AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO

DATE: May 15, 1996

TO: Air Pollution Control Board

SUBJECT: Adoption of Amendments to Rule 2 (Definitions) and Related Rules 19.3, 20.1, 67.0 - 67.5, 67.7, 67.11, 67.12, 67.15 - 67.19, 67.22 and 67.24

SUMMARY:

Rule 2 contains definitions for various terms used in District Rules and Regulations. The main purpose for amending Rule 2 is to include a definition of Volatile Organic Compounds (VOC) and update the Exempt Compound list. Recently, the Environmental Protection Agency added specific methylated siloxanes, parachlorobenzotrifluoride, acetone and perchloroethylene to their Exempt Compound list because of their negligible contribution to ozone (smog) formation. The state Air Resources Board also added these compounds and ethane to its Exempt Compound list pertaining to state regulations. Ethane was previously exempted by the Environmental Protection Agency but not by the Air Resources Board.

The revised Exempt Compound list in Rule 2 includes ethane, specific methylated siloxanes, parachlorobenzotrifluoride, acetone and perchloroethylene. Other District rules regulating volatile organic compound emissions are also being revised to reference the Exempt Compound list in Rule 2.

As a result, local businesses will have greater opportunity to substitute currently used volatile organic compounds and chlorinated solvents that are toxic or stratospheric ozone depleting materials with more benign compounds now being exempted.

Other proposed amendments add new or updated definitions for various terms in the District rules and delete terms no longer used.

A draft Negative Declaration and an Initial Study have been prepared for the proposed amendments to Rule 2 pursuant to the California Environmental Quality Act (CEQA). The Initial Study revealed no substantial evidence that the proposed amendments may have a significant effect on the environment.

Issue

Should the Board adopt amendments to Rule 2 (Definitions) to add a definition of Volatile Organic Compounds (VOC) and update the Exempt Compound list, and amend related Rules 19.3, 20.1, 67.0 - 67.5, 67.7, 67.11, 67.12, 67.15 - 67.19, 67.22 and 67.24 to make them consistent with the revised Exempt Compound list in Rule 2, and make other minor changes?

Recommendation

AIR POLLUTION CONTROL OFFICER

Adopt the resolution amending Rule 2 and related Rules 19.3, 20.1, 67.0 - 67.5, 67.7, 67.11, 67.12, 67.15 - 67.19, 67.22 and 67.24 and make appropriate findings:

(i) of necessity, authority, clarity, consistency, non-duplication and reference as required by Section 40727 of the State Health and Safety Code;

(ii) that the adoption of amendments to Rule 2 and related Rules 19.3, 20.1, 67.0 - 67.5, 67.7, 67.11, 67.12, 67.15 - 67.19, 67.22 and 67.24 will alleviate a problem and will not interfere with attainment of ambient air quality standards (Section 40001 of the State Health and Safety Code);

(iii) that the amendments will not significantly affect air quality or emissions limitations, and that an assessment of socioeconomic impacts is not required (Section 40728.5 of the State Health and Safety Code);

(iv) that an Initial Study was prepared for the proposed amendments to Rule 2 by the District pursuant to the California Environmental Quality Act, and the Initial Study revealed no substantial evidence that the proposed amendments may have a significant effect on the environment;

(v) that a proposed Negative Declaration was prepared for the proposed amendments to Rule 2 pursuant to the California Environmental Quality Act and that public notice and a public review period were provided for the proposed Negative Declaration; that no comments were received during said public review period; and that considering the Initial Study and proposed Negative Declaration and the entire record before the Board, a finding be made by the Board in the exercise of its independent judgment approving the proposed Negative Declaration in that the proposed amendments will not have a significant effect on the environment, and that an Environmental Impact Report need not be prepared;

(vi) that there is no evidence in the record as a whole that the amendments will have an adverse effect on wildlife resources, and on the basis of substantial evidence, the presumption of adverse effect in California Code of Regulations, Title 14, Section 753.5 (c) has been rebutted; and

(vii) approving the Certificate of Fee Exemption for De Minimis Impact Finding exempting the District from payment of fees to the California Department of Fish and Game.

Alternatives

There is no practical alternative to the proposed amendment of the Volatile Organic Compound definition and Exempt Compound list. If the amendment is not made, District rules will be inconsistent with federal and state regulations. Local businesses will have less flexibility to substitute toxic or stratospheric ozone depleting materials with more benign exempt compounds. There will be an adverse impact on affected businesses.

Advisory Statement

The Air Pollution Control District Advisory Committee recommended adopting proposed amendments to Rule 2 and related Rules 19.3, 20.1, 67.0 - 67.5, 67.7, 67.11, 67.12, 67.15 - 67.19, 67.22 and 67.24 at its April 24, 1996 meeting.

Fiscal Impact

Adopting proposed amendments will have no fiscal impact on the District.

BACKGROUND:

San Diego County is classified as a serious non-attainment area for federal and state ozone standards. Volatile organic compounds react in the atmosphere causing ozone (smog). Both federal and state law require the District to control volatile organic compound emissions. The photochemical reactivity of some organic compounds is negligible and they have been exempted from control requirements because they do not participate in significant ozone formation.

The definition of Volatile Organic Compounds and the Exempt Compound list related to federal requirements are promulgated by the Environmental Protection Agency (EPA). Similarly, the state Air Resources Board (ARB) defines Volatile Organic Compounds and an Exempt Compound list related to state regulatory requirements. Recently, the EPA expanded its Exempt Compound list to include specific methylated siloxanes, parachlorobenzotrifluoride, acetone and perchloroethylene.

In response, the ARB also revised its list of Exempt Compounds. It determined that parachlorobenzotrifluoride and acetone both recently exempted by EPA, have low but not negligible photochemically reactivity. It also determined that ethane, previously exempt by EPA but not ARB, had low but not negligible photochemically reactivity. Therefore, ARB added these three compounds to the state Exempt Compound list as a separate group of low-reactive organic compounds.

Rule 2 contains definitions for various terms used in District Rules and Regulations. The primary goal of the proposed amendment to Rule 2 is to include the most current definitions of Volatile Organic Compounds (VOC) and update the Exempt Compound list consistent with the recent federal and state changes. Amending the Exempt Compound list provides an opportunity for businesses using organic solvents to choose different products containing less reactive and less toxic materials. Local paint manufacturers can use exempt materials in their formulations reducing the overall reactivity and toxicity of paints. In addition, businesses using halogenated solvents recently classified as toxic or stratospheric ozone depleting materials can substitute them with the more benign compounds now being exempted.

The proposed amendments also add new or updated definitions for various terms in the District rules and delete terms no longer used.

Finally, the following District rules listing exempt compounds are revised to reference the new Exempt Compound list in Rule 2: Rule 19.3, Rule 20.1, Rules 67.0 - 67.5, Rule 67.7, Rule 67.11, Rule 67.12, Rules 67.15 - 67.19, Rule 67.22 and Rule 67.24.

Section 40728.5 of the State Health and Safety Code requires the District to perform a socioeconomic impact assessment for new and revised rules and regulations significantly affecting air quality or

emission limitations. Adopting the proposed amendments to Rule 2 and related rules will not affect air quality or emissions limitations. Therefore, a socioeconomic impact assessment is not required.

On February 2, 1993, the Air Pollution Control Board directed that, with the exception of a regulation requested by business or a regulation for which a socioeconomic impact assessment is not required, no new or revised regulation shall be implemented unless specifically required by federal or state law. Adopting the proposed amendments to Rule 2 and related Rules is consistent with the Board directive because the amendments are consistent with federal and state requirements and provide greater flexibility to local businesses.

California Environmental Quality Act (CEQA)

The District prepared an Initial Study of the proposed amendments to Rule 2 pursuant to the California Environmental Quality Act to determine whether there is evidence that adopting the amended rule may have a significant effect on the environment. The Initial Study revealed no substantial evidence that the proposed amended rule may have a significant effect on the environment.

On the basis of the Initial Study, the District prepared a proposed Negative Declaration. The District published a Notice of Intent to adopt the proposed Negative Declaration, and solicited comments from the public during a review period. No comments were received.

CEQA requires that the Board review the Initial Study and proposed Negative Declaration and any comments received. The Board can approve the Negative Declaration only if it finds, on the basis of that review, that there is no substantial evidence that the project will have a significant effect on the environment. The Board must also make a finding that the Negative Declaration reflects the Board's independent judgment.

In addition, the District has prepared a Certificate of Fee Exemption for De Minimis Impact Finding pursuant to California Code of Regulations, Title 14, Section 753.5(c). The District will be exempted from payment of fees to the California Department of Fish and Game for reviewing the Negative Declaration if the Board finds after considering the Initial Study and the record as a whole that there is no evidence that adoption of the amended rule will have potential for an adverse effect on wildlife resources or the habitat on which the wildlife depends, and the Boards finds, on the basis of substantial evidence, that the presumption of adverse effect in California Code of Regulations, Title 14, Section 753.5(c) has been rebutted.

A workshop was held on January 25, 1996. The workshop report, the Negative Declaration and the Initial Study are attached.

Concurrence:

GARY R. STEPHANY
Chief Administrative Officer (Acting)

Respectfully submitted,

BY: ROBERT R. COPPER
Deputy Chief Administrative Officer (Acting)

R. J. SOMMERVILLE
Air Pollution Control Officer

SUBJECT: Adoption of Amendments to Rule 2 (Definitions) and Related Rules 19.3, 20.1, 67.0 - 67.5, 67.7, 67.11, 67.12, 67.15 - 67.19, 67.22 and 67.24

4/23/96

COUNTY COUNSEL APPROVAL: Form and Legality [X] Yes [ ] N/A
[ ] Standard Form [ ] Ordinance [X] Resolution

CHIEF FINANCIAL OFFICER/AUDITOR REVIEW: [ ] Yes [X] N/A
4 VOTES: [ ] Yes [X] No

CONTRACT REVIEW PANEL: [ ] Approved _____ [X] N/A

PREVIOUS RELEVANT BOARD ACTION: N/A

BOARD POLICIES APPLICABLE: N/A

CONCURRENCES: N/A

ORIGINATING DEPARTMENT: Air Pollution Control District County of San Diego

CONTACT PERSON: Richard Smith, Deputy Director 750-3303 MS: 0-176

R.J. SOMMERVILLE
DEPARTMENT AUTHORIZED REPRESENTATIVE

MAY 15, 1996
MEETING DATE

RESOLUTION NO. 96-141

WEDNESDAY, MAY 15, 1996

Re Rules and Regulations of the)
Air Pollution Control District)
of San Diego County . . . . .)

RESOLUTION AMENDING RULE 2 AND RELATED RULES 19.3, 20.1, 67.0, 67.1 - 67.5, 67.7, 67.11, 67.12, 67.15 - 67.19, 67.22, AND 67.24 OF REGULATIONS II AND IV OF THE RULES AND REGULATIONS OF THE SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

On motion of Member Horn, seconded by Member Slater the following resolution is adopted:

WHEREAS, the San Diego County Air Pollution Control Board, pursuant to Section 40702 of the Health and Safety Code, adopted Rules and Regulations of the Air Pollution Control District of San Diego County; and

WHEREAS, said Board now desires to amend said Rules and Regulations; and

WHEREAS, notice has been given and a public hearing has been had relating to the amendment of said Rules and Regulations pursuant to Section 40725 of the Health and Safety Code.

NOW THEREFORE IT IS RESOLVED AND ORDERED that the San Diego County Air Pollution Control Board finds that the proposed amendments to Rule 2 and related Rules 19.3, 20.1, 67.0, 67.1 - 67.5, 67.7, 67.11, 67.12, 67.15 - 67.19, 67.22 and 67.24 will not have significant effect on the environment and that an Environmental Impact Report need not be prepared pursuant to the California Environmental Quality Act; and

IT IS FURTHER RESOLVED AND ORDERED by the San Diego County Air Pollution Control Board that the Rules and Regulations of the Air Pollution Control District of San Diego County be and hereby are amended as follows:

1. Rule 2 is amended and reformatted to read as follows:

RULE 2. DEFINITIONS

(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) **"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.

(2) **"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.

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

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

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

(6) **"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.

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

(8) **"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.

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

(10) **"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", E 117° 35' 40";

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

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

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

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

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

(11) **"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.

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

(13) **"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, 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.

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

(15) **"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;

(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.

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

(17) **"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.

(18) **"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 (49)(i) through (49)(v) of this rule.

(19) **"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.

(20) **"Exempt Compounds"** means any of -

(i) the following negligibly photochemically-reactive organic compounds:

methylene chloride (dichloromethane),
perchloroethylene (tetrachloroethylene),
1,1,1-trichloroethane,
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),
1,1,1-trifluoro-2,2-dichloroethane (HCFC-123),
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124),
1,1-dichloro-1-fluoroethane (HCFC-141b),
1-chloro-1,1-difluoroethane (HCFC-142b),
trifluoromethane (HFC-23),
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),
cyclic, branched, or linear completely methylated siloxanes (VMS),

the following four classes of perfluorocarbon (PFC) compounds:

(A) cyclic, branched, or linear, completely fluorinated alkanes,

(B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations,

(C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations, and

(D) sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine,

(ii) the following low photochemically-reactive organic compounds:

acetone,
ethane,
1-chloro-4-trifluoromethyl benzene (parachlorobenzotrifluoride, PCBTF).

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

(22) **"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).

(23) **"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)(48).

(24) **"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:

Air Contaminant	Emission Rate (tons/year)
Particulate Matter (PM_{10})	100
Oxides of Nitrogen(NO_X)	50
Volatile Organic Compounds (VOC)	50
Oxides of Sulfur (SO_X)	100
Carbon Monoxide (CO)	100
Lead (Pb)	100

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

(26) **"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.

(27) **"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).

(28) **"NO_X"** means the sum of all oxides of nitrogen, except for nitrous oxide, collectively expressed as nitrogen dioxide.

(29) **"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.

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

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

(32) **"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.

(33) **"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.

(34) **"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.

(35) **"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.

(36) **"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 charged are part of the process weight, but liquid and gaseous fuels and combustion air are not.

(37) **"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.

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

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

(40) **"SO_x"** means the sum of all oxides of sulfur, collectively expressed as sulfur dioxide.

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

(42) **"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.

(43) **"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.

(44) **"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.

(45) **"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).

(46) **"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.

(47) **"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:

$$C_cvoc = \frac{(W_s - W_w - W_{es})}{(V_m - V_w - V_{es})}$$

where:

C_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_{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

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

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

where:

$C_{m}voc$ = 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

(49) **"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.

2. Proposed amendment to Rule 19.3 Subsection (b)(6) is to read as follows:

RULE 19.3. EMISSION INFORMATION

(b) **DEFINITIONS**

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

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

3. Proposed amendment to Rule 20.1 Subsection (c)(64) is to read as follows:

RULE 20.1. NEW SOURCE REVIEW - GENERAL PROVISIONS

(c) **DEFINITONS**

For purposes of Rules 20.1, 20.2, 20.3, 20.4, 20.5, 20.9 and 20.10, the following defintions shall apply:

(64) **"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. Exempt compounds means the same as defined in Rule 2.

4. Proposed amendments to Rule 67.0 Subsections (c)(8) and (c)(39) are to read as follows:

RULE 67.0. ARCHITECTURAL COATINGS

(c) **DEFINITIONS**

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

(39) **"Volatile Organic Compound (VOC)"** means any compound of carbon which may be emitted to the atmosphere during the application of or subsequent drying or curing of coatings subject to this rule, except methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate and exempt compounds. VOC content of coatings is expressed in grams of VOC per liter of coating, as applied, less water and less exempt compounds.

5. Proposed amendment to Rule 67.1 Subsection (b)(4) is to read as follows:

RULE 67.1. ALTERNATIVE EMISSION CONTROL PLANS

(b) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

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

6. Proposed amendment to Rule 67.2 Subsection (c)(2) is to read as follows:

RULE 67.2. DRY CLEANING EQUIPMENT USING PETROLEUM BASED SOLVENT

(c) **DEFINITIONS**

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

7. Proposed amendment to Rule 67.3 Subsection (c)(11) is to read as follows:

RULE 67.3. METAL PARTS AND PRODUCTS COATING OPERATIONS

(c) **DEFINITIONS**

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

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

8. Proposed amendment to Rule 67.4 Subsection (c)(9) is to read as follows:

RULE 67.4. METAL CONTAINER, METAL CLOSURE AND METAL COIL COATING OPERATIONS

(c) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

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

9. Proposed amendment to Rule 67.5 Subsection (c)(3) is to read as follows:

RULE 67.5. PAPER, FILM AND FABRIC COATING OPERATIONS

(c) **DEFINITIONS**

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

10. Proposed amendment to Rule 67.7 Subsection (c)(5) is to read as follows:

RULE 67.7. CUTBACK AND EMULSIFIED ASPHALTS

(c) **DEFINITIONS**

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

11. Proposed amendment to Rule 67.11 Subsection (c)(9) is to read as follows:

RULE 67.11. WOOD PRODUCTS COATING OPERATIONS

(c) **DEFINITIONS**

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

12. Proposed amendment to Rule 67.12 Subsection (c)(9) is to read as follows:

RULE 67.12. POLYESTER RESIN OPERATIONS

(c) **DEFINITIONS**

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

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

13. Proposed amendments to Rule 67.15: adding Subsection (c)(3), renumbering subsequent subsections and amending Subsection (c)(9), are to read as follows:

RULE 67.15. PHARMACEUTICAL AND COSMETIC MANUFACTURING OPERATONS

(c) DEFINITIONS

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.

(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.

14. Proposed amendment to Rule 67.16 Subsection (c)(2) is to read as follows:

RULE 67.16. GRAPHIC ARTS OPERATIONS

(c) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

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

15. Proposed amendment to Rule 67.17 Subsection (c)(6) is to read as follows:

RULE 67.17. STORAGE OF MATERIALS CONTAINING VOLATILE ORGANIC COMPOUNDS

(c) **DEFINITIONS**

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

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

16. Proposed amendment to Rule 67.18 Subsection (c)(8) is to read as follows:

RULE 67.18. MARINE COATING OPERATIONS

(c) **DEFINITIONS**

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

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

17. Proposed amendment to Rule 67.19 Subsection (c)(2) is to read as follows:

RULE 67.19. COATINGS AND PRINTING INKS MANUFCTURING OPERATIONS

(c) **DEFINITIONS**

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

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

18. Proposed amendment to Rule 67.22 Subsection (c)(2) is to read as follows:

RULE 67.22. EXPANDABLE POLYESTER FOAM PRODUCTS MANUFACTURING OPERATIONS

(c) **DEFINITIONS**

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

19. Proposed amendment to Rule 67.24 Subsection (c)(4) is to read as follows:

RULE 67.24. BAKERY OVENS

(c) **DEFINITIONS**

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

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

IT IS FURTHER RESOLVED AND ORDERED that the subject amendments to Rules 2, 19.3 and 20.1 of Regulation II, and Rules 67.0, 67.1 - 67.5, 67.7, 67.11, 67.12, 67.15 - 67.19, 67.22 and 24 of Regulation IV, shall take effect upon adoption.

PASSED AND ADOPTED by the Air Pollution Control Board of the San Diego County Air Pollution Control District, State of California, this 15th day of May, 1996 by the following votes:

AYES: Cox, Jacob, Slater, Roberts, Horn
NOES: None
ABSENT: None

5/15/96 (APCB 2)

APPROVED AS TO FORM AND LEGALITY
COUNTY COUNSEL
BY L. Dutton
DEPUTY

STATE OF CALIFORNIA)ss
County of San Diego)

I hereby certify that the foregoing is a full, true, and correct copy of the Original Resolution which is now on file in my office.

ARLINE S. HULTSCH
Assistant Clerk of the Air Pollution Control Board

By L. Monteleone
Lorena Loaiza Monteleone, Deputy

Resolution No. 96-141
5/15/96 (APCB 2)

AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO

PROPOSED AMENDMENTS TO RULE 2 AND RELATED RULES 19.3, 20.1, 67.0, 67.1 - 67.5, 67.7, 67.11, 67.12, 67.15 - 67.19, 67.22, AND 67.24

CHANGE COPY

1. Rule 2 is amended and reformatted to read as follows:

RULE 2. DEFINITIONS

(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.

~~(a)~~(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**

~~(aa)~~(1) **"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.

~~(j)~~(2) **"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, ~~includes~~ smoke, ~~charred paper,~~ dust, soot, ~~grime,~~ carbon, noxious acids and gases, fumes, ~~gases,~~ odors, ~~or particulate matter,~~ or any combination thereof.

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

~~(d)~~(4) **"Air Pollution Control Officer (APCO)"** means the Air Pollution Control Officer of the San Diego County Air Pollution Control District ~~of San Diego County~~.

~~(z)~~(5) **"Application Station"** means a booth, a room, a designated area, a point in an operation, or a location ~~or locations~~ on a process line where, at any given time, a material ~~of the same composition~~ is applied.

~~(p)~~(6) **"Atmosphere"** means the air that ~~envelopes or~~ surrounds the earth. Where air pollutants are emitted into a building not designed specifically as a piece of air pollution control equipment, such emissions into the building shall be considered ~~an~~ emissions into the atmosphere.

~~(e) "Board" means the Air Pollution Control Board of the Air Pollution Control District of San Diego County.~~

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

(8) **"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.

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

(10) **"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", E 117° 35' 40";

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

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

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

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

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

~~(e)~~(11) **"Combustion Particulates"** ~~are~~ means particulate matter discharged into the atmosphere from the burning of any kind of material containing carbon in a free or combined state.

~~(g)~~(12) **"Combustible Refuse"** ~~is~~ means any solid or liquid combustible waste material containing carbon in a free or combined state.

~~(w) **"Compliance Schedule"** means a statement of dates when various steps are to be taken to bring a source of air contaminants into compliance with emission standards and shall include, to the extent feasible, the following: (Effective 3/10/77)~~

~~(1) The date of submittal of the final plan for the control of emissions of air contaminants from the source.~~

~~(2) The date by which contracts for emission control systems or process modifications will be awarded, or the date by which orders will be issued for the purchase of component parts to accomplish emission control or process modification.~~

~~(3) The date of initiation of on-site construction or installation of emission control equipment or process change.~~

~~(4) The date by which on-site construction or installation of emission control equipment or process modification is to be completed.~~

~~(5) The date by which final compliance is to be achieved.~~

~~(6) Such other dates by which other appropriate and necessary steps shall be taken to permit close and effective supervision of progress toward timely compliance.~~

~~(n) "Condensed Fumes" are minute solid particles generated by the condensation of vapors from solid matter after volatilization from the molten state, or may be generated by sublimation, distillation, calcination, or chemical reaction, when these processes create airborne particles.~~

(13) **"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, 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.

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

~~(t)~~(15) ~~The~~ **"Desert Portion"** ~~of San Diego County is defined for the purposes of these Rules and Regulations as all of~~ means that part of San Diego County, State of California, lying east of the following described line:

~~(1)~~(i) Beginning at the United States-Mexico International boundary ~~border~~ 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 ~~southeast corner of~~ township line common to Township 16 South~~, Range 6 East~~ 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;

~~(2)~~(iv) thence west along the township line common to Township 16 South and Township 17 South to the point of intersection with the ~~southwest corner of Township 16 South,~~ range line common to Range 6 East and Range 5 East;

~~(3)~~(v) thence north along the range line common to Range 6 East and Range 5 East to the point of intersection with the ~~southeast corner of~~ township line common to Township 14 South~~, Range 5 East~~ and Township 15 South;

~~(4)~~(vi) thence west along the township line common to Township 14 South and Township 15 South to the point of intersection with the ~~East~~ boundary of the Rancho Cuyamaca Land Grant ~~Park~~;

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

~~(6)~~(viii) thence north along ~~this~~ 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;

~~(7) thence east and north along the land grant boundary to the eastern most corner;~~

~~(8)~~(ix) thence ~~continuing west and north~~ 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;

~~(9)~~(x) thence north along ~~this~~ 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 ~~to~~ South and Township 9 South;

~~(10)~~(xi) thence west along ~~this~~ 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;

~~(11)~~(xii) thence north along ~~this~~ the range line common to Range 4 East and Range 3 East to the San Diego-Riverside County boundary.

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

~~(m)~~(17) **"Dusts"** ~~are~~ means minute solid particles released into the air by natural forces or by mechanical processes ~~such as~~ including, but not limited to: crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, and sweeping~~, etc~~.

(18) **"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 (49)(i) through (49)(vi) of this rule.

(19) **"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.

(20) **"Exempt Compounds"** means any of -

(i) the following negligibly photochemically-reactive compounds:

methylene chloride (dichloromethane),
perchloroethylene (tetrachloroethylene),
1,1,1-trichloroethane,
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),
1,1,1-trifluoro-2,2-dichloroethane (HCFC-123),
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124),
1,1-dichloro-1-fluoroethane (HCFC-141b),
1-chloro-1,1-difluoroethane (HCFC-142b),
trifluoromethane (HFC-23),
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),
cyclic, branched, or linear completely methylated siloxanes (VMS),

the following four classes of perfluorocarbon (PFC) compounds:

(A) cyclic, branched, or linear, completely fluorinated alkanes,

(B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations,

(C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations, and

(D) sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine,

(ii) the following low photochemically-reactive organic compounds:

acetone,
ethane,
1-chloro-4-trifluoromethyl benzene (parachlorobenzotrifluoride, PCBTF).

~~(e)~~(21) **"Hearing Board"** means the Hearing Board of the San Diego County Air Pollution Control District ~~of San Diego County~~.

~~(bb)~~(22) **"ISO Standard Day Conditions"** means atmospheric conditions at a temperature of 59°F (15°C), ~~degrees Fahrenheit (15 degrees Centigrade),~~ 60 percent relative humidity, and an atmospheric pressure of 14.70 pounds per square inch, absolute (~~29.92 inches [~~760 mm Hg~~] of mercury~~).

(23) . **"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)(48).

(24) **"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:

Air Contaminant	Emission Rate (tons/year)
Particulate Matter (PM_{10})	100
Oxides of Nitrogen(NO_x)	50
Volatile Organic Compounds (VOC)	50
Oxides of Sulfur (SO_x)	100
Carbon Monoxide (CO)	100
Lead (Pb)	100

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

~~(r)~~(26) **"Multiple-Chamber Incinerator"** ~~is~~ 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 ~~the method described in the American Society for Testing Materials,~~ ASTM Method C-24.

(27) **"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).

(28) **"NO_x"** means the sum of all oxides of nitrogen, except for nitrous oxide, collectively expressed as nitrogen dioxide.

~~(s)~~(29) **"Orchard or Citrus Grove Heater"** means any article, machine, bowl burner or contrivance, which is designed for, used, maintained or capable of being used ~~to~~ for burning any kind of fuel ~~capable of emitting air contaminants~~ for frost protection of orchards, citrus groves or plant nurseries in areas that are not completely enclosed. ~~The word "orchard" includes orchards or plant nurseries.~~

~~(k)~~(30) **"Particulate Matter"** ~~is~~ means any finely divided material which exists as a solid or liquid at standard conditions, excluding uncombined water. ~~any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions. This definition shall not apply to sources covered by Regulation X, Standards of Performance for New Stationary Sources.~~

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

~~(b)~~(32) **"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.

~~(v)~~(33) **"Portable Equipment"** means any articles, machines, equipment or other contrivances that ~~are~~ is routinely moved from one location to another in order to perform ~~their~~ its function.

~~(x)~~(34) **"Process"** ~~is~~ 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 ~~the~~ manufacture ~~of~~ a product.

~~(y)~~(35) **"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.

~~(t)~~(36) **"Process Weight"** ~~is~~ 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 charged ~~will be~~ are ~~considered as~~ part of the process weight, but liquid and gaseous fuels and combustion air ~~will~~ are not. ~~"The Process Weight Per Hour" will be 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.~~

(37) **"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.

~~(h)~~(38) **"Regulation"** means one of the major subdivisions contained within the Rules and Regulations ~~of the rules~~ of the Air Pollution Control District of San Diego County.

~~(g)~~(39) **"Rule"** means any rule contained within the Rules and Regulations of the Air Pollution Control District of San Diego County.

~~(f) "Section" means a section of the Health and Safety Code of the State of California unless some other statute is specifically mentioned.~~

~~(u) "Source", "any source", "any single source", and "any source whatsoever" as used in these Rules and Regulations has the same meaning as "non-vehicular sources" as defined in Section 39043 of the Health and Safety Code.~~

(40) **"SO_x"** means the sum of all oxides of sulfur, collectively expressed as sulfur dioxide.

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

(42) **"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.

(43) **"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.

(44) **"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.

(45) **"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).

(46) **"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.

(47) **"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:

$$C_{c}voc = \frac{(W_s - W_w - W_{es})}{(V_m - V_w - V_{es})}$$

where:

$C_{c}voc$	=	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_{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

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

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

where:

$C_{m}voc$	=	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

~~(i)~~(49) **"Western Section of the Air Pollution Control District of San Diego County"** ~~is defined as~~ means all of that portion of San Diego County, State of California, lying west~~erly~~ of the following described line:

~~(1)~~(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 ~~Northwest of Township 9 South, 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,

~~(2) thence running southerly along the West line of said township to the South line thereof;~~

~~(3)~~(ii) thence east~~erly~~ along the township line common to Township 9 South and Township 10 South ~~said South line~~ to the point of intersection with the range line ~~between~~ common to Range 1 West and Range 1 East;

~~(4)~~(iii) thence southerly along ~~said~~ the range line common to Range 1 West and Range 1 East to the point of intersection with the township line ~~between~~ common to Township 11 South and Township 12 South;

~~(5)~~(iv) thence easterly along ~~said~~ the township line common to Township 11 South and Township 12 South to the point of intersection with the range line ~~between~~ common to Range 1 East and Range 2 East;

~~(6)~~(v) thence southerly along ~~said~~ the range line common to Range 1 East and Range 2 East to the point of intersection with the United States-Mexico International boundary ~~between the United States of America and Mexico~~.

~~That portion of San Diego County lying easterly of the above described line shall be known as "Eastern Section of Air Pollution Control District of San Diego County".~~

2. Proposed amendment to Rule 19.3 Subsection (b)(6) is to read as follows:

RULE 19.3. EMISSION INFORMATION

(b) **DEFINITIONS**

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

(6) **"Exempt Compound~~s~~"** means the same as defined in Rule 2.

~~any of the following compounds: methylene chloride; 1,1,1-trichloroethane; trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22), trifluoromethane (HFC-23); trichlorotrifluoroethane (CFC-113); dichlorotetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); dichlorotrifluoroethane (HCFC-123); tetrafluoroethane (HFC-134a); dichlorofluoroethane (HCFC-141b); chlorodifluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); and the following four classes of perfluorocarbon (PFC) compounds:~~

~~(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.~~

3. Proposed amendment to Rule 20.1 Subsection (c)(64) is to read as follows:

RULE 20.1. NEW SOURCE REVIEW - GENERAL PROVISIONS

(c) **DEFINITIONS**

For purposes of Rules 20.1, 20.2, 20.3, 20.4, 20.5, 20.9 and 20.10, the following defintions shall apply:

(64) "**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. Exempt compounds means the same as defined in Rule 2. ~~any of the compounds listed in Table 20.1 – 14:~~

~~**TABLE 20.1 - 14**~~
~~**Exempt Compounds**~~

~~Chlorodifluoromethane (HCFC-22)~~
~~1,1,1-Trifluoro - 2,2 dichloroethane (HCFC-123)~~
~~2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)~~
~~Pentafluoroethane (HFC-125)~~
~~1,1,2,2-Tetrafluoroethane (HFC-134)~~
~~1,1,1,2-Tetrafluoroethane (HFC-134a)~~
~~1,1-Dichloro-1-fluoroethane (HCFC-141b)~~
~~1-Chloro-1,1-difluoroethane (HCFC-142b)~~
~~1,1,1-Trifluoroethane (HFC-143a)~~
~~1,1-Difluoroethane (HFC-152a)~~
~~Perfluorocarbon compounds which fall into these classes:~~
- ~~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, and~~
- ~~Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine~~

~~Methylene chloride~~
~~1,1,1-Trichloroethane~~
~~Trifluoromethane (HFC-23)~~
~~Trichlorofluoromethane (CFC-11)~~
~~Dichlorodifluoromethane (CFC-12)~~
~~1,1,1-Trichloro-2,2,2,-trifluoroethane (CFC-113)~~
~~1,2,-Dichloro-1,1,2,2-tetrafluoroethane (CFC-114)~~
~~Chloropentafluoroethane (CFC-115)~~

4. Proposed amendments to Rule 67.0 Subsections (c)(8) and (c)(39) are to read as follows:

RULE 67.0. ARCHITECTURAL COATINGS

(c) **DEFINITIONS**

(8) **"Exempt Compounds ~~Solvent~~"** means the same as defined in Rule 2.

~~a compound excepted under the definition of "Volatile Organic Compounds," Subsection (c)(38).~~

(39) **"Volatile Organic Compound (VOC)"** means any compound of carbon which may be emitted to the atmosphere during the application of or subsequent drying or curing of coatings subject to this rule, except methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate and exempt compounds. ~~, 1,1,1-trichloroethane, methylene chloride, trichlorofluoromethane, (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (HCFC-22), trifluoromethane (HCFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b, tetrafluoroethane (HFC-134a), and chlorodifluoroethane (HCFC-142b).~~ VOC content of coatings is expressed in grams of VOC per liter of coating, as applied, less water and less exempt compounds.

5. Proposed amendment to Rule 67.1 Subsection (b)(4) is to read as follows:

RULE 67.1. ALTERNATIVE EMISSION CONTROL PLANS

(b) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

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

~~any of the following compounds: methylene chloride, 1 ,1,1-trichloroethane, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (FC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), tetrafluoroethane (HFC-134a), dichlorofluoroethane (HCFC-141b), and chlorodifluoroethane (HCFC-142b).~~

6. Proposed amendment to Rule 67.2 Subsection (c)(2) is to read as follows:

RULE 67.2. DRY CLEANING EQUIPMENT USING PETROLEUM BASED SOLVENT

(c) **DEFINITIONS**

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

~~is any of the following compounds: methylene chloride, 1,1,1-trichloroethane, trichlorofluoromethane (CFC-11), dichlorodifluoro-methane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (FC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropenta-fluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), tetrafluoroethane (HFC-134a), dichlorofluoroethane (HCFC-141b), and chlorodifluoroethane (HCFC-142b).~~

7. Proposed amendment to Rule 67.3 Subsection (c)(11) is to read as follows:

RULE 67.3. METAL PARTS AND PRODUCTS COATING OPERATIONS

(c) **DEFINITIONS**

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

(11) **"Exempt Compound<u>s</u>"** means <u>the same as defined in Rule 2.</u>

~~any of the following compounds or classes of compounds: 1,1,1-trichloroethane, methylene chloride (dichloromethane), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trifluoromethane (HFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), chlorodifluoromethane (HCFC-22), dichlorotrifluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b), 1,1,1,2-tetrafluoroethane (HFC-134a), 1,1,2,2-tetrafluoroethane (HFC-134), chlorodifluoroethane (HCFC-142b), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), and the following four classes of perfluorocarbon (PFC) compounds:~~

~~(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.~~

8. Proposed amendment to Rule 67.4 Subsection (c)(9) is to read as follows:

RULE 67.4. METAL CONTAINER, METAL CLOSURE AND METAL COIL COATING OPERATIONS

(c) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

(9) **"Exempt Compound<u>s</u>"** means <u>the same as defined in Rule 2.</u> ~~any of~~ –

(i) the following compounds:

1,1,1-trichloroethane,
methylene chloride, (dichloromethane),
trichlorofluoromethane (CFC-11),
dichlorodifluoromethane (CFC-12),
trifluoromethane (HFC-23),
trichlorotrifluoroethane (CFC-113),
dichlorotetrafluoroethane (CFC-114),
chloropentafluoroethane (CFC-115),
chlorodifluoromethane (HCFC-22),
dichlorotrifluoroethane (HCFC-123),
dichlorofluoroethane (HCFC-141b),
1,1,1,2-tetrafluoroethane (HFC-134a),
1,1,2,2-tetrafluoroethane (HFC-134),
chlorodifluoroethane (HCFC-142b),
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124),
pentafluoroethane (HFC-125),
1,1,1-trifluoroethane (HFC-143a),
1,1-difluoroethane (HFC-152a),

(ii) the following linear volatile methyl siloxane (VMS) compounds:

hexamethyldisiloxane (MM),
octamethyltrisiloxane (MDM),
decamethyltetrasiloxane (MD_2M),
dodecamethylpentasiloxane (MD_3M),
tetradecamethylhexasiloxane (MD_4M),
dimethyl silicones and siloxanes (MD_xM),

(iii) the following cyclic volatile methyl siloxane (VMS) compounds:

hexamethylcyclotrisiloxane (D_3),
octamethylcyclotetrasiloxane (D_4),
decamethylcyclopentasiloxane (D_5),
dodecamethylcyclohexasiloxane (D_6),
cyclopolydimethylsiloxanes (D_x),

(iv) the following branched volatile methyl siloxane (VMS) compounds:

1,1,1,3,5,5,5-heptamethyl-3-[(trimethylsilyl)oxyl]-trisiloxane (M_3T),
1,1,1,5,5,5-hexamethyl-3,3,bis[(trimethylsilyl)oxy]-trisiloxane (M_4Q),
pentamethyl[(trimethylsilyl)oxy]cyclotrisiloxane (MD_3),

(v) and the following 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; and

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

9. Proposed amendment to Rule 67.5 Subsection (c)(3) is to read as follows:

RULE 67.5. PAPER, FILM AND FABRIC COATING OPERATIONS

(c) **DEFINITIONS**

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

~~is any of the following compounds: 1,1,1-trichloroethane, methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trifluoromethane (FC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), chlorodifluoromethane (HCFC-22), dichlorotrifluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b), tetrafluoroethane (HFC-134a), and chlorodifluoroethane (HCFC-142b).~~

10. Proposed amendment to Rule 67.7 Subsection (c)(5) is to read as follows:

RULE 67.7. CUTBACK AND EMULSIFIED ASPHALTS

(c) **DEFINITIONS**

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

~~is any of the following compounds: methylene chloride, 1,1,1-trichloroethane, trichlorofluoromethane (CFC-11), dichlorodifluoro-methane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (FC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropenta-fluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), tetrafluoroethane (HFC-134a), dichlorofluoroethane (HCFC-141b), and chlorodifluoroethane (HCFC-142b).~~

11. Proposed amendment to Rule 67.11 Subsection (c)(9) is to read as follows:

RULE 67.11. WOOD PRODUCTS COATING OPERATIONS

(9) **"Exempt Compounds"** means the same as defined in Rule 2. ~~any of—~~

~~(i) the following compounds:~~

~~1,1,1-trichloroethane,~~
~~methylene chloride, (dichloromethane),~~
~~trichlorofluoromethane (CFC-11),~~
~~dichlorodifluoromethane (CFC-12),~~
~~trifluoromethane (HFC-23),~~
~~trichlorotrifluoroethane (CFC-113),~~
~~dichlorotetrafluoroethane (CFC-114),~~
~~chloropentafluoroethane (CFC-115),~~
~~chlorodifluoromethane (HCFC-22),~~
~~dichlorotrifluoroethane (HCFC-123),~~
~~dichlorofluoroethane (HCFC-141b),~~
~~1,1,1,2-tetrafluoroethane (HFC-134a),~~

~~1,1,2,2-tetrafluoroethane (HFC-134),~~
~~chlorodifluoroethane (HCFC-142b),~~
~~2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124),~~
~~pentafluoroethane (HFC-125),~~
~~1,1,1-trifluoroethane (HFC-143a),~~
~~1,1-difluoroethane (HFC-152a),~~

~~(ii) the following linear volatile methyl siloxane (VMS) compounds:~~

~~hexamethyldisiloxane (MM),~~
~~octamethyltrisiloxane (MDM),~~
~~decamethyltetrasiloxane (MD_2M),~~
~~dodecamethylpentasiloxane (MD_3M),~~
~~etradecamethylhexasiloxane (MD_4M),~~
~~dimethyl silicones and siloxanes (MD_xM),~~

~~(iii) the following cyclic volatile methyl siloxane (VMS) compounds:~~
~~hexamethylcyclotrisiloxane (D_3),~~
~~octamethylcyclotetrasiloxane (D_4),~~
~~ecamethylcyclopentasiloxane (D_5),~~
~~dodecamethylcyclohexasiloxane (D_6),~~
~~cyclopolydimethylsiloxanes (D_x),~~

~~(iv) the following branched volatile methyl siloxane (VMS) compounds:~~
~~1,1,1,3,5,5,5-heptamethyl-3-[(trimethylsilyl)oxyl]-trisiloxane (M_3T),~~
~~1,1,1,5,5,5-hexamethyl-3,3,bis[(trimethylsilyl)oxy]-trisiloxane (M_4Q),~~
~~pentamethyl[(trimethylsilyl)oxy]cyclotrisiloxane (MD_3),~~

~~(v) the following 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, and~~
~~sulfur containing perfluorocarbons with no unsaturations and with sulfurbonds only to carbon and fluorine.~~

12. Proposed amendment to Rule 67.12 Subsection (c)(9) is to read as follows:

RULE 67.12. POLYESTER RESIN OPERATIONS

(c) **DEFINITIONS**

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

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

~~any of the following compounds or classes of compounds: 1,1,1-trichloroethane, methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (HCFC-22), trifluoromethane (HFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b), tetrafluoroethane (HFC-134 and HFC-134a, both isomers), chlorodifluoroethane (HCFC-142b),~~

~~chlorotetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), trifluoroethane (HFC-143a), difluoroethane (HFC-152a); and the following four classes of perfluorocarbon (PFC) compounds:~~

~~(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.~~

13. Proposed amendments to Rule 67.15: adding Subsection (c)(3), renumbering subsequent subsections and amending Subsection (c)(9), are to read as follows:

RULE 67.15. PHARMACEUTICAL AND COSMETIC MANUFACTURING OPERATIONS

(c) **DEFINITIONS**

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.

~~(3)~~(4) **"Fugitive Liquid Leak"** means a visible leak of liquid, containing VOC, at a rate in excess of three drops per minute.

~~(4)~~(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.

~~(5)~~(6) **"Pharmaceutical Manufacturing Plant"** means any plant producing or blending chemicals for use in pharmaceutical products and/or manufacturing pharmaceutical products by chemical processes.

~~(6)~~(7) **"Pharmaceutical Products"** means any substances resulting from preparing, preserving or compounding of medicinal drugs, vitamins or other materials used to enhance personal health.

~~(7)~~(8) **"Process Tanks"** means containers used for mixing, blending, folding, crystallizing or cleaning operations in the manufacture of pharmaceuticals and/or cosmetics.

~~(8)~~(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, ~~and~~ metallic carbonates, and exempt compounds ~~methylene chloride, 1,1,1-trichloroethane, trichloroflu-oromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodi-fluoromethane (CFC-22), trifluoromethane (FC-23), trichlorotrifluoroethane (CFC-113), dichlorotetra-fluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotri-fluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b), tetrafluoroethane (HFC-134a), and chlorodifluoroethane (HCFC-142b)~~ 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.

14. Proposed amendment to Rule 67.16 Subsection (c)(2) is to read as follows:

RULE 67.16. GRAPHIC ARTS OPERATIONS

(c) **DEFINITIONS**

For the purpose of this rule the following definitions shall apply:

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

~~any of the following compounds or classes of compounds: 1,1,1-trichloroethane, methy-lene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trifluoromethane (HFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), chlorodifluoromethane (HCFC-22), dichlorotrifluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b), 1,1,1,2-tetrafluoroethane (HFC-134a), 1,1,2,2-tetrafluoroethane (HFC-134), chlorodifluoroethane (HCFC-142b), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), and the following four classes of perfluorocarbon (PFC) compounds:~~

~~(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.~~

15. Proposed amendment to Rule 67.17 Subsection (c)(6) is to read as follows:

RULE 67.17. STORAGE OF MATERIALS CONTAINING VOLATILE ORGANIC COMPOUNDS

(c) **DEFINITIONS**

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

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

~~any of the following compounds or classes of compounds: methylene chloride, 1,1,1-trichloroethane, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (HCFC-22), trifluoromethane (HFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), tetrafluoroethane (HFC-134a), dichlorofluoroethane (HCFC-141b), chlorodifluoroethane (HCFC-142b), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,2,2-tetrafluoroethane (HFC-134), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a); and the following four classes of perfluorocarbon (PFC) compounds:~~

~~(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.~~

16. Proposed amendment to Rule 67.18 Subsection (c)(8) is to read as follows:

RULE 67.18. MARINE COATING OPERATIONS

(c) **DEFINITIONS**

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

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

~~any of the following compounds or classes of compounds: 1,1,1-trichloroethane, methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (HCFC-22), trifluoromethane (HFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b), 1,1,1,2-tetrafluoroethane (HFC-134a), 1,1,2,2-tetrafluoroethane (HFC-134), chlorodifluoroethane (HCFC-142b), 2-chloro-1,1,1,2-chlorotetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a); and the following four classes of perfluorocarbon (PFC) compounds:~~

~~(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.~~

17. Proposed amendment to Rule 67.19 Subsection (c)(2) is to read as follows:

RULE 67.19. COATINGS AND PRINTING INKS MANUFCTURING OPERATIONS

(c) **DEFINITIONS**

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

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

~~any of the following compounds or classes of compounds: 1,1,1-trichloroethane, methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trifluoromethane (HFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), chlorodifluoromethane (HCFC-22), dichlorotrifluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b), 1,1,1,2-tetrafluoroethane (HFC-134a), 1,1,2,2-tetrafluoroethane (HFC-134), chlorodifluoroethane (HCFC-142b), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), and the following four classes of perfluorocarbon (PFC) compounds:~~

~~(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.~~

18. Proposed amendment to Rule 67.22 Subsection (c)(2) is to read as follows:

RULE 67.22. EXPANDABLE POLYESTER FOAM PRODUCTS MANUFACTURING OPERATIONS

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

~~any of the following compounds or classes of compounds: 1,1,1-trichloroethane, methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trifluoromethane (HFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane~~

~~(CFC-114), chloropentafluoroethane (CFC-115), chlorodifluoromethane (HCFC-22), dichlorotrifluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b), 1,1,1,2-tetrafluoroethane (HFC-134a), 1,1,2,2-tetrafluoroethane (HFC-134), chlorodifluoroethane (HCFC-142b), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), and the following four classes of perfluorocarbon (PFC) compounds:~~

~~(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.~~

19. Proposed amendment to Rule 67.24 Subsection (c)(4) is to read as follows:

RULE 67.24. BAKERY OVENS

(c) **DEFINITIONS**

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

(4) **"Exempt Compound<u>s</u>"** means <u>the same as defined in Rule 2.</u>

~~any of the following compounds or classes of compounds: 1,1,1-trichloroethane, methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), trifluoromethane (HFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), chlorodifluoromethane (HCFC-22), dichlorotrifluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b), 1,1,1,2-tetrafluoroethane (HFC-134a), 1,1,2,2-tetrafluoroethane (HFC-134), chlorodifluoroethane (HCFC-142b), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), and the following four classes of perfluorocarbon (PFC) compounds:~~

~~(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.~~

RULE 2 -- DEFINITIONS

WORKSHOP REPORT

A workshop notice was mailed to each permit holder in San Diego County. Notices were also mailed to all Chambers of Commerce and all Economic Development Corporations, the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and other interested parties.

The workshop was held on January 25, 1996, and was attended by 39 people. Written comments were also received. The workshop comments and District responses are as follows:

1. WORKSHOP COMMENT

The definition of "Atmosphere" in Subsection (b)(2) states that "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." Does this definition create any conflict with the Rule 11 (d)(9)(ii) exemption for abrasive blasting cabinets that are vented through a control device and back into the same room?

DISTRICT RESPONSE

The definition of "Atmosphere" in Rule 2 would not affect the exemption in Rule 11 (d)(9)(ii). The Rule 11 (d)(9)(ii) exemption applies when a blasting cabinet is vented through a control device and back into the same room. Although any emissions emitted after the control device would be considered emissions to the atmosphere pursuant to the Rule 2 definition, this does not limit or remove the Rule 11(d)(9)(ii) exemption which contains no caveats, exclusions or conditions relative to emissions to the atmosphere.

2. WORKSHOP COMMENT

"Calendar Day" in Subsection (b)(7) is defined as starting and ending at twelve midnight. Can a facility define calendar day as starting at some other hour and continuing for the next 24 hour period?

DISTRICT RESPONSE

If an applicable rule and/or permit condition specifies that records must be kept on a "Calendar Day" basis, then the daily record must start at 12:01 a.m. and end at twelve midnight of each day. If an applicable rule and/or permit condition only specifies that daily records are required, a facility may choose any consistent, continuous 24 hour period as the basis of their daily records. However, if noncompliance is determined based on these "daily" records (covering more than one calendar day), then a separate notice of violation could be issued for each calendar day. If a facility operates through the midnight hour and is concerned with the requirement to keep daily records on a calendar day basis, they should contact the District for specific compliance assistance.

3. WORKSHOP COMMENT

The definition of "Combustible Refuse" found in Subsection (b)(12) should be revised to indicate that human and animal remains which are to be cremated, are not considered "Combustible Refuse."

DISTRICT RESPONSE

The District agrees. However, the suggested change would affect the applicability of Rules 53 and 58, both of which regulate emissions from incineration operations. Since both of these rules are scheduled for revisions later this year, the District will clarify the applicability of each rule and provide specific definitions within each rule at that time.

4. WORKSHOP COMMENT

In Subsection (b)(20) the word "photochemically" should be inserted before the word "reactive" to clarify the type of reactivity being referred to.

DISTRICT RESPONSE

The District agrees. Subsection (b)(20) has been revised as suggested.

5. WORKSHOP COMMENT

Previously the definition of "Particulate Matter" (now in Subsection (b)(30)), included language stating that the definition did not apply to sources subject to Regulation X. Why was this language deleted and will it have any effect on sources subject to Regulation X?

DISTRICT RESPONSE

The deleted language is no longer needed since a new applicability provision (Subsection (a)(1)), states that the definitions listed in Rule 2 do not apply if the same term is specifically defined within an applicable rule or regulation. Regulation X contains a definition for "Particulate Matter," therefore that definition applies to any equipment or operation subject to Regulation X, rather than the Rule 2 definition. The deleted wording will not affect any sources subject to Regulation X.

6. WORKSHOP COMMENT

Is halon classified as an "Exempt Compound"?

DISTRICT RESPONSE

No. Halon is not defined as an Exempt Compound by the EPA, ARB, or the District.

7. WORKSHOP COMMENT

Is the definition of "NO_X" in Subsection (b)(28) also specified in other District rules?

DISTRICT RESPONSE

Yes. This definition of NO_X can also be found in Regulation X, Subpart GG. A similar definition can also be found in District Rule 69.

8. WORKSHOP COMMENT

Does the definition of "Toxic Air Contaminant" in Subsection (b)(45) include all of the air contaminants regulated under the AB2588 Hot Spots Program?

DISTRICT RESPONSE

No. The definition of "Toxic Air Contaminant" specifically includes the air contaminants listed as such under the California Toxic Air Contaminant Identification and Control Act (AB1807 program), and all of the hazardous air pollutants identified in the federal Clean Air Act Section 112(b). However, specific future District rules for implementation of toxic air contaminant programs may contain broader definitions of toxic air contaminants that would be applicable for those rules.

9. WORKSHOP COMMENT

The definition of "Air Contaminant" in Subsection (b)(2) includes exempt compounds. Does this mean that exempt compounds such as acetone will continue to be regulated as air contaminants?

DISTRICT RESPONSE

Yes. Any exempt compound may be regulated as an air contaminant, but exempt compounds are not regulated as volatile organic compounds (VOC). For example, methylene chloride is regulated as a hazardous air pollutant when used in cleaning and stripping operations. However, it is not regulated as a VOC.

10. WORKSHOP COMMENT

If acetone is now classified as an "Exempt Compound," should acetone emissions still be counted when determining compliance with daily VOC emission limits?

DISTRICT RESPONSE

No, by definition acetone is not a VOC. Therefore, its emissions do not need to be included when calculating VOC emissions. Acetone usage records should still be maintained for the purposes of completing District emission inventory forms.

11. WORKSHOP COMMENT

The definition of "VOC" in Subsection (b)(46) currently includes compounds that react through polymerization, but do not volatilize during the application process. Can the VOC definition be modified to exclude such compounds?

DISTRICT RESPONSE

No. The EPA's definition of volatile organic compound (VOC), which is mandatory for the District, includes all organic compounds except those specifically listed as Exempt Compounds. EPA allows the District, on a case-by-case basis, to exclude a particular compound within a specific rule based on its physical properties such as high-boiling point or low-vapor pressure materials. However, EPA has indicated that blanket exemptions for these types of materials would not be permissible. In addition, some monomers or reactive diluents may volatilized and emitted in

such processes. Rules that limit emissions of VOC typically establish standards based on VOC that are emitted from the regulated operations. In this way, organics that remain bound in the polymerized material can be accounted for when determining compliance.

12. WRITTEN COMMENT

The definition of "Dust" in Subsection (b)(17) includes "solid particles released into the air...by mechanical processes." Are shredding and screening considered mechanical processes?

DISTRICT RESPONSE

Yes.

13. WRITTEN COMMENT

Please clarify the term "low-reactive compound" in Subsection (b)(20).

DISTRICT RESPONSE

The term "low (photochemically)-reactive compound" in Subsection (b)(20) is a new term used by the ARB to classify some exempt compounds which are slightly more reactive than other compounds that have negligible photochemical reactivity.

14. WRITTEN COMMENT

Please clarify the term "aggregate potential to emit" as used in the definition of "Major Source" in Subsection (b)(24).

DISTRICT RESPONSE

The terms "Major Source" and "aggregate potential to emit" have the same meaning as defined in Rule 20.1 (NSR rules). The definitions of these terms in recently amended Rule 20.1 are very long and include a reference to an additional subsection of Rule 20.1 which relates to calculation procedures. In addition, EPA is currently discouraging the District from referencing other District rules unless such rules are already adopted into the State Implementation Plan (SIP). Therefore, the District we continue to rely on the defintions provided in Rule 20.1, rather than providing the defintions in Rule 2.

15. WRITTEN COMMENT

Does the definition of "Person" in Subsection (b)(32) include "subcontractors" and "consultants"?

DISTRICT RESPONSE

Yes.

16. WRITTEN COMMENT

Please clarify the difference between the terms "Portable Emission Unit" and "Portable Equipment," as used in Rule 11 and proposed Rule 12.1 respectively.

DISTRICT RESPONSE

The term "Portable Emission Unit" is a new term used in Rules 11, 20.1 & 69.4 for equipment or operations that might otherwise be considered "Portable Equipment." This new term restricts the use of portable equipment to no more than 180 days at any one stationary source. Currently this term is only used in Rules 11, 20.1 & 69.4, and is specifically defined in each of those rules. Therefore a general definition is not needed in Rule 2. However, the older term "Portable Equipment" still appears in several rules that do not provide specific definitions for this term. Therefore the existing definition has been retained in Rule 2 so that the definitions in Rules 11, 20.1 and 69.4 do not become applicable to the general term as used in other rules.

17. WRITTEN COMMENT

The definition of "Standard Conditions" in Subsection (b)(41) indicates a temperature of 68°F and an atmospheric pressure of 14.70 psi. What reference are these values based on?

DISTRICT RESPONSE

The new Standard Conditions definition in Rule 2 is based on the definition for the same term found in Rule 3. The District has been using the definition in Rule 3 since 1976. The addition of this term in Rule 2 will make it easier to locate when needed.

18. WRITTEN COMMENT

The definition of "Vehicle" in Subsection (b)(45) cites devices which may be "legally" propelled, moved, or drawn upon a highway. Please clarify the term "legally."

DISTRICT RESPONSE

The District has reviewed the possible implications of the term "legally" as used in the definition of vehicle, and has determined that the proposed definition would create unintended conflicts within other District rules that use the term vehicle. Therefore, the proposed definition of vehicle has been deleted from Rule 2. The definition of this term found in Webster's dictionary is sufficient to clarify the District's intent whenever the term is used within District rules.

19. WRITTEN COMMENT

Are mobile equipment such as forklifts and cranes considered "vehicles"?

DISTRICT RESPONSE

As noted in the District Response to Comment # 18 above, the proposed definition of vehicle is being deleted from Rule 2. Forklifts and cranes would be considered motor vehicles if they are self-propelled and are able to be driven upon a highway. As motor vehicles, these types of equipment could also be classified as special types of vehicles.

20. WRITTEN COMMENT

Please clarify the terms "booth", "room" and "designated area" as used in Subsection (b)(5) for the definition of "Application Station."

DISTRICT RESPONSE

The listed terms are commonly used and require no special definitions. The definitions of these terms can be found in Webster's Dictionary.

21. WRITTEN COMMENT

If tarping or shrouding is used to create a temporary "designated area," would this be considered an "Application Station" under the definition of Subsection (b)(2)? If yes, would such an area require a separate Permit to Operate pursuant to Rule 40 and Rule 10?

DISTRICT RESPONSE

Yes. Any area that is designated for the specific purpose of applying a material would be considered an application station as defined in Subsection (b)(2). Pursuant to Rule 11(d)(15)(iii), a separate Permit to Operate would not be required if less than 20 gallons per year of coatings are applied and usage records are maintained to substantiate the applicability of the exemption. If a facility has a Permit to Operate which allows general, outside or facility-wide coating operations, and a temporary "designated area" is set up for a few days around an object to be coated and is removed when the coating operation is completed, then an additional Permit to Operate would not be required.

22. WRITTEN COMMENT

Can a definition for "Low-Solids Coatings" and the calculation procedure for such coatings be added to Rule 2? Currently Low-Solids Stains cannot comply with the VOC limits in Rule 67.0 since the specific calculation method applicable for Low-Solids materials is not provided in that rule.

DISTRICT RESPONSE

A definition including the calculation method for "Low-Solids Stain" has been added to Rule 2 as suggested.

23. WRITTEN COMMENT

The definition of "Emission Unit" in Subsection (b)(19) should be revised as follows: "means any non-vehicular article, machine, equipment, contrivance, process, or process line which emits or reduces, or may emit or reduce the emissions of any air contaminant."

DISTRICT RESPONSE

The District disagrees. "Non-vehicular" and "vehicular" sources are both emission units in that they each are capable of emitting air contaminants. The primary difference between these sources is that ARB regulates "vehicular sources" and local air districts regulate non-vehicular sources.

Specific exemptions from District regulation of vehicular sources are located, as appropriate, in the California Health and Safety Code and in specific District rules and regulations.

24. WRITTEN COMMENT

For clarification, a definition for the term "Location" should be added to Rule 2 and defined as follows: "means any single site at a building, structure, facility or installation."

DISTRICT RESPONSE

The District disagrees. The definition being proposed is too narrow. A "Location" may include several site locations within a facility, or the entire facility may be one of many locations throughout the county. Terms that require special definitions to meet the specific needs of a rule, should only be defined within that rule, in order to avoid unintended effects in other rules.

25. WRITTEN COMMENT

A definition for "Military Tactical Support Equipment" that is consistent with the recent changes to Title 13 of the California Code of Regulations should be added to Rule 2.

DISTRICT RESPONSE

The District disagrees. The term "Military Tactical Support Equipment" is currently not used in any District Rule or Regulation. The term "Military Tactical Deployable Equipment" is currently used and defined in only Rules 69.3 and 69.4. Therefore a general definition of this term is not needed in Rule 2.

26. WRITTEN COMMENT

While parachlorobenzotrifluoride (PCBTF) and cyclic, branched, or linear completely methylated siloxanes (VMS's) are clearly less reactive then ethane, they may pose toxicity problems that are unacceptable. Exempting them from the VOC regulations would allow unregulated increases in the use of these possible toxic air contaminants. These compounds should not be listed as "Exempt Compounds" until more is known about their possible toxicity.

DISTRICT RESPONSE

The District disagrees. Currently several "Exempt Compounds" have known toxicity problems and are regulated accordingly as toxic air contaminants. The use of these two new compounds may be regulated in a similar manner if either of these materials are determined at a later date to be toxic air contaminants by the State of California or by federal EPA.

AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO

NEGATIVE DECLARATION

1. Project Name: Adoption of amended Rule 2 -- Definitions, in the San Diego County Air Pollution Control District Rules & Regulations.

2. Project Applicant: San Diego County Air Pollution Control District
9150 Chesapeake Drive
San Diego, California 92123-1096

3. Project Location:

Entire area within the boundaries of San Diego County. San Diego County is the southwestern most county in California.

4. Project Description:

The District has proposed adopting an amended version of existing Rule 2 -- Definitions, which will add several new definitions, delete some outdated definitions, and revise some of the existing definitions. Except for the definition of "Exempt Compounds," each of the terms in Rule 2 are defined similar to, and have the same meaning as, terms defined in other District, Federal or State rules and guidance documents. The term "Exempt Compounds" refers to a list of chemical compounds with negligible photochemical reactivity. "Exempt Compounds" is currently defined within many District rules, but the definition is being amended to provide consistency with state and federal regulations. The new definition provided in Rule 2 adds parachlorobenzotrifluoride, acetone, ethane, perchloroethylene, and volatile methylated siloxanes to the list of exempt compounds. Additionally, other district rules that provide a definition of "Exempt Compounds" are also being amended to reference the new Rule 2 definition.

5. Finding:

The project will not have a significant effect on the environment. Therefore, the adoption of the proposed amendments to Rule 2 -- Definitions, does not require preparation of an Environmental Impact Report.

Note: This action becomes final upon approval by the Air Pollution Control Board.

CS:LY:jo
03/27/96

INITIAL STUDY

San Diego Air Pollution Control District

Adoption of Amended Rule 2 -- Definitions

March 26, 1996

Prepared by
Laura Yannayon

San Diego Air Pollution Control District
9150 Chesapeake Drive
San Diego, CA 92123-1096

CONTENTS

I. INTRODUCTION

1. Project Name:

Adoption of amended Rule 2, Definitions, in the San Diego County Air Pollution Control District Rules & Regulations.

2. Project Applicant:

San Diego County Air Pollution Control District
9150 Chesapeake Drive
San Diego, California 92123-1095

3. Project Location:

Entire area within the boundaries of San Diego County. San Diego County is the southwestern most county in California.

II. PROJECT DESCRIPTION

The District has proposed adopting an amended version of existing Rule 2 -- Definitions. Rule 2 provides standard definitions for various terms used in District Rules and Regulations. The proposed amendments will add several new definitions, delete some outdated definitions, and revise some of the existing definitions.

Specifically the amendments will add or revise definitions for the following terms:

- Air Contaminant or Air Pollutant
- Air Pollution Control Board
- Application Station
- Calendar Day
- Calendar Quarter
- Calendar Year
- California Coastal Waters
- Contiguous Property
- Control Equipment
- District
- Emission Unit
- Exempt Compounds
- Low Solids Stain
- Major Stationary Source
- Motor Vehicle
- NO_X
- Orchard or Citrus Grove Heater
- Particulate Matter
- PM_{10}
- SO_X
- Standard Conditions
- State Implementation Plan (SIP)
- Stationary Source or Source
- Touch-up Operation
- Toxic Air Contaminant
- Volatile Organic Compound (VOC)
- VOC Content Per Volume of Coatings, Less Water & Exempt Compounds
- VOC Content Per Volume of Material

The definitions for the following terms will be deleted:

- Board
- Compliance Schedule
- Condensed Fumes
- Section
- Source, any source, any single source, and any source whatsoever

Each of these new or revised terms and the applicable definitions were reviewed to determine if their use in Rule 2 would have a significant impact upon the environment. Except for the definition of "Exempt Compounds," each of these terms are defined similar to, and have the same meaning as, terms defined in other District, Federal or State rules and guidance documents. The deleted terms are no longer used in district rules or have been replaced with a newer term.

The term "Exempt Compound" applies to a group of chemical compounds with negligible photochemical reactivity. Unlike volatile organic compounds (VOC's), exempt compounds do not participate in the formation of photochemical smog, therefore they are not regulated by the District rules that control VOC's.

The definition of exempt compounds is currently used in many District rules, but is being amended to provide consistency with state and federal regulations. The new definition of "Exempt Compounds" provided in Rule 2 includes acetone, ethane, perchloroethylene (perc), volatile methylated siloxanes (VMS) and parachlorobenzotrifluoride (PCBTF).

Additionally, other district rules that provide a definition of "Exempt Compounds" are also being amended to reference the new Rule 2 definition.

A copy of the proposed amendments to Rule 2 is attached.

III. ENVIRONMENTAL CHECKLIST

	YES	MAYBE	NO
1. **Earth.** Will the proposal result in:			
a. Unstable earth conditions or in changes in geologic substructure?			x
b. Disruptions, displacements, compaction or overcovering of the soil?			x
c. Change in topography or ground surface relief features?			x
d. The destruction, covering or modification of any unique geologic or physical features?			x
e. Any increase in wind or water erosion of soils, either on or off the site?			x
f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?			x
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?			x
2. **Air.** Will the proposal result in:			
a. Significant air emissions for some air contaminants?		x	
b. The creation of objectionable odors?			x
c. Alteration of air movement, moisture, or temperature, or any change in climate, either locally or regionally?			x
3. **Water.** Will the proposal result in:			
a. Changes in currents, or the course of direction of water movements, in either marine or fresh waters?			x
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?			x
c. Alterations to the course or flow of flood waters?			x

	YES	MAYBE	NO
d. Change in the amount of surface water in any water body?	____	____	x
e. Discharge into surface waters, or any alteration of surface water quality, including but not limited to temperature, dissolved oxygen, or turbidity?	____	____	x
f. Alteration of the direction or rate of flow of ground water?	____	____	x
g. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	____	____	x
h. Substantial reduction in the amount of water otherwise available for public water supplies?	____	____	x
i. Exposure of people or property to water related hazards such as flooding or tidal waves?	____	____	x
4. **Plant Life.** Will the proposal result in:			
a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?	____	____	x
b. Reduction of the numbers of any unique, rare or endangered species of plants?	____	____	x
c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	____	____	x
d. Reduction in acreage of any agricultural crop?	____	____	x
5. **Animal Life.** Will the proposal result in:			
a. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms or insects)?	____	____	x
b. Reduction of the numbers of any unique, rare or endangered species or animals?	____	____	x
c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	____	____	x
d. Deterioration to existing fish or wildlife habitat?	____	____	x

	YES	MAYBE	NO
6. **Noise.** Will the proposal result in:			
a. Increases in existing noise levels?	____	____	x
b. Exposure of people to severe noise levels?	____	____	x
7. **Light and Glare.** Will the proposal produce new light and glare?	____	____	x
8. **Land Use.** Will the proposal result in a substantial alteration of the present or planned land use of an area?	____	____	x
9. **Natural Resources.** Will the proposal result in increases in the rate of use of any natural resource?	____	____	x
10. **Risk of Upset.** Will the proposal involve:			
a. A risk of an explosion or the release of hazardous substances (including, but not limited to oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?	____	____	x
b. Possible interference with an emergency response plan or an emergency evacuation plan?	____	____	x
11. **Population.** Will the proposal alter the location, distribution, density, or growth rate of the human population of an area?	____	____	x
12. **Housing.** Will the proposal affect existing housing, or create a demand for addition housing?	____	____	x
13. **Transportation/Circulation.** Will the proposal result in:			
a. Generation of substantial additional vehicular movement?	____	____	x
b. Effects on existing parking facilities, or demand for new parking?	____	____	x
c. Substantial impact upon existing transportation systems?	____	____	x
d. Alterations to present patterns of circulation or movement of people and/or goods?	____	____	x

	YES	MAYBE	NO
e. Alterations to waterborne, rail or air traffic?	____	____	x
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	____	____	x
14. **Public Services.** Will the proposal have an effect upon, or result in a need for, new or altered governmental services in any of the following areas:			
a. Fire protection?	____	____	x
b. Police protection?	____	____	x
c. Schools?	____	____	x
d. Parks or other recreational facilities?	____	____	x
e. Maintenance of public facilities, including roads?	____	____	x
f. Other government services?	____	____	x
15. **Energy.** Will the proposal result in:			
a. Use of substantial amounts of fuel or energy?	____	____	x
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	____	____	x
16. **Utilities.** Will the proposal result in a need for new systems, or substantial alterations to existing utilities?	____	____	x
17. **Human Health.** Will the proposal result in:			
a. Creation of any health hazard or potential health hazard (excluding mental health)?	____	____	x
b. Exposure of people to potential health hazards?	____	____	x
18. **Aesthetics.** Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?	____	____	x

	YES	MAYBE	NO
19. **Recreation.** Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?	____	____	x
20. **Cultural Resources.** Will the proposal:			
a. Result in the alteration of or the destruction of a prehistoric or historic archaeological site?	____	____	x
b. Result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?	____	____	x
c. Have the potential to cause a physical change which would affect unique ethnic cultural values?	____	____	x
d. Restrict existing religious or sacred uses within the potential impact area?	____	____	x
21. **Mandatory Findings of Significance.** Does the project have:			
a. The potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	____	____	x
b. The potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)	____	____	x
c. Impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant.)	____	____	x
d. Environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	____	____	x

IV. DETERMINATION OF CONSISTENCY WITH EXISTING ZONING, PLANS, AND LAND-USE CONTROLS

Adoption of Rule 2 will be consistent with existing zoning, plans, and other applicable land use controls.

V. DETERMINATION OF DEPARTMENT OF FISH & GAME DE MINIMIS IMPACT FINDING

Based on the information contained in the environmental checklist of this Initial Study, there is no evidence before the San Diego County Air Pollution Control District that adoption of amended Rule 2 will have any potential for adverse effect on wildlife resources or the habitat upon which the wildlife depends; and,

The San Diego County Air Pollution Control District has, on the basis of substantial evidence, rebutted the presumption of adverse effect to the resources listed in Section 753(d) of the Fish and Game Code.

VI. DETERMINATION OF ENVIRONMENTAL DOCUMENT

Evaluation of Potential Impacts and Effects on the Environment of the Proposed Project

The proposed amendments will add several new definitions, delete some outdated definitions, and revise some of the existing definitions. Each of these new or revised terms and the applicable definitions were reviewed to determine if their use in Rule 2 would have a significant impact upon the environment. Except for the definition of "Exempt Compounds," each of these terms are defined similar to, and have the same meaning as, terms defined in other District, Federal or State rules and guidance documents. The deleted terms are no longer used in district rules or have been replaced with a newer term. Since each of the definitions proposed within this project, except "Exempt Compounds," have the same meaning as other existing definitions, amending Rule 2 to include these new or modified definitions and deleting the outdated terms, will have no impact and therefore, no effect upon the environment.

The proposed definition of "Exempt Compounds" in Rule 2 will expand the list of compounds that are not regulated as VOC's to include acetone, ethane, perchloroethylene (perc), volatile methylated siloxanes (VMS) and parachlorobenzotrifluoride (PCBTF). Based on this new definition, these compounds will no longer be regulated by District rules that control emissions of VOC's. The partial deregulation of these five compounds may have an impact upon the environment. Accordingly, District staff has reviewed each of the listed exempt compounds to determine the potential environmental impacts of this portion of the proposed project.

Based upon the information regarding these five new exempt compounds provided in Attachment A, there is no reasonable possibility that this portion of the proposed project will result in a significant impact upon the environment.

On the basis of this initial evaluation:

[X] I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION should be prepared.

[ ] I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures(s) described in the Initial Study will be applied to the project. A MITIGATED NEGATIVE DECLARATION should be prepared.

[ ] I find the proposed project, individually and/or cumulatively, MAY have a significant effect on the environment and determine that an ENVIRONMENTAL ASSESSMENT is required.

3/27/96

G. CARL SELNICK
Associate Air Resources Specialist
County of San Diego
Air Pollution Control District

ATTACHMENT A

TECHNICAL DOCUMENTATION FOR PROPOSED PROJECT TO ADD FIVE COMPOUNDS TO THE LIST OF EXEMPT COMPOUNDS

March 26, 1996

Prepared by
Laura Yannayon

San Diego Air Pollution Control District
9150 Chesapeake Drive
San Diego, CA 92123-1096

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SUMMARY

This report evaluates the potential environmental impacts of amending District Rule 2 to expand the definition for "Exempt Compounds" by including acetone, ethane, parachlorobenzo-trifluoride (PCBTF), volatile methyl siloxanes (VMS) and perchloroethylene (perc).

BACKGROUND

Federal and State clean air laws require districts which do not attain the National Ambient Air Quality Standard for ozone to control emissions of tropospheric ozone precursors - volatile organic compounds (VOC's) and nitrogen oxides.

On July 8, 1977, EPA published a recommended policy on control of VOC emissions (42 FR 3513), which discussed the photochemical reactivity of organic compounds and their role in the formation of tropospheric ozone. This policy statement identified several compounds with negligible photochemical reactivity that do not participate in the photochemical reactions resulting in the formation of tropospheric ozone. EPA exempted these compounds from the VOC definition, and correspondingly from all regulations controlling VOC emissions. Since that date, EPA has amended its policy to include additional compounds with negligible photochemical reactivity. These compounds are often referred to as "Exempt Compounds" since they are 'exempt' from the definition of VOC.

On February 3, 1992 (57 FR 3941), EPA promulgated a general definition of VOC (40 CFR 51.100(s)), that superseded the July 8, 1977 policy statement and previous amendments to that policy. This definition of VOC includes a list of exempt compounds. Since promulgating the general definition of VOC in 1992 and based on new information submitted, EPA has amended the definition three times to include parachlorobenzo-trifluoride (PCBTF) and cyclic, branched, or linear completely methylated siloxanes (VMS) (59 FR 50693), acetone (60 FR 31633) and perchloroethylene (perc) (61 FR 4588) in the list of exempt compounds.[1] With the exception of ethane, the definition of VOC and exempt compounds found in most District rules are consistent with EPA's February 3, 1992 definition. The District is now proposing to amend the current Rule 2 definition of "Exempt Compounds" to provide consistency with EPA's latest amendments, including ethane. The current definition of "Exempt Compounds" in each District rule controlling VOC's will also be amended to reference the new definition for this term in Rule 2. The net effect of these actions will be a definition of "Exempt Compounds" for each District rule regulating VOC emissions that includes all of the new compounds recently listed by EPA as negligibly photochemically reactive.

DESCRIPTION OF COMPOUNDS

Acetone

At ambient conditions acetone (C_3H_6O) is a highly volatile, flammable liquid with a pungent, characteristic odor. It is commonly used in consumer products, especially fingernail polish remover, as a solvent for a variety of uses, and as a chemical intermediate in the production of other ketones, acetic acid, and isoprene rubber. It is miscible with water, alcohols, and fats, and dissolves plastics, oils, fats, resins, waxes, and dried paints. Currently the largest users of acetone within the District are polyester resin operations and

eyeglass lens manufacturing operations, where it is used for clean-up of resin application equipment and wipe cleaning prior to inspection of the eyeglass lenses.

According to The Merck Index, prolonged dermal exposure to acetone can result in erythemia and dryness, and inhalation may produce headaches, fatigue, excitement, bronchial irritation, and in high concentrations, narcosis. However, severe poisoning is rare. Acetone is not listed as a hazardous air pollutant by the federal Clean Air Act Section 112(b), or by the State of California as a carcinogen or reproductive toxicant under Proposition 65. It is also not listed as a toxic air contaminant under AB1807, however, it is listed as a reportable substance under AB2588, Air Toxics "Hot Spots" Program (CAPCOA, 1993).

EPA noted that one concern about acetone was its potential in high concentrations to be a precursor to the formation of formaldehyde. However, studies by Russell and McNair of Carnegie Mellon University[2] showed that the substitution of some solvents by acetone may actually reduce formaldehyde concentrations because acetone is less reactive than the materials it will replace, such as toluene and xylene.

There are three measures of a compound's ability to form ozone: the rate constant of radical formation (k_{OH}), the maximum incremental reactivity (MIR), and the maximum ozone incremental reactivity (MOIR). These parameters measure the potential for ozone formation. The study by Russell and McNair showed acetone has a MIR of 0.41 and a MOIR of 0.16, compared to the ethane "baseline" of 0.25 and 0.2, respectively. Carter of the University of California at Riverside[3] reported that the MOIR scale is a better representation of acetone's reactivity.

Acetone has no stratospheric ozone depletion potential (SODP), and the global warming potential (GWP) is insignificant according to ARB.

Ethane

At ambient conditions ethane (C_2H_6) is a colorless, odorless, flammable. The main source of ethane is from fugitive emissions at refinery and natural gas handling facilities. According to The Merck Index, ethane is listed as a narcotic in high concentrations, but ethane is not listed on the Proposition 65, AB1807, or AB2588 lists.

According to Russell and McNair,[2] ethane has a MIR of 0.25 and MOIR of 0.2. It has no SODP and the GWP is insignificant.

Parachlorobenzotrifluoride (PCBTF)

At ambient conditions PCBTF ($C_7H_4F_3Cl$) is a colorless, flammable liquid with a sweet, naphthalenic odor (similar to "moth balls"). The current usage of PCBTF is very small. Expected uses include surface cleaning, consumer products, and coatings.

PCBTF is rather costly at $21 a gallon and is moderately toxic. However, Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) has determined that its toxic impacts are not expected to result in specific health effects. Current PCBTF toxicity data on humans is subject to further study. PCBTF is not listed on the Proposition 65, AB1807, or AB2588 lists.

Using Carter's formula,[3] ARB determined that PCBTF has a MIR of 0.05, which is considerably lower than ethane at 0.25. PCBTF has a very low SODP of 0.001 (for comparison CFC-11 has a SODP of 1.0) and an insignificant GWP.

Cyclic, Branched, or Linear Completely Methylated Siloxanes (VMS)
VMS are a class of high boiling liquids with completely methylated $[-Si-O-]_x$ basic structures. There are currently 14 VMS compounds of which six are commercially available. Three are linear and are used for solvent cleaning, and three are cyclic and are used mostly in consumer products. There are no branched VMS compounds commercially available. VMS are flammable and costly at a current price of $65 a gallon. It is a potential replacement for ODC and VOC materials in paints, consumer products, and cold solvent cleaning. Although current commercial usage is small, some VMS compounds are commonly used in anti-perspirants, skin creme, hair condition, glass cleaners, paper coatings and lubricants.

There is little toxicity data available on VMS, however, EPA indicated that the known toxic effects do not warrant alteration of their decision to make VMS exempt compounds. None of the VMS compounds are listed on the Proposition 65, AB1807, or AB2588 lists. Because they contain no chloride or bromine, VMS have no SODP and have an insignificant GWP. Carter[4] reports that VMS has a MIR of zero.

Perchloroethylene (Perc)
Perc (C_2Cl_4) is a colorless, non-flammable liquid, with a chloroform like odor. Perc's high boiling point, excellent solvent properties, and relatively low cost of $5 per gallon make it an attractive solvent. Current perc usage is significant, with the majority of perc emissions coming from drycleaning, degreasing and aerospace maskant coating operations.

According to The Merck Index, perc is listed as a narcotic in high concentrations and a dermal irritant if exposed for long periods. Perc is also classified as a human carcinogen, and is listed on the Proposition 65, AB1807, and AB2588 lists, as well as EPA's list of hazardous air pollutants (HAP's). Perc has a very low SODP and an insignificant GWP. While there is currently no MIR value calculated for perc, a 1983 EPA study concluded that perc contributes less to the ambient ozone problem than equal concentrations of ethane, which is the "baseline" for determining if a compound has negligible photochemical reactivity.[5]

DISCUSSION OF EMISSIONS

The current emissions of the five compounds proposed to be exempted from the VOC definition in Rule 2 were estimated as follows:

Acetone:	131.5 tons/year (1992 inventory)
Ethane:	Unknown, likely to be very small from fugitive emissions in natural gas operations and sources of incomplete combustion
PCBTF:	Unknown, estimated as significantly less than one ton/year
VMS:	Unknown, estimated as significantly less than one ton/year
Perc:	554 tons/year (based on 1989, 1990 & 1991 AB2588 inventory)

DISCUSSION OF POTENTIAL SOLVENT REPLACEMENT

The use of at least six compounds currently classified as ozone depleting, toxic, or significantly reactive, may potentially be replaced by usage of the five proposed exempt compounds.

1,1,1- trichloroethane (TCA)

TCA production was ceased as of January 1, 1996, in accordance with the Montreal Protocol (40 CFR 82, December 10, 1993). Therefore its availability will be very limited and its price will continue to increase significantly. Perc is the only proposed exempt compound that could be used to replace TCA as a solvent for vapor degreasing. Pursuant to District policy, a health risk assessment would be required to ensure that any health risks associated with perc emissions are below an acceptable level before perc could be used as a substitute. The remaining compounds are either flammable, odorous, or very costly. According to a SCAQMD study, 47.6 percent of TCA emissions are from vapor degreasing. The remaining 52.4 percent of the TCA emissions are from surface cleaning, hand wiping, thinning, strippers, foam blowing agents, and coatings. Acetone and/or a blend with PCBTF or VMS should replace a portion of this TCA usage, especially in surface cleaning and coatings.

While the maximum quantity of TCA replaced by acetone and/or blends could be significant, flammability and odors issues associated with acetone usage will likely limit the substitution to less than 25 percent of current TCA usage. A reduction in the emissions of ODC's and TAC's will result if TCA usage is substituted with acetone. Because TCA is both an ozone depletor and a toxic compound, substitution by acetone will result in a net beneficial effect for the environment, even though acetone has a slightly higher photo-chemically reactivity than TCA.

Methylene Chloride ($MeCl_2$)

This compound is used primarily in cleaning and paint stripping operations. Small quantities are also used in adhesive formulations. It is a known carcinogen. Acetone could replace $MeCl_2$ in some adhesive, stripping, and solvent cleaning operations. According to solvent distributors, approximately 30 percent of $MeCl_2$ could be replaced with acetone. While acetone is more photochemically reactive then $MeCl_2$, it is not toxic. Therefore a reduction in the emissions of toxic compounds will result if acetone is substituted for $MeCl_2$ usage.

Toluene and Xylene

These materials are hazardous air pollutants according to the federal Clean Air Act and are currently listed on the AB2588 list. According to paint manufacturers, acetone and/or its blends could replace up to 20 to 30 percent of the toluene and xylene now used in coatings and surface cleaning. Acetone is more volatile than toluene and xylene, but its volatility could be reduced by blending with PCBTF and VMS. Since xylene and toluene are both significantly more reactive and moderately more toxic than acetone, if some of the emissions are replaced by acetone emissions, there will be a net air quality benefit.

Methyl Ethyl Ketone (MEK) and Methyl Isobutyl Ketone (MIBK)

The aerospace industry has started using acetone for some surface preparation and wipe cleaning applications. The industry expects a 50 percent replacement of presently used products containing MIBK, which is highly photochemically reactive, and MEK which is a

reactive VOC. Since acetone is less reactive than these compounds, its use should result in a net air quality benefit.

DISCUSSION OF PROJECTED USAGE INCREASES

Acetone

The overall increase in the usage of this compound will be the most significant. Acetone is expected to be used as a replacement for solvents, especially 1,1,1- trichloroethane (TCA), perchloroethylene (perc), methylene chloride ($MeCl_2$), ketones, toluene, and xylene, used in coatings, hand wiping, stripping and surface cleaning operations. Despite acetone's volatility, odor, and flammability, it is still attractive to industry due to its ability to dissolve a wide range of materials, including polymerized resins, and low cost of $2.10 a gallon.

Potentially, acetone can be used as a substitute solvent in coatings such as wood coatings, metal coatings, including some aerospace component coatings and architectural coatings. An increase in the usage of acetone can also be expected as it is used for surface preparation and a cleaning solvent for metal parts, wood products and some aerospace component coating operations. However, acetone is a highly aggressive solvent, and it is unlikely that it will be used in coatings applied to plastic, composite or rubber materials because it can dissolve the substrate. There could also be an increase in acetone usage if certain facilities are not satisfied with the performance of presently used water based cleaners. It is unlikely, however, that most facilities (especially small businesses) will completely switch from water based cleaners to acetone, due to its flammability and potential explosion problems.

Currently, the largest users of acetone in San Diego County are facilities involved in eyeglass lens manufacturing and polyester resin manufacturing operations where it is used as a cleaning solvent. The annual usage of acetone in such operations is currently limited by permit conditions that limit emissions of VOC. District Rule 67.12 also encourages the use of water-based cleaners but allows acetone use provided that the affected facility uses reclamation equipment. Since the current allowable usage of acetone from these two industries is significant, it is difficult to predict the potential increase in usage if acetone is classified as an exempt compound.

A South Coast Air Quality Management District study estimated that acetone usage may increase by approximately 140 percent above current levels. It is likely that San Diego County will see similar increases. The District is monitoring the concentrations of acetone at two monitoring stations in the county to measure any increase in acetone concentration in the air and determine its potential impact on the ambient air quality.

Ethane

No increase in ethane emissions is expected in San Diego County.

Parachlorobenzotrifluoride (PCBTF)

A large increase in the use of this material is not likely because of its cost, flammability, and potential toxicity. Its primary use would be in coating formulations with acetone and possibly cold solvent degreasing. The District is aware of only one source that is currently using this compound, and the facility has indicated that due to its strong odor, they expect to use less than 5 gallons per year. Occidental Chemical Corporation, which is a manufacturer of this product, commonly known as Oxsol, predicts an increase of 500 tons per year of PCBTF in California. It is difficult to estimate what the actual usage will be in

San Diego County, a conservative estimate would be 5 percent of the state wide estimate, or 25 tons per year.

Cyclic, Branched, or Linear Completely Methylated Siloxanes (VMS)
These compounds are already used in the cosmetic, consumer product, and paper coating industries. Of the 14 VMS compounds listed in the Federal Register notice, only six are used commercially. Dow Chemical does not expect the use of VMS in consumer products to exceed 20 millions pounds nationally. Outside of consumer products, the usage within the District should be small. VMS are flammable, so additional usage would be limited to cold solvent degreasers, specialized cleaning, and paints. The high cost of these solvents will also be a significant limiting factor ($65/gallon).

Perchloroethylene (perc)
This compound has been used for many years by the dry cleaning industry. Approximately 79 percent of all perc emissions in San Diego County come from this source category. The remaining emissions are from solvent degreasing operations and aerospace maskant coating operations. Since perc is currently classified as a hazardous air pollutant (HAP), any requests for increased usage would require a health risk assessment to ensure that any associated risks are minimized to an acceptable level.

DISCUSSION OF POTENTIAL IMPACTS

Acetone
The primary purpose of exempting this compound is to maintain consistency with state and federal definitions of VOC's which determines how this compound is regulated in District rules. The list of "Exempt Compounds" will be amended to include acetone, based on EPA's determination that it is negligibly photochemically reactive and therefore does not contribute significantly to the formation of tropospheric ozone.

Acetone is a common solvent, which is easily available and comparatively cheap. Since acetone is not listed by EPA as a HAP, its new classification as an "Exempt Compound" makes it an excellent replacement choice for many solvents that are classified as HAP's, such as TCA, $MeCl_2$, xylene, and toluene.

The 1992 District emission inventory reported acetone emissions of 131.5 tons. The significant source categories of acetone users include an eyeglass lens manufacturer with 31 percent of the emissions, polyester resin operations at 30 percent, and electronic manufacturing operations at 12 percent. The remaining 27 percent of the emissions are attributed to miscellaneous hand wiping and cleanup operations.

The primary use of acetone in the eyeglass lens manufacturing operation occurs when the lens are cleaned prior to various internal inspection procedures. The acetone emissions from the lens cleaning operations are currently limited by permit conditions, based on acetone's classification as a VOC. If the proposed Rule 2 amendments are adopted, acetone will be listed as an exempt compound, and no longer be regulated as a VOC. Accordingly, the usage of acetone in these operations will no longer be limited by the current permit conditions and an increase in usage may occur. Therefore, the potential increase in acetone emissions from this industry may be significant.

District Rule 67.12 -- Polyester Resin Operations currently regulates the use of acetone by requiring that VOC containing materials be kept in self-closing containers and that a VOC

reclamation system be used. While these requirements will no longer apply to the use of acetone, polyester resin operation facilities are likely to continue their current practices to ensure worker safety and reduce the quantity of waste materials, therefore only small increases above current usage is expected. Rule 67.6 -- Solvent Cleaning Operations will continue to regulate the use of acetone since the rule applies to all organic solvents and not just volatile organic compounds.

Acetone emission increases will also occur as it is used to reformulate VOC coatings. The overall emission increase from coating reformulation is not expected to be overwhelming, since acetone is highly flammable and cannot be used as a replacement for many of the solvents currently used in coating formulations. The largest expected increase will likely occur in hand wiping operations. Some hand wiping operations that currently use VOC solvents such as isopropyl alcohol (IPA), will likely switch to acetone, though the fire safety issue will have to be considered. Recently a large user of IPA and TCA decided to purchase emission reduction credits to expand their hand wiping operation rather than using acetone, due to the fire safety issues.

A conservative estimate would suggest that the use of acetone is likely to increase 140 percent above current usage levels. While this increase in itself is significant, the expected impacts on the environment should not be considered significant, since acetone is likely to replace compounds that are either more photochemically reactive, stratospheric ozone depletors, or toxic. Therefore, using acetone as a replacement solvent will most likely result in an overall net benefit to air quality.

Ethane

The primary purpose of exempting this compound is to maintain consistency with state and federal definitions of VOC's which determines how this compound is regulated in District rules. The list of "Exempt Compounds" will be amended to include ethane, based on EPA's determination that it is negligibly photochemically reactive and therefore does not contribute significantly to the formation of tropospheric ozone.

The primary source of ethane emissions are petroleum refineries. No petroleum refineries exist in San Diego County. Small quantities of ethane are also emitted from incomplete combustion and fugitive leaks from natural gas distribution facilities. There is no expected increase in ethane emissions as a result of the proposed exemption, therefore there are no significant impacts from this action.

Parachlorobenzotrifluoride (PCBTF)

The primary purpose of exempting this compound is to maintain consistency with state and federal definitions of VOC's which determines how this compound is regulated in District rules. The list of "Exempt Compounds" will be amended to include PCBTF, based on EPA's determination that it is negligibly photochemically reactive and therefore does not contribute significantly to the formation of tropospheric ozone.

PCBTF is a relatively new compound developed and marketed by Occidental Chemical Corporation. PCBTF is currently regulated as an organic solvent and/or VOC. If the purposed Rule 2 amendments are adopted, it will be listed as an exempt compound and no longer be regulated as a VOC in any District rule. The primary effect of this change would be seen in the District's coating rules. For the purposes of those rules, PCBTF could be used as an exempt solvent in surface preparation or coating formulations, which may in turn result in an increase of PCBTF emissions. PCBTF will still be regulated as an organic solvent subject to Rule 67.6 Solvent Cleaning Operations, therefore the emissions are expected to be similar to emissions from other VOC solvents used in these types of

operations. Since PCBTF is significantly less reactive than the solvents currently in use, its use should result in a net positive effect on air quality.

PCBTF is not listed as a toxic air contaminant (TAC) pursuant to Proposition 65, AB1807, AB2588 or Section 112(b) of the federal Clean Air Act. However, further research of its toxicity is underway. If PCBTF is classified as a TAC, its usage would then be regulated under current District toxic rules and policies which will ensure that the health effects of any increase in PCBTF emissions are limited to a level determined by the District to be insignificant.

PCBTF has an extremely foul odor and a retail cost of $21 per gallon. This high cost, along with the objectionable odor, will prevent the solvent from gaining wide-spread use. The District expects no significant increase in the use of this solvent, therefore listing PCBTF as an "Exempt Compound" will not have a significant impact upon the environment.

Cyclic, Branched, or Linear Completely Methylated Siloxanes (VMS)

The primary purpose of exempting this class of compounds is to maintain consistency with state and federal definitions of VOC's which determines how these compounds are regulated in District rules. The list of "Exempt Compounds" will be amended to include VMS, based on EPA's determination that the compounds are negligibly photochemically reactive and therefore do not make a significant contribution to the formation of tropospheric ozone.

VMS are a relatively new class of compounds developed and marketed by Dow Chemical. The District is unaware of any sources that are currently using these compounds. VMS would currently be regulated under District rules as organic solvents and/or VOC's. If the purposed Rule 2 amendments are adopted, VMS will be listed as exempt compounds and no longer be regulated as VOC's in any District rule. The primary effect of this change would be seen in the District's coating rules. For the purposes of those rules, the VMS could be used as exempt solvents in surface preparation or coating formulations, which could result in an increase of VMS emissions. VMS will still be regulated as organic solvents subject to the requirements of Rule 67.6 (Solvent Cleaning Operations), therefore the emissions from degreasing operations that switch to VMS are expected to be similar to the current emissions from other VOC solvents.

VMS are not listed as toxic air contaminants (TAC's) pursuant to Proposition 65, AB1807, AB2588 or Section 112(b) of the federal Clean Air Act. If VMS are classified as TAC's, their usage would then be regulated under current District toxic rules and policies which will ensure that the health effects of any increase in VMS emissions are limited to a level determined by the District to be insignificant.

The VMS are a relatively new class of solvents with a retail cost of $64 per gallon. The cost is presently so prohibitive that it is unlikely to gain wide spread use. The District expects no significant increase in the use of these solvents, therefore listing VMS as "Exempt Compounds" will not have a significant impact upon air quality.

Perchloroethylene (perc)

The primary purpose of exempting this compound is to maintain consistency with state and federal definitions of VOC's which determines how this compound is regulated in District rules. The list of "Exempt Compounds" will be amended to include perc, based on EPA's determination that it is negligibly photochemically reactive and therefore does not contribute significantly to the formation of tropospheric ozone. However, perc is identified as a

hazardous air pollutant (HAP) by the Federal Clean Air Act and as a toxic air contaminant (TAC) by the Air Resources Board and is therefore subject to federal National Emission Standards for Hazardous Air Pollutants (NESHAP) and state Air Toxic Control Measure (ATCM) regulations.

Perc emissions in the District occur primarily in three source categories: dry cleaning operations, solvent cleaning operations and aerospace maskant operations, as shown in Table 1. Each of these source categories are currently regulated by a specific District rule.

TABLE 1
PERC USAGE AS REPORTED IN THE 1994 UPDATED AB2588 REPORT

Company	Perc Emissions in tons/yr	Percentage of Total Emissions	Year Reported
Drycleaning Operations (Area Sources)	437.0	78.9	1991
Rohr Industries	48.1	8.7	1989
Chemtronics	42.1	7.6	1989
Degreasing Facilities† (Area Sources)	9.3	1.7	1991
Caspian	4.1	0.7	1989
USMC Base	3.8	0.7	1989
USN Miramar Naval Air Station	2.6	0.5	1989
All other sources (<.6 tons/yr)	2.1	0.4	Various
Hues Metal Finishing	1.8	0.3	1990
Landfills (13)	1.7	0.3	Various
Specialized Processing Company	1.5	0.3	1991
	554 tons total	**100%**	

Perc usage in dry cleaning operations is presently regulated under Rule 67.8 -- Dry Cleaning Facilities Using Halogenated Organic Solvent. In addition, a new statewide ATCM for dry cleaning operations is currently being implemented by the District and is expected to reduce emissions by 25 percent this year (109 tons), and by 47 percent (205 tons) when it is fully implemented in October of 1998. These reductions will decrease the ambient concentration of perc and provide a positive benefit to air quality.[6]

Degreasing operations using perc will continue to be regulated under Rule 67.6 -- Solvent Cleaning Operations and the District's Rule 51 Toxic Policy. In addition, the federal NESHAP for Halogenated Solvent Cleaning Operations, which contains slightly more stringent requirements, is currently being implemented within the District. The reclassification of perc as an "Exempt Compound" is not expected to increase perc emissions from this source category beyond levels currently allowed.

Perc emissions from maskant coatings used in the aerospace industry are currently regulated under Rule 67.9 -- Aerospace Coating Operations. If the amendments to Rule 2 are adopted, and perc is classified as an "Exempt Compound," the perc emissions from maskant coating operations will increase. This will occur because the rule specifies the VOC limit for maskants in terms of grams of VOC per liter of coating, less water and exempt compounds. Since perc is proposed to be an exempt compound, its content will no longer count when determining the VOC content in maskants. To compensate for the relaxation of perc emissions control resulting from recalculation of the VOC limit for

maskants, Rule 67.9 is being revised to specify additional control requirements for dip tanks used to apply the maskants such as a 0.5 freeboard ratio and submerged fill pipes.

The projected 1996 emissions of perc were calculated assuming perc to be either a VOC or an exempt compound and were compared for the two facilities which use maskants containing perc. The first facility uses add-on controls to reduce their perc based VOC emissions. Perc emissions from this facility are 15.8 tons per year. If perc is defined as an exempt compound, the VOC-based add-on controls would no longer be required and the facility may consider removing the add-on controls, which would result in an increase of perc emissions. However, perc is also regulated as a toxic air contaminant and is subject to the District's Rule 51 Toxic Policy. Therefore any potential increase in perc emissions would require a new health risk assessment before the District could issue a permit for the facility to modify its current operation. An increase of perc emissions of 15.8 tons per year would be considered significant, and would likely result in an unacceptable health risk and therefore the District could not authorize removal of the add-on control device. Therefore, it is unlikely that perc emissions from this facility will increase as a result of exempting perc from the VOC definition.

It should be noted that this facility will be subject to the federal NESHAP regulation for aerospace manufacturing and rework operations which limits the perc content in maskants or requires the use of add-on controls. This regulation will become effective in 1998. The facility has also indicated that it has no intention of disconnecting the presently used control device.

The second facility using perc based maskants has been unable to comply with the VOC limits in Rule 67.9, and is currently operating under a variance. Under the conditions of the variance, 16.65 tons of perc were emitted last year. Since perc is currently defined as a VOC, the compliance alternative would require the use of add-on controls that reduce emissions by at least 85 percent. Under this scenario, District staff has estimated that perc emissions would be approximately 2.5 tons per year.[7]

In another scenario, if perc is defined as an exempt compound, the facility could comply with the standards by using a two part maskant system consisting of a combination of perc and water based maskants. The facility would also be required to comply with the new 0.5 freeboard ratio and submerged fill pipe requirements currently proposed for Rule 67.9. Under this scenario, District staff has estimated perc emissions would be approximately 3.6 tons per year.[7] The potential 1.1 tons per year increase is insignificant when compared to the significant emission reductions that will be occurring from dry cleaning operations (109 tons this year). In addition, the definition of "Exempt Compounds" in Rule 67.9 will not be changed to include perc, until the new 0.5 freeboard ratio and submerged fill pipe requirement are also adopted.

ASSESSMENT OF ENVIRONMENTAL IMPACTS

Compounds classified as negligibly photochemically reactive make only a negligible contribution to the formation of tropospheric ozone, therefore they are excluded or "exempted" from the definition of VOC. Accordingly, these new compounds will no longer be subject to rules that control emissions of VOC's. The deregulation of these compounds may cause an increase in their use and/or emissions to the atmosphere. Since the basis of exempting these compounds is their negligible photochemically reactivity, any increase in usage will not cause an increase in the formation of tropospheric ozone.

A significant increase in acetone emissions is expected based on the proposed amendments to Rule 2. Acetone will replace approximately 25 percent of the current TCA usage, which is both an ozone depleting compound (ODC) and a toxic air contaminant (TAC). It will also replace up to 30 percent of the current toluene and xylene usage, which are also toxic air contaminants and more photochemically reactive than acetone. Over time, the increased usage of acetone to replace usage of existing solvents that are more photochemically reactive or toxic, is expected to have a positive effect on the environment.

No significant increase in VMS or PCBTF emissions are expected based on the proposed amendments to Rule 2. Any increased usage of either compound will likely occur as a replacement for some of the TCA, toluene or xylene usage, which are all toxic air contaminants and are more reactive then VMS and PCBTF. A net positive effect on air quality is expected from adding VMS and PCBTF to the list of exempt compounds.

The net potential change in perc emissions in the County is expected to be a decrease of approximately 108 tons per year. This decrease accounts for the potential increase of 1.1 tons per year from the application of maskants in the aerospace industry. The potential increase of 1.1 tons per year of perc emissions from aerospace maskant coatings can be considered insignificant. It represents less than 0.2 percent of the baseline perc emissions in San Diego County.[8] The 109 tons per year emission reductions expected from the new dry cleaning control requirements, will also sufficiently compensate for any small increases in perc emissions from aerospace maskants or other coatings.

CONCLUSION

An increase in the use of some of the compounds proposed to be listed as "Exempt Compounds" is likely to occur. The effects of increased usage of the proposed compounds is not significant, since they will replace the current usage of solvents that are overall more toxic, ozone depletors or are more photochemically reactive. Based upon all the information provided within this report, there is no reasonable possibility that this project will result in a significant impact upon the environment.

References

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2 Russell, t., and McNair, L., Memorandum to Bart Croes and Randy Pasek of the ARB on "Analysis of potential air quality impacts from exempting acetone," p.5, July 24, 1995.

3 Carter, W.P.L., "Development and Application of an Up-to-Date Photochemical Mechanism for Airshed Modeling and Reactivity Studies, "ARB Contract No. A932-094.

4 Carter, W.P.L., "Development of Ozone Reactivity Scales for Volatile Organic Compounds," EPA-600/3-91/050, August 1991.

5 Photochemical Reactivity of Perchloroethylene, EPA-600/3-83-001, January 1983.

6 Kelley Cronin, SDAPCD, Memorandum to Laura Yannayon, SDAPCD, on "Perc emissions from dry cleaning," March 14, 1996.

7 Steve Moore, SDAPCD, Memorandum to Laura Yannayon, SDAPCD, on "Emissions from Aerospace Coating Operations Resulting from change in VOC Definition to Exclude Perchloroethylene," March 14, 1996.

8 Annual AB2588 Report, 1994.