this rule, shall be updated at least every eighteen months from the date of last plan approval or update. (Effect. 5/1/81)

5.28.81

RULE 132. TRAFFIC ABATEMENT PLAN (REV. 5-25-77)

(a) The Traffic Abatement Plan shall be in two parts: abatement plans prepared by the operators of the facilities or operations, pursuant to subdivision (c) and an abatement plan for other operations prepared by the Air Pollution Control Officer.

(b) Facilities or operations subject to traffic abatement measures (in order to prevent an episode) include the following:

- (1) Facilities with 1,000 or more parking spaces, including shopping centers.
- (2) Operations with 50 or more fleet vehicles in San Diego County.
- (3) Governmental agencies employing more than 100 persons per shift at one business address.
- (4) Industrial or commercial businesses employing more than 100 persons per shift at one business address.

(c) Persons owning, operating or responsible for facilities or operations listed in (b) above shall submit to the Air Pollution Control Officer, on request, plans for the immediate abatement of motor vehicle traffic on declaration of an episode. Plans shall be submitted within 45 days after notification that such plans are required. The plans shall be in three parts, one part for each episode. Implementation of the Stage 1 plan shall be voluntary. The plans shall be reviewed by the Air Pollution Control Officer within an additional 45 days and approved, or disapproved, or disapproved and returned to the person for revision within a specified time, or modified by the Air Pollution Control Officer to comply with this Rule. Any disapproval or modification by the Air Pollution Control Officer is reviewable by the Hearing Board pursuant to Regulation V. Plans required by this rule shall include the following:

- (1) Name and location of the facility.
- (2) Number of employees.
- (3) The number of employee vehicles used in commuting and the total average daily commute miles.
- (4) The number of company or agency vehicles and employee vehicles used for company or agency business by type (gasoline or diesel) and the total average daily mileage of each type.
- (5) The minimum number of vehicles used for company or agency business that need to be operated for 1) protection of public health and safety and 2) performance of emergency services.

(6) Procedures for briefing employees regarding the plan requirements.

(7) Procedures for notifying employees and individuals responsible for abatement plan requirements, at each episode stage.

(8) The names and telephone numbers of a person and alternates to contact in case abatement is necessary.

(9) The measures to be taken to decrease public patronage in the event of the declaration a day in advance or far enough in advance for the public to be reached.

(10) The measures to be taken to decrease the number of employee vehicles used in commuting in the event of the declaration of an episode a day in advance or far enough in advance for employees to be reached before they leave for work.

(11) The measures to be taken to decrease the operation of vehicles used for company or agency business in the event of declaration of an episode.

(12) An estimate of the reduction of miles traveled that will be made through decreasing employee and company vehicle travel, and an estimate of the decrease in public patronage, when the plan is used during an episode.

(13) The name of the official responsible for implementing the plan.

(14) Provisions for a report, upon the Air Pollution Control Officer's request, after an episode of Air Pollution Disaster, of the plan's effectiveness, to include the following:

(i) An estimate of the reduction in travel and the basis for the estimate.

(ii) Identification of the problems encountered in implementing the plan.

(iii) Comments on the effectiveness of the plan, actions implemented and recommendations for improved effectiveness.

(15) Other information that may be required by the Air Pollution Control Officer to improve the source's plan effectiveness.

(d) Plans submitted to the Air Pollution Control Officer, pursuant to Section (c) of this Rule, shall be updated at least every eighteen months from the date of last plan approval or update.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 133. SCHOOLS

(Effective 5/25/77)

Schools shall prepare and submit to the Air Pollution Control Officer, on request, procedures for discontinuing strenuous activities by students during episodes and air pollution disasters. Procedures will be submitted within 45 days after notification that they are required. The procedures shall be reviewed by the Air Pollution Control Officer within an additional 45 days and approved or disapproved. If a procedure is disapproved, it shall be revised as necessary by the submitter and resubmitted to the Air Pollution Control Officer within 30 days of notice of disapproval.

SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 134. SOURCE INSPECTION

(Effective 5/25/77: Rev. Effect. 5/1/81)

In the event a second- or third-stage episode or an air pollution disaster is declared, the Air Pollution Control Officer shall inspect sources subject to mandatory traffic abatement measures and stationary source curtailment pursuant to Rule 130 during the time abatement measures or curtailment is required in order to assure compliance and to determine effects of compliance.

SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 135. AIR MONITORING STATIONS

(Effective 5/25/77)

The Air Pollution Control District shall as a minimum maintain a sufficient number of air quality monitoring stations in the County to meet State Air Resources Board requirements.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 136. INTERDISTRICT AND INTERBASIN COORDINATION

(Effective 5/25/77)

(a) In the event an episode is reached or predicted in San Diego County and it is determined that an adjacent air pollution control district or air basin is or will be the emission source area contributing to the episode, the source districts shall be requested by the Air Pollution Control Officer to take appropriate abatement action.

(b) In the event an air pollution control district or the ARB has declared an episode in an adjacent district or basin and had determined that the emission source area is in San Diego County and has requested abatement action, the Air Pollution Control Officer shall evaluate the request and take appropriate response action. The Air Pollution Control Officer shall contact the ARB for relief from the action or actions within one hour after the request if some or all of the actions are considered inappropriate.



SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 137. EMERGENCY ACTION COMMITTEE

(Effective 5/25/77)

(a) The Air Pollution Control Board shall appoint an Emergency Action Committee to act in an advisory capacity to the Air Pollution Control Officer in regard to the appropriate actions to be taken whenever an episode level is reached or predicted. The Committee shall include the following among its members:

*County Health Officer*

*Sheriff*

*County Counsel*

*County Manager of Emergency Services*

*Border Division Commander of the California Highway Patrol*

*Chief of Police of the City of San Diego and representative(s) of other police departments*

*The Federal Executive Association of San Diego*

*Others as the Board may deem appropriate*

(b) When an episode is reached or predicted, the Emergency Action Committee need not be convened before the Air Pollution Control Officer can order the implementation of abatement and curtailment actions.

# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## RULE 138. PROCEDURES AND PLANS

(Effective 5/25/77)

(a) Within 120 days after adoption of this Regulation, the Air Pollution Control Officer shall prepare Air Pollution Control District Administrative Procedures for implementing this Plan. Administrative emergency procedures in effect before the adoption of this Regulation shall remain in effect and use until the new plan is complete. The Air Pollution Control District traffic abatement plan procedures for second and third episode stages shall be developed with the assistance of and with the concurrence of local law enforcement agencies and the Emergency Action Committee. The Emergency Action Committee shall approve the Administrative Procedures for the stationary source curtailment plan prior to its implementation.

(b) Since it is impossible to notify directly all facilities caring for the ill, aged and young and all recreational facilities on the declaration of an episode, and since the annual frequency of episode occurrence is too small to require such facilities to undergo the expense of purchasing direct radio communication links to the County, the Air Pollution Control Officer shall, on adoption of this Regulation, inform these facilities in writing how they may keep informed daily of pollution levels and expected episode conditions, what personal protection measures should be taken during the different episode levels and where other information regarding pollution levels may be obtained. Information regarding personal protection measures shall be that listed in the California Air Pollution Emergency Plan.

SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 140. VALIDITY

(Effective 1/1/69)

If any regulation, rule, sentence, clause or phrase of these rules and regulations is for any reason held to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the validity or constitutionality of the remaining portions of these rules and regulations; it being hereby expressly declared that these rules and regulations, and each regulation, rule, sentence, clause or phrase thereof would have been prepared, proposed, adopted, approved and ratified irrespective of the fact that any one or more of such regulations, rules, sentences, clauses or phrases be declared invalid or unconstitutional.

SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 141. EFFECTIVE DATE

(Effective 1/1/69)

These rules and regulations shall take effect on January 1, 1969.

## SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

### **RULE 175. GENERAL**

(Effective 5/22/74)

(a) Pursuant to Section 6254.7 of the Government Code of the State of California:

1. All information, analyses, plans or specifications that disclose the nature, extent, quantity or degree of air contaminants or other pollution which any article, machine, equipment or other contrivance will produce, which the Air Pollution Control District requires any applicant to provide before such applicant builds, erects, alters, replaces, operates, sells, rents or uses such article, machine, equipment or other contrivance, are public records.
2. All air or other pollution monitoring data, including data compiled from stationary sources, are public records.
3. Except as otherwise provided in Subdivision (a)(4), trade secrets are not public records under this rule. "Trade secrets", as used in this rule and the Government Code, may include, but are not limited to, any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data or compilation of information which is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce or compound an article of trade or a service having commercial value and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it.
4. Notwithstanding any other provision of law, all air pollution emission data, including these emission data which constitute trade secrets as defined in Subdivision (a)(3) of this rule, are public records. Data used to calculate emission data are not emission data for the purpose of this subdivision, and data which constitute trade secrets and which are used to calculate emission data are not public records.

(b) Pursuant to 40 Code of Federal Regulations, Part 51, Section 51.10(e), emission data reported by any source owner or operator or otherwise obtained by the Air Pollution Control District when made available as public records shall be correlated with applicable emission limitations and presented to show the relationship between amounts of emissions discharged and amounts of emissions allowable under such applicable emission limitations.

(c) Pursuant to Section 6252(c) of the Government Code of the State of California, "record" means 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 combination thereof, and all papers, maps, magnetic or paper tapes, photographic films and prints, magnetic or punched cards, discs, drums and other documents.

(d) "**Emission data**" are measured or calculated concentrations or weights of air contaminants emitted into the atmosphere. Data used to calculate emission data are not emission data.

## SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

### **RULE 176. INFORMATION SUPPLIED TO DISTRICT**

(a) When requesting information from a person for determining the amount of air contaminants from non-vehicular sources, the Air Pollution Control District shall identify the information requested with sufficient specificity to enable the person to identify the information sought. The District shall give notice in writing that the information provided may be released (1) to the public on request, except trade secrets which are not emission data, and (2) to the Federal Environmental Protection Agency, which protects trade secrets as provided in Section 114(c) of the Clean Air Act as amended in 1970, and in 40 Code of Federal Regulations, Chapter 1, Part 2.

(b) Any person from whom the Air Pollution Control District obtains any records, whether requested by the District or furnished by the person for some other reason, may label as "trade secret" any part of those records which are entitled to confidentiality. Written justification of the "trade secret" designation shall be furnished with the records so designated, and the justification shall be a public record. The justification shall be as detailed as possible without disclosing the trade secret; the person may submit additional information to support the justification, which information, on request, will be kept confidential in the same manner as the record sought to be protected.

## SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

### **RULE 177. INSPECTION OF PUBLIC RECORDS**

(a) It is the policy of the Air Pollution Control District that all records not exempted from disclosure by state law shall be open for public inspection with the least possible delay and expense to the requesting party.

(b) A request to inspect public records in the custody of the District need not be in any particular form, but it must describe the records with sufficient specificity to enable the District to identify the information sought. The District may require that a request to inspect be in writing.

(c) A request to inspect public records should be addressed to the Air Pollution Control Officer, Air Pollution Control District of San Diego County, 9150 Chesapeake Drive, San Diego, CA 92123.

(d) The District shall make available the records requested, with the exception of those records specifically exempted from disclosure by state law and those records labelled as "trade secret" which are not emission data, within ten (10) working days, of the date of receipt of the request therefore. If, for good cause, the information cannot be made available within ten (10) working days, the District will notify the requesting person the reasons for the delay and when the information will be available. Those records labelled as "trade secret" shall be governed by the procedure set forth in Subdivision (f) of this rule.

(e) Within five (5) working days of receipt of a request to inspect public records, the District shall advise the requesting person of the following facts when appropriate:

1. The location at which the public records in question may be inspected, and the date of office hours during which they may be inspected.
2. If copies of the public records are requested, the cost of providing such copies, if any.
3. Which of the records requested, if any, have been labelled as "trade secret" and are not public records. In such a case, the District shall give the notice required by Subdivision (g) of this rule.
4. The specific reason why the records cannot be made available, if such is the case. Reasons or unavailability may be, but are not limited to, the following: the records are exempt from disclosure by state law; the records cannot be identified from the information contained in the request; status not determined; the records do not exist; the District has determined pursuant to Section 6255 of the Government Code that on the facts of the particular case the public interest served by not making the record public clearly outweighs the public interest served by disclosure of the records; or the records in question are not in custody of the District. In the latter situation the District shall, if possible, notify the requesting party of the entity most likely to have custody of the records requested.

