6/30/72

REGULATION I. GENERAL

Rule 1. Title

These Rules and Regulations shall be known as the Rules of the Ventura County Air Pollution Control District.

Rule 2. Definitions.

A. Except as otherwise specifically provided in these Rules and except where the context otherwise indicates, words used in these Rules are used in exactly the same sense as the same words are used in Chapter 2, Division 20, of the Health & Safety Code of the State of California.

1. Acceptable Incinerator. "Acceptable Incinerator" means any device or contrivance designed to consume combustible refuse without creating objectionable odor, smoke, or contaminants in excess of specified emission limits. An acceptable incinerator must have a chimney or flue.

2. Agricultural Operation. "Agricultural Operation" means an operation directly related to the growing of products for human consumption such as food crops or the raising of fowls or animals, as a gainful occupation.

3. Agricultural Wastes. "Agricultural Wastes" means unwanted or unsaleable materials produced wholly from agricultural operations other than forest or range management operations, directly related to the growing of crops or animals for the primary purpose of making a profit or for a livelihood.

4. Air Contaminant. "Air Contaminant" means any emission for which allowable discharge limits and/or air quality standards have been established by the Rules and Regulations of the Ventura County Air Pollution Control District, the State of California Air Resources Board, or the Federal Government.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 2 - DEFINITIONS
(Adopted 10/22/68)

A. Except as otherwise specifically provided in these Rules and except 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 of the State of California. (Revised 3/9/76)

Air Contaminant. "Air Contaminant" or "Air Pollutant" means any discharge, release, or other propagation into the atmosphere and includes but is not limited to, smoke, charred paper, dust, soot, grime, carbon, greenhouse gases, fumes, gases, odors, particulate matter, acids or any combination thereof. (Revised 6/23/81, 4/12/11)

Air Pollution Control Officer. "Air Pollution Control Officer" means the Air Pollution Control Officer or his duly authorized assistants and deputies. (Added 3/26/74)

Air Quality Standards. "Air Quality Standards" as used in these Regulations refers to those ambient air quality standards as promulgated by State or Federal pollution control agencies or as described in these Regulations. (Added 5/23/72, Revised 7/18/72)

Atmosphere. "Atmosphere" means the air that surrounds the earth but does not include the general volume of gases contained in any bona fide building.

Authority to Construct. "Authority to Construct" means a written permit issued by the Ventura County Air Pollution Control District for the construction, erection, installation, assembling, modification, or replacement of any facility including any article, machine, equipment or contrivance the use of which may cause the issuance, reduction, control or elimination of air contaminants. (Added 5/23/72)

Best Available Control Technology (BACT). "Best Available Control Technology" means the most stringent emission limitation or control technology for an emissions unit which:

1. Has been achieved in practice for such emissions unit category, or

2. Is contained in any implementation plan approved by the Environmental Protection Agency for such emissions unit category. A specific limitation or control shall not apply if the owner or operator of such emissions unit demonstrates to the satisfaction of the Air Pollution Control Officer (APCO) that such limitation or control technology is not presently achievable, or

3. Any other emission limitation or control technology, including, but not limited to, replacement of such emissions unit with a lower emitting emissions unit, application of control equipment or process modifications, determined by the

APCO to be technologically feasible for such emissions unit and cost effective as compared to the BACT cost effectiveness threshold adopted by the Ventura County Air Pollution Control Board.

In defining emissions unit categories, the APCO may take into account the function of the emissions unit, the capacity of the emissions unit, the annual throughput of the emissions unit, and the location of the emissions unit with respect to electricity or fuels needed to achieve an emission limitation or control technology. (Added 9/28/76, Revised 6/20/78, 6/19/79, 1/10/84, 10/22/91)

Board. "Board" means the Air Pollution Control Board of the Air Pollution Control District of Ventura County.

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

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

Construction. "Construction" means the erection, installation, assembling, modification, or replacement of any article, machine, equipment, or contrivance. Construction begins when any of the following occurs; ground is broken, equipment is moved into position, or any connection or attachment is done to or for the equipment in question. (Added 5/23/72)

Control Strategy. "Control Strategy" means a combination of measures designed to reduce air contaminant emissions to attain and maintain ambient air quality standards. (Added 8/17/76)

Crude Oil. "Crude Oil" means any naturally occurring, unrefined petroleum liquid. (Added 6/20/78)

District. "District" shall mean the Ventura County Air Pollution Control District. (Added 1/29/74)

Effluent. "Effluent" means the total volume of gases and/or liquids and/or solids emitted from an emission point. (Revised 5/23/72)

Emission. "Emission" means the act of passing into the atmosphere of air contaminant or a gas stream which may or may not contain an air contaminant or the material so passed into the atmosphere. (Revised 5/23/72)

Emission Data. "Emission Data" means measured or calculated concentrations or weights of air contaminants emitted into the ambient air. Data used to calculate emission data are not emission data. (Added 1/29/74)

Emission Point. "Emission Point" means any point from which any air contaminants are released into the atmosphere. (Added 5/23/72)

Emission Standards. "Emission Standards" as used in these Regulations means U.S. Federal (EPA), State of California (ARB), or Ventura County Air Pollution Control District standards of limits for air contaminant emissions, whichever are the most restrictive. (Added 5/23/72, Revised 7/18/72)

Equipment. Any operation, article, machine, equipment, or contrivance which may emit or reduce the emissions of any air contaminant or regulated pollutant. (Added 11/19/85, Revised 4/12/11)

Exempt Organic Compounds. "Exempt Organic Compounds" means any of the following negligibly-reactive or low-reactive compounds.

Negligibly-Reactive Compounds	
Compound	**CAS Number**
carbon monoxide	630-08-0
carbon dioxide	124-38-9
metallic carbines (M-C) or Carbonates (M-CO3)	
ammonium carbonate ((NH4)HCO3(NH4)CO2NH2)	8000-73-5-123
carbonic acid (CO(OH)2)	463-79-6
methane (CH4)	74-82-8
methylene chloride (dichloromethane)	75-09-2
1,1,1-trichloroethane (methyl chloroform)	71-55-6
trichlorofluoromethane (CFC-11)	75-69-4
dichlorodifluoromethane (CFC-12)	75-71-8
chlorodifluoromethane (HCFC-22)	75-45-6
trifluoromethane (HFC-23)	75-46-7
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)	76-13-1
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)	76-14-2
chloropentafluoroethane (CFC-115)	76-15-3
1,1,1-trifluoro-2,2-dichloroethane (HCFC-123)	306-83-2
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)	2837-89-0
pentafluoroethane (HFC-125)	354-33-6
1,1,2,2-tetrafluoroethane (HFC-134)	359-35-3
1,1,1,2-tetrafluoroethane (HFC-134a)	811-97-2
1,1-dichloro-1-fluoroethane (HCFC-141b)	1717-00-6
1-chloro-1,1-difluoroethane (HCFC-142b)	75-68-3
1,1,1-trifluoroethane (HFC-143a)	420-46-2
1,1-difluoroethane (HFC-152a)	75-37-6

difluoromethane (HFC–32)	75-10-5
1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC–43–10mee)	138495-42-8
3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC–225ca)	422-56-0
1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC–225cb)	507-55-1
1,1,1,2,2,3,3-heptafluoro-3-methoxypropane (HFE-7000)	375-03-1
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane (C4F9OCH3)	163702-07-6
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$)	163702-05-4
1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300)	132182-92-4
3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl)hexane (HFE-7500)	297730-93-9
2-(difluoromethoxymethyl)-1,1,1,2,3,3,3 heptafluoropropane [(CF3)2CFCF2OCH3)]	163702-08-7
trans-1-chloro-3,3,3-trifluoromethyl-pentane (HFO-1233zd)	102687-65-0
trans-1,3,3,3-tetrafluoropropene (HFO-1234ze)	29118-24-9
2,3,3,3-tetrafluoropropene (HFO-1234yf)	754-12-1
cis-1,1,1,4,4,4-hexafluorobut-2-ene (HFO-1336mzz-Z)	692-49-9
1,1,2,2-Tetrafluoro-1-(2,2,2-trifluoroethoxy) ethane (HFE-347pcf2)	406-78-0
2-Amino-2-methyl-1-propanol (AMP)	124-68-5
2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane [(CF3)2CFCF2OC2H5)]	163702-06-5
ethylfluoride (HFC–161)	353-36-6
1,1,1,2,3,3-hexafluoropropane (HFC–236ea)	431-63-0
1,1,1,3,3,3-hexafluoropropane (HFC–236fa)	690-39-1
1,1,2,2,3-pentafluoropropane (HFC–245ca)	679-86-7
1,1,2,3,3-pentafluoropropane (HFC–245ea)	24270-66-4
1,1,1,2,3-pentafluoropropane (HFC–245eb)	431-31-2
1,1,1,3,3-pentafluoropropane (HFC–245fa)	460-73-1
1,1,1,3,3-pentafluorobutane (HFC–365mfc)	406-58-6
chlorofluoromethane (HCFC–31)	593-70-4
1,2-dichloro-1,1,2-trifluoroethane (HCFC–123a)	354-23-4
1-chloro-1-fluoroethane (HCFC–151a)	1615-75-4
cyclic, branched, or linear, completely methylated siloxanes (VMS), and perfluorocarbon (PFC) 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	
sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine	

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

2. The following are low-reactive compounds:

Compound	CAS Number
acetone	67-64-1
ethane	74-84-0
methyl acetate	79-20-9
tetrachloroethylene (perchloroethylene)	127-18-4
1-chloro-4-trifluoromethyl benzene (parachlorobenzotrifluoride or PCBTF)	98-56-6
t-butyl acetate	123-86-4
dimethyl carbonate	646-38-6
propylene carbonate	108-32-7
methyl formate	107-31-3

(Added 5/12/92, Revised 12/15/92, 4/9/96, 11/10/98, 01/12/10, 4/9/19)

Experimental or Research Operations. (Added 4/22/80) "Experimental or Research Operations" mean those operations to which a preponderance of the following characteristics apply:

1. Not producing a product for commercial use or sale.

2. The primary objective is not to produce an immediate profit.

3. The primary objective is to advance the state-of-the-art.

4. Frequently accompanied by literature search, theoretical studies and computer modeling.

5. Operations are under direct control of engineers or scientists.

6. Theoretical solutions are evaluated by hardware testing.

7. Limited quantities of hardware are built for test purposes.

8. Hardware may incorporate special instrumentation for design and performance evaluation.

9. Hardware frequently is sub-scale, pilot plant scale, incomplete system components, breadboard systems, or may be constructed from boiler plate or other materials not suitable for a commercial product.

10. Hardware is subject to continuing modification, may be destroyed in testing or scrapped upon completion.

11. Except for life performance demonstration, tests are usually for short duration or at reduced operating levels.

Fleet Vehicle. "Fleet Vehicles" are gasoline powered motor vehicles as defined by the Motor Vehicle Code, Division I, Section 416 of the State of California Vehicle Code and operated from one business or governmental entity. (Added 6/25/74)

Frost Protection. "Frost Protection" means the protection of agricultural crops against damage from frost or cold weather.

Gasoline. "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4.0 pounds per square inch or greater, which is sold or intended for sale for use in motor vehicles or engines and is commonly or commercially known or sold as gasoline. (Added 5/23/72)

Greenhouse Gases (GHGs). "Greenhouse Gases" shall mean the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons (by category), perfluorocarbons (by category), and sulfur hexafluoride. (Added 4/12/11)

Hazardous Material. "Hazardous Material" means dangerous, poisonous, corrosive, oxidizing, volatile, flammable, explosive or toxic materials for which Federal, State or Ventura County industrial safety or other limits have been established. (Added 5/23/72)

Motor Vehicle. "Motor Vehicle" is a vehicle that is self-propelled, including recreational vehicles, and does not include a self-propelled wheelchair, motorized tricycle, or motorized quadricycle, if operated by a person who, by reason of physical disability, is otherwise unable to move about as a pedestrian. Also excluded are truck campers. (revised 4/12/11)

Opacity. "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of the background. (Added 5/23/72)

Operation. "Operation" means any physical action resulting in a change in a location, form, or physical properties of a material or any chemical action resulting in a change in the chemical composition, chemical or physical properties of a material.

Orchard Heater. "Orchard Heater" means any article, machine, equipment or contrivance burning any kind of fuel, which is designed, used, maintained, or capable of being used

for protection of agricultural crops against frost or cold weather; provided, however, that the devices which are commonly known as wind machines are not included in the terms "Orchard Heater" or "Heater".

Organic Solvents. "Organic Solvents" are any liquids containing organic compounds which are used as dissolvers, viscosity reducers or cleaning agents. These liquids are principally derived from petroleum and include petroleum distillates, chlorinated hydrocarbons, chlorofluorocarbons, ketones, and alcohols. Solutions, emulsions, and dispersions of water and soap, or water and detergent are not organic solvents. Soaps and detergents are water based surfactants. (Revised 5/8/90)

Outer Continental Shelf Area (OCS). "Outer Continental Shelf Area" means any offshore waters for which the District has been designated the corresponding onshore area by the U.S. Environmental Protection Agency, Anacapa Island, and San Nicolas Island (Added 1/10/84, Revised 1O/22/9l).

Particulate Matter. "Particulate Matter" means any material except uncombined water that exists in a finely divided form as a liquid or solid at standard conditions. (Revised 4/13/04)

Particulate Matter (PM10). "Particulate matter (PM10)" means particulate matter with an aerodynamic diameter equal to or less than 10 micrometers. (Added 10/22/91)

Particulate Matter (PM2.5). "Particulate matter (PM2.5)" means particulate matter with an aerodynamic diameter equal to or less than 2.5 micrometers. (Added 4/12/11)

Permit to Operate. "Permit to Operate" means a written permit issued by the Ventura County Air Pollution Control District for the operation of any facility, article, machine, equipment, or other contrivance the use of which may cause the issuance, reduction, control, or elimination of air contaminants (Added 5/23/72).

Permitted Emissions. "Permitted Emissions" means those emissions which are imposed on a Permit to Operate limiting the maximum quantity of each air pollutant which a source can emit. These limits shall be expressed in pounds per hour, and tons per year. Permitted emissions shall be determined pursuant to Rule 29.B. (Added 6/19/79, Revised 10/22/91)

Person. "Person" means any person, corporation, government agency, public officer, association, joint venture, partnership or any combination of such, jointly or separately, operating in concert for any common objective related to the purposes of this Regulation. It includes the owner, lessor, lessee, tenant, licensee, manager, and operator, or any of such, of an emission point or any source operation related thereto, or of any interest in such emission point or source operation. (Revised 5/23/72)

Portable. "Portable" means a device that is not stationary. (Added 4/12/11)

PPM. "PPM" means parts per million by volume. (Added 5/23/72)

Public Record. "Public Record" means any record made available to the public by law containing information relating to the conduct of the public's business that is prepared, owned, used or retained by the District, except "trade secrets" as defined in Regulation IX, Rule 200, Paragraph C. (Added 1/29/74)

Reactive Organic Compounds. "Reactive Organic Compounds" (ROC) is any compound containing at least one atom of carbon except those compounds identified in this Rule as Exempt Organic Compounds. This term and definition shall replace the following terms and definitions wherever they appear in the District's Rules and Regulations: organic compound, organic gases, organic liquid, organic materials, organic vapor, volatile organic compounds and hydrocarbons. (Revised 11/3/81, 1/28/92, 5/12/92)

Record. "Record" means handwriting, typewriting, printing, photostating, photographing, and every other means of recording upon any form of communication or representation, including letters, words, pictures, sounds, or symbols, or combinations thereof, and all papers, maps, magnetic or paper tapes, photographic films and prints, magnetic or punched cards, discs, drums, and other documents. (Added 1/29/74)

Reduction of Animal Matter. "Reduction of Animal Matter" means processing animal matter by any process, including rendering, cooking, drying, dehydration, digestion, evaporation, and protein concentration but not including any processing of food for human consumption. (Revised 5/23/72)

Regulation. "Regulation" means one of the major categories of the rules of the Air Pollution Control District of Ventura County.

Rule. "Rule" means a rule of the Air Pollution Control District of Ventura County.

Schedule of Increments of Progress. "Schedule of Increments of Progress" 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:

1. The date of submittal of the final plan for the control of emissions of air contaminants from that source to the Air Pollution Control District.
2. That 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 notification is to be completed.
5. The date by which final compliance is to be addressed.
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.

(Added 8/17/76)

Section. "Section" means the section of the Health and Safety Code of the State of California unless some other regulation is specifically indicated. (Revised 5/23/72)

Source Operation. "Source Operation" means the last operation preceding the emission of an air contaminant which operation:

1. Results in a separation of the air contaminants in the process material or in the conversion of the process materials into air contaminants as in the case of combustion of fuel, and,

2. Is not an air pollution abatement operation.

Standard Conditions. "Standard Conditions" means a gas temperature of 68 degrees Fahrenheit (20 degrees Celsius) and a gas pressure of 14.7 pounds per square inch (760

mm. Hg) absolute. Results of all analyses and tests shall be calculated and reported at this gas temperature and pressure unless otherwise called for. (Revised 4/13/04)

Startup. "Startup" means the setting in operation of an affected facility for any purpose. (Added 5/23/72)

Stationary. "Stationary" means a device that meets any one of the following criteria:

1. The device is attached to a foundation, or if not so attached, resides at the same location or at the same stationary source for more than 12 consecutive months. A backup, standby or replacement device that replaces a device at a location or stationary source and is intended to perform the same or similar function as the device being replaced shall be included in calculating the consecutive time period. The cumulative time of all devices, including the time between the removal of the original device and installation of the replacement device, shall count toward the consecutive time determination; or

2. The device is not attached to a foundation and is located at a seasonal stationary source for less than 12 consecutive months. To be stationary, the device must be located at the seasonal source for at least three months each year for at least two years.

3. The device is moved from one location to another in an attempt to circumvent the 12 month residence time requirement in paragraph 1 above. The period during which the device is maintained at a storage facility shall be excluded from the consecutive time determination.

4. The device is moved around a stationary source and performs routine or regular operations integral to the function of the stationary source. (added 4/12/11)

Stationary Source. Any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission.

"Building, structure, facility, or installation" means all pollutant emitting activities, including activities located in California coastal waters adjacent to the District boundaries, which:

1. belong to the same industrial grouping, and

2. are located on one or more contiguous or adjacent properties (except for activities located in coastal waters), and

3. are under the same or common ownership, operation, or control or which are owned or operated by entities which are under common control.

Pollutant emitting activities shall be considered as part of the same industrial grouping if they belong to the same two-digit Standard Industrial Classification code, or if they are part of a common production process. (Common production process includes industrial processes, manufacturing processes, extractive processes, and any connected processes involving a common raw material or product.)

"California Coastal Waters" means that area between the California coastline and a line starting at the California-Oregon border at the Pacific Ocean

thence to 42.0 north, 125.5 west
thence to 41.0 north, 125.5 west
thence to 40.0 north, 125.5 west
thence to 39.0 north, 125.0 west
thence to 38.0 north, 124.5 west
thence to 37.0 north, 123.5 west
thence to 36.0 north, 122.5 west
thence to 35.0 north, 121.5 west
thence to 34.0 north, 120.5 west
thence to 33.0 north, 119.5 west
thence to 32.5 north, 118.5 west

and ending at the California - Mexico border at the Pacific Ocean. (Added 1/10/84)

"Cargo Carriers" includes trains dedicated to a specific source, and marine vessels. The emissions from all marine vessels which load or unload at the source shall be considered as emissions from the stationary source while such vessels are operating in District waters and in California coastal waters adjacent to the District. The emissions from vessels shall include reactive organic compound vapors that are displaced into the atmosphere; fugitive emissions; combustion emissions in District waters; and emissions from the loading and unloading of cargo. The emissions from all trains dedicated to a specified stationary source, while operating in the District, including directly emitted and fugitive emissions, shall be considered as emissions from the stationary source. (Added 1/10/84)

"Common operations" includes operations which are related through dependent processes, storage, or transportation of the same or similar products or raw material. The emissions within District boundaries and California coastal waters from cargo carriers associated with the stationary source shall be considered emissions from the stationary source.

"Contiguous Property" means two or more parcels of land with a common boundary or separated solely by a private roadway or other public right-of-way. (Added 1/10/84)

"Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.
(Added 5/23/72, Revised 6/20/78, 6/19/79, 1/10/84, 11/19/85, 10/22/91)

B. Except as otherwise specifically provided in these Rules and except where the context otherwise indicates, abbreviations used in these Rules are as follows:

B.T.U.	- British Thermal Unit(s)
cal.	- calorie(s)
c.f.m.	- cubic feet per minute
CO	- carbon monoxide
CO_2	- carbon dioxide
CO_2e	- carbon dioxide equivalent
g.	- gram(s)
GHGs	- greenhouse gases
gr.	- grain(s)
Hg.	- mercury
H_2S	- hydrogen sulfide
hr.	- hour
in.	- inch(es)
l.	- liter(s)
lb.	- pound(s)
mg.	- milligram(s)
min.	- minute
ml.	- milliliter(s)
mm.	- millimeter(s)
NO	- nitric oxide
NO_2	- nitrogen dioxide
NOx	- oxides of nitrogen
%	- percent
ppm	- part(s) per million
s.c.f.	- standard cubic feet
s.c.f.m.	- standard cubic feet per minute
SO_2	- sulfur dioxide
vol.	- volume
M or K	- thousand(s)
MM	- million(s)

(Adopted 5/23/72, Revised and Renumbered 11/21/78, revised 4/12/11)

Table 1, Global Warming Potentials (GWP) (100-year Time Horizon) has been deleted, as it was no longer relevant due to court mandated changes in the federal permitting requirements for the permitting of greenhouse gases. All references to this table will be deleted from applicable District rules as part of a future rule action to make District rules consistent with current federal greenhouse gas permitting requirements. (deleted 4/9/19).

4/21/76

~~D. In discharging their duties the Committee shall obtain any technical advice needed, but any costs for such technical services must first be approved by the Air Pollution Control Board.~~

Rule 4. Rules Supplemental

All Rules, Regulations, and Ordinances adopted by the Air Pollution Control District are supplemental to the provisions of Division 26 of the Health and Safety Code. In the event of conflicting provisions, the most restrictive shall prevail.

~~Rule 5. Effective Date~~

All Rules are effective for all equipment as of the effective date of their adoption, unless indicated otherwise. When an effective date is otherwise indicated, existing equipment shall be subject to the previous Rule until the newly adopted Rule becomes effective.

Rule 6. Abbreviations

B.T.U.	-British Thermal Unit(s)
cal.	-calorie(s)
c.f.m.	-cubic feet per minute
CO	-carbon monoxide
CO_2	-carbon dioxide
g.	-gram(s)
gr.	-grain(s)
Hg.	-mercury
H_2S	-hydrogen sulfide
hr.	-hour
in.	-inch(es)
l.	-liter(s)
lb.	-pound(s)
mg.	-milligram(s)
min.	-minute
ml.	-milliliter(s)
mm.	-millimeter(s)
NO	-nitric oxide
NO_2	-nitrogen dioxide
NO_x	-oxides of nitrogen
%	-percent
ppm	-part(s) per million
s.c.f.	-standard cubic feet
s.c.f.m.	-standard cubic feet per minute
SO_2	-sulfur dioxide
vol.	-volume

7/19/04

Rule 5. Effective Date (Adopted 5/23/72, Revised 4/13/04)

All Rules are effective for all equipment as of the effective date of their adoption, unless indicated otherwise. When an effective date is otherwise indicated, existing equipment shall be subject to the previous Rule until the newly adopted Rule becomes effective.

"Existing equipment" means all equipment that is in use or is under construction on the date of rule adoption.