(f) Only those portions of records in the custody of the District which are not emission data and (1) were labelled "trade secret" prior to the adoption of this regulation, (2) are hereafter specifically labelled as "trade secret" pursuant to Rule 176(b), or (3) are received from a state or other local agency, including an air pollution control district, with a "trade secret" designation, shall be subject to the procedure set forth in the following Subdivision (g) of this rule. All other

portions of such records shall be made available pursuant to Subdivisions (a) through (e) of this rule.

(g) When the District receives a request to inspect any records labelled with a "trade secret" designation which is not emission data, it shall promptly notify the requesting party that such record is designated a trade secret under Rule 176(b), and, if such is the case, under law it cannot be made available. The notification shall contain a copy of the justification of the request for confidentiality, and if the party requesting the record considers the justification inadequate, he may so advise the District in writing, setting forth his reasons.

Upon receipt of such advice, the Air Pollution Control Officer shall (1) promptly review in detail the justification, the challenge to the justification, and the record; (2) determine if the record is in its entirety a trade secret; and (3) promptly notify those persons affected of its decision in writing. If the Air Pollution Control Officer withholds the record from inspection, the person requesting it may seek judicial relief under Section 6528 of the Government Code. If the District determines that the record is in any significant part not a trade secret, the District shall send notice by certified mail, return receipt requested, to the person designating the information as a trade secret, with an additional notice that the record in question shall be released for inspection to the requesting party twenty-one days after receipt of the notice, unless the District is restrained from so doing by a court of competent jurisdiction.

Should the person designating the record as a trade secret seek protection in a court of law, the requesting party may be made a party to the litigation to justify his challenge to the designation.



# SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

## REGULATION XV. FEDERAL CONFORMITY

### RULE 1501. CONFORMITY OF GENERAL FEDERAL ACTIONS

(Adopted 3/7/95; EPA Approval Effective June 22, 1999)

#### **§1551.850 - PROHIBITION**

- a. The purpose of Rule 1501 is to assure that Federal Agencies do not take or support actions which are in any way inconsistent with the efforts of the San Diego Air Pollution Control District (the District) to achieve the National Ambient Air Quality Standards (NAAQS), and that federal agencies do not fail to take advantage of opportunities to assist in the achievement of the NAAQS. Under the Clean Air Act Section 176(c), as amended (42 U.S.C. 7506(c) et. seq.) and regulations under 40 CFR part 51 Subpart W, 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 was 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 was made by the Federal agency responsible for the Federal action by March 15, 1994.
- d. Notwithstanding any provision of Rule 1501, 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.

#### **§1551.851- STATE IMPLEMENTATION PLAN (SIP) REVISION**

- a. The Federal conformity rules under 40 CFR part 51 Subpart W 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. Following EPA approval of the conformity provisions (or a portion thereof) in a revision to the SIP, the approved (or approved portion of the) 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 District's conformity provisions that is not approved by EPA. In addition, any previously applicable SIP requirements relating to conformity remain enforceable until the SIP is revised to specifically remove them from the SIP and that revision is approved by EPA.

#### **§1551.852 - DEFINITIONS**

*Terms used but not defined in this part shall have the meaning given them by the federal Clean Air Act ("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 *National Ambient Air Quality Standard ("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 1551.858,** 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 time frame specified by the program.

**Emissions that a Federal agency has a continuing program responsibility for** means emissions that are specifically caused by an agency carrying out its authorities, and does not include emissions that occur due to subsequent activities, unless such activities are required by the Federal agency. Where an agency, in performing its normal program responsibilities, takes actions itself or imposes conditions that result in air pollutant emissions by a non-Federal entity taking subsequent actions, such emissions are covered by the meaning of a continuing program responsibility.

**EPA** means the United States Environmental Protection Agency.

**Federal action** means any activity engaged in by a department, agency, or instrumentality of the Federal government, or any activity that a department, agency or instrumentality of the Federal government supports in any way, provides financial assistance for, licenses, permits, or approves, other than activities related to transportation plans, programs, and projects developed, funded, or approved under title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.). Where the Federal action is a permit, license, or other approval for some aspect of a non-Federal undertaking, the relevant activity is the part, portion, or phase or the non-Federal undertaking that requires the Federal permit, license, or approval.

**Federal agency** means, for purposes of this rule, a Federal department, agency, or instrumentality of the Federal government.

**Increase the frequency or severity of an existing violation of a 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, including, but not limited to, (i) traffic on or to, or stimulated or accommodated by, a proposed facility which is related to increases or other changes in the scale or timing of operations of such facility; (ii) emissions related to the activities of employees of contractors or Federal employees; (iii) emissions related to employee commutation; (iv) emissions related to the use of Federal facilities under lease or temporary permit; (v) emissions related to the activities of contractors or lease-holders that may be addressed by provisions that are usual and customary for contracts or leases or within the scope of contractual protection of the interests of the United States.

**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. The San Diego Association of Governments is the designated MPO in San Diego County.

**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 (NO<sub>2</sub>), ozone, particulate matter (PM<sub>10</sub>), and sulfur dioxide (SO<sub>2</sub>).

**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<sub>x</sub>), unless an area is exempted from NO<sub>x</sub> requirements under Section 182(f) of the Act, and volatile organic compounds (VOC), and
2. For PM<sub>10</sub>, those pollutants described in the PM<sub>10</sub> nonattainment area applicable SIP as significant contributors to the PM<sub>10</sub> 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.

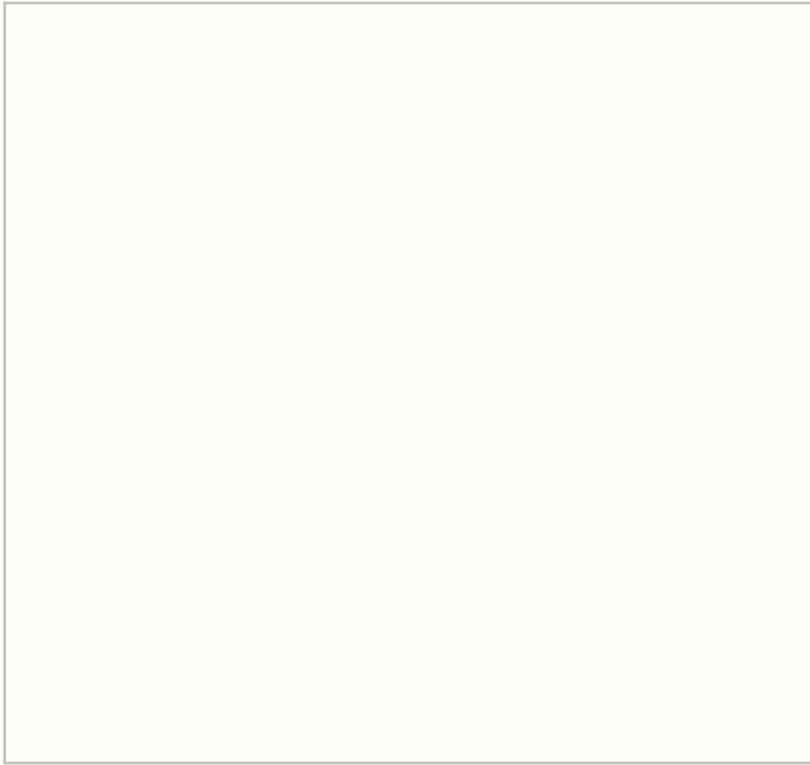
**Regional water and/or wastewater projects** include construction, operation, and maintenance of water or wastewater conveyances, water or wastewater treatment facilities, and water storage reservoirs which affect a large portion of a nonattainment or maintenance area.

**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 1551.853, 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. The segmentation of projects for conformity analyses when emissions are reasonably foreseeable is not permitted.

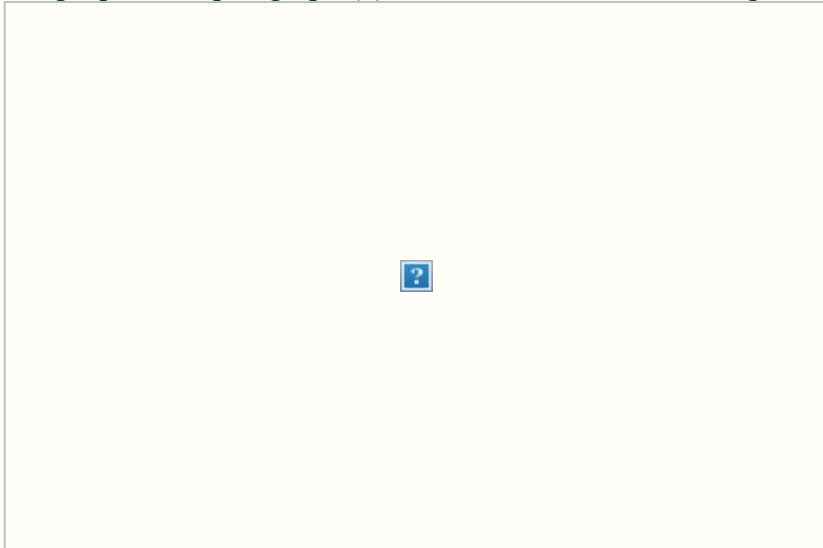
### **§1551.853 - APPLICABILITY**

- 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 Rule 1501.
- 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):



2. For purposes of paragraph (b) of this section, the following rates apply in maintenance areas:



c. The requirements of Rule 1501 shall not apply to:

1. Actions where the total of direct and indirect emissions are below the emissions levels specified in paragraph (b) of this section.
2. The following actions which would result in no emissions increase or an increase in emissions that is clearly de minimis:
  - i. Judicial and legislative proceedings.
  - ii. Continuing and recurring activities such as permit renewals where activities conducted will be similar in scope and operation to activities currently being conducted.
  - iii. Rulemaking and policy development and issuance.
  - iv. Routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails, and facilities.

- v. Civil and criminal enforcement activities, such as investigations, audits, inspections, examinations, prosecutions, and the training of law enforcement personnel.
- vi. Administrative actions such as personnel actions, organizational changes, debt management or collection, cash management, internal agency audits, program budget proposals, and matters relating to the administration and collection of taxes, duties and fees.
- vii. The routine, recurring transportation of materiel and personnel.
- viii. Routine movement of mobile assets, such as ships and aircraft, in home port reassignments and stations (when no new support facilities or personnel are required) to perform as operational groups and/or for repair or overhaul.
- ix. Maintenance dredging and debris disposal where no new depths are required, applicable permits are secured, and disposal will be at an approved disposal site.
- x. Actions, such as the following, with respect to existing structures, properties, facilities and lands where future activities conducted will be similar in scope and operation to activities currently being conducted at the existing structures, properties, facilities, and lands; for example, relocation of personnel, disposition of federally owned existing structures, properties, facilities, and lands, rent subsidies, operation and maintenance cost subsidies, the exercise of receivership or conservatorship authority, assistance in purchasing structures, and the production of coins and currency.
- xi. The granting of leases, licenses such as for exports and trade, permits, and easements where activities conducted will be similar in scope and operation to activities currently being conducted.
- xii. Planning, studies, and provision of technical assistance.
- xiii. Routine operation of facilities, mobile assets and equipment.
- xiv. Transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of the transfer.
- xv. The designation of empowerment zones, enterprise communities, or viticultural areas.
- xvi. Actions by any of the Federal banking agencies or the Federal Reserve Banks, including actions regarding charters, applications, notices, licenses, the supervision or examination of depository institutions or depository institution holding companies, access to the discount window, or the provision of financial services to banking organizations or to any department, agency or instrumentality of the United States.
- xvii. Actions by the Board of Governors of the Federal Reserve System or any Federal Reserve Bank to effect monetary or exchange rate policy.
- xviii. Actions that implement a foreign affairs function of the United States.
- xix. Actions (or portions thereof) associated with transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly after a specific, reasonable condition is met, such as promptly after the land is certified as meeting the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and where the Federal agency does not retain continuing authority to control emissions associated with the lands, facilities, title, or real properties.
- xx. Transfers of real property, including land, facilities, and related personal property from a Federal entity to another Federal entity and assignments of real property, including land, facilities, and related personal property from a Federal entity to another Federal entity for subsequent deeding to eligible applicants.
- xxi. Actions by the Department of the Treasury to effect fiscal policy and to exercise the borrowing authority of the United States.

3. Actions where the emissions are not reasonably foreseeable, such as the following:

- i. Initial Outer Continental Shelf lease sales which are made on a broad scale and are followed by exploration and development plans on a project level.
- ii. Electric power marketing activities that involve the acquisition, sale and transmission of electric energy.

4. Individual Actions which implement a decision to conduct or carry out a program that has been found to conform to the applicable implementation plan, such as prescribed burning actions which are consistent

with a land management plan that has been found to conform to the applicable implementation plan.

- d. Notwithstanding the other requirements of Rule 1501, 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 1551.853(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 1551.853(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 1551.853(d)(2) are exempt from the requirements of Rule 1501 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 Rule 1501, 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, the basis for the presumptions, and the means for obtaining access to documentation of the analysis, assumptions, emission factors, and criteria used as 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 Rule 1501, 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 1551.850 and Sections 1551.855-860 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 1551.850 and Sections 1551.855-860 shall apply for the Federal action.
- k. The provisions of Rule 1501 shall apply in all nonattainment and maintenance areas.

#### **§1551.854 - CONFORMITY ANALYSIS**

Any Federal department, agency, or instrumentality of the Federal government taking an action subject to Rule 1501 must make its own conformity determination consistent with the requirements of Rule 1501. 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.

#### **§1551.855 - REPORTING REQUIREMENTS**

- a. A Federal agency making a conformity determination under Section 1551.858 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 1551.858.

### **§1551.856 - 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 1551.858 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 1551.858 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 1551.858 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 1551.858 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.

### **§1551.857 - 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 1551.855, 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 1551.855.
- 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 1551.853(b), a new conformity determination is required.

### **§1551.858 - CRITERIA FOR DETERMINING CONFORMITY OF GENERAL FEDERAL ACTIONS**

- a. An action required under Section 1551.853 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 1551.853, 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 PM10,
  - 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 the District's attainment or maintenance demonstration after 1990 and the District makes a determination as provided in paragraph (A) or where the District 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 District 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 District 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 California Air Resources Board 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 District commitment

under subparagraph (a)(5)(i)(B) of this paragraph, such a District 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 District 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 1551.859] 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 year that is most representative in terms of the level of activity), if a classification is promulgated in 40 CFR part 81, or
      - 3. The year of the baseline inventory in the PM10 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 1551.859] 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 implementation plan, based on assumptions regarding per capita use that are developed or approved in accordance with Section 1551.859(a).
- b. The areawide and/or local air quality modeling analyses must:
- 1. Meet the requirements in Section 1551.859, 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 Rule 1501 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.

- a. The analyses required under Rule 1501 must be based on the latest planning assumptions.
  1. All current planning assumptions (including, but not limited to, per capita water and sewer use, vehicle miles traveled per capita or per household, trip generation per house-hold, vehicle occupancy, household size, vehicle fleet mix, vehicle ownership, wood stoves per household, and the geographic distribution of population growth) must be derived from the estimates of current and future population, employment, travel, and con-gestion most recently developed 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 Rule 1501 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, or an alternative model approved by EPA for use in California, and available for use in the preparation or revision of SIPs in California 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 three 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 Rule 1501 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 Rule 1501, except Section 1551.858, 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.

## **§1551.860 - MITIGATION OF AIR QUALITY IMPACTS**

- a. Any measures that are intended to mitigate air quality impacts must be identified (including the identification and quantification of all emission reductions claimed) and the process for implementation (including any necessary funding of such measure and the tracking of such emission reductions) 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. Such written commitment shall describe such mitigation measures and the nature of the commitment, in a manner consistent with paragraph (a).
- 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, as provided in paragraph (a) of this section.
- 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 in accordance with Sections 1551.858 and 1551.859, and this section. Any proposed change in the mitigation measures is subject to the reporting requirements of Section 1551.856 and the public participation requirements of Section 1551.857.
- f. Written commitments to mitigation measures must be obtained prior to a positive conformity determination and such commitments must be fulfilled.
- g. After the State SIP is revised to include this rule 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.