5/23/79

D. In discharging their duties the committee shall obtain any technical advice needed, but any costs for such technical services must first be approved by the Air Pollution Control Board. (Adopted 10/22/68)

Rule 4. Rules Supplemental

All Rules, Regulations, and Ordinances adopted by the Air Pollution Control Districts are supplemental to the provisions of Division 26 of the Health and Safety Code. In the event of conflicting provisions, the most restrictive shall prevail. (Rev. 3/9/76)

Rule 5. Effective Date

All Rules are effective for all equipment as of the effective date of their adoption, unless indicated otherwise. When an effective date is otherwise indicated, existing equipment shall be subject to the previous Rule until the newly adopted Rule becomes effective. (Adopted 1/25/73)

Rule 6. Severability

If any provision, clause, sentence, paragraph, section or part of these Regulations or application thereof to any person or circumstance shall for any reason be adjudged by a court of competent jurisdiction to be unconstitutional or invalid, such judgment shall not affect or invalidate the remainder of these Regulations and the application of such provision to other persons or circumstances, but shall be confined in its operation to the provision, clause, sentence, paragraph, section or part thereof directly involved in the controversy in which such judgment shall have been rendered and to the person or circumstance involved, and it is hereby declared to be the intent of the Ventura County Air Pollution Control Board that these Regulations would have been adopted in any case had such invalid provision or provisions not been included. (Adopted 5/23/72, Amended 11/21/78, Renumbered 11/21/78)

Rule 7. Zone Boundaries

The Ventura County Air Pollution Control District shall consist of two zones as defined below:

A. The South Zone of the District shall be that portion of Ventura County south of the southern boundary of the Los Padres National Forest.

B. The North Zone of the District shall be that portion of Ventura County north of the southern boundary of the Los Padres National Forest. (Adopted 6/14/77)

Rule 8. Access to Facilities (Adopted 5/23/72, Renumbered 11/21/78)

Representatives of the Air Pollution Control District, during reasonable hours, and upon identification, for the purpose of enforcing or administering the Rules and Regulations of the Ventura County Air Pollution Control District or any provisions of the Vehicle Code relating to the emission or control of air contaminants, or of any order, Regulation or Rule prescribed pursuant thereto, may enter every building, premises, or other place, except a building designed for and used exclusively as a private residence and may stop, detain, and

5/23/79

6/22/78

~~PROPOSED~~ RULE 7

Rule 7. Zone Boundaries

The Ventura County Air Pollution Control District shall consist of two zones as defined below:

A. The South Zone of the District shall be that portion of Ventura County south of the southern boundary of the Los Padres National Forest.

B. The North Zone of the District shall be that portion of Ventura County north of the southern boundary of the Los Padres National Forest.

7/19/04

Rule 10. Permits Required (except as listed in Rule 23) (Adopted 10/22/68, Revised 5/23/72, 11/21/78, 8/14/79, 7/5/83, 6/13/95, 5/14/02, 4/13/04)

A. Authority to Construct

1. Requirement to Obtain an Authority to Construct

A person shall not build, erect, install, modify, relocate or replace any emissions unit at a stationary source without first obtaining an Authority to Construct. An Authority to Construct shall be required for any new emissions unit, modified emissions unit, relocated emissions unit, or replacement emissions unit. An Authority to Construct shall also be required for any physical change to an emissions unit which may alter the emissions of air contaminants.

2. Exemptions from Obtaining an Authority to Construct

An Authority to Construct shall not be required for:

a. New, modified or replacement emissions units at a small stationary source.

b. Relocation of an emissions unit within Ventura County where the new location is no more than five miles from the previous location, provided the emissions unit is at a small or medium source as defined in Rule 11, and provided that there is no emission increase.

For an emissions unit exempted pursuant to this subsection, a person shall apply directly for a Permit to Operate.

3. Contents of an Authority to Construct

The APCO shall list the following information and restrictions in an Authority to Construct:

a. A description of the emissions units for which the Authority to Construct is being issued.

b. Any reasonable conditions determined by the APCO pursuant to Rule 29 to be necessary to assure or demonstrate that the stationary source will operate in compliance with applicable federal, state and local rules and regulations. These conditions may include, but shall not be limited to, any applicable requirement(s) to perform source testing, apply for a Permit to Operate or obtain emission reduction credits.

c. A statement that the granting of the Authority to Construct shall not be construed as an endorsement by the APCD or guarantee compliance with APCD Rules and Regulations.

4. Expiration of an Authority to Construct

An Authority to Construct shall expire and shall be cancelled two years from the date of issuance or when a Permit to Operate or Temporary Permit to Operate is granted or denied, whichever comes first, unless an extension has been approved in writing by the APCO. To obtain an extension, the applicant must submit an application prior to the expiration date of the Authority to Construct. The APCO may grant a two-year extension to the expiration date in the following cases:

a. Where the APCO determines that the applicable BACT requirements that are in effect on the expiration date are not more stringent than the BACT requirements that were originally imposed.

b. Where the APCO determines, based on an analysis submitted by the applicant, that the more stringent BACT requirements in effect on the expiration date are not cost effective based on current APCD cost effectiveness guidelines, taking into consideration expenditures already made in addition to additional expenditures needed to comply with current BACT.

B. Permit to Operate

1. Requirement to Obtain a Permit to Operate

A person shall not operate, use or offer for use any emissions unit at a stationary source without first obtaining a Permit to Operate or a revised Permit to Operate which lists such emissions unit in its current operating configuration.

a. A new or revised Permit to Operate shall be obtained prior to the operation of:

1) Any new emissions unit.
2) Any modified emissions unit
3) Any relocated emissions unit
4) Any replacement emissions unit
5) Any physical change to an emissions unit which may alter the emissions of air contaminants.

b. A revised Permit to Operate shall be obtained in order to operate under modified permit conditions.

c. A new or revised Permit to Operate shall be obtained for a stationary source prior to the effective date of any revision to Rule 23 that removes the exemption from permit for the source.

d. A Permit to Operate shall be obtained prior to the transfer of ownership of any stationary source.

2. Contents of a Permit to Operate

The APCO shall list the following information and restrictions in the Permit to Operate:

a. A description of all emissions units at the stationary source for which the Permit to Operate is being issued.

b. Any reasonable conditions determined by the APCO pursuant to Rule 29 to be necessary to assure or demonstrate that a stationary source and all emissions units at the stationary source will operate in compliance with all applicable federal, state and local emission standards.

c. The amount of emissions that the APCO determines a stationary source may emit calculated pursuant to Rule 29. This amount is called "Permitted Emissions."

d. A statement that the Permit to Operate shall not be construed to allow any emissions unit to operate in violation of any applicable State or Federal emission standard or rules of the District.

3. Expiration of a Permit to Operate

A Permit to Operate, except a Part 70 permit, shall expire annually and must be renewed in accordance with the requirements of Rule 30. Notwithstanding the term of a Part 70 permit, a Part 70 permit shall expire if it is not renewed in accordance with the requirements of Rule 30.

4. Temporary Permit to Operate

During the processing of an application for a Permit to Operate, the APCO may issue a Temporary Permit to Operate. The Temporary Permit to Operate shall specify conditions under which the emissions units may be operated. A Temporary Permit to Operate shall expire when a Permit to Operate is issued, or when the application for the Permit to Operate is denied.

C. Exemption

This rule shall not apply to any emissions unit exempted from permit by Rule 23, Exemptions from Permit.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 11 - DEFINITIONS FOR REGULATION II
(Adopted 6/13/95, amended 3/14/06)

For the purpose of Regulation II, the following definitions shall apply. Additional applicable definitions are contained in Rule 2.

1. "Authority to Construct": A written permit issued by the APCO that authorizes the construction of one or more emissions units at a stationary source.

2. "BACT Certification": A compilation of emission limitations, control technologies and permit conditions established by the APCO pursuant to Rule 16, which may include but are not limited to: throughput limits; control equipment requirements; required operating parameters; and monitoring, recordkeeping, source testing and reporting requirements that ensure that a particular make and model of mass produced emissions units are equipped with and can demonstrate Best Available Control Technology.

3. "Best Available Control Technology (BACT)": The most stringent emission limitation or control technology for an emissions unit which:

   a. Has been achieved in practice for such emissions unit category, or

   b. Is contained in any implementation plan approved by the Environmental Protection Agency for such emissions unit category. A specific limitation or control shall not apply if the owner or operator of such emissions unit demonstrates to the satisfaction of the Air Pollution Control Officer (APCO) that such limitation or control technology is not presently achievable, or

   c. Any other emission limitation or control technology, including, but not limited to, replacement of such emissions unit with a lower emitting emissions unit, application of control equipment or process modifications, determined by the APCO to be technologically feasible for such emissions unit and cost-effective as compared to the BACT cost-effectiveness threshold adopted by the Ventura County Air Pollution Control Board.

   In defining emissions unit categories, the APCO may take into account the function of the emissions unit, the capacity of the emissions unit, the annual throughput of the emissions unit and the location of the emissions unit with respect to electricity or fuels needed to achieve an emission limitation or control technology.

4. "Emissions Unit": Any operation, article, machine, equipment or contrivance which may emit, or reduce the emission of, any air contaminant or pollutant.

5. "Large Source": Any source that does not meet the criteria of a Small or Medium source as determined by the APCO.

6. "Medium Source": A source that is not a Small Source and meets the following criteria as determined by the APCO:

   a. The Permitted Emissions for the source will be less than all of the values listed below:

Reactive Organic Compounds (ROC)	5.0	ton/yr
Nitrogen Oxides (NOx)	5.0	ton/yr
Particulate Matter (PM10)	15.0	ton/yr
Sulfur Oxides (SOx)	15.0	ton/yr
Carbon Monoxide	30.0	ton/yr

   and

   b. The permit application must not trigger any toxics review requirements (H&SC 44300 et seq.), CEQA review requirements, federal NSPS or NESHAP, federal operating permits requirements (Rule 33), and must not be located within 1000 feet from the outer boundary of a schoolsite (H&SC 42301.6 et seq.).

7. "Modified Emissions Unit":

   a. Any physical change to any emissions unit, which would result in an emission increase or for which an application to bank emission reduction credits is submitted to the District, or

   b. Any change in method of operation of any emissions unit, which would result in an emission increase or for which an application to bank emission reduction credits is submitted to the District, or

   c. Any change in hours of operation or throughput, which would result in an emission increase and would necessitate a revision to a permit condition, or for which an application to bank emission reduction credits is submitted to the District.

   A change in ownership, or routine maintenance or repair, shall not be considered a physical change or change in method of operation.

8. "Permit to Operate": A written permit issued by the APCO that authorizes the operation of all emissions units at a stationary source. A Temporary Permit to Operate is a Permit to Operate.

9. "Relocated Emissions Unit": An emissions unit which is moved from a location in Ventura County to another location in Ventura County. The moving of an emissions unit from a location at a stationary source to another location at the same stationary source shall not be considered a relocation. The moving of an emissions unit specifically noted on the Permit to Operate as being portable shall not be considered a relocation.

10. "Replacement Emissions Unit": An emissions unit which supplants another emissions unit where the replacement emissions unit serves the identical function as the emission unit being replaced.

11. "Small Source": A source that meets the following criteria as determined by the APCO:

a. The Permitted Emissions for the source will be less than all of the values listed below:

Reactive Organic Compounds (ROC)	5.0	ton/yr
Nitrogen Oxides (NOx)	5.0	ton/yr
Particulate Matter (PM10)	15.0	ton/yr
Sulfur Oxides (SOx)	15.0	ton/yr
Carbon Monoxide	30.0	ton/yr

and

b. The permit application must not trigger any toxics review requirements (H&SC 44300 et seq.), CEQA review requirements, federal NSPS or NESHAP, federal operating permits requirements (Rule 33), and must not be located within 1000 feet from the outer boundary of a schoolsite (H&SC 42301.6 et seq.), and

c. The permit application must deal exclusively with equipment that is listed by the APCO as BACT certified pursuant to Rule 16 and must not require an initial source test to demonstrate compliance, and

d. The applicant must be willing to accept the standard permit conditions contained in the BACT certification as established by the APCO.

12. "Stationary Source": Any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission.

"Building, structure, facility, or installation" means all pollutant emitting activities, including activities located in California coastal waters adjacent to the District boundaries, which:

a. belong to the same industrial grouping, and

b. are located on one or more contiguous or adjacent properties (except for activities located in coastal waters), and

c. are under the same or common ownership, operation, or control or which are owned or operated by entities which are under common control.

Pollutant emitting activities shall be considered as part of the same industrial grouping if they belong to the same two-digit Standard Industrial Classification code, or if they are part of a common production process. (Common production

process includes industrial processes, manufacturing processes, extractive processes, and any connected processes involving a common raw material or product.)

"California Coastal Waters" means that area between the California coastline and a line starting at the California-Oregon border at the Pacific Ocean

thence to 42.0 north, 125.5 west
thence to 41.0 north, 125.5 west
thence to 40.0 north, 125.5 west
thence to 39.0 north, 125.0 west
thence to 38.0 north, 124.5 west
thence to 37.0 north, 123.5 west
thence to 36.0 north, 122.5 west
thence to 35.0 north, 121.5 west
thence to 34.0 north, 120.5 west
thence to 33.0 north, 119.5 west
thence to 32.5 north, 118.5 west

and ending at the California-Mexico border at the Pacific Ocean.

"Cargo Carriers" includes trains dedicated to a specific source, and marine vessels. The emissions from all marine vessels which load or unload at the source shall be considered as emissions from the stationary source while such vessels are operating in District waters and in California coastal waters adjacent to the District. The emissions from vessels shall include reactive organic compound vapors that are displaced into the atmosphere; fugitive emissions; combustion emissions in District waters; and emissions from the loading and unloading of cargo. The emissions from all trains dedicated to a specified stationary source, while operating in the District, including directly emitted and fugitive emissions, shall be considered as emissions from the stationary source.

"Common operations" includes operations which are related through dependent processes, storage, or transportation of the same or similar products or raw material. The emissions within District boundaries and California coastal waters from cargo carriers associated with the stationary source shall be considered emissions from the stationary source.

"Contiguous Property" means two or more parcels of land with a common boundary or separated solely by a private roadway or other public right-of-way.

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

VENTURA

10-13-95

Rule 12. Applications for Permits (Adopted 6/13/95)

A. Applications for Permits - General

1. To obtain the Permits required by Rule 10, a person shall submit an application to the APCO:

   a. A person applying for a permit for a "Small" source shall submit an application for a Permit to Operate.

   b. A person applying for a permit for a "Medium" or "Large" source shall submit an application for an Authority to Construct and obtain an Authority to Construct before applying for a Permit to Operate.

2. The applicant should contact the APCD to obtain the required forms before submitting any application. To expedite permit processing, the APCO shall schedule a pre-application meeting for any applicant requesting such a meeting. The APCO shall allow the applicant to propose permit conditions. (H&SC Sec. 42322.5(a)(b))

3. Applications shall be filed on appropriate forms as prescribed by the APCO. To expedite the permitting process the APCO shall make standardized permit application forms available for common categories of pollution sources (H&SC Sec. 42322.(a)(5)).

4. A separate permit application shall be required for each stationary source

B. Application for Authority to Construct

To obtain an Authority to Construct a person shall submit an application to the Air Pollution Control District along with any fees or deposits required pursuant to Regulation III.

1. The application shall include all information the APCO finds necessary to determine that the emissions unit(s) will operate without emitting air contaminants in violation of any applicable federal, state or local rules or regulations. The APCO shall make available a list of information that may be required to make this determination.

2. The application shall include a statement signed by the applicant that the data submitted with the application is true and that the stationary source can be expected to comply with all applicable rules when operated as proposed by the applicant.

C. Application for Permit to Operate

To obtain a Permit to Operate a person shall submit an application to the Air Pollution Control District along with any fees or deposits required pursuant to Regulation III.

1. The applicant shall include any information the APCO finds necessary to determine that the emissions unit(s) will operate without emitting air contaminants in violation of any applicable federal, state or local rules and regulations. The APCO shall make available a list of information that may be required to make this determination.

2. The application shall include a statement signed by the applicant that the data submitted with the application is true and that the emissions unit(s) will comply with all applicable rules.

3. If an Authority to Construct was required (medium and large sources), the application shall also include all information required to be submitted pursuant to any conditions of the Authority to Construct, and either:

   a. A statement that the emissions unit(s) were installed and will be operated in conformance with all requirements of the Authority to Construct, or

   b. A list of all changes that were made that differ in any way from the requirements of the Authority to Construct.

D. Every person is guilty of a misdemeanor who knowingly makes any false statement in any application for a permit or in any information, analyses, plans or specifications submitted either in conjunction therewith, or at the request of the Air Pollution Control District.

VENTURA

10-12-95

Rule 13. Action on Applications for an Authority to Construct (Adopted 6/13/95)

A. Initial Screening

Upon receipt of an application for an Authority to Construct, the APCO shall screen the submittal for any fees required by Regulation III and all required signatures. Any application lacking either of these items shall be returned to the applicant within 10 working days of receipt by the APCO with a notice that the application cannot be accepted.

B. Determination of Completeness

Upon receipt of an application containing the items listed in Section A of this rule, the APCO shall review the application for completeness. A complete application for an Authority to Construct contains all of the information listed in Section B of Rule 12.

1. The APCO shall notify the applicant in writing, within 30 days of receipt of the application, whether the application is complete.

2. If the APCO determines that the application is not complete, the APCO shall specify those parts of the application that are incomplete and shall specify the additional information needed to make the application complete and the reason that information is needed. If new information submitted by the applicant is still not sufficient to make the application complete, the APCO shall again specify what additional information is needed and the reason that information is needed. The APCO shall set a new 30 day deadline for determining completeness from each date any correspondence containing new information is received from the applicant.

3. After the APCO deems an application complete, the applicant shall not be required to submit additional information. However, the APCO may, in the course of processing the application, request the applicant to supply additional information to expedite processing.

C. Actions on Applications Deemed Complete

The following time limits may be extended for an additional period not to exceed 90 days upon consent of the applicant and the APCO.

1. Medium Sources: Within 90 days of the date on which the application was deemed complete, the APCO shall either issue or deny the Authority to Construct.

2. Large Sources: Within 180 days of the date on which an application for a large source, which does not require CEQA

review, was accepted as complete, the APCO shall either issue or deny the Authority to Construct.

If the project requires CEQA review, the APCO shall issue or deny the Authority to Construct within 180 days of the date on which the lead agency has approved the project. If the Air Pollution Control District is the lead agency in a project that requires CEQA review, the District shall prepare and act on CEQA requirements and permit processing concurrently (H&SC 42301.3(h)).

VENTURA

10-12-95

Rule 14. Action on Applications for a Permit to Operate (Adopted 6/13/95)

A. Initial Screening

Upon receipt of an application for a Permit to Operate, the APCO shall screen the submittal for any fees required by Regulation III and all required signatures. Any application lacking either of these items shall be returned to the applicant within 10 working days of receipt by the APCO with a notice that the application cannot be accepted.

B. Issuance of a Temporary Permit to Operate

Within 30 days of receipt of an application containing the items listed in Section A of this rule:

1. Small Sources: The APCO shall issue a Temporary Permit to Operate.

2. Medium and Large Sources: If the application contains a statement that the emissions units were installed and will be operated in conformance with all requirements of the Authority to Construct, the APCO shall issue a Temporary Permit to Operate.

   If the application does not contain a statement that the emissions units were installed and will be operated in conformance with the requirements of the Authority to Construct, the APCO shall assess the difference(s) between the requirements of the Authority to Construct and the emissions units as constructed to determine if the differences will affect the ability of the source to operate in compliance. Based on this assessment, the APCO shall either issue a Temporary Permit to Operate or shall deny the application for a Permit to Operate and require an application for an Authority to Construct.

C. Final Action on Applications

When the APCO determines whether or not the source will operate in compliance with all applicable regulations and permit conditions, the APCO shall either issue or deny the Permit to Operate.

To make this determination the APCO may require the applicant to supply any information required by subsection C of Rule 12 including source test data, clarifying information, and offset information.

10-13-95

Rule 15. Standards for Permit Issuance (Adopted 10/22/68, Revised 11/18/69, 4/20/71, 5/23/72, 7/18/72, 7/5/83 Revised and Renamed 10/12/93, Revised 6/13/95)

A. The Air Pollution Control Officer shall deny an Authority to Construct or a Permit to Operate unless the applicant shows that the emissions units will comply with all applicable federal, state or District orders, rules or regulations including any requirement promulgated pursuant to a federal implementation plan for Ventura County.

The Air Pollution Control Officer may issue a Permit to Operate to an applicant who presents a variance from Health and Safety Code Section 41701 or from any District Rules, or an abatement order that has the effect of a variance, issued by the District Hearing Board. The compliance schedule in the variance or abatement order shall be incorporated into a Part 70 permit upon issuance or reissuance of the permit.

B. The Air Pollution Control Officer shall deny a Permit to Operate if an emissions unit has not been constructed in accordance with the conditions on the Authority to Construct and if the emissions unit as constructed provides less effective air pollution control than the emissions unit specified in the Authority to Construct.

C. The Air Pollution Control Officer may deny an Authority to Construct if an applicant fails to submit sufficient information to enable the Air Pollution Control Officer to deem the application complete within 6 months of the initial submittal of the application.

The Air Pollution Control Officer may deny a Permit to Operate if an applicant fails to submit sufficient information to enable the Air Pollution Control Officer to determine the compliance status of the source within 6 months of the initial submittal of the application.

D. The granting or denial of an Authority to Construct or Permit to Operate for a medium or large source shall be governed by the requirements of the District's Regulation II in force on the date the application for the Authority to Construct was deemed complete.

The granting or denial of a Permit to Operate for a small source shall be governed by the requirements of the District's Regulation II in force on the date the application for the Permit to Operate was deemed complete.

3/29/94

Rule 15.1 Sampling and Testing Facilities (Adopted 10/12/93)

Before an Authority to Construct or a Permit to Operate is granted, the Air Pollution Control District may require the applicant to provide and maintain such facilities and instruments as are necessary for sampling and testing in order to secure or provide information that will disclose the nature, extent, quantity, or degree of air contaminants discharged into the atmosphere from the emissions units described in the Authority to Construct or Permit to Operate. All such facilities shall be constructed in accordance with the General Industry Safety Orders of the State of California.

VENTURA

10-13-95

Rule 16. BACT Certification (Adopted 6/13/95)

A. Applicability

This rule shall establish a list of models of emissions units that are certified as being equipped with best available control technology (BACT). Use of BACT certified emissions units is one criteria that must be met for a source to be classified as a small source. Small sources are eligible for expedited permit processing.

B. Requirements

1. The APCO shall establish an official list of makes and models of emissions units that have BACT certifications. The APCO shall update the official list each calendar quarter (January 1, April 1, July 1, October 1) and shall make the list available on request.

2. When the APCO determines that a listed emissions unit no longer complies with current BACT, the APCO shall delete the emissions unit from the list. The deletion of the emissions unit from the official list shall become effective on the first day of the next calendar quarter. The APCO shall honor any BACT certification that is contained in the official list on the day that a permit application for such BACT certified emissions unit is received by the District.

3. Any manufacturer, distributor or dealer may apply to have a make and model of emissions unit included in the list of emissions units with BACT certifications by submitting an application on a form specified by the APCO. The APCO shall process such an applications as an application for an Authority to Construct and shall assess fees in accordance with Rule 42.

   a. The applicant shall include any information the APCO finds necessary to determine that the model of emissions unit and all mass-produced copies will comply with current BACT.

   b. The APCO shall evaluate each emissions unit for compliance with BACT. The APCO shall also evaluate information to ensure that all copies of the certified model will comply with BACT. If the APCO is able to establish a BACT certification for the emissions unit, the APCO shall include the emissions unit model in the official list of BACT certified emissions units.

4. The APCO may include makes and models of emissions units that are BACT certified by another air agency in the District's official list of BACT certified emissions units without requiring the submittal of an application by the manufacturer, distributor or dealer.

6/30/72

~~Rule 18. Permit to Operate Application Required for Existing Equipment.~~

~~Persons having equipment or facilities, existing or under construction, not presently under permit, the operation of which may emit any air contaminant, shall apply for a Permit to Operate within 90 (ninety) days after adoption of this Rule. Until such a permi is granted, a copy of the application for such Permit shall be maintained on the premises as per Rule 19. The Permit submittal procedures shall be the same as those required for new equipment as specified in these Rules and Regulations.~~

Exist. ~~Posting of Permit to Operate.~~

~~A person who has been granted a Permit to Operate any article, machine, equipment, process or other contrivance shall keep such permit in a room or office on the premises readily accessible to Air Pollution personnel from the Air Pollution Control District for inspection or examination and reasonably close to the equipment or other contrivance which is the subject of such permit.~~

Rule 19. Posting of Permits.

A person who has been granted an Authority to Construct or a Permit to Operate any article, machine, equipment, process or other contrivance shall keep such permit in a room or office on the premises readily accessible to inspection personnel from the Air Pollution Control District. Permits, or a fascimile thereof, shall be posted reasonably close to the equipment or other contrivance which is the subject of such permit(s).

~~Exist. Transfer of Permit to Operate.~~

~~The Permit to Operate shall not be transferrable by operation of law or otherwise from one location to another nor from one installation requiring a permit to another, but it may be transferred from one person to another upon payment of the required fee.~~

6/30/72

Rule 20. Transfer of Permit.

The Authority to Construct or Permit to Operate shall not be transferrable by operation of law or otherwise from one location to another or from one installation or equipment item requiring a Permit to another, except for those items specifically noted on the Permit as being portable and/or relocatable which were previously approved for operation. Permits may be transferred from one person to another upon submittal of the appropriate application and payment of the required fee.

~~Exist. Cancellation of Application.~~

~~Application to receive a Permit to Operate a new plant and equipment shall expire and the application shall be cancelled two years from the date of the original request, provided, however, that the original request is renewable for two year periods upon application by the applicant prior to the cancellation of the original application. The applicant shall pay the required fee for renewal.~~

Rule 21. Expiration of Applications and Permits.

A. An Authority to Construct shall expire and be cancelled if construction has not begun within one year of the date of issuance.

B. An application for Permit to Operate shall expire and the application shall be cancelled if operations have not started within one year of completion of construction. The original permit application, however, is renewable for one year periods upon application prior to the cancellation of the original permit application. The applicant shall pay the required fee for renew

~~Exist. Appeals.~~

~~Within ten days after notice by the Air Pollution Control Officer of denial of conditional approval of a Permit to Operate, the applicant may petition the Hearing Board in writing for a public hearing. The Hearing Board after notice and a public hearing held within thirty days after filing the petition may sustain or reverse the action of the Air Pollution Control Officer. Such order may be made subject to specified conditions.~~

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 23 - EXEMPTIONS FROM PERMIT
(Adopted 10/22/68, Revised 5/23/72, 7/18/72, 8/26/74, 3/9/76, 6/14/77, 1/17/78, 6/20/78,11/21/78, 6/17/80, 5/5/81, 7/2/85, 10/21/86, 11/22/88, 5/16/89, 6/20/89, 6/27/89, 9/12/89, 5/8/90, 1/8/91, 7/16/91, 1/28/92, 6/8/93, 3/22/94, 12/13/94, 7/9/96, 11/11/03, 4/13/04, 10/12/04, 9/12/06, 4/8/08, 4/12/11, 11/12/13)

The following operations, equipment or emission sources are exempt from the requirements of Rule 10, but must comply with emission standards and prohibitions. The owner or operator shall provide, as required by the District, calculations, usage records, emissions records and/or operational data as necessary to substantiate any exemptions that apply to the subject facility.

A. Burning, Incineration, Smoke

1. Open outdoor fires used only for recreational purposes, heating or occasional cooking of food for human consumption, where such use is accomplished in a fireplace or barbecue pit.

2. Smoke generators that are intentionally operated for purposes of training observers in observing the shade or opacity of emissions.

3. Acceptable incinerators used exclusively in connection with any structure designed and used exclusively as a residential dwelling for not more than four (4) families. (Revised 5/23/72)

4. After July 1, 2011, safety flares rated at less than one million BTU per hour used exclusively used for emergency standby for the disposal of process gases in the event of unavoidable process upsets. (Adopted 6/14/77, Revised 4/12/11)

B. Dust and Metalworking Fluids

1. Material stock piles.

2. Blasting with explosives.

3. Mobile equipment that is used solely for the movement of solid materials. (Revised 5/23/72)

4. Equipment used for buffing (except automatic or semi-automatic tire buffers), polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding or turning of ceramic artwork, ceramic precision parts, leather, metals, plastics, rubber, fiberboard, masonry, carbon or graphite. This exemption applies to equipment used with metalworking fluids, direct contact lubricants, or vanishing oils that are Super Compliant Materials containing 50 grams ROC per

liter of material or less, including, but not limited to, metal protecting (corrosion inhibitor application equipment) and metal treating quench tanks, except metal forging operations are still subject to permit requirements.

The following equipment using any metalworking fluid is exempt from permit requirements regardless of the ROC content of the fluid being used:

a. Lapping
b. Sinker Electrical Discharge Machining
c. Carbide grinding machine tools where the machine tool manufacturer specifies the viscosity of the fluid
d. Machining of aluminum or magnesium in single or multiple spindle automatic machines.

5. Equipment used for carving, cutting, drilling, surface grinding, planing, routing, sanding, sawing, shredding, or turning of wood or paper, or the pressing or storing of sawdust, wood chips or wood shavings.

6. Blast cleaning equipment using a suspension of abrasives in water.

7. Abrasive blast cabinet-dust filter integral combination units where the total internal volume of the blast section is 50 cubic feet or less.

8. Batch mixers of 5 cubic feet rated working capacity or less.

9. Tumblers used for the cleaning or deburring of metal products without abrasive blasting.

10. Lint traps used exclusively in conjunction with dry cleaning tumblers.

11. Laundry dryers, extractors or tumblers used for fabrics cleaned only with water solutions of bleach or detergents.

C. Heaters, Boilers

1. Space heating and heat transfer equipment rated at less than one million BTU/s per hour, except reboilers that are part of a glycol dehydration unit. (Revised 6/14/77, 12/13/94)

2. Equipment rated at less than one million BTUs per hour and used exclusively for steam cleaning. (Revised 6/20/89)

3. Natural draft hoods, natural draft stacks or natural draft ventilators.

D. Vehicles, Engines

1. Vehicles, as defined by the Vehicle Code of the State of California. A vehicle may have an engine that both propels the vehicle and powers equipment mounted on the vehicle. Not included is any equipment mounted on a vehicle that would otherwise require a permit under the provisions of these Rules and Regulations.

2. Locomotives, aircraft, marine vessels, and recreational watercraft used to transport passengers or freight. Not included is any equipment mounted on a locomotive, aircraft or marine vessel that would otherwise require a permit under the provisions of these Rules and Regulations.

3. (Reserved)

4. Internal combustion engines used exclusively for frost protection.
5. (Reserved)

6. Internal combustion engines with a maximum continuous design power rating of less than 50 brake horsepower and gas turbines with a rated full load output of less than 0.30 megawatts (300 kilowatts) at ISO Standard Day Conditions.

7. Emergency internal combustion engines, as follows:

   a. Spark-ignited internal combustion engines used exclusively for the emergency pumping of water for either fire protection or flood relief. The engines may either drive pumps directly or generate electricity to drive pumps. Such engines may be operated for engine maintenance.

   b. Spark-ignited emergency internal combustion engines used only when electrical power line or natural gas service fails. Such engines may be operated for engine maintenance.

   c. Portable engines used for emergency purposes. An engine powering a generator connected to a facility's electrical grid in preparation for a future emergency shall not be considered a portable emergency engine.

   Engine maintenance operation is limited to 50 hours per calendar year per engine.

   An emergency internal combustion engine may not be operated to replace an internal combustion engine or a turbine that has failed or requires maintenance; to supplement a primary power source when the load capacity or rating of the primary power source has been either reached or exceeded; nor to reduce the demand for electrical power when normal electrical power line service has not failed.

8. (Reserved)

9. Portable internal combustion engines, including any turbines qualified as military technical support equipment under Health and Safety Code Section 41754, used pursuant to registration in the California Statewide Portable Engine Registration Program (PERP) under Health and Safety Code Section 41753.

E. Food Preparation, Processing, Household

1. Equipment used in connection with any structure designed and used exclusively as a residential dwelling.

2. (Reserved)

3. Vacuum cleaning systems used exclusively for industrial, commercial, institutional or residential housekeeping purposes.

4. Comfort air conditioning or ventilating systems which are not designed to remove air contaminants generated by or released from specific units of equipment.

5. Refrigeration units except those used as, or in conjunction with, air pollution control operations.

6. Smokehouses for food preparation in which the maximum horizontal inside cross-sectional area does not exceed 2 square meters (21.5 square feet).

7. Smokehouses that use liquid smoke exclusively and are completely enclosed. To qualify, a smokehouse must vent to neither a control device nor the atmosphere.

8. Confection cookers where products are edible and intended for human consumption.

9. Grinding, blending or packaging equipment used exclusively for tea, cocoa, roasted coffee, flavor, fragrance extraction, dried flowers, or spices, and control equipment used exclusively with such equipment, provided no organic solvents are used.

10. Equipment used for the purpose of preparing food for human consumption, except conveyorized charbroilers and coffee roasting equipment with a maximum capacity of greater than 25 pounds, in either eating establishments or retail establishments.

11. Equipment used to produce noodles, macaroni, pasta, food mixes or drink mixes, and control equipment used exclusively with such equipment, where products are edible and intended for human consumption, provided no organic solvents are

used. Not included are storage bins located outside buildings and combustion equipment not exempt pursuant to Subsection C.1.

12. Non-retail cooking kettles, excluding deep-frying equipment, where the product is edible and intended for human consumption.

13. Coffee roasting equipment with a maximum capacity of 25 pounds or less.

14. Ovens, mixers, scales, blenders used in bakeries, and control equipment used exclusively with such equipment, where products are edible and intended for human consumption and where total production is less than 1,000 pounds of product per operating day.

F. Organic Compound Emissions

1. Storage in or loading into any tank having a capacity of 550 gallons or less that is equipped with a submerged fill pipe and is not required to have a vapor recovery system. (Revised 11/22/88)

2. Equipment for loading and storing of a reactive organic compound liquid into any stationary storage tank having a capability of holding 250 gallons or less. (Revised 5/23/72)

3. Equipment for loading of reactive organic compound liquid into transportable containers of 100 gallons or less.

4. Equipment for loading of a maximum of 500 gallons per calendar day or less of reactive organic compound liquid into transportable containers.

5. Containers for the storage of unheated asphalt. (Revised 5/23/72)

6. Nonrefillable aerosol cans.

7. Products used for facility, grounds, and building maintenance and repair, including solvents, coatings, adhesives, lubricants, and sealants. Facility maintenance and repair does not include the use of these products for maintenance and repair of process and industrial equipment when this activity is being conducted by contractors.

8. Janitorial services and use of products for routine janitorial maintenance, including graffiti removal.

9. Office and administrative use of products such as ink, marking pens, ink pads, glues and adhesives, and cleaning solvents. Office and administrative use does not include production activities by facilities involved in graphic arts operations.

10. Cleaning operations and materials as follows:

    a. Cleaning agents certified by the SCAQMD as Clean Air Solvents.

    b. Cleaning agents that contain no more than 25 grams per liter of ROC as used or applied, and no more than 5 percent by weight combined of methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, and chloroform.

    c. Cold cleaners using non-boiling organic solvent(s) with an initial boiling point (excluding water) greater than 150 ^{o}C (302 ^{o}F) having a liquid surface area of less than 1 square meter (10.8 square feet), at any stationary source where less than 1000 pounds of ROC, are lost to the atmosphere from all such cold cleaners during every rolling period of 12 consecutive calendar months.

    d. Solvent cleaning operations, including cold cleaners, vapor degreasers, wipe cleaning, dip cleaning and flush cleaning, but excluding coating, graphic arts, adhesive/sealant and polyester resin operations, where less than 200 pounds each of ROC, methylene chloride, 1,1,1 trichloroethane, and perchloroethylene are lost to the atmosphere from all such activities at the stationary source during any rolling period of 12 consecutive calendar months. Emissions from activities exempted by subsections a, b, and c, above, shall not be included in this determination.

11. Coating operations and materials as follows:

    a. (Reserved)

    b. Coating operations, other than motor vehicle or mobile equipment coating operations, where less than 200 pounds each of ROC, methylene chloride, 1,1,1 trichloroethane, and perchloroethylene are lost to the atmosphere during every rolling period of 12 consecutive calendar months.

       For the purpose of this section, coating operations shall include emissions from coatings, thinning, substrate surface preparation, and application equipment cleaning, associated with the coating operation. Emissions from cold cleaners and vapor degreasers shall not be included in this determination. Emissions included in a graphic arts operation shall not be included in this determination.

    c. Coatings used in mobile automotive touch-up operations where application is done using either a paint brush or an air brush with a cup that holds no more than 4 ounces of paint.

12. Adhesive/sealant operations where less than 200 pounds each of ROC, methylene chloride, 1,1,1 trichloroethane, and perchloroethylene are lost to the atmosphere during every rolling period of 12 consecutive calendar months.

    For the purpose of this section, adhesive/sealant operations shall include emissions from adhesives, sealants, adhesive/sealant primers, thinning, substrate surface preparation, and application equipment cleaning, associated with the adhesive/sealant operation. Emissions from cold cleaners and vapor degreasers shall not be included in this determination. Emissions included in a graphic arts operation shall not be included in this determination.

13. Graphic arts operations (including but not limited to packaging gravure, publication gravure, flexographic printing, screen printing, letterpress, lithographic printing, or ink jet printing) where less than 200 pounds each of ROC, methylene chloride, 1,1,1 trichloroethane, and perchloroethylene are lost to the atmosphere during every rolling period of 12 consecutive calendar months.

    For the purpose of this section, graphic arts operations shall include emissions from inks, ink additives, fountain solutions, substrate surface preparation, application equipment cleaning, coatings, and adhesives for binding or gluing printed substrates, associated with the graphic arts operation. Emissions from cold cleaners and vapor degreasers shall not be included in this determination.

14. Polyester resin operations using less than 240 gallons of polyester resin materials over a rolling period of 12 consecutive calendar months, including unsaturated polyester resins, cross-linking agents, catalysts, gel coats, inhibitors, accelerators, promoters, and any other material containing ROC and used in the polyester resin operation. Inert filler and cleaning material is specifically excluded from this determination.

15. Operations using organic solvent (other than solvent cleaning operations, coating operations, adhesive operations, graphic arts operations, polyester resin operations, semiconductor manufacturing, dry cleaning, and other defined exempted uses) that emit less than 200 pounds each of ROC, methylene chloride, 1,1,1 trichloroethane, and perchloroethylene during every rolling period of 12 consecutive calendar months.

16. Equipment for melting and applying coatings of oils, waxes, greases, resins, and like substances where no reactive organic solvents, diluents or thinners are used.

17. Equipment used exclusively for the manufacture of water emulsions of asphalt, greases, oils or waxes or the manufacture of waterbased adhesives or waterbased paints.

18. Equipment used to compress, store, liquefy or separate gases from the air or to compress or store natural hydrocarbon gases, other than engines. (Revised 5/23/72)

19. Equipment used exclusively to mill or grind coatings and molding compounds where all materials charged are in a paste form.

20. Oilfield wastewater sumps, pits or ponds, where the ROC content of the wastewater entering the sump, pit or pond is less than 5 milligrams per liter.

21. Any tank or container used to hold or store reactive organic compound liquids, except gasoline and crude oil, that is not required to have reactive organic compound vapor emission controls.

22. (Reserved)

23. Any soil aeration project exempt from the soil aeration limit in Rule 74.29 pursuant to Subsection C.1 or C.2 of Rule 74.29. This exemption applies only to soils contaminated with gasoline, diesel fuel or jet fuel.

24. Any soil remediation project where collected organic vapors are not emitted to the atmosphere by any means. For the purpose of this subsection, this may include, but is not limited to, routing the vapors into the ground.

G. Experimental Operations

Bench scale experimental or research operations and equipment used exclusively for investigation, experimentation or research to advance the state of air pollution control knowledge or to improve techniques. This exemption is subject to express prior approval from the Air Pollution Control Officer and shall include a time limitation. (Revised 5/23/72, 4/13/04)

H. Plastics and Rubber

1. Presses used for the curing of rubber products and plastic products.

2. Ovens used exclusively for the curing of plastics that are concurrently being vacuum held to a mold or for the softening or annealing of plastics.

3. Equipment used for compression molding or injection moulding of plastics.

4. Mixers for rubber or plastics where no material in powder form is added and no organic solvents, diluents or thinners are used.

5. Ovens used exclusively for the curing of vinyl plastisols by the closed mold curing process.

6. Roll mills or calendar for rubber or plastics where no organic solvents, diluents or thinners are used.

7. Ovens used exclusively for curing potting materials or castings made with epoxy resins.

8. Equipment used exclusively for conveying and storing plastic pellets.

9. Presses used exclusively for extruding plastics where no heat is applied.

I. Metals and Ceramics

1. Porcelain enameling furnaces, porcelain enameling drying ovens, vitreous enameling furnaces or vitreous enameling drying ovens of one million BTU/s per hour or less heat input. (Revised 5/23/72)

2. Kilns used for firing ceramic ware of one million BTU/s per hour or less heat input. (Revised 6/14/77)

3. Equipment used exclusively for heat treating or sintering glass or metals or for case hardening metals of one million BTU/s per hour or less heat input. (Revised 5/23/72)

4. Presses used exclusively for extruding metals, minerals or wood where no heat is applied.

5. Equipment used for hydraulic or hydrostatic testing.

6. Equipment used for inspection of metal products.

7. Brazing, soldering or welding equipment.

8. Molds used for the casting of metals.

9. Equipment using dilute aqueous solutions for surface preparation, cleaning, stripping, etching (does not include chemical milling) or the electrolytic plating, electrolytic polishing or the electrolytic stripping of brass, bronze, cadmium, copper, iron, lead, nickel, tin, and zinc. This exemption does not apply to chrome plating or chromic acid anodizing. (Revised 5/23/72, 6/27/89)

10. Equipment used for washing or drying products fabricated from metal or glass, provided that no volatile organic materials are used in the process and that no oil or solid fuel is burned.

11. Crucible furnaces, pot furnaces, or induction furnaces, with a capacity of 1000 pounds or less each with fail-safe temperature controllers preventing vapor boil-off, in which no sweating or distilling is conducted and from which only the following metals are poured or in which only the following metals are held in a molten state. (Revised 5/23/72)

    a. Aluminum or any alloy containing over 50 percent aluminum.

    b. Magnesium or any alloy containing over 50 percent magnesium.

    c. Lead or any alloy containing over 50 percent lead.

    d. Tin or any alloy containing over 50 percent tin.

    e. Zinc or any alloy containing over 50 percent zinc.

    f. Copper

    g. Precious metals

12. Crucible furnaces, pot furnaces or induction furnaces with a brimful capacity of less than 450 cubic inches of any molten metal. (Revised 6/14/77)

13. Wax burnout kilns with an internal volume of 0.2 cubic meters (7.0 cubic feet) or less and a rated capacity of less than one million BTUs per hour.

J. Miscellaneous

1. Bench scale laboratory equipment used exclusively for chemical or physical analyses or experiments. (Revised 6/14/77)

2. Vacuum producing devices in laboratory operations or in connection with other equipment that is exempt by this Rule.

3. Fuel cells that use phosphoric acid, molten carbonate, proton exchange membrane or solid oxide technologies.

4. Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy.

5. Equipment used exclusively to package pharmaceuticals or cosmetics or to coat pharmaceutical tablets.

6. Shell-core and shell-mold manufacturing machines.

7. Die casting machines.

8. Equipment used exclusively for bonding lining to brake shoes.

9. Valves and flanges.

10. Cooling towers and ponds that are not in contact with contaminated process water.

11. Equipment used exclusively for the dyeing or stripping (bleaching) of textiles where no organic solvents, diluents, thinners or sulfur compounds are used.

12. Any article, machine, equipment, contrivance or their exhaust systems, the discharge from which contains airborne radioactive materials and which is emitted into the atmosphere in concentrations above the natural radioactive background concentration in air. "Air-borne radioactive material" means any radioactive material dispersed in the air in the form of dusts, fumes, smoke, mists, liquids, vapors or gases.

    Nuclear energy development and radiation protection are controlled by the State of California, to the extent it has jurisdiction thereof, by the California Energy Commission and the California Department of Health Services. Such development and protection are fully regulated by the United States Nuclear Regulatory Commission to the extent that such authority has not been delegated to the states.

13. Repairs, including the replacement of worn or defective parts, to any article, machine, equipment or other contrivance where a Permit to Operate had previously been granted for such equipment, so long as such repairs do not constitute a substantial replacement of the equipment as a whole. (Revised 1/17/78)

14. Any sterilizer or aerator at a stationary source where the amount of ethylene oxide charged to all sterilizers at the stationary source is no more than 4 pounds per year (lb/yr).

15. Equipment used exclusively to generate ozone and associated ozone destruction equipment for the treatment of cooling tower water or for water treatment processes.

16. Emission units used exclusively in agricultural operations, except where the total actual annual emissions, excluding fugitive PM10 emissions, from an agricultural source is equal to or greater than 50 percent of any of the following federal major source thresholds:

Pollutant	Threshold (Tons Per Year)

Any single HAP	10
Combination of HAPs	25
CO, PM10, or SOx	100
Greenhouse Gases (CO_2e)(effective July 1, 2011)	100,000
Greenhouse Gases (CO_2e)(until July 1, 2011)	No Applicable Threshold

Attainment / Nonattainment Classification (Ozone)	Threshold (TPY) (ROC, NOx)
Attainment, Marginal, or Moderate	100
Serious	50
Severe	25
Extreme	10

This provision shall not exempt any large confined animal facility or any major source or any major modification to a major source required to be issued a permit pursuant to Title I (42 U.S.C. Sec. 7401 et seq.) or Title V (42 U.S.C. Sec. 7661 et seq.) For the purpose of this subsection, agricultural operations are operations conducted in the raising of fowl or animals or the production of products of the soil, including crops, orchard fruits, trees, vines, rose bushes, ornamental plants, floricultural crops, and other horticultural crops. An agricultural source includes all emissions units that are not exempt pursuant to other provisions of this rule which are used in agricultural operations located on contiguous property under common ownership or control.

For the purpose of this subsection a "large confined animal facility" is defined as follows:

(i) 1,000 milk-producing dairy cows;
(ii) 3,500 beef cattle;
(iii) 7,500 calves, heifers or other cattle;
(iv) 650,000 chickens other than laying hens;
(v) 650,000 laying hens;
(vi) 650,000 ducks;
(vii) 100,000 turkeys;
(viii) 3,000 swine;
(ix) 2,500 horses;
(x) 15,000 sheep, lambs, or goats; or
(xi) 30,000 rabbits or other animals.

[Source: CCR Title 17, Division 1, Chapter 1, Subchapter 2.7, §86500(a)]

Ventura
11/12/92

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Rule 24. Source Recordkeeping, Reporting and Emission Statements (Adopted 10/31/72, Renumbered 11/21/78, Revised and Renamed 9/15/92)

A. Source Recordkeeping and Reporting

The owner or operator of any stationary source shall maintain records which will disclose the nature and amounts of emissions from such source and any other information as may be deemed necessary by the Air Pollution Control Officer (APCO) to determine whether such source is in compliance with applicable federal, state and District laws, rules, regulations, orders, and permit conditions including permitted emissions. Records to determine compliance with annual permitted emissions shall be maintained on a monthly basis.

All records shall be retained for at least two years and shall be made available to the APCO upon request.

B. Process Rate Information Forms

Upon request by the APCO, the owner or operator of any stationary source shall complete and submit a Process Rate Information form to the APCO. This Process Rate Information form shall be submitted to the APCO on forms or format as furnished or approved by the APCO. Reporting periods for Process Rate Information forms shall be based on emission inventory years as specified by the APCO. Copies of Process Rate Information forms shall be retained by the owner or operator for two years after the date on which such forms are submitted.

C. Emission Statements

The owner or operator of any stationary source that emits or may emit nitrogen oxides or reactive organic compounds shall provide the Air Pollution Control Officer (APCO) with a written statement showing actual emissions of nitrogen oxides and reactive organic compounds from such stationary source. At a minimum the emission statement shall contain all of the information contained in the Air Resources Board's Emission Inventory Turn Around Document as described in the most recent version of "Instruction for the Emission Data System Review and Update Report". The emission statement shall contain emission data for the emission inventory year specified by the APCO. The emission statement shall be certified by a company or agency official of such source and shall state that the information contained in the emission statement is accurate to the best knowledge of the individual certifying the statement. The first emission statement shall cover the calendar year of 1992 and shall be submitted to the APCO no later than November 1, 1993. Emissions statements shall be submitted annually thereafter.

The owner or operator of any stationary source subject to this Section may comply with the provisions of this Section by satisfying the following requirements:

1. The owner or operator shall return an annual Process Rate Information form to the APCO. This form shall be certified by a company or agency official of such source and shall state that the

information contained in the form is accurate to the best knowledge of the individual certifying the statement.

2. The owner or operator shall return an emission statement to the APCO. This emission statement shall be provided to the owner or operator of such source by the District and the estimated actual emissions contained in the statement shall be calculated by the District based on the data provided in the Process Rate Information form. This emission statement shall be certified by a company or agency official of such source and shall state that the information contained in the emission statement is accurate to the best knowledge of the individual certifying the statement.

The APCO may waive the requirements of this Section for any class or category of stationary sources which emit less than 25 tons per year of nitrogen oxides and less than 25 tons per year of reactive organic compounds if the District provides the Air Resources Board with an inventory of sources emitting more than 10 tons per year of either nitrogen oxides or reactive organic compounds based on the use of emission factors acceptable to the Air Resources Board.

D. Definitions

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

1. "Company or Agency": Any self-employed individual, trust, firm, joint stock company, corporation, partnership, association or government agency. This term includes for-profit, not-for-profit and non-profit enterprises.

2. "Company or Agency Official": The highest ranking employee of a company or agency stationary source: 1) having knowledge of and responsibility for equipment emitting nitrogen oxides or reactive organic compounds at such source and 2) duly authorized by such company or agency to prepare and maintain records of emissions from such equipment.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 26 - NEW SOURCE REVIEW - GENERAL
(Adopted 10/22/91, amended 3/14/06)

A. General

Rule 26, which includes Rules 26 through 26.11, specifies the New Source Review provisions that are applicable to new, replacement, modified or relocated emissions units in Ventura County. These provisions shall be applicable on a pollutant-by-pollutant and an emissions unit-by-emissions unit basis.

Applications received by the Air Pollution Control District shall be subject to the version of this rule in effect at the time such application is deemed complete, regardless of the date on which the new or replacement emissions unit is installed, or the date on which the emissions unit is modified or relocated.

Rule 26.1 contains definitions of terms that are used throughout Rule 26.

Rule 26.2 specifies the requirements for new, replacement, modified or relocated emissions units in Ventura County. These requirements shall be applicable on a pollutant-by-pollutant and an emissions unit-by-emissions unit basis.

Rule 26.3 provides exemptions from specific requirements of Rule 26 for certain stationary sources or emissions units.

Rule 26.4 provides for the banking of emission reductions of reactive organic compounds, nitrogen oxides, particulate matter, and sulfur oxides. Eligibility standards and administrative practices are included to ensure that any emission reductions intended to be banked are real, quantifiable, permanent, enforceable, and surplus.

Rule 26.5 provides for the banking of emission reductions of reactive organic compounds and nitrogen oxides as essential public service credits and the disbursement of these credits.

Rule 26.6 contains the provisions by which emission increases, emission reductions, and offset profile checks are calculated. These calculation provisions shall be applicable on a pollutant-by-pollutant and an emissions unit-by-emissions unit basis.

Rule 26.7 specifies the cases in which notification shall be provided of the Air Pollution Control Officer's preliminary decision to, grant an Authority to Construct, or issue a Certificate of Emission Reduction Credit. In addition, Rule 26.7 specifies the process by which such notification shall be made.

Rule 26.8 specifies provisions which apply to the cases where an Authority to Construct or Permit to Operate was required but was not obtained, additional offsets are required, or a startup period may be allowed for a replacement emissions unit.

Rule 26.9 specifies the process by which the Air Pollution Control Officer shall review an Application for Certification for a power plant proposed for construction in Ventura County.

Rule 26.10 incorporates by reference the requirements of Title 40 Code of Federal Regulations 52.21, Prevention of Significant Deterioration.

Rule 26.11 specifies the process by which the Air Pollution Control Officer shall determine if emission reduction credits are surplus at the time of use. In addition, it provides for the creation and implementation of an annual equivalency demonstration program.

B. Previous District New Source Review and Banking Rules

Prior to October 22, 1991 the District's New Source Review rule consisted of the following:

1. Rule 26, New Source Review (Authority to Construct and Permit to Operate) (Adopted 5/23/72, Revised 7/18/72, 10/31/72, 9/28/76, 6/14/77, 6/20/78, 6/19/79, 8/14/79, 4/22/80, 9/9/80, 5/5/81, 6/23/81, 7/21/81, 1/10/84, 2/26/85)

2. Rule 26.1, All New or Modified Major Stationary Sources (Revised 6/23/81, 1/10/84, 2/26/85, 11/19/85)

3. Rule 26.2, New or Modified Non-Major Sources (Revised 9/29/81, Renumbered and Revised 1/10/84, Revised 2/26/85, 11/19/85)

4. Rule 26.3, New or Modified Stationary Sources - Prevention of Significant Deterioration (PSD) (Added 1/10/84, Revised 6/5/84, 2/26/85, 11/19/85)

5. Rule 26.4, Emission Banking (Adopted 6/19/79, Revised 7/21/81, 12/19/89)

6. Rule 26.5, Power Plants (Revised 1/10/84)

7. Rule 26.6, Air Quality Impact Analysis and Notification (Revised 1/10/84)

8. Rule 26.7, Food Processors - Exemptions from "New Source Review" Requirements (Adopted 12/11/85, Repealed 1/1/88)

On October 22, 1991 the Ventura County Air Pollution Control Board repealed Rules 26 through 26.7, which are listed in this Section, and adopted new Rules 26 through 26.10.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 26.1 - NEW SOURCE REVIEW - DEFINITIONS
(Adopted 10/22/91, Revised 2/13/96, 1/13/98, 5/14/02, 3/14/06, 11/14/06)

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

1. "Ambient Air Quality Standards": The federal and state ambient air quality standards. For the purposes of submittal of Rule 26 to the U.S. Environmental Protection Agency for inclusion in the state implementation plan, all references to ambient air quality standards shall be interpreted as federal ambient air quality standards.

2. "Banking": The process of determining the eligibility of emission reductions, and the certification and registration of eligible emission reductions as emission reduction credits.

3. "Best Available Control Technology (BACT)": The most stringent emission limitation or control technology for an emissions unit which:

    a. Has been achieved in practice for such emissions unit category, or

    b. Is contained in any implementation plan approved by the Environmental Protection Agency for such emissions unit category. A specific limitation or control shall not apply if the owner or operator of such emissions unit demonstrates to the satisfaction of the Air Pollution Control Officer (APCO) that such limitation or control technology is not presently achievable, or

    c. Is contained in any applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants set forth in 40 CFR Parts 60 and 61, or

    d. Any other emission limitation or control technology, including, but not limited to, replacement of such emissions unit with a lower emitting emissions unit, application of control equipment or process modifications, determined by the APCO to be technologically feasible for such emissions unit and cost effective as compared to the BACT cost effectiveness threshold adopted by the Ventura County Air Pollution Control Board.

    In defining emissions unit categories, the APCO may take into account the function of the emissions unit, the capacity of the emissions unit, the annual throughput of the emissions unit and the location of the emissions unit with respect to electricity or fuels needed to achieve an emission limitation or control technology.

4. "Biosolids": Organic material resulting from the physical, chemical and biological treatment of sewage sludge generated at wastewater treatment facilities.

5. "Biosolids Processing Facility": An operation that further treats biosolids generated from wastewater originating exclusively in Ventura County.

6. "Effective Date": The date by which compliance must be achieved with a requirement in a rule.

7. "Emission Increase": A change in emissions with a value greater than zero, as calculated pursuant to Rule 26.6.D.

8. "Emission Reduction": A change in emissions with a value greater than zero, as calculated pursuant to Rule 26.6.E.

9. "Emission Reduction Credit (ERC)": The banked emission reductions available for use as an offset for emission increases from new, replacement, modified or relocated emissions units.

10. "Emissions Unit": Any operation, article, machine, equipment or contrivance which may emit or reduce the emission of any air contaminant or pollutant.

11. "Enforceable Emission Reduction": An emission reduction which is assured by changes to a Permit to Operate that reflect a reduced potential to emit, or assured by the surrender or revocation of a Permit to Operate.

12. "Essential Public Service": Essential public services are the following;

    A. Jails;
    B. Police or fire fighting facilities;
    C. Schools;
    D. Hospitals;
    E. Ambulance services;
    F. Landfill gas control or processing equipment;
    G. Publicly owned biosolids processing facilities;
    H. Publicly owned sewage (wastewater) treatment facilities;
    I. Publicly owned or nonprofit water delivery operations.

13. "Essential Public Service Bank": A bank that contains essential public service credits which are used as offsets for emission increases from new, replacement, modified, and relocated emissions units located at essential public services.

14. "Essential Public Service Credit": A credit obtained from the community bank between October 23, 1991, and March 14, 2006, for use by an essential public service or, after March 14, 2006, a credit obtained from the essential public service bank.

15. "Existing Emission Reduction Credit": Existing emission reduction credits are:

a. Emission reduction credits certified pursuant to Rule 26.4 as it existed prior to October 22, 1991, which are not currently being used as offsets on October 22, 1991. Notwithstanding the previous sentence any emission reduction credits certified pursuant to Rule 26.4 as it existed prior to October 22, 1991, which are temporarily transferred to a stationary source on October 22, 1991 shall be considered existing emission reduction credits, or

b. Emission reductions for which an application to bank emission reduction credits was deemed complete before October 22, 1991, which have not been used as offsets, or

c. Reductions in emissions at a stationary source certified pursuant to the procedures in Rule 26.1 as it existed prior to October 22, 1991, or in the process of certification on October 22, 1991, minus any increases from new, modified, or replacement emissions units at that stationary source since June 19, 1979.

16. "Further Study Measure": A potential control measure which is identified as a further study measure in the Ventura County Air Quality Management Plan (AQMP) approved by the District Board or by the California Air Resources Board, whichever plan is approved most recently.

17. "Implementation Plan": A plan adopted by a state or local agency to meet the requirements of Sections 110 and/or 172 of the Clean Air Act.

18. "Major Source": A stationary source which emits or has the potential to emit 25 tons per year or more of nitrogen oxides (NOx) or reactive organic compounds (ROC).

    A major source is also any physical change at a stationary source if such a change would constitute a major source by itself.

    Fugitive emissions shall be included when determining if a source is a major source if the source belongs to any of the categories listed in 40 CFR 51.165(a)(1)(iv)(C).

19. “Major Modification": Any physical change or change in method of operation of a major source that would result in a federally significant contemporaneous net emissions increase.

    For the purpose of this section, a “federally significant contemporaneous net emissions increase" means a contemporaneous net emissions increase equal to or exceeding any of the following thresholds:

    ROC 25 tons per year
    NOx 25 tons per year

For the purpose of this section a "contemporaneous net emissions increase" is the sum, during the specified evaluation period, of all emission increases calculated pursuant to Rule 26.6.D and all emission reductions calculated pursuant to Rule 26.6.E. The specified evaluation period is the five consecutive calendar years including the calendar year of the most recent application and the four previous calendar years. Emission reductions that are not surplus at the time of use shall not be included.

20. "Modified Emissions Unit":

    a. Any physical change to any emissions unit, which would result in an emission increase or for which an application to bank emission reduction credits is submitted to the District, or

    b. Any change in method of operation of any emissions unit, which would result in an emission increase or for which an application to bank emission reduction credits is submitted to the District, or

    c. Any change in hours of operation or throughput, which would result in an emission increase and would necessitate a revision to a permit condition, or for which an application to bank emission reduction credits is submitted to the District.

    A change in ownership, or routine maintenance or repair, shall not be considered a physical change or change in method of operation.

21. "New Emissions Unit": An emissions unit that is part of a new stationary source, an emissions unit that is added to an existing stationary source, or any existing emissions unit that is located at a stationary source in violation of Rule 10.

22. "Offset": An emission reduction credit or essential public service credit which is used to mitigate an emission increase from a new, replacement, modified, or relocated emissions unit.

23. "Outer Continental Shelf Area (OCS)": Any offshore waters for which the District has been designated the corresponding onshore area by the U.S Environmental Protection Agency, Anacapa Island, and San Nicolas Island.

24. "Permanent Emission Reduction": An emission reduction that can be assured for the period during which any emission reduction credits obtained from the emission reduction are available for use as offsets. This time period may be limited or unlimited.

25. "Potential to Emit": The potential to emit is an emission limit which specifies the maximum quantity of each air pollutant which may be emitted by an emissions unit during a 12 calendar month rolling period. This limit shall be based on any period of 12 consecutive calendar months and shall be expressed in the units of tons per year.

The potential to emit shall be calculated based on the maximum design capacity or other operating conditions which reflect the maximum potential emissions, unless specific limiting conditions on the Authority to Construct and/or Permit to Operate restrict emissions to a lower level. Other operating conditions may include, but are not limited to, production bottlenecks where other equipment may limit the throughput of an emissions unit.

26. "Quantifiable Emission Reduction": An emission reduction for which the District can establish a reliable basis for calculating the amount and rate of the reduction, and describing the characteristics of the reduction.

27. "Real Emission Reduction": An emission reduction that is calculated based on actual emissions, pursuant to Rule 26.6.E.1, 26.6.E.2, or 26.6.E.3. Notwithstanding the previous sentence, if emission reduction credits or essential public service credits have been provided as offsets for the purpose of obtaining a Permit to Operate, a real emission reduction may be calculated as specified pursuant to Rule 26.6.E.4.

28. "Relocated Emissions Unit": An emissions unit which is moved from a location in Ventura County to another location in Ventura County. The moving of an emissions unit from a location at a stationary source to another location at the same stationary source shall not be considered a relocation. The moving of an emissions unit specifically noted on the Permit to Operate as being portable shall not be considered a relocation.

29. "Replacement Emissions Unit": An emissions unit which supplants another emissions unit where the replacement emissions unit serves the identical function as the emission unit being replaced.

30. "Stationary Source": Any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission.

"Building, structure, facility, or installation" means all pollutant emitting activities, including activities located in California coastal waters adjacent to the District boundaries, which:

a. belong to the same industrial grouping, and

b. are located on one or more contiguous or adjacent properties (except for activities located in coastal waters), and

c. are under the same or common ownership, operation, or control or which are owned or operated by entities which are under common control.

Pollutant emitting activities shall be considered as part of the same industrial grouping if they belong to the same two-digit Standard Industrial Classification code, or if they are part of a common production process. (Common production

process includes industrial processes, manufacturing processes, extractive processes, and any connected processes involving a common raw material or product.)

"California Coastal Waters" means that area between the California coastline and a line starting at the California-Oregon border at the Pacific Ocean

thence to 42.0 north, 125.5 west
thence to 41.0 north, 125.5 west
thence to 40.0 north, 125.5 west
thence to 39.0 north, 125.0 west
thence to 38.0 north, 124.5 west
thence to 37.0 north, 123.5 west
thence to 36.0 north, 122.5 west
thence to 35.0 north, 121.5 west
thence to 34.0 north, 120.5 west
thence to 33.0 north, 119.5 west
thence to 32.5 north, 118.5 west

and ending at the California-Mexico border at the Pacific Ocean.

"Cargo Carriers" includes trains dedicated to a specific source, and marine vessels. The emissions from all marine vessels which load or unload at the source shall be considered as emissions from the stationary source while such vessels are operating in District waters and in California coastal waters adjacent to the District. The emissions from vessels shall include reactive organic compound vapors that are displaced into the atmosphere; fugitive emissions; combustion emissions in District waters; and emissions from the loading and unloading of cargo. The emissions from all trains dedicated to a specified stationary source, while operating in the District, including directly emitted and fugitive emissions, shall be considered as emissions from the stationary source.

"Common operations" includes operations which are related through dependent processes, storage, or transportation of the same or similar products or raw material. The emissions within District boundaries and California coastal waters from cargo carriers associated with the stationary source shall be considered emissions from the stationary source.

"Contiguous Property" means two or more parcels of land with a common boundary or separated solely by a private roadway or other public right-of-way.

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

31. "Surplus Emission Reduction":

    a. An emission reduction that is not required by any federal, state, or district law, rule, order, permit or regulation other than by Rule 26.2.A for modified, replacement, or relocated emissions units that are not part of a major modification. A new emissions unit that is subject to Rule 26.2.A cannot have an associated emission reduction.

    b. Solely for the purpose of determining the amount of an emission reduction that is surplus at the time an Authority to Construct is issued pursuant to Rule 26.11.B.2, surplus emission reduction shall be defined as an emission reduction as specified in subsection 28.a plus that portion of such emission reduction required by state or district laws, rules, orders, permits and regulations that exceeds the emission reduction otherwise required by the federal Clean Air Act (United States Code, Title 42, section 7401 et seq.).

32. "Tactic": A control measure, excluding further study measures, contained in the Ventura County Air Quality Management Plan (AQMP) approved by the District Board or by the California Air Resources Board, whichever plan is approved most recently.

33. "Throughput": A production rate, raw material use rate, or fuel use rate.

34. "Ventura County": The geographic area of jurisdiction of the Ventura County Air Pollution Control District, Anacapa Island, San Nicolas Island, and all waters for which the District is designated the corresponding onshore area.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 26.2 - NEW SOURCE REVIEW - REQUIREMENTS
(Adopted 10/22/91, Revised 2/13/96, 1/13/98, 5/14/02, 3/14/06)

A. Best Available Control Technology

The Air Pollution Control Officer (APCO) shall deny an applicant an Authority to Construct for any new, replacement, modified, or relocated emissions unit which would have a potential to emit any of the pollutants specified in Table A-1, unless the emissions unit is equipped with the current Best Available Control Technology for such pollutants.

Table A-1.

Reactive Organic Compounds (ROC)
Nitrogen Oxides (NOx)
Particulate Matter (PM10)
Sulfur Oxides (SOx)

B. Offsets

1. The APCO shall deny an applicant an Authority to Construct for any new, replacement, modified or relocated emissions unit with an emission increase of any of the pollutants specified in Table B-1, and where the potential to emit of the stationary source would be greater than or equal to the limits specified in Table B-1, unless offsets are provided for any emission increases of such pollutants from the new, replaced, modified, or relocated emissions unit.

Table B-1.

ROC	5.0 ton/yr
NOx	5.0 ton/yr
PM10	15.0 ton/yr
SOx	15.0 ton/yr

2. An applicant required to provide offsets shall use emission reduction credits to provide offsets. The use of emission reduction credits to offset an emission increase shall be restricted to only those emission reduction credits which are not subject to reduction pursuant to Rules 26.4.D.1 and 26.4.D.2 during the reasonably expected duration of such emission increase.

   a. For any stationary source where the potential to emit would be equal to or greater than the limits specified in Table B-2, offsets for ROC and NOx shall be provided at a tradeoff ratio of 1.3.

b. For any stationary source where the potential to emit would be less than the limits specified in Table B-2, offsets for ROC and NOx shall be provided as follows:

1) For a stationary source with a pre-project potential to emit of equal to or greater than 5 tons per year of either NOx or ROC, offsets for any emission increase of such pollutant shall be provided at a tradeoff ratio of 1.1.

2) For a stationary source with a pre-project potential to emit of less than 5 tons per year of either NOx or ROC, offsets for any emission increase of such pollutant shall be provided at a tradeoff ratio of 1.1. The emission increase shall be calculated as follows:

$$A = B - (C \times D)$$

where:
A = Emission Increase (tons/yr)
B = Post-project potential to emit of such pollutant at the stationary source (tons/yr)
C = The number of years since initial permit issuance (but not to exceed 5)
D = Distribution Rate (1 ton per year per year)

c. Offsets for PM10 and SOx shall be provided at a tradeoff ratio of 1.1.

Table B-2.

ROC	25.0 ton/yr
NOx	25.0 ton/yr

d. For any new major source and any major modification, offsets for ROC and NOx shall be provided at a tradeoff ratio of 1.3. All emission reduction credits provided by the applicant for a new major source or a major modification shall be surplus at the time of use as determined pursuant to Rule 26.11.B except as provided in Rule 26.11.C.6.

3. An applicant for an essential public service who is required to provide offsets may use essential public service credits to provide offsets for ROC and NOx if the following provisions are satisfied:

a. The applicant is proposing to provide some or all of the required offsets by using any emission reduction credits held by the applicant.

b. The potential to emit of the stationary source will not exceed the limits specified in Table B-2.

If no credits are available from the essential public service bank, the applicant shall provide offsets using emission reduction credits. All ROC and NOx emission reduction credits and essential public service credits provided as offsets pursuant to this section shall be provided at a tradeoff ratio of 1.0.

4. For any applicant who is using emission reduction credits to provide offsets, the quarterly profile of the emission reduction credits and the quarterly profile of the emission increase for which the applicant is proposing to utilize the emission reduction credits as offsets shall satisfy the profile check for offsets as calculated pursuant to Rule 26.6.F.

C. Protection of Ambient Air Quality Standards and Ambient Air Increments

The APCO shall deny an applicant an Authority to Construct for any new, replacement, modified or relocated emissions unit that would cause the violation of any ambient air quality standard or the violation of any ambient air increment as defined in 40 CFR 51.166(c). In making this determination the APCO shall take into account any offsets which were provided for the purpose of mitigating the emission increase.

D. Certification of Statewide Compliance

The APCO shall deny an application for an Authority to Construct for any new major source or major modification, unless the applicant certifies that all major sources, as defined in their specific nonattainment area, that are both located in California and owned or operated by the applicant, or by any entity controlling, controlled by or under common control with such applicant, are in compliance or on a schedule for compliance with all applicable emission limitations and standards.

E. Analysis of Alternatives

The APCO shall deny an application for an Authority to Construct for any new major source or major modification unless the applicant provides an analysis as required by Section 173(a)(5) of the federal Clean Air Act, of alternative sites, sizes, production processes, and environmental control techniques for the proposed source demonstrating that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 26.3 - NEW SOURCE REVIEW - EXEMPTIONS
(Adopted 10/22/91, Revised 2/13/96, 1/13/98, 5/14/02, 3/14/06)

A. Exemptions from New Source Review

An exemption from the requirements of Rule 26.2 shall be allowed for the following:

1. Any emissions unit which is required to obtain a Permit to Operate from the District due to a revision to Rule 23, provided the emissions unit was operated within Ventura County before the date on which a Permit to Operate is required by such revision to Rule 23 and the application for a Permit to Operate is submitted no later than one year after the date on which a Permit to Operate is required by such revision to Rule 23.

2. Any emissions unit located on San Nicolas Island or Anacapa Island.

3. A relocation of an emissions unit within Ventura County where the new location is no more than five miles from the previous location, provided the emissions unit is at a small or medium source as defined in Rule 11, and provided that there is no emission increase.

4. Any stationary source which is required to obtain a Permit to Operate solely because of permit renewal or a transfer of ownership.

B. Exemptions from Best Available Control Technology Requirements

An exemption from the requirements of Rule 26.2.A shall be allowed for the following:

1. A modified emissions unit where the modification is made for the purpose of complying with a regulatory requirement that applies to the emissions unit and where there is no increase in throughput. This exemption shall not apply to any pollutant for which there is an emission increase.

2. A modified emissions unit where the modification is made for the purpose of reducing the emission of air pollutants and where there is no increase in throughput. This exemption shall not apply to any pollutant for which there is an emission increase.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 26.4 - NEW SOURCE REVIEW - EMISSION BANKING
(Adopted 10/22/91, Revised 2/13/96, 1/13/98, 5/14/02, 3/14/06)

A. Applicability

This Rule provides for the banking of emission reductions of reactive organic compounds (ROC), nitrogen oxides (NOx), particulate matter (PM10), and sulfur oxides (SOx). Eligibility standards and administrative practices are included to ensure that any emission reductions intended to be banked are real, quantifiable, permanent, enforceable, and surplus.

B. Requirements

1. Only emission reductions which are real, quantifiable, permanent, enforceable, and surplus shall be eligible for banking.

2 Emission reductions, which result from emissions units subject to a tactic on the date the application to bank emission reduction credits is deemed complete, shall be eligible for banking if such application is deemed complete before the effective date of a rule implementing the tactic. An emissions unit shall be subject to a tactic if on the date the application to bank is deemed complete a tactic exists for such emissions unit, regardless of the implementation date of the tactic.

3. Emission reductions, which result from emissions units subject to a further study measure on the date the application to bank emission reduction credits is deemed complete, shall be eligible for banking if such application is deemed complete before the adoption date of a rule implementing the further study measure. An emissions unit shall be subject to a further study measure if on the date the application to bank is deemed complete a further study measure exists for such emissions unit, regardless of the implementation date of the further study measure.

4. Any person who has modified or taken out of service any permitted emissions unit for the purpose of receiving emission reduction credits must surrender existing permits to operate for the emissions unit involved before a certificate of Emissions Reduction Credit can be granted.

5. Gasoline dispensing facilities that dispense gasoline into the fuel tanks of motor vehicles or marine pleasure craft shall be eligible to bank no more than the quantity of emission reduction credits provided as offsets by the applicant after October 22, 1991.

6. If an emission reduction at a stationary source makes all or part of an essential public service credit eligible for return to the essential public service bank, such credit shall only be available for return to the essential public service bank.

7. After October 22, 1991, any ROC or NOx emission increase calculated pursuant to Rule 26.6.D but not offset with emission reduction credits shall be ineligible for banking. An emission increase offset with a credit obtained from the community bank between October 23, 1991, and March 14, 2006, shall be ineligible for banking.

8. Emission reductions occurring after January 1, 1991, from emission units that were and remain exempt from the district requirement to have a Permit to Operate shall be eligible for banking.

C. Emission Reduction Discounts

1. Emission reductions which result from the shutdown of an emissions unit, or a reduction in throughput of an emissions unit shall be discounted by the greater of the following:

   a. The amount of the emission reduction that could be controlled by the application of the best available control technology applicable on the date the application to bank emission reduction credits is deemed complete.

   b. 20 percent.

2. Emission reductions which result from the application of control equipment, a modified emissions unit, or the replacement of an emissions unit with a lower emitting emissions unit shall be discounted by 10 percent.

Notwithstanding the requirements of subsections C.1 and C.2, emission reductions banked pursuant to subsection B.8 shall not be discounted.

D. Limitations on the Usage of Emission Reduction Credits

1. Emission reduction credits which result from emissions units which are subject to a tactic on the date the application to bank emission reduction credits is deemed complete, and any offsets obtained with these emission reduction credits, shall be reduced to zero after the effective date of a rule implementing the tactic. The emission reduction credits shall not be reduced to zero if the APCO determines that the proposed emission reduction will result in an emission level below the level specified in the AQMP for implementation of the tactic, and the excess amount of emission reductions meets all other eligibility requirements. In this event only the excess emission reduction may be permanently banked.

2. Emission reduction credits which result from emissions units which are subject to a further study measure on the date the application to bank emissions reductions is deemed complete and provided such application is deemed complete after December 19, 1989, and any offsets obtained with these emission reduction credits, shall be reduced by 50 percent after the effective date of a rule implementing the further study measure. If a further study measure is identified in any state or local rule or regulation which was adopted before the date the application to bank emission reduction credits is deemed complete, or identified as a control measure for adoption in any state or local implementation plan which was adopted before the date the application to bank emission reduction credits is deemed complete, any emission reduction credits identified in the previous sentence shall be reduced to zero after the effective date of a rule implementing the further study measure.

3. Emission reduction credits which result from the shutdown of an emissions unit, or a reduction in throughput or hours of operation of an emissions unit at a stationary source, shall not be used as offsets at a different stationary source where the potential to emit would exceed the limits specified in Table D-1, unless the applicant can establish the following:

   a. The shutdown, or reduction in throughput or hours of operation occurred after August 7, 1977, and

   b. The proposed new or modified stationary source is a replacement for the shutdown or curtailment.

Table D-1

ROC	25.0	ton/yr
NOx	25.0	ton/yr

E. Application for and Determination of Emission Reduction Credits

1. Any person wishing to be credited with an emission reduction for the purpose of banking shall submit an application to the District. An application to bank emission reduction credits must be submitted to the District before any emissions unit is modified to reduce emissions. However, an application to bank emission reduction credits may be submitted at any time if the emission reduction results from a decrease in throughput or a shutdown. If the emission reduction occurs as a result of permit activity requiring an application for an Authority to Construct, the Authority to Construct application shall serve as the application to bank emission reduction credits.

2. The APCO shall deny any application to bank emission reduction credits if the applicant fails to provide sufficient information to calculate the emission

reduction, to determine the quarterly emissions profile of the emission reduction, to determine the location at which the emission reduction occurred, or to determine if the emission reduction is real, quantifiable, permanent, enforceable, and surplus.

3. An application to bank emission reduction credits shall be treated and processed in the same manner as an Authority to Construct or Permit to Operate application.

4. Based on the application evaluation, the APCO may determine that all, part, or none of the emission reductions can be certified as emission reduction credits.

F. Emission Reduction Credit Registration and Transfer

1. Registration of Title

The District shall issue a certificate to the applicant identifying the emission reduction credits, the location at which the emission reduction occurred, the quarterly profile of the emission reduction credit, and any emission reduction credits that could be subject to reductions pursuant to subsections D.1 and D.2. In cases involving an appeal of the APCO's decision, issuance of the certificate shall be subject to the outcome of the appeal.

2. Renewal of Registration

At the discretion of the Air Pollution Control Officer, the District shall contact the registered owner of an emission reduction credit certificate to determine if the owner wishes to renew registration of the certificate. The balance of any emission reduction credit certificate not renewed shall be deemed inactive and shall be transferred to the Essential Public Service Bank.

3. Transfer by Registered Owner

An emission reduction credit certificate may be transferred from one person to another in whole or in part. The registered owner of the certificate shall submit a written request to the District stating what portion of the emission reduction credit is to be transferred. The District shall issue a revised emission reduction credit certificate to the prior owner and a new emission reduction credit certificate to the new owner upon payment of the transfer of ownership fees required by Rule 42. If the transfer occurs as a result of permit activity requiring an application for an Authority to Construct, and no new certificate is required to be issued to the new owner, the transfer of ownership fee shall be waived.

4. Temporary Use of Emission Reduction Credits

The provisions of this section shall apply to the use of emission reduction credits as temporary emission offsets for the emission increases from a project. The provisions of this section shall apply only if the District is notified that use of the emission reduction credits will be temporary at the time the application for the project is submitted to the District.

Any project for which temporary emission reduction credits are used shall terminate, or permanent emission reduction credits shall be obtained, within the 3 year period beginning the date a revised emission reduction credit certificate indicating the temporary use of the credits is issued by the District. When the project is terminated or permanent emission reduction credits are obtained, the registered owner of the emission reduction credits must apply to re-bank the emission reduction credits.

If temporary emission reduction credits are to be used for a project, the amount of credits required shall be determined in accordance with the provisions of Rule 26.2.B. Notwithstanding Rule 26.5.B.l.c, the District shall not deposit in the essential public service bank the portion of the emission reduction credit which is used as an offset at a tradeoff ratio greater than 1.0. When the emission reduction credits are re-banked, the portion of the emission reduction credit which is used as an offset at a tradeoff ratio greater than 1.0 shall be returned to the emission reduction credit certificate. Furthermore, notwithstanding Rule 26.4.C, the emission reduction credits shall not be discounted when the credits are re-banked.

Temporary emission reduction credits may not be used to offset any emission increase resulting from a new major source or major modification.

G. Existing Emission Reduction Credits

Existing emission reduction credits shall be considered to be emission reduction credits pursuant to this Rule with the following conditions:

1. ROC and NOx credit balances shall be discounted by 25 percent and this reduction shall be deposited into the essential public service bank. Any ROC or NOx emission reduction credits which are temporarily transferred to another stationary source on October 22, 1991, shall be discounted pursuant to this subsection upon their return to the bank.

2. Particulate matter balances shall be recalculated as the PM-10 fraction of the particulate matter balances.

3. Carbon monoxide balances shall be eliminated.

4. SOx balances shall remain unchanged.

5. Any limitations on the use of existing emission reduction credits that applied to the emission reduction credit under Rule 26 as it existed prior to October 22, 1991, shall continue to apply to the use of the emission reduction credit. These limitations shall be described on the reissued certificates of emission reduction credit.

6. All balances shall be expressed on tons per year basis and all references to pounds per hour shall be deleted.

7. A quarterly emissions profile shall be determined for all existing emission reduction credits based on the best information available.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 26.5 - NEW SOURCE REVIEW - ESSENTIAL PUBLIC SERVICE BANK
(Adopted 10/22/91, Revised 12/22/92, 2/13/96, 1/13/98, 3/14/06)

A. Applicability

This rule provides for the banking, by the District, of emission reductions of reactive organic compounds (ROC) and nitrogen oxides (NOx) as essential public service credits and the disbursement of these credits.

B. Essential Public Service Bank Funding

The following emission reductions shall be certified as essential public service credits and shall be deposited in the essential public service bank:

1. The discounted portion of any emission reduction resulting from a reduction in throughput for an emissions unit or the shutdown of an emissions unit which is discounted pursuant to Rule 26.4.C.1 on or after October 22, 1991.

2. The discounted portion of any emission reduction resulting from the application of control equipment, a modified emissions unit or the replacement of an emissions unit with a lower emitting emissions unit which is discounted pursuant to Rule 26.4.C.2 on or after October 22, 1991.

3. The portion of any emission reduction credit which is used as an offset at a tradeoff ratio greater than 1.0, as required pursuant to Rule 26.2.B.2 on or after October 22, 1991.

4. Any emission reduction resulting from a shutdown of an emissions unit, which occurred on or after October 22, 1991, and which is not banked pursuant to Rule 26.4, provided the emissions unit is located at a stationary source with a potential to emit of greater than or equal to five tons per year with respect to the pollutant being deposited into the essential public service bank and provided there is reasonable evidence to determine that the reduction is real, quantifiable, permanent, enforceable, and surplus.

   For the purposes of this subsection the potential to emit of a source shall be equal to the potential to emit at the time immediately prior to the occurrence of such shutdown.

5. The discounted portion of any existing emission reduction credit which is discounted pursuant to Rule 26.4.G.1.

6. Any essential public service credits which are returned from an essential public service pursuant to subsection C.3 or Rule 26.6.E.4.d on or after October 22, 1991.

C. Disbursement and Return of Essential Public Service Credits

1. The APCO shall disburse essential public service credits to an essential public service, which is required to provide offsets and which is eligible to use the essential public service bank, on the date the Authority to Construct for such essential public service is issued. If the requests for credits for essential public services exceed the amount of essential public service credits available for use by essential public services, priority shall be given to the application which was deemed complete the earliest. Notwithstanding the previous sentence, the Ventura County Air Pollution Control Board may determine that a specific essential public service shall be given priority for access to the essential public service bank based on public health or safety regardless of the date on which the application was deemed complete.

2. Essential public services may reserve essential public service credits to allow multi-year projects to be planned. The reservation of any essential public service credits pursuant to this subsection shall be subject to the approval of the Ventura County Air Pollution Control Board. When approving such reservation, the Ventura County Air Pollution Control Board shall consider whether the project is consistent with the growth projections in the most recently adopted version of the Ventura County Air Quality Management Plan. An application for an Authority to Construct which proposes to utilize such reserved credits shall be submitted to the District within two years after the date on which such reservation is approved by the Ventura County Air Pollution Control Board. If such application is not submitted on or before the required date, the reservation shall be canceled.

3. Essential public service credits shall be returned to the essential public service bank under the following conditions:

a. Construction has not started prior to the expiration of an Authority to Construct. In this case all essential public service credits which were granted to obtain the Authority to Construct shall be returned.

b. The voluntary surrender or the revocation of an Authority to Construct or Permit to Operate. In this case all essential public service credits which were granted to obtain the Authority to Construct or Permit to Operate shall be returned.

D. Transferability

Essential public service credits shall not be transferable except in the case where a Permit to Operate is transferred pursuant to Rule 20.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 26.6 - NEW SOURCE REVIEW - CALCULATIONS
(Adopted 10/22/91, Revised 1/13/98, 5/14/02, 3/14/06)

A. Applicability

This Rule specifies the provisions by which emission increases, emission reductions, and profile checks for offsets shall be calculated. Emission increases and emission reductions shall be calculated separately. Both the emission increase and emission reduction sections shall apply for many cases where an emissions unit is being replaced, modified, or relocated. Only the emission increase section would apply for new emissions units.

B. Potential to Emit

The potential to emit is an emission limit which specifies the maximum quantity of each air pollutant which may be emitted by an emissions unit during a 12 calendar month rolling period. This limit shall be based on any period of 12 consecutive calendar months and shall be expressed in the units of tons per year.

The potential to emit shall be calculated based on the maximum design capacity or other operating conditions which reflect the maximum potential emissions, unless specific limiting conditions on the Authority to Construct and/or Permit to Operate restrict emissions to a lower level. Other operating conditions may include, but are not limited to, production bottlenecks where other equipment may limit the throughput of an emissions unit.

C. Actual Emissions

The actual emissions of air pollutants from an emissions unit shall be calculated based on the actual operating history of the emissions unit. The actual operating history of the emissions unit shall be averaged over a period of two years immediately preceding the date of application to bank emission reduction credits, or a more representative period, as determined by the Air Pollution Control Officer (APCO), of two consecutive years during the five years immediately preceding the date of such application. Actual emissions shall be expressed in the units of tons per year. In no case shall the actual emissions exceed the permitted emissions. If at any time during the specified two year period the emissions unit was operated in violation of any applicable federal, state or District law, rule, regulation, order, or permit condition, then the actual emissions shall be adjusted to reflect the level of emissions that would have occurred if such violation did not occur. Permit conditions and permitted emissions shall only be applicable to emissions units for which a Permit to Operate is required.

D. Emission Increases

1. Emission increases from the addition of a new emissions unit shall be calculated by using the potential to emit for the new emissions unit.

2. Emission increases from a modified or replacement emissions unit shall be calculated as; the emissions unit's post-project potential to emit adjusted to reflect the application of the current Best Available Control Technology minus the emissions unit's pre-project potential to emit adjusted to reflect the application of the current Best Available Control Technology.

3. Emission increases from a relocated emissions unit shall be calculated as; the emissions unit's potential to emit, at the new location, adjusted to reflect the application of the current Best Available Control Technology minus the emissions unit's potential to emit, at the old location, adjusted to reflect the application of the current Best Available Control Technology.

4. Emissions increases from a modified emissions unit where the modification is made for the purpose of complying with regulatory requirements and where there is no increase in throughput shall be calculated as; the emissions unit's post-project potential to emit minus the emissions unit's pre-project potential to emit adjusted to reflect the application of the best control method to comply with the regulation currently available, as determined by the APCO.

5. Emission increases from a modified emissions unit where the modification is made for the purpose of reducing the emission of air pollutants and where there is no increase in throughput, shall be calculated as, the emissions unit's post-project potential to emit minus the emissions unit's pre-project potential to emit.

6. In addition to the emissions increases calculated pursuant to subsection D.2, D.3, or D.4 of this rule, alternative emissions increases shall be calculated for these cases using the emissions unit's pre-project potential to emit with no adjustments. An alternative emissions increase calculated pursuant to this subsection which is greater than the emissions increase calculated pursuant to D.2 D.3, or D.4 shall be substituted for the emissions increase calculated pursuant to D.2. D.3. or D.4 if the alternative emissions increase exceeds 25 tons per year of ROC or NOx or if the APCO determines that the alternative emissions increase would cause or contribute to the violation of a national ambient air quality standard.

7. Notwithstanding subsections D.2, D.3, D.4, D.5, and D.6 of this rule, emissions increases from a major modification shall be calculated as the post-project potential to emit minus the greater of the following:

   a. The emissions unit's pre-project actual emissions, or

b. The total amount of all emission reduction credits that were used to provide offsets for the emissions unit and that were determined to be surplus at the time of use pursuant to Rule 26.11.B.

E. Emission Reductions

This Section shall be used to calculate emission reductions for the purpose of determining emission reduction credits.

1. Emission reductions which result from the application of control equipment, a modified emissions unit or the replacement of an emissions unit with a lower emitting emissions unit shall be calculated as, the emissions unit's pre-project actual emissions minus the emissions unit's post-project emissions based on the same throughput level as the actual emissions.

2. Emission reductions which result from a reduction in throughput for an emissions unit shall be calculated as, the actual emissions minus the new potential to emit at the proposed throughput level.

3. Emission reductions which result from the shutdown of an emissions unit shall be calculated as, the actual emissions.

4. If emission reduction credits or essential public service credits were provided as offsets after October 22, 1991 for the purpose of obtaining a Permit to Operate, emission reductions shall be calculated as follows:

a. Emission reductions which result from the application of control equipment, a modified emissions unit or the replacement of an emissions unit with a lower emitting emissions unit shall be calculated as the greater of the values calculated pursuant to subsections E.4.a.1) and E.4.a.2).

1) The emission reduction calculated pursuant to subsection E.1.

2) The lesser of the two following values:

i. The total amount of all emission reduction credits and essential public service credits provided as offsets for the emissions unit since October 22, 1991.

ii. The emissions unit's pre-project potential to emit minus the emissions unit's post-project potential to emit.

b. Emission reductions which result from a reduction in throughput for an emissions unit shall be calculated as the greater of the values calculated pursuant to subsections E.4.b.1) and E.4.b.2).

1) The emission reduction calculated pursuant to subsection E.2.

2) The lesser of the two following values:

i. The total amount of all emission reduction credits and essential public service credits provided as offsets for the emissions unit since October 22, 1991.

ii. The emissions unit's pre-project potential to emit minus the emissions unit's post-project potential to emit at the proposed throughput level.

c. Emission reductions which result from the shutdown of an emissions unit shall be calculated as the greater of the two following values:

1) The emission reduction calculated pursuant to subsection E.3.

2) The total amount of all emission reduction credits and essential public service credits provided as offsets for the emissions unit since October 22, 1991.

d. For the purpose of determining the portion of any emission reduction calculated pursuant to subsections E.4.a, E.4.b, or E.4.c, which shall be returned to the essential public service bank or shall be eligible for banking pursuant to Rule 26.4, the following procedure shall be used. The emission reduction shall be applied:

1) First, to return any essential public service credits, which were used to obtain the Permit to Operate, to the essential public service bank.

2) Second, to allow any remaining portion of the emission reduction to be banked pursuant to Rule 26.4.

F. Profile Check for Offsets

Quarterly profiles shall be based on four quarters which shall begin on January 1, April 1, July 1, and October 1, of any calendar year. Quarterly profiles for emission reduction credits and for emission increases shall be expressed in terms of a percentage value for each quarter, where the sum of the percentage values for each quarter is equal to 100 percent. For each quarter the lower percentage value from the quarterly profile of either the emission reduction credits or the emission increase for which the applicant is proposing to utilize the emission reduction credits as offsets shall be summed, and this sum shall be equal to at least 80 percent.

5-12-93

5/13/93

Rule 26.7 New Source Review - Notification (Adopted 10/22/91, Revised 12/22/92)

A. Applicability

This Rule specifies the cases in which notification shall be provided of the Air Pollution Control Officer's preliminary decision to grant an Authority to Construct, or issue a Certificate of Emission Reduction Credit. In addition, this Rule specifies the process by which such notification shall be made.

B. Requirements

1. The Air Pollution Control Officer (APCO) shall publish a notice, as specified in subsection B.3, of any preliminary decision to grant an Authority to Construct for any new, replacement, modified, or relocated emissions unit where the potential to emit from all new, modified, replacement, or relocated emissions units at the stationary source, which are covered by the application for such Authority to Construct, would exceed the limits in Table B-1.

Table B-1.

Nitrogen Oxides (NOx)	15.0 tons/year
Reactive Organic Compounds (ROC)	15.0 tons/year
Sulfur Oxides (SOx)	15.0 tons/year
Particulate Matter (PM-10)	15.0 tons/year
Carbon Monoxide	100.0 tons/year

2. The APCO shall publish a notice, as specified in subsection B.3, of any preliminary decision to certify emission reduction credits where the amount of such credit would exceed any of the limits specified in Table B-1.

3. Any notice of a preliminary decision required to be published pursuant to subsections B.1 or B.2 shall:

a. Be published in at least one newspaper of general circulation in Ventura County, by no later than 10 days after such preliminary decision.

b. Include the location where the public may inspect the information required to be made available pursuant to subsection B.5.

c. Provide at least 30 days from the date of publication for the public to submit written comments regarding such preliminary decision.

4. The APCO shall publish a notice of any preliminary decision to certify emission reduction credits. Such notice shall:

   a. Be published in the Ventura County Air Pollution Control District Monthly Report.

   b. Include the location where the public may inspect the information required to be made available pursuant to subsection B.5.

   c. Provide at least 30 days from the date of publication for the public to submit written comments regarding such preliminary decision.

5. The APCO shall, by no later than the date of publication, make available for public inspection at the District office the information submitted by the applicant and the APCO's supporting analysis for any preliminary decision subject to the notification requirements of subsections B.1, B.2 or B.4. Information which contains trade secrets shall be handled in accordance with Section 6254.7 of the Government Code.

6. The APCO shall, by no later than the date of publication, provide to the California Air Resources Board (ARB) and the U.S. Environmental Protection Agency (EPA) a copy of any notification made pursuant to subsections B.1 or B.2, and the supporting data and analysis relating to any such preliminary decision.

7. The APCO shall consider any comments received during the 30 day comment period. If during the 30 day comment period the APCO receives a written request from either ARB or EPA to defer the APCO's final decision pending the requesting agency's review of the application, then the APCO shall defer the final decision for a period of 30 days from the date of such request.

8. The APCO shall provide written notification of the final decision to grant or deny any such Authority to Construct or Certificate of Emission Reduction Credits to any person and/or agency which submitted comments during the comment period.

1/28/92

1-28-92

Rule 26.8 New Source Review - Permit to Operate (Adopted 10/22/91)

A. No Authority to Construct or Permit to Operate Issued

For any new, replacement, modified, or relocated emissions unit for which an Authority to Construct or Permit to Operate was required but not obtained, the application for a Permit to Operate shall, for the purposes of Rule 26, be considered an application for an Authority to Construct. Such application shall be subject to the version of Rule 26 in effect on the date on which such application is deemed complete.

B. Additional Offsets Required

The Air Pollution Control Officer (APCO) shall deny an applicant a Permit to Operate for any new, replacement, modified, or relocated emissions unit if it is determined that the emissions are greater than previously calculated when the Authority to Construct was issued and offsets are required for this additional emission increase pursuant to Rule 26.2.B, unless one of the following requirements is satisfied:

1. Offsets are provided for this additional emission increase, pursuant to Rule 26.2.B.

2. The applicant accepts a specific condition on the Permit to Operate limiting emissions to the level calculated when the Authority to Construct was issued.

If the applicant elects to provide offsets for this additional emission increase, these offsets shall be provided within 90 days after the mailing of written notice, from the APCO, that additional offsets are required.

C. Startup Period for Replacement Equipment

For a new emissions unit which will be a replacement, in whole or in part, for an existing emissions unit at the same stationary source, the APCO may allow a start up period of up to 90 days for the simultaneous operation of such units.

1/25/92

1-28-92

Rule 26.9 New Source Review - Power Plants (Adopted 10/22/91)

A. Applicability

This Rule shall apply to all power plants proposed to be constructed in Ventura County and for which a Notice of Intention (NOI) or Application for Certification (AFC) has been accepted by the California Energy Commission. The Air Pollution Control Officer (APCO), pursuant to Section 25538 of the Public Resources Code, may apply for reimbursement of all costs incurred, including lost fees, in order to comply with the provisions of this Rule.

B. Intent to Participate And Preliminary Report

Within 14 days of receipt of a NOI, the APCO shall notify the California Air Resources Board (ARB) and the California Energy Commission of the District's intent to participate in the NOI proceeding. If the District chooses to participate in the NOI proceeding, the APCO shall prepare and submit a report to ARB and the California Energy Commission prior to the conclusion of the nonadjudicatory hearings specified in Section 25509.5 of the Public Resources Code. That report shall include, at a minimum:

1. A preliminary specific definition of Best Available Control Technology for the proposed facility;

2. A preliminary discussion of whether there is substantial likelihood that the requirements of Rule 26 and all other District rules and regulations can be satisfied by the proposed facility;

3. A preliminary list of conditions which the proposed facility must meet in order to comply with Rule 26 and all other applicable District rules and regulations.

The preliminary determinations contained in the Report shall be as specific as possible within the constraints of the information contained in the NOI.

C. Determination of Compliance Review

Upon receipt of an AFC for a power plant, the APCO shall conduct a Determination of Compliance review. This determination shall consist of a review identical to that which would be performed if an application for an Authority to Construct had been received for the power plant. If the APCO determines that the AFC does not contain the information necessary to process the application, the APCO shall, within 20 calendar days of receipt of the AFC, so inform the California Energy Commission, and the AFC shall be considered incomplete and returned to the applicant for resubmittal.

D. Equivalency of Application for Certification to Authority to Construct

The APCO shall consider the AFC to be equivalent to an application for an Authority to Construct during the Determination of Compliance review, and shall apply all provisions of Rule 26 and all other District rules and regulations which apply to applications for an Authority to Construct.

E. Need for Additional Information

The APCO may request from the applicant any information necessary for the completion of the Determination of Compliance review. If the APCO is unable to obtain the information, the APCO may petition the presiding Commissioner of the California Energy Commission for an order directing the applicant to supply such information.

F. Preliminary Determination

Within 180 days of accepting an AFC as complete, the APCO shall make a preliminary decision on:

1. Whether the proposed power plant meets the requirements of Rule 26 and all other applicable District rules and regulations; and

2. In the event of compliance, what conditions will be required including the specific Best Available Control Technology requirements and a description of required mitigation measures.

Such preliminary decision shall be treated as a preliminary decision under Rule 26.7.B.1, and shall be finalized by the APCO only after being subject to the public notice and comment requirements of Rule 26.7. The APCO shall not issue a Determination of Compliance unless all requirements of Rule 26 and all other applicable District rules and regulations are met.

G. Determination of Compliance

Within 240 days of the filing date, the APCO shall issue and submit to the California Energy Commission a Determination of Compliance or, if such a determination cannot be issued, shall so inform the California Energy Commission. A Determination of Compliance shall confer the same rights and privileges as an Authority to Construct only when and if the California Energy Commission approves the AFC, and the Commission certificate includes all conditions of the Determination of Compliance.

H. Permit to Operate

Any applicant receiving a certificate from the California Energy Commission pursuant to this part and in compliance with all conditions of the certificate shall be issued a Permit to Operate by the APCO.

Rule 26.11 New Source Review – ERC Evaluation At Time of Use (Adopted 5/14/02)

A. Applicability

This rule provides for the evaluation by the District of emission reduction credits for reactive organic compounds (ROC) and nitrogen oxides (NOx) at the time that an Authority to Construct is issued, and for the creation and implementation of an annual equivalency demonstration program.

B. Determination of Surplus at the Time of Use

1. The District shall conduct the following evaluation of each ROC or NOx emission reduction credit that is:

a. Provided by an applicant pursuant to the provisions of Rule 26.2.B as of the date the Authority to Construct is issued; or

b. Permanently surrendered by the registered owner, without being used pursuant to the provisions of Rule 26.2.B, as of the date the emission reduction credit is surrendered.

The evaluation shall not be conducted for any emission reduction credits provided by an applicant as temporary emission reduction credits pursuant to Rule 26.4.F.3.

2. For each emission reduction credit used or surrendered, the District shall conduct a record review to determine the size of the emission reduction that was used to establish the emission reduction credit after the emission reduction had been evaluated to determine that it was real, quantifiable, permanent and enforceable. The District shall then evaluate this emission reduction to determine what portion of it is surplus on the date the Authority to Construct is issued. The portion that is surplus on the date the Authority to Construct is issued shall be designated ER1.

3. For each emission reduction credit used or surrendered, the District shall conduct a record review to determine the size of the emission reduction that was used to establish the emission reduction credit after the emission reduction had been evaluated to determine that it was real, quantifiable, permanent, enforceable and surplus at the time the emission reduction credit was issued. The District shall then evaluate this emission reduction to determine what portion of it was granted as an emission reduction credit after any discounting required pursuant to Rule 26.4.C. If the emission reduction credit has been further discounted pursuant to Rule 26.4.D.1 or Rule 26.4.D.2, the District shall determine what portion of the emission reduction was granted as a final emission reduction credit. The portion granted as a final emission reduction credit shall be designated ER2.

4. For each emission reduction credit used or surrendered, the amount of the emission reduction credit that is determined to be surplus at the time of use shall be calculated as follows:

Surplus Credit = (ER1/ER2) * Emission Credit Used or Surrendered

Where ER1 is the amount determined pursuant to subsection B.2 and ER2 is the amount determined pursuant to subsection B.3.

5. If the amount of emission reduction credit calculated to be surplus at the time of use pursuant to subsection B.4 exceeds the amount of emission reduction credit provided by an applicant pursuant to the provisions of Rule 26.2.B, the amount of offsets required pursuant to Rule 26.2.B shall not be reduced.

C. Annual Equivalency Demonstration Program

1. The District shall create and implement an Annual Equivalency Demonstration Program to determine whether new major sources and major modifications shall be required to provide ROC and NOx emission reduction credits pursuant to Rule 26.2.B.2.d that are determined pursuant to subsection B to be surplus at the time of use.

2. The District shall determine as of January 1 of each year the total amount of emission reduction credits of ROC and the total amount of emission reduction credits of NOx that have been determined pursuant to subsection B to be surplus at the time of use during the prior calendar year.

3. The District shall determine as of January 1 of each year the total amount of ROC and NOx emission reduction credits that have been required to be provided to the District by new major sources and major modifications pursuant to Rule 26.2.B during the prior calendar year.

4. The District shall determine as of January 1 of each year a balance for each pollutant equal to the amount calculated pursuant to subsection C.3 subtracted from the amount calculated pursuant to subsection C.2. A total balance for each pollutant will be calculated by adding the annual balance to the balance from the prior year.

5. No later than April 1 of each year, the District shall provide a report for ROC and NOx to the U.S. Environmental Protection Agency (EPA) on the balances determined pursuant to subsection C.4 of this rule, and submit a summary of all the calculations conducted pursuant to Section B of this rule that establish that balance.

6. For any year that the report required in subsection C.5 shows a positive balance for either pollutant, then major sources and major modifications shall be exempt from the provision in Rule 26.2.B.2.d that all emission reduction credits provided shall be surplus at the time of use for the pollutant that shows a positive balance until the submission of the next report.

D. Initial Annual Evaluation

The first annual evaluation pursuant to Section C shall occur as of January 1, 2003, for calendar years 2000, 2001 and 2002.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 26.13 - NEW SOURCE REVIEW - PREVENTION OF SIGNIFICANT DETERIORATION (PSD) *(Adopted 6/28/2011, Revised 11/10/2015)*

A. Purpose

The prevention of significant deterioration (PSD) program is a construction permitting program for new major facilities and major modifications to existing major facilities that emit either criteria or greenhouse gas pollutants located in areas classified for an air pollutant as either attainment or unclassifiable. Rules 10 through 32 contain application requirements and processing requirements for permit actions. The intent of this Rule is to incorporate by reference federal PSD rule requirements into these Rules and Regulations.

B. Applicability

The provisions of this Rule shall apply to any source and the owner or operator of any source subject to any requirement under Title 40 of the Code of Federal Regulations Section 52.21 (40 CFR 52.21) as incorporated into this Rule.

C. Incorporation by Reference

Except as provided below, the provisions of 40 CFR 52.21, in effect September 1, 2015, are incorporated herein by reference and made part of the District's Rules and Regulations.

1. The following subsections of 40 CFR 52.21 are excluded: (a)(1), (b)(55-58), (f), (g), (i)(1)(i-v, ix, x), (i)(6-8), (p)(6-8), (q), (s), (t), (u), (v), (w), (x), (y), (z) and (cc).

2. Unless otherwise defined below, the terms used in this Rule are defined in 40 CFR 52.21:

    a. The term "administrator" shall mean as follows:

        1) "USEPA administrator" as used in 40 CFR 52.21(b)(17), (b)(37)(i), (b)(43), (b)(48)(ii)(c), (b)(50)(i), (b)(51), (l)(2) and (p)(2); or

        2) "Air Pollution Control Officer" (defined in Rule 2), as used elsewhere in this Rule.

3. The phrase "paragraph (q) of this section" in 40 CFR 52.21(l)(2) and (p)(1) shall read as follows: "the public notice and comment provisions of Rule 26.13 Section E".

D. Requirements

1. An owner or operator must obtain a prevention of significant deterioration (PSD) permit pursuant to this Rule before beginning actual construction of a new major stationary source, a major modification, or a Plantwide Applicability Limitation (PAL) major modification, as defined in 40 CFR 52.21(b).

2. Notwithstanding the provisions of any other District Rule or Regulation, the Air Pollution Control Officer shall require compliance with this Rule prior to issuing a federal Prevention of Significant Deterioration permit as required by Clean Air Act (CAA) Section 165.

3. The applicant shall pay the applicable fees specified in Rule 42.

4. The Air Pollution Control Officer shall provide written notice of any permit application for a proposed major stationary source or major modification to the USEPA administrator. Such notification shall include a copy of all information relevant to the permit application and shall be given within 30 days of receipt and at least 60 days prior to any public hearing on the application for a permit to construct.

5. The Air Pollution Control Officer shall determine whether an application is complete not later than 30 days after receipt of the application or after such longer time as both the applicant and the Air Pollution Control Officer may agree. If the Air Pollution Control Officer determines that the application is not complete, the applicant shall be notified in writing of the decision specifying the information that is required. Upon receipt of any re-submittal of the application, a new 30-day period to determine completeness shall begin. Upon determination that the application is complete, the Air Pollution Control Officer shall notify the applicant in writing. The date of receipt of the application shall be the date on which the reviewing authority received all required information.

6. Greenhouse gas emissions shall not be subject to the requirements of subsections (k) or (m) of 40 CFR 52.21 in effect on September 1, 2015.

7. Except as specified in Section D.7.a below, the PSD requirements of this Rule shall be incorporated into and made enforceable through Authority to Construct permits and Permits to Operate according to the permitting requirements of Regulation II (Rules 10 through 36) of the District's Rules and Regulations.

    a. For power plants which will be licensed by the California Energy Commission, the PSD requirements of this Rule may, at the District's discretion, be incorporated into and made enforceable through Determinations of Compliance and Permits to Operate according to the Determination of Compliance provisions of Rule 26.9 New Source

Review – Power Plants and the permitting requirements of Regulation II of the District's Rules and Regulations.

E. Public Participation

Prior to issuing a federal PSD permit pursuant to this Rule and within one year after receipt of a complete application, the Air Pollution Control Officer shall:

1. Make a preliminary determination whether construction should be approved with conditions or disapproved.

2. Make available in at least one location in each region in which the proposed source would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination, a copy of the proposed permit and a copy or summary of other materials, if any, considered in making the preliminary determination.

3. Notify the public, by advertisement in a newspaper of general circulation in the District, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, the opportunity for comment at a public hearing and the opportunity for written public comment.

4. Send a copy of the notice of public comment to the applicant, USEPA Region 9, any persons requesting such notice and any other interested parties such as: Any other State or local air pollution control agencies, the chief executives of the city and county where the source would be located; any comprehensive regional land use planning agency, and any State, Federal Land Manager, or Indian Governing body whose lands may be affected by emissions from the source or modification.

5. Provide opportunity for a public hearing for persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations, if in the Air Pollution Control Officer's judgment such a hearing is warranted.

6. Consider all written comments that were submitted within 30 days after the notice of public comment is published and all comments received at any public hearing(s) in making a final decision on the approvability of the application and make all comments available, including the District's response to the comments, for public inspection in the same locations where the District made available preconstruction information relating to the proposed source or modification.

7. Make a final determination whether construction should be approved with conditions or disapproved.

8. Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the District

made available preconstruction information and public comments relating to the source.

6/30/72

~~Pollution Control District is guilty of a misdemeanor. (Health & Safety Code Section 24282)~~

* Rule 28. Revocation of Permits.

If the holder of any permit provided for by the Rules and Regulations of the Ventura County Air Pollution Control District violates any Rules or Regulations of the District, the Air Pollution Control Officer may request the Hearing Board to hold a public hearing to determine whether the permit should be revoked. Notice in writing shall be served on the permittee by mail informing him of such action and reasons therefor.

~~* Rule 29. Conditions on Permits.~~

~~The Air Pollution Control District may apply any reasonable conditions to an Authority to Construct or a Permit to Operate necessary to assure and/or demonstrate that any article, machine, equipment or other contrivance operated within all applicable State and Federal Emission Standards and the Rules and Regulations of the District. Such conditions shall be specified in writing. Appeals to conditions may be made in accordance with Rule 22.~~

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 29 - CONDITIONS ON PERMITS
(Adopted 5/23/72, Revised 7/18/72, 6/19/79, 10/14/80, 1/11/83, 7/1/83, 1/10/84, 2/26/85, 5/30/89, 10/22/91, 3/14/06)

A. Rules Compliance

1. The Air Pollution Control Officer (APCO) shall apply any reasonable conditions to an Authority to Construct or a Permit to Operate which are necessary to assure or demonstrate that a stationary source and all emissions units at the stationary source will operate in compliance with applicable state and federal emission standards and with these Rules, including permit conditions required by Rule 26, New Source Review.

2. Upon annual renewal, each permit shall be reviewed by the APCO to determine that permit conditions are adequate to ensure compliance with applicable state and federal emission standards and with these Rules, including permit conditions required by Rule 26 which were in effect at the time the permit was issued or modified, or which have subsequently been adopted and made retroactively applicable to an existing emissions unit. If the conditions are not in compliance, the permit shall be revised by the APCO to specify permit conditions in accordance with applicable state and federal emission standards and with these Rules, including permit conditions required by Rule 26. The permittee shall be notified in writing of any revisions to permit conditions made pursuant to this subsection, such notice shall be given at the time of the notification of the renewal fee due.

B. Permitted Emissions

1. The APCO shall apply conditions to permits which will limit the amount of air contaminants a stationary source may emit. These emission limits are called permitted emissions and shall be expressed in pounds per hour and tons per year. In addition, conditions may include restrictions on production rates, fuel use rates, raw material use rates, hours of operation or other reasonable conditions to insure that the permitted emission limits are not exceeded.

2. Upon annual renewal, each permit shall be reviewed by the APCO to insure that permitted emission limits are not in violation of applicable state and federal emission standards and these Rules, including permit conditions required by Rule 26 which were in effect at the time the permit was issued or modified, or which have subsequently been adopted and made retroactively applicable to an existing emissions unit. If the permitted emissions are not in compliance, the permit shall be revised by the APCO to specify permitted emissions in compliance with applicable state and federal emissions standards and with these Rules, including

permit conditions required by Rule 26. The permittee shall be notified in writing of any revisions to permitted emissions made pursuant to this subsection, such notice shall be given at the time of the notification of the renewal fee due.

3. a. Permitted emissions shall be calculated for each emissions unit at a stationary source. Permitted emissions for a stationary source shall be determined by aggregating the permitted emissions for each emissions unit at the stationary source.

For emissions units for which a permit has been issued on or before October 22, 1991, annual permitted emissions shall be the permitted emissions attributed to the emissions unit on October 22, 1991. For new, modified, replacement or relocated emissions units for which a permit is issued after October 22, 1991, annual permitted emissions shall be the annual emissions used to determine compliance for issuance of the permit. For emissions units which require a permit solely as a result of a change in Rule 23, annual permitted emissions shall be calculated as 1.2 times the maximum emissions from the emissions unit during any 12 month consecutive period in the five years immediately prior to application for the permit corrected for compliance with any applicable federal, state or district laws, rules, regulations, agreements or orders. Annual permitted emissions shall be based on a 12 calendar month rolling period and shall be expressed in the units of tons per year.

For all emissions units, hourly permitted emissions shall be calculated based on the maximum quantity of each air pollutant which may be emitted from the emissions unit during a one hour period, as limited by any applicable rules or permit conditions. Hourly permitted emissions shall be expressed in the units of pounds per hour.

b. Upon annual renewal, any permitted emissions unit that has been permanently removed from the stationary source shall be removed from the Permit to Operate and the permitted emissions for the stationary source shall be reduced by the permitted emissions calculated for the emissions unit. If any piece of combustion equipment can no longer use a fuel it was permitted to use, the permitted emissions for the stationary source shall be reduced as appropriate. The permittee shall be notified in writing of, the removal of any permitted equipment from a Permit to Operate, and any revisions to permitted emissions, made pursuant to this subsection. Such notice shall be given at the time of notification of the renewal fee due.

c. Upon annual renewal, the APCO may revise the permitted emissions of any emissions unit based on better emission rate information if the correction will not result in the violation of any applicable federal, state or district laws, rules, regulations, agreements or orders. The permittee shall

be notified in writing of any revisions to permitted emissions, made pursuant to this subsection. Such notice shall be given at the time of notification of the renewal fee due.

d. Notwithstanding Subsection B.3.a above, during the first annual renewal between March 14, 2006, and June 14, 2007, the permitted emissions for an existing stationary source used to dispense gasoline into motor vehicles or marine pleasure craft shall be calculated based on the number, size, and type of gasoline storage tanks at the source, the control equipment at the source, and the gasoline throughput requested by the permittee.

If the permittee requests an increase in permitted throughput and the revised permitted emissions equal or exceed 5 tons per year of reactive organic compounds, the permittee shall submit an application to modify the existing permit and provide offsets as necessary. In all other cases, the permitted emissions shall be modified as part of the renewal process.

e. Notwithstanding Subsection B.3.a above, during the first annual renewal between March 14, 2006, and June 14, 2007, the permitted emissions for an existing drycleaning facility as classified by the Standard Industrial Classification Manual will be calculated based on the number, size, and type of drycleaning machines at the source, the control equipment at the source, and the solvent throughput requested by the permittee.

If the permittee requests an increase in permitted throughput and the revised permitted emissions equal or exceed 5 tons per year of reactive organic compounds, the permittee shall submit an application to modify the existing permit and provide offsets as necessary. In all other cases, the permitted emissions shall be modified as part of the renewal process.

4. a. If any permitted emissions unit is capable of operating at a rate greater than its contribution to the permitted emissions of the stationary source, the operator may submit an application requesting the APCO to increase the permitted emissions component of that emissions unit up to its operating capacity. If any such increase in permitted emissions results from a modified emissions unit, as defined in Rule 26.1, then the application shall be reviewed pursuant to Rule 26, and not pursuant to this subsection.

The APCO shall review the data relating to the increased level of operation of that emissions unit to determine if the change in operation would cause a violation of applicable state and federal emission standards or these Rules, including permit conditions applied pursuant to Section A of this rule.

If no violation of any applicable state and federal emission standards or these Rules, including permit conditions applied pursuant to Section A of this Rule is expected to occur, the APCO shall issue a new Permit to Operate incorporating new permitted emissions upon receipt of the additional fees specified in Rule 42.

b. If a stationary source holding a valid Permit to Operate is not being operated at the level of the permitted emissions shown on the Permit to Operate, the operator may submit an application requesting the APCO to revise the Permit to Operate to decrease the permitted emissions. If the permittee desires to have the next permit renewal fee based on the reduced permitted emissions, then the permittee shall submit the application to reduce permitted emissions to the APCO at least 90 days before the permit expiration date.

C. Violation of Permit Conditions

1. Construction or operation of any stationary source in violation of the conditions of an Authority to Construct or a Permit to Operate issued pursuant to these Rules is prohibited.

2. Any violation of the conditions of an Authority to Construct or a Permit to Operate issued pursuant to these Rules shall constitute a violation of these Rules. Any such violation is subject to the penalties provided for in Part 4 of Division 26 of the California Health and Safety Code.

D. Federal Enforceability

All requirements of this Rule and conditions of a valid Authority to Construct and a valid Permit to Operate (both of which together for the purposes of this section of Rule 29 shall be considered as equivalent to a Federal Authority to Construct) granted for a new or modified major stationary source under this and other of the District's Rules shall be federally enforceable by the Environmental Protection Agency.

3-26-90

Rule 30. Permit Renewal (Adopted 5/23/72, Revised 3/9/76, 7/18/78, 8/14/79, 6/17/80, 7/1/83, 5/30/89)

The Permit to Operate for a facility shall be renewed annually on a staggered schedule determined by the Air Pollution Control Officer. In order to better balance the workload of the District, a Permit to Operate may be renewed for a period of no less than six months and no more than eighteen months. The renewal fee shall be prorated based on the number of months for which the permit is renewed.

The permit holder will be notified of the renewal fee due, as specified in Rule 42, and the due date. The due date shall be the permit expiration date or 60 days after the mailing of the notice of the renewal fee due, whichever is later. Upon receipt of the renewal fee due, the Permit to Operate will be renewed. If the renewal fee is not paid by the due date, the permit will be void and the permittee will be notified by certified mail. The permit will be reinstated upon payment of the renewal fee and the penalties prescribed in Rule 42.

Renewal on an annual basis shall begin for each existing Permit to Operate, on the date when that Permit to Operate expires.

7/19/74

Rule 31. Public Disclosure of Data

Pursuant to Government Code Section 6254.7, emission data reported by source owners or operators, or otherwise obtained by State or local agencies shall be available to the public as provided for in Regulation IX - Public Records. The data shall be so presented as to show the relationship between measured or estimated amounts of emissions and the amounts of such emissions allowable under the applicable emission limitations or other measures. (Rev. 1/29/74)

VENTURA
5/24/95

Rule 34 Acid Deposition Control (Adopted 3/14/95)

A. Applicability

This rule shall apply to any acid rain source, as defined in Title IV of the 1990 Federal Clean Air Act Amendments.

B. Requirements

The provisions of Title 40 of the Code of Federal Regulations, Part 72, Acid Rain Program (40 CFR Part 72), are hereby adopted by reference and incorporated into the Rules and Regulations of the Ventura County Air Pollution Control District (District).

1. If the provisions or requirements of 40 CFR Part 72 are determined to conflict with or are not included in Rule 33 (Part 70 Permits - General), Part 72 provisions and requirements shall apply and take precedence.

The effective date of this rule shall be the date on which the District receives delegation from the Environmental Protection Agency for the implementation of the Title V program via Rule 33.

C. Exemptions

(Reserved)

D. Definitions

Except as noted below, all definitions applicable to this Rule shall be those given in 40 CFR Part 72.

1. "Administrator": The Administrator of the United States Environmental Protection Agency.

2. "Permitting Authority": The Ventura County Air Pollution Control District.

Attachment C

Rule 50. Opacity (Adopted 7/2/68, Revised and Renumbered 10/22/68, Revised 5/23/72, 4/1/73, 5/2/74, 2/20/79, 4/13/04)

A. Requirements

A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminants for a period or periods aggregating more than three (3) minutes in any one (1) hour which are:

1. As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or,

2. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection A.1 of this Rule.

B. Test Methods

Compliance shall be determined using EPA Method 9. Any other appropriate test method may be used with prior written approval by the District, the California Air Resources Board, and the U.S. Environmental Protection Agency.

C. Exemptions

1. Section A of this rule shall not apply to diesel pile-driving hammers meeting the requirements of California Health and Safety Code Section 41701.5.

2. Section A of this rule shall not apply to any diesel auxiliary engine or generator used exclusively to operate a drinking water system meeting the requirements of California Health and Safety Code Section 41701.6.

3. This rule shall not apply to dust generated by the cultivation of land, harvesting of crops or by livestock.

4. This rule shall not apply to the use of an orchard heater which does not produce unconsumed solid carbonaceous matter at a rate in excess of one (1) gram per minute.

5. This rule shall not apply to smoke generators approved by the Air Pollution Control District which are intentionally operated for purposes of training observers in observing the shade or opacity of emissions.

6. This rule shall not apply to abrasive blasting operations meeting the requirements of Rule 74.1.

7. This rule shall not apply to fires set in accordance with the requirements of Rule 56.

Rule 52. Particulate Matter - Concentration (Grain Loading) (Adopted 7/2/68, Revised and Renumbered 10/22/68, Revised 5/23/72, 4/13/04)

A. Requirements

A person shall not discharge into the atmosphere from any source particulate matter in excess of the concentration shown in the following table (see Rule 52 Table).

Where the volume discharged falls between figures listed in the Table, the exact concentration permitted to be discharged shall be determined by linear interpolation.

CONCENTRATION
(Grain Loading)

TABLE FOR RULE 52

VOLUME DISCHARGED – Cubic Feet of Dry Gas Per Minute Calculated at Standard Conditions **DCFM**	MAXIMUM CONCENTRATION OF PARTICULATE MATTER ALLOWED IN DISCHARGED GAS – Grains Per Cubic Foot of Dry Gas at Standard Conditions **GR/DCF**	VOLUME DISCHARGED – Cubic Feet of Dry Gas Per Minute Calculated at Standard Conditions **DCFM**	MAXIMUM CONCENTRATION OF PARTICULATE MATTER ALLOWED IN DISCHARGED GAS – Grains Per Cubic Foot of Dry Gas at Standard Conditions **GR/DCF**
1000 or le	0.200	20000	0.0635
1200	.187	30000	.0544
1400	.176	40000	.0487
1600	.167	50000	.0447
1800	.160	60000	.0417
2000	.153	70000	.0393
2500	.141	80000	.0374
3000	.131	100000	.0343
3500	.124	200000	.0263
4000	.118	400000	.0202
5000	.108	600000	.0173
6000	.101	800000	.0155
7000	.0949	1000000	.0142
8000	.0902	1500000	.0122
10000	.0828	2000000	.0109
15000	.0709	2500000 or more	.0100

B. Exemptions

1. This Rule shall not apply to the following equipment provided it combusts only liquid fuels, gaseous fuels, or waste gases, and emits only combustion products:

   a. Boilers
   b. Steam generators

c. Water heaters
d. Process heaters
e. Space heaters
f. Gas turbines
g. Internal combustion engines
h. Flares

2. This Rule shall not apply to abrasive blasting operations meeting the requirements of Rule 74.1.

3. This Rule shall not apply to fires set in accordance with the requirements of Rule 56.

C. Test Methods

Compliance shall be determined using CARB Method 5. The total particulate catch shall include the filter catch, probe catch, impinger catch, and the solvent extract, as specified in CARB Method 5. Any other appropriate test method may be used with prior written approval by the District, the California Air Resources Board, and the U.S. Environmental Protection Agency.

D. Definitions

1. "Abrasive blasting": The operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against that surface.

2. "Particulate Matter": Any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions.

3. "Standard Conditions": A gas temperature of 68 degrees Fahrenheit (20 degrees Celsius) and a gas pressure of 14.7 pounds per square inch (760 mm. Hg) absolute.

Rule 53. Particulate Matter - Process Weight (Adopted 7/2/68, Revised and Renumbered 10/22/68, Revised 5/23/72, 7/18/72, 4/13/04)

A. Requirements

A person shall not discharge into the atmosphere from any source whatsoever, solid particulate matter; including lead and lead compounds, in excess of the rate shown in the following table (Rule 53 Table).

Where the process weight per hour falls between the figures listed in the Table, the exact weight of the permitted discharge shall be determined by linear interpolation.

PROCESS WEIGHT
TABLE FOR RULE 53

PROCESS WEIGHT PER HOUR – Lbs/Hr	MAXIMUM DISCHARGE RATE ALLOWED FOR SOLID PARTICULATE MATTER (Aggregate Discharge From All Points of Process) Lbs/Hr	PROCESS WEIGHT PER HOUR – Lbs/Hr	MAXIMUM DISCHARGE RATE ALLOWED FOR SOLID PARTICULATE MATTER (Aggregate Discharge From All Points of Process) Lbs/Hr
250 or less	1.00	12000	10.4
300	1.12	14000	10.8
350	1.23	16000	11.2
400	1.34	18000	11.5
450	1.44	20000	11.8
500	1.54	25000	12.4
600	1.73	30000	13.0
700	1.90	35000	13.5
800	2.07	40000	13.9
900	2.22	45000	14.3
1000	2.38	50000	14.7
1200	2.66	60000	15.3
1400	2.93	70000	15.9
1600	3.19	80000	16.4
1800	3.43	90000	16.9
2000	3.66	100000	17.3
2500	4.21	120000	18.1
3000	4.72	140000	18.8
3500	5.19	160000	19.4
4000	5.64	180000	19.9
4500	6.07	200000	20.4
5000	6.49	250000	21.6
5500	6.89	300000	22.5
6000	7.27	350000	23.4
6500	7.64	400000	24.1
7000	8.00	450000	24.8
7500	8.36	500000	25.4
8000	8.70	600000	26.6
8500	9.04	700000	27.6
9000	9.36	800000	28.4
9500	9.68	900000	29.3
10000	10.00	1000000 or more	30.0

B. Exemptions

1. This Rule shall not apply to the following equipment provided it combusts only liquid fuels, gaseous fuels, or waste gases, and emits only combustion products:

a. Boilers
b. Steam generators
c. Water heaters
d. Process heaters
e. Space heaters
f. Gas turbines
g. Internal combustion engines
h. Flares

2. This Rule shall not apply to abrasive blasting operations meeting the requirements of Rule 74.1.

3. This Rule shall not apply to fires set in accordance with the requirements of Rule 56.

C. Test Methods

Compliance shall be determined using CARB Method 5. The total particulate catch shall include the filter catch, probe catch, and impinger catch, as specified in CARB Method 5. The "solvent extract" portion of the particulate matter catch shall not be included in the total particulate catch. Any other appropriate test method may be used with prior written approval by the District, the California Air Resources Board, and the U.S. Environmental Protection Agency.

D. Definitions

1. "Particulate Matter": Any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions.

2. "Process Weight": The total weight of all materials introduced into a source operation including solid fuels, but excluding combustion air and liquids and gases used solely as fuels or as a means of conveyance. Liquids and gases shall be included only in the process weight to the extent that they chemically react in the formation of the final product or to the extent that they remain in combined form as an integral part of the final product.

3. Process Weight Per Hour": The total process weight divided 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.

4. "Solid Particulate Matter": Particulate matter that exists as a solid at standard conditions.

5. "Standard Conditions" A gas temperature of 68 degrees Fahrenheit (20 degrees Celsius) and a gas pressure of 14.7 pounds per square inch (760 mm. Hg) absolute.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 54 - SULFUR COMPOUNDS
(Adopted 7/2/68, Revised and Renumbered 10/22/68, Revised 6/24/69, 5/23/72, 7/5/83, 06/14/94, 01/14/14)

A. Applicability

This rule is applicable to any person who discharges sulfur compounds into the atmosphere from any source whatsoever.

B. Requirements

No person shall discharge sulfur compounds which would exist as a liquid or gas at standard conditions, in excess of the concentrations listed below.

1. Sulfur compounds calculated as sulfur dioxide (SO_2) by volume at the point of discharge:

    a. Exceeding 300 ppm by volume, on a dry basis, from any combustion operation, corrected to exhaust gas oxygen content as follows:

        1) For sources subject to Rule 59 Electrical Power Generating Equipment – Oxides of Nitrogen Emissions, corrected to 3% oxygen;

        2) For sources subject to Rule 74.9 Stationary Internal Combustion Engines, corrected to 15% oxygen;

        3) For sources subject to Rule 74.11 Natural Gas-Fired Water Heaters, corrected to 3% oxygen;

        4) For sources subject to Rule 74.11.1 Large Water Heaters and Small Boilers, corrected to 3% oxygen;

        5) For sources subject to Rule 74.15 Boilers, Steam Generators and Process Heaters (5MMBTUs and greater), corrected to 3% oxygen;

        6) For sources subject to Rule 74.15.1 Boilers, Steam Generators and Process Heaters (1 to 5 MMBTUs), corrected to 3% oxygen;

        7) For sources subject to Rule 74.17.1 Municipal Solid Waste Landfills or 40 CFR Part 60 Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills:

            a. Boilers corrected to 3% oxygen;

b. Process heaters corrected to 3% oxygen;
c. Enclosed flares corrected to 3% oxygen;
d. Internal combustion engines corrected to 15% oxygen;
e. Turbines corrected to 15% oxygen;
f. All other sources corrected to 3% oxygen;

8) For sources subject to Rule 74.23 Stationary Gas Turbines, corrected to 15% oxygen;

9) For all other flares, corrected to 15% oxygen;

10) For all other combustion operations, corrected to 15% oxygen; or;

b. Exceeding 500 ppm by volume from any other operation.

2. Sulfur dioxide which results in average ground or sea level concentrations at any point at or beyond the property line in excess of the amounts shown below:

Concentration	Averaging Time
0.25 ppm (Vol)	1 hour
0.04 ppm (Vol)	24 hours

a. Sulfur dioxide which results in ground or sea level concentrations at any point at or beyond the property line such that the 1-hour average design value exceeds 0.075 ppm (Vol).

1) For purposes of Subsection B.2.a of this Rule, the design value is derived from the 3-year average of annual 99th percentile daily maximum 1-hour values. At the District's discretion, compliance with the ground or sea level concentration limit in Subsection B.2.a of this rule may be demonstrated using EPA-approved dispersion models or ambient air monitoring. If the District requires ambient air monitoring, the test method(s) listed in Subsection D.2 of this rule must be employed.

2) To demonstrate compliance using dispersion modeling, the annual 99^{th} percentile daily maximum at each receptor is determined from model results as follows: for each year of meteorological data modeled, select from each day the maximum hourly modeled SO_2 concentration value and sort all these daily maximum hourly values by descending value. The 99^{th} percentile is the 4^{th} highest value for each modeled year. Calculate the average of the 99^{th} percentile values for three consecutive years of modeling data for each receptor. Compliance is demonstrated if this average value is

less than or equal to the design value concentration limit in Subsection B.2.a of this Rule at each receptor.

3) Compliance with the limit in subsection B.2.a may also be demonstrated using EPA-approved screen models. Compliance is demonstrated if the 1-hour SO_2 ground or sea level concentration does not exceed 0.075 ppm (Vol) at or beyond the property line.

4) If ambient air monitoring data is used to demonstrate compliance, the design value must be calculated in accordance with 40 CFR Part 50 Appendix T – Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Sulfur (Sulfur Dioxide).

3. Hydrogen Sulfide (H_2S) exceeding 10 ppm, by volume, at the point of discharge.

4. Hydrogen sulfide (H_2S) which results in average ground or sea level concentrations at any point at or beyond the property line in excess of the amounts shown in the following table:

Concentration	Averaging Time
0.06 ppm	3 minutes
0.03 ppm	1 hour

For purposes of Subsections B.1 and B.2 of this Rule, all sulfur present in gaseous molecular compounds containing oxygen shall be calculated as SO_2. For purposes of Subsections B.3 and B.4 of this Rule, all reduced sulfur compounds present shall be calculated as H_2S.

C. Exemptions

1. Unplanned Flaring: The provisions of Subsections B.1 and B.2 shall not apply to the unplanned burning of gas for emergency or safety concerns provided all the following conditions have been met:

a. The flaring is not the result of an intentional or negligent act or omission on the part of the operator or owner.

b. The flaring is not the result of improper maintenance or improper setting of:

1) High-pressure, high-temperature or high-level shut-in sensors. A proper setting for a high-pressure shut-in sensor is one which is

greater than 90 percent of the maximum allowed by applicable safety regulations.

2) Low-pressure, low-temperature, or low-level shut-in sensors. A proper setting for a low-pressure shut-in sensor is one which is less than 110 percent of the minimum allowed by applicable safety regulations.

c. The flaring event results from operational problems, including but not limited to: emergency blowdowns, process upsets, power outages, and equipment breakdown.

d. Records or logs of each flaring event shall be kept which include the following information:

1) Operator initials, date, time, duration, volume of gas flared.

2) Reason for flaring including description of any equipment involved.

3) If involved in flaring, setting of high-pressure, high-temperature, or high-level shut-in sensor or pressure relief valve, and maximum allowed high-pressure shut-in sensor setting by applicable safety regulations.

4) If involved in flaring, setting of low-pressure, low-temperature, or low-level shut-in sensor, and minimum allowed low-pressure shut-in sensor setting by applicable safety regulations.

5) Description of corrective measure taken to come into compliance with Subsections B.1 and B.2 of this Rule.

6) For flaring events lasting one hour, or longer, description of actions to be taken to prevent the flaring event from recurring.

All records shall be retained for a minimum of two years from the date of each entry and shall be made available to District personnel upon request.

e. The owner or operator immediately undertakes appropriate corrective measures to come into compliance with Subsections B.1 and B.2 of this Rule.

f. The unplanned flaring event shall not exceed 24 hours in duration. If the flaring event exceeds 1 hour in duration, the operator shall:

1) Notify the APCO as soon as reasonably possible, but no later than four hours after its detection by the operator.

2) Within one week after the flaring event, submit a written report to the APCO which contains records from Subsection C.1.d, an estimate of sulfur emissions, and pictures or descriptions of the equipment or controls that failed.

g. Sulfur emissions are minimized.

2. Planned Flaring Events: The provisions of Subsections B.1 and B.2 shall not apply to the planned burning of gas provided all of the following conditions have been met:

a. A notice to flare has been submitted in writing at least 72 hours prior to such work being done, which justifies that such work shall be done. This written notice may be submitted less than 72 hours prior to the event provided that it is justified in writing by the operator for at least one of the following reasons: imminent hazardous situation, considerable economic harm to the company, or excess emissions. This written notice shall contain the following information:

1) Description of the safety, maintenance or production work that requires the proposed flaring event.

2) Expected date and time marking the start and end of the proposed flaring event.

3) Expected gas volume (MCF) and expected sulfur emissions (as pounds of SO_2).

4) Description of steps to be taken or equipment modifications to be made to minimize sulfur emissions.

b. Each operator shall submit a planned flaring management plan to the APCO for approval no later than 180 days after June 14, 1994. This plan shall include at least the following:

1) A description of all measures to be implemented to decrease flare gas volume and reduce sulfur emissions. One measure that shall be included in the Plan involves a method of depressurizing vessels, compressors and pipelines to prevent flaring.

2) A description of all planned operational or maintenance procedures that may cause flaring.

3) A description of each flare system including design features such as type, dimensions, flow or pressure capacity, process flow diagrams, flow monitoring systems, sulfur measurement procedures, and pilot and purge gas features.

4) A description of any sulfur reduction system, including process name, process flow diagrams, design capacity, and emission control efficiency.

5) A description of all measures to be implemented to reduce the number of planned flaring events including changes to maintenance or production schedules or installation of new procedures or equipment.

6) Any other information determined by the APCO that is necessary for evaluating the qualifications of a source for this exemption.

c. Records of the date, time, duration, flare volume and estimated sulfur emissions (as pounds of SO_2) are kept during the entire flaring event. These records shall be retained for a minimum of two years from the date of each entry and shall be made available to District personnel upon request.

d. The District is notified in writing when work is completed. This notice shall include all updated information from Subsection C.2.a.1 through Subsection C.2.a.4.

e. Sulfur emissions are minimized during the operation.

f. No flaring shall occur unless an excess emission fee of $5.00 per pound of sulfur compounds (calculated as SO_2) emitted is paid to the District per calendar year (Section N of Rule 42). For each source, an SO_2 emission is excess when and after the source's flare gas volume allowance has been exceeded during the calendar year. The flare gas volume allowance is 91 percent of the average of the two highest, consecutive, annual flare gas volumes in the applicable six year period as specified below.

These excess emissions shall be determined by the operator and the records of those measurements, including gas flows and calculated SO_2 concentrations, shall be submitted to the District no later than 15 days after the end of each calendar year.

1) For sources operating prior to January 1, 1988, the flare gas volume allowance is calculated from the planned flaring conducted

during the period from January 1, 1988 through December 31, 1993; or

2) For sources constructed after January 1, 1988, the flare gas volume allowance is calculated from the planned flaring conducted during the first six whole calendar years of operation.

D. Test Methods

1. Sulfur compounds at the point of discharge shall be determined by EPA Test Methods 6, 6A, 6C, 8, 15, 16A, 16B, or South Coast AQMD Test Method 307-91 (Determination of Sulfur in a Gaseous Matrix), as appropriate. Hydrogen sulfide emissions from a point of discharge may be determined using a portable monitor provided the instrument is operated and calibrated according to manufacturer's instructions. The portable monitor shall meet the following minimum specifications:

   a. Resolution of 1 ppm H_2S.
   b. Accuracy of +/- 5 ppm at 50 ppm H_2S.
   c. Drift of 1.5 percent of span over 200 days.
   d. Intrinsically safe power source.

2. Ground or sea level concentrations of H_2S and SO_2 shall be determined by Bay Area Air Quality Management District Manual of Procedures, Volume VI, Section 1, Ground Level Monitoring for Hydrogen Sulfide and Sulfur Dioxide (July 20, 1994) with the following amendments:

   a. The wind direction shall be continuously measured and recorded to within 5 degrees of arc, and wind speed shall be continuously measured and recorded to within 0.25 miles per hour (mph) at wind speeds less than 25 mph and with a threshold no greater than 0.2 mph.

   b. The meteorological instruments and siting requirements shall comply with the guidelines in "Quality Assurance Handbook for Air Pollution Measurements Systems, Volume IV, Meteorological Measurements Version 2.0," EPA-454/B-08-002, March 2008.

   c. The gas standards shall be restandardized against the reference wet chemical method at a minimum of once every 12 months, or be standardized using National Institute of Standards and Technology (NIST) standard gases.

E. Definitions

1. "Flaring Event": A flaring event is any flaring that occurs for 10 minutes or longer.

2. "Planned-Flaring Event": A planned-flaring event is one which results from operations identified in the operator's Planned Flaring Management Plan.

3. "Unplanned-Flaring Event": Any flaring event that occurs as a result of an unforeseen process upset or an equipment malfunction or breakdown.

Rule 56. Open Burning (Adopted 10/22/68, Revised 9/14/71, 1/25/73, 6/14/77, 1/9/79, 11/20/79, 5/24/88, 3/29/94, 11/11/03)

A. Applicability

The provisions of this rule shall apply to the burning of combustible materials in open outdoor fires.

B. Requirements

A person may conduct open burning only if all of the following requirements are met:

1. A valid burn permit shall be obtained. The permit shall be at the location of the fire for the duration of the fire. The permit shall bear a statement of warning containing the following words or words of similar import: "This permit is valid only on those days during which open burning is not prohibited by the State Air Resources Board pursuant to Section 41855 of the Health and Safety Code, and not prohibited by the Ventura County Air Pollution Control District pursuant to Rule 56."

2. Open burning is allowed only on days declared to be "Burn Days" by the APCD.

3. Open burning is allowed for the following purposes only:

   a. The disposal of agricultural wastes in the pursuit of agricultural operations.

   b. Range improvement burning.

   c. Wildland vegetation management burning.

   d. Levee, reservoir or ditch maintenance.

   e. The disposal of Russian thistle (Salsola kali or tumbleweed).

4. Open Burning shall be conducted in compliance with all applicable conditions listed on the burn permit.

5. Only plant material that grew on the property where the burn is to be conducted (or on another property of the same grower if approved by the APCD) may be burned.

6. The material to be burned shall be reasonably free of dirt, soil and visible surface moisture.

7. All trees to be burned over six inches in diameter shall be felled. Stumps shall be uprooted and reasonably free of soil. This subsection shall not apply to prescribed burning.

8. The material to be burned shall be allowed to become sufficiently dry to allow for maximum combustion efficiency. This subsection shall not apply to prescribed burning.

   The following are minimum drying times:

Material	Drying Time
Trees or branches exceeding three inches in diameter	6 weeks
Prunings, small branches, and other vegetation three inches or less in diameter	3 weeks

9. The material to be burned shall be stacked or arranged to allow for maximum air circulation, to facilitate combustion and to minimize the amount of smoke emitted during combustion. To facilitate combustion and minimize smoke, smoldering fires shall be mixed, stirred, or condensed when it is safe and feasible to do so. This subsection shall not apply to prescribed burning.

10. The materials to be burned shall be ignited only by those devices approved by the APCD and the fire protection agency having jurisdiction in the area. Tires, tar paper, plastics, oils and other similar materials shall not be used for ignition purposes.

11. The material to be burned shall be ignited as rapidly as practicable within applicable fire control restrictions. This subsection shall not apply to prescribed burning.

12. Open burning shall not be conducted when wind speed and direction will carry emissions into smoke sensitive areas. In no case shall burning be conducted when weather conditions could cause smoke to create a public nuisance.

13. Open outdoor fires shall be ignited during one or more of the following three allowable ignition periods which may be approved by the APCD on each Burn Day:

Early Morning	7 a.m. to noon.
Late Morning	10 a.m. to noon.
Afternoon	12 p.m. to 4 p.m.

    No additional material shall be ignited or added to any open outdoor fire after the end of the last ignition period approved by the APCD for the day. In no case shall any additional material be ignited or added to any open outdoor fire after 4 p.m. This subsection shall not apply to prescribed burning.

14. The APCD shall restrict the amount, timing, and location of all open burning to minimize smoke impacts on smoke sensitive areas, avoid cumulative smoke impacts, and prevent public nuisance. Open burning may be restricted to one or more individual locations or

regions. On a day when prescribed burning is scheduled to occur, the APCD may prohibit all other open burning.

15. For prescribed burning, the vegetation to be burned shall be in a condition that will facilitate combustion and minimize the amount of smoke emitted during combustion.

16. For prescribed burning, burning at night and multi-day burns shall be minimized whenever practicable.

17. For range improvement burning conducted primarily for improvement of land for wildlife and game habitat, the applicant shall file with the APCD a statement from the Department of Fish and Game certifying that burning is desirable and proper. The Department of Fish and Game may specify the amount of brush treatment required, along with any other conditions it deems appropriate.

C. Additional Requirements for Prescribed Burning

1. The land manager or his/her designee shall register all planned burn projects annually or seasonally with the APCD, including areas considered for potential naturally-ignited wildland fires managed for resource benefits, with updates as they occur.

2. The land manager or his/her designee shall submit a smoke management plan containing all of the following information to the APCD for review and approval in advance of the proposed burning:

a. The location and the specific objectives of the burn.

b. The acreage or tonnage, type and arrangement of the vegetation to be burned.

c. The distances and directions to all potentially affected smoke sensitive areas.

d. The fuel condition, combustion and meteorological prescription elements developed for the project.

e. The project schedule and duration of project ignition, combustion and burndown.

f. Specifications for monitoring and verifying critical parameters such as air quality or weather.

g. A discussion of how the requirements of Section B of this Rule that apply to prescribed burning will be satisfied.

h. A discussion of what specific contingency actions (such as fire suppression or containment) will be taken if unanticipated conditions cause smoke to create or contribute to an exceedance of a state or federal ambient air quality standard or cause a public nuisance.

i. A discussion of the procedure that the land manager or his/her designee will use to coordinate daily with the APCD on multi-day burns, which may impact smoke sensitive areas, to affirm that the burn project remains within the conditions specified in the Plan, or whether contingency actions are necessary.

j Specifications and procedures for disseminating project information to the public.

k. Procedures for public notification and education, including appropriate signage at burn sites, and for reporting any public smoke complaints to the APCD.

l. Identification of responsible personnel, including 24-hour telephone contacts for on-site personnel responsible for the burn.

m. The smoke management criteria the land manager or his/her designee will use for making burn ignition decisions.

n. Projections, including a map, of where the smoke is expected to travel, both day and night.

o. An evaluation of alternatives to burning considered. If an analysis of alternatives has been prepared as part of the environmental documentation required for the burn project pursuant to the National Environmental Policy Act or the California Environmental Quality Act, as applicable, the analysis shall be attached to the smoke management plan to satisfy this requirement.

3. The land manager or his/her designee must receive authorization to burn from the APCD the business day prior to burning.

4. Prior to ignition on the day of the burn, the land manager or his/her designee shall confirm with the APCD that all conditions and all requirements stated in the smoke management plan are met.

5. When a natural ignition occurs on a No Burn Day, the initial "go/no-go" decision by the land manager to manage the fire for resource benefit will be "no-go" unless, after consultation with the APCD or ARB, the APCD or ARB concurs, for smoke management purposes, that the burn can be managed for resource benefit. A "no-go" decision does not necessarily mean that the fire must be extinguished, but that the fire cannot be considered prescribed burning.

6. For naturally-ignited wildland fires managed for resource benefits that are expected to exceed 10 acres in size, the land manager or his/her designee shall submit a smoke management plan no later than 72 hours after the start of the fire.

7. For fires greater than 250 acres, the land manager or his/her designee, shall submit a post-burn smoke management evaluation to the APCD no later than 30 days after completion of the burn.

D. Exemptions

1. This rule shall not apply to open outdoor fires used only for the heating or cooking of food for human consumption or for recreational purposes when such fires are confined to a fireplace or barbecue pit.

2. This rule shall not apply to the burning, in a respectful and dignified manner, of an unserviceable American flag that is no longer fit for display.

3. Nothing in this rule shall be construed as limiting the authority granted under other provisions of law to any public officer to set or permit a fire when such fire is, in his or her opinion, necessary for any of the following purposes:

   a. The prevention of a fire hazard which cannot be abated by any other reasonable means.

   b. The instruction of public employees in the methods of fighting fires.

   c. The instruction of employees in the methods of fighting fire when such fire is set, pursuant to permit issued by the fire protection agency having jurisdiction in the area, on property used for industrial purposes.

   d. The setting of backfires necessary to save life, or valuable property pursuant to Section 4426 of the Public Resources Code.

   e. The abatement of fire hazards pursuant to Section 13055 of the Health and Safety Code.

   f. Disease or pest prevention, where there is an immediate need for and no reasonable alternative to burning.

   g. The remediation of an oil spill pursuant to Section 8670.7 of the Government Code.

   A person conducting open burning pursuant to subsection D.3.a-g shall inform the APCD during the initial planning stages of the burn and immediately prior to ignition.

E. Violations

1. The failure of a person to meet any requirements of this Rule shall constitute a violation of this Rule.

2. The cost of putting out any open outdoor fire in violation of this Rule may be imposed on the person responsible for setting and/or maintaining that fire.

F. Burn Day Decisions

1. The APCD shall declare a Burn Day, for one or more individual locations or regions in the District, if all of the following conditions are met:

   a. The State Air Resources Board declares a permissive Burn Day or a Marginal-Burn Day for the South Central Coast Air Basin.

   b. The APCD predicts that the local meteorological conditions in the specific area will be conducive for good dispersion of smoke.

   c. The fire protection agency with jurisdiction in the area does not prohibit burning. The APCD will coordinate with the applicable fire protection agency on every burn day decision.

2. Notwithstanding subsection F.1, all of the following are No Burn Days: New Years Day, Dr. Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas, all Fridays and Saturdays immediately following any above holiday that falls on a Thursday or Friday, all Saturdays immediately preceding any above holiday that falls on a Monday, and all Sundays.

3. The APCD shall declare a No Burn Day for the specific areas of the District where the ambient concentration of ozone or particulate matter exceeds or is predicted to exceed any state or federal air quality standard.

4. The APCD may allow individual open burns or region-wide open burning on a day declared by the Air Resources Board to be a Marginal-Burn Day when the APCD has determined that impacts to smoke sensitive areas are not expected.

G. Responsibility for Open Fires

The APCD and the fire protection agencies are not responsible for damages to property or to the general public resulting from open burning authorized by these rules. Responsibility rests with the person responsible for setting and maintaining the fire.

H. Notification/Permit Requirements

1. No person shall burn any agricultural waste without first obtaining a valid burn permit.

2. Any person that has burned agricultural waste shall provide the following information to the APCD within 48 hours after the burn:

   a. Burn Permit number, name, address or location, date of burn, and tons of material that were burned.

   b. Whether or not the burn was completed, and if not, the amount of remaining material to be burned.

I. Definitions

1. "Agricultural Operation": An operation directly related to the growing or harvesting of products such as food crops or plants, or raising of fowls or animals, for the primary purpose of making a profit, of providing a livelihood, or of conducting agricultural research or instruction by an educational institution. The clearing of agricultural land for the purpose of non-agricultural development is not included under this definition.

2. "Agricultural Wastes": Unwanted or unsaleable plant materials produced wholly from agricultural operations. Examples of agricultural wastes include:

   a. Trees and tree trimmings;

   b. Grass, weeds, and trimmings from windbreaks in or adjacent to fields in cultivation or being prepared for cultivation;

   c. Vegetation being cleared from presently uncultivated or ungrazed land to establish an agricultural operation may also be considered agricultural wastes.

3. "Burn Day": A day, on which the Air Resources Board and the APCD and the fire protection agency do not prohibit open burning for the purposes listed in subsection B.3. On a "Burn Day," the APCD may restrict burning to the time period(s) and regions/locations specified in subsections B.13 and B.14 respectively.

4. "Crop": Any agricultural product grown, produced, or raised commercially for feed or for human consumption or in connection with agricultural operations.

5. "Marginal-Burn Day": A day when limited amounts of agricultural burning for individual projects in specific areas for limited times, is not prohibited by Air Resources Board, and such limited burning is authorized by the APCD.

6. "No Burn Day": A day that open burning is not allowed by the APCD.

7. "Open Burning": To burn or allow the burning of combustible materials in an open outdoor fire.

8. "Open outdoor fire" means any combustion of combustible material of any type outdoors in the open, not in any enclosure, where the products of combustion are not directed through a flue.

9. "Range Improvement Burning": The use of open fires to remove vegetation for a wildlife, game or livestock habitat or for the initial establishment of an agricultural practice on presently uncultivated land.

10. "Smoke Sensitive Areas": Areas where the APCD determines that smoke and air pollutants can adversely affect public health or welfare. Such areas can include but are not limited to, towns and villages, campgrounds, trails, populated recreational areas, hospitals, nursing homes, schools, roads, airports, public events, shopping centers, and areas designated Class 1 pursuant to Section 169A of the federal Clean Air Act.

11. "Wildland Vegetation Management Burning": Open burning conducted by a public agency, or through a cooperative agreement or contract involving a public agency, to burn land predominantly covered with chaparral (as defined in Title 14, California Administrative Code, Section 1561.1), trees, grass or standing brush, for forest management, fire hazard suppression, the improvement of land for wildlife and game habitat, or disease or pest control.

12. "Prescribed Burning": Wildland Vegetation Management Burning and Range Improvement Burning.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 57 - INCINERATORS
(Adopted 7/2/68, Renumbered 10/22/68, Revised 5/23/72, 8/17/76, 6/14/77, Renamed and Revised 1/11/05)

A. Applicability

This rule applies to equipment used for the disposal of solid or liquid combustible refuse by burning.

B. Requirements

1. No person shall burn solid or liquid combustible refuse in an incinerator except in a multiple chamber incinerator, or in equipment approved by the APCO and the U.S. Environmental Protection Agency to be equally effective for the purpose of air pollution control.

2. No incinerator shall discharge particles individually large enough to be visible while suspended in the atmosphere.

C. Exemptions

This rule shall not apply to:

1. Crematoriums

2. Process equipment such as ovens used to remove contaminants or components from a part or assembly.

D. Definitions

"Multiple Chamber Incinerator": Any equipment, structure or part of a structure, used to dispose of combustible refuse by burning, consisting of three or more refractory lined combustion chambers, physically separated by refractory walls, interconnected by gas passage ports or ducts.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 57.1 – PARTICULATE MATTER EMISSIONS FROM FUEL BURNING EQUIPMENT

(Adopted 1/11/05)

A. Applicability

This rule applies to fuel burning equipment such as boilers, steam generators, process heaters, water heaters, space heaters, flares and gas turbines.

B. Requirements

Emissions of particulate matter shall not exceed 0.12 pounds per million BTU of fuel input.

C. Exemptions

This rule shall not apply to:

1. Internal combustion engines
2. Jet engine test stands and rocket engine test stands
3. Rocket propellant testing devices and rocket fuel testing devices.
4. Exhaust gas streams containing particulate matter that was not generated by the combustion of fuel. These exhaust gas streams are subject to Rule 52 and Rule 53.

D. Test Methods

Compliance shall be determined using CARB Method 5. The total particulate catch shall include the filter catch, probe catch, impinger catch, and the solvent extract, as specified in CARB Method 5. Any other appropriate test method may be used with prior written approval by the District, the California Air Resources Board, and the U.S. Environmental Protection Agency.

E. Definitions

1. "Particulate Matter": Any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions.

2. "Standard Conditions": A gas temperature of 68 degrees Fahrenheit (20 degrees Celsius) and a gas pressure of 14.7 pounds per square inch (760 mm. Hg) absolute.

6/30/72

~~Exist. Reduction of Animal Matter.~~

~~A person shall not operate or use any article, machine, equipment or other contrivance for the reduction of animal matter, except processing of food for human consumption, unless all gases, vapors and gas-entrained effluents from such an article, machine, equipment or other contrivance are:~~

~~A. Incinerated at temperatures of not less than 1300 degrees Fahrenheit for a period of not less than 0.4 second, or~~

~~B. Processed in such a manner determined by the Air Pollution Control Officer to be equally, or more, effective for the purpose of air pollution control than (A) above.~~

Rule 58. Reduction of Animal Matter.

A person shall not operate or use any article, machine, equipment or other contrivance for the reduction of animal matter, except processing of food for human consumption, unless all gases, vapors and gas entrained effluents from such an article, machine, equipment or other contrivance are:

A. Incinerated at temperatures of not less than 1300 degrees Fahrenheit for a period of not less than 0.4 seconds, or

B. Processed in such a manner determined by the Air Pollution Control District to be equally, or more, effective for the purpose of air pollution control than (A) above.

A person incinerating or processing gases, vapors, or gas-entrained effluents pursuant to this Rule shall provide, properly install and maintain in calibration, in good working order and in operation devices, as specified in the Authority to Construct or Permit to Operate or as specified by the Air Pollution Control District, for indicating any or all operational parameters or conditions

3/10/98

Rule 59. Electrical Power Generating Equipment - Oxides of Nitrogen Emissions (Adopted 10/6/69, Revised 5/23/72, 7/18/72, 10/31/72, 8/14/79, 12/7/82, 6/4/91, 9/15/92 effective 4/1/93, 10/12/93, 7/15/97)

A. Applicability

The provisions of this rule shall apply to electric power generating steam boilers with a rated heat input capacity of greater than three hundred (300) million BTU's per hour, and any auxiliary boiler used with an electric power generating steam boiler, not subject to the provisions of Rule 74.15.

B. Requirements

1. No person shall allow the discharge into the atmosphere from any electric power generating steam boiler NOx emissions in excess of 0.10 pounds per megawatt hour (MW-hr) produced (net). Compliance shall be determined using an emission rate calculated from continuous emission monitor measurements as a rolling hourly average of not to exceed 24 hours.

2. No person shall allow the discharge into the atmosphere from any auxiliary boiler NOx emissions in excess of 0.040 pounds per million BTU's of fuel consumed. Compliance shall be determined using continuous emission monitor measurements averaged hourly.

3. Operation of any applicable boiler on any amount of fuel oil shall be prohibited, except as provided in Subsection C.3.

4. No person shall allow the discharge into the atmosphere from any emission control device installed and operated pursuant to the requirements of Subsections B.1 and B.2 above, ammonia (NH_3) emissions in excess of 10 ppmv.

C. Exemptions

1. The provisions of Subsections B.1 and B.4 of this rule shall not apply during the cold start-up of an applicable unit. For units with a rated heat input capacity of equal to, or greater than, two thousand one hundred fifty (2150) million BTU's per hour, the duration of each start-up procedure shall not exceed twenty (20) hours. For units with a rated heat input capacity of less than two thousand one hundred fifty (2150) million BTU's per hour, the duration of each start-up procedure shall not exceed ten (10) hours.

2. The provisions of Subsections B.2 and B.4 of this rule shall not apply during the cold start-up of an applicable unit. The duration of each start-up procedure shall not exceed four (4) hours.

3. The provisions of Subsections B.1 and B.3 of this rule shall not apply during either a force majeure natural gas curtailment, a fuel oil system test or an emission test. Fuel oil system tests

for all units at each stationary source shall not exceed a total of 48 hours per year. For multiple stationary sources that have the same owner, fuel oil system tests for all units shall not exceed a total of 96 hours per year. When fuel oil is in use in any electric power steam generating boiler, NOx emissions shall not exceed the following:

a. When operated on 100 percent fuel oil, 0.33 pounds per megawatt hour (MW-hr) produced (net).

b. When operated on a mixture of natural gas and fuel oil, a limit calculated every hour as an average of the sum of the current and previous hourly emission limits. The number of hourly limits averaged shall equal the number of hours used to calculate the compliance rolling average for the hour. The hourly emission limit shall be determined from the following equation:

$$R = \frac{[((0.33)(Fo)(HFo))+((0.10)(Fg)(HFg))]}{B}$$

Where R = Emission limit in pounds per megawatt hour (MW-hr) produced (net)
Fo = Rate of fuel oil used (gallons/hour)
Fg = Rate of natural gas used (cubic feet/hour)
HFo = Heating value of fuel oil in use (BTU/gallon)
HFg = Heating value of natural gas in use (1050 BTU/cubic foot)
B = (Fo)(HFo)+(Fg)(HFg), or the total energy input per hour (BTU/Hr)

Compliance shall be determined using an emission rate calculated from continuous emission monitor measurements as a rolling hourly average of not to exceed 24 hours.

D. Recordkeeping Requirements

1. For those units subject to Subsection B.2, permanent daily records shall be maintained for a period of five (5) years and shall be available for inspection by the Air Pollution Control Officer upon request. The records shall include, but are not limited to, type of fuel burned, sulfur content of fuel burned, quantity of fuel burned, and hours of operation.

2. Any unit exempt pursuant to the provisions of Subsections C.1 and C.2 shall maintain permanent hourly records of the cold startup procedure for a period of five (5) years. Records shall be available for inspection by the Air Pollution Control Officer upon request. The records shall include, but are not limited to, type of fuel burned, sulfur content of fuel burned, quantity of fuel burned, net energy production in megawatt hours (MW-hr), and the duration of the procedure.

3. For those units subject to the provisions of Subsection B.1, permanent hourly records shall be maintained for a period of five (5) years and shall be available for inspection by the Air Pollution Control Officer upon request. The records for each hour shall include, but are not limited to, net energy production in megawatt hours (MW-hr), quantity of fuel burned, the injection rate of reactant chemicals (gallons/minute), if appropriate, NOx emissions in pounds (lb), the NOx emission rate in lb/MW-hr, the rolling hourly average NOx emission rate with the number of hours averaged, and the applicable NOx emission limit calculated pursuant to Subsection C.3.

E. Test Methods

1. The oxides of nitrogen (NOx) emission limitation specified in Subsections B.1, B.2, and C.3 are expressed as nitrogen dioxide. The limitation in Subsection B.4 is referenced at three (3) percent volume stack gas oxygen on a dry basis. Stack gas oxygen shall be measured using EPA Method 3A. The heating value of fuel oil shall be measured using ASTM Method D 240-87.

2. Megawatt hours (MW-hr) produced (net), as required in Subsection B.1, shall be measured using a method approved by the Air Pollution Control Officer. The method shall be submitted by the owner or operator of an electric power generating unit and shall include a description of the principle of measurement and calculation used to determine the megawatt hours (MW-hr) produced (net). The method shall also include the technique and procedures used to calibrate each measurement device. Each measurement device shall be calibrated against standards which are traceable to either National Institute of Standards and Technology (NIST) standards or a higher authority if no NIST standards exist. The calibration accuracy tolerance of each measurement device shall be ±0.5 percent of all measured values.

3. The hourly calculations used to determine pounds per MW-hr, as required in Subsections B.1 and C.3, shall use NOx and MW-hr measurements determined according to the procedure set forth in 40 CFR 75.10(d)(1).

4. The rolling hourly average specified in Subsections B.1 and C.3 shall be calculated every hour as (Et)/(Ft), where Et is the sum of a number of previous consecutive hourly average emission rates E and Ft is the sum of the same number of corresponding consecutive hourly MW-hr produced (net) calculations F, as specified in Subsection E.3. The number of hours averaged shall be determined by the operator.

5. For those units subject to the ammonia emission requirement in Subsection B.4, compliance shall be determined using Bay Area Air Quality Management District Method ST-1B, dated 1/20/82.

6. The hourly average specified in Subsection B.2 shall be calculated every clock hour as the sum of valid 15-minute emission rates

measured during the previous hour divided by the number of valid 15-minute emission rates.

F. Violations

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

G. Definitions

1. "Boiler": An individual piece of combustion equipment fired with liquid and/or gaseous fuel and used to produce steam.

2. "Cold startup procedure": The process of bringing a boiler and the associated emission control device up to operating temperature after the boiler and control device have experienced zero fuel flow for a period of time and are considered cold. A boiler and control device shall be considered cold if the temperature of the flue gas leaving the economizer outlet is less than 550 degrees F.

3. "Force majeure natural gas curtailment": An interruption in natural gas service, such that the daily fuel needs of a boiler cannot be met with the natural gas available, due to one of the following reasons:

   a. Unforeseeable failure or malfunction not resulting from an intentional or negligent act or omission on the part of the owner or operator of a boiler, or natural disaster, or;

   b. A supply restriction resulting from a California Public Utilities Commission priority allocation system.

4. "Heat Input": The chemical heat released due to fuel combustion in a boiler, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.

5. "Megawatt hour (MW-hr) produced (net)": The electricity produced according to the following equation:

$$MW\text{-}hr = VI(\cos u)$$

Where V = Voltage to the power grid (volt)
I = Current to the power grid (ampere)
cos u = Power factor
u = Phase angle

6. "Rated Heat Input Capacity": The heat input capacity specified on the nameplate of the unit's burner. If the burner has been permanently altered or modified such that the maximum heat input is different than the input capacity specified on the nameplate, and this alteration or modification has been approved in writing by the Air Pollution Control Officer, then the new maximum heat input shall be considered as the rated heat input capacity.

6/30/72

Rule 62. Hazardous Materials.

No hazardous materials shall be discharged from any source so as to result in concentrations at or beyond the property line in excess of any State, Federal or local standards or emission limits established.

In the absence of specific standards for particular hazardous material, the air borne concentrations of such materials shall not exceed those levels and time intervals established by the State Division of Industrial Safety or the Occupational Safety and Health Administration.

Ventura
10/25/91

Rule 62.6 Ethylene Oxide - Sterilization and Aeration (Adopted 7/16/91)

A. Applicability

The requirements of this rule shall apply to any person that operates a sterilizer and/or an aerator.

B. Requirements

1. No person shall operate any sterilizer at a stationary source where the source-wide use of ethylene oxide is greater than 4 pounds per year (lb/yr), but no greater than 600 lb/yr, unless the sterilizer exhaust stream is vented to control equipment with a control efficiency of at least 99.0 percent.

2. No person shall operate any sterilizer and/or aerator at a stationary source where the source-wide use of ethylene oxide is greater than 600 lb/yr, but no greater than 5,000 lb/yr, unless all of the following requirements are satisfied:

   a. The sterilizer exhaust stream shall be vented to control equipment with a control efficiency of at least 99.9 percent.

   b. The aerator exhaust stream and back-draft valve exhaust stream shall be vented to control equipment with a control efficiency of at least 95.0 percent.

3. No person shall operate any sterilizer and/or aerator at a stationary source where the source-wide use of ethylene oxide is greater than 5,000 lb/yr, unless all of the following requirements are satisfied:

   a. The sterilizer exhaust stream shall be vented to control equipment with a control efficiency of at least 99.9 percent.

   b. The aerator exhaust stream, sterilizer door hood exhaust stream and back-draft valve exhaust stream shall be vented to control equipment with a control efficiency of at least 99.0 percent.

4. No person shall operate an aerator at a stationary source where products that have been sterilized at another stationary source are aerated, unless the aerator exhaust stream is vented to control equipment with a control efficiency of at least 95.0 percent

5. Compliance shall be verified by source testing at least every 24 months, with the first source test being performed no later than the date specified pursuant to Section J.

6. Any person that operates a sterilizer and/or aerator shall submit to the APCO a compliance plan no later than the date specified in

Section J. The compliance plan shall contain the following:

a. The name of the manufacturer, model number and a description of the equipment which will be used to comply with the emission control requirements of this Section and with the requirements of subsection C.1.

b. The dates or estimated dates of the purchase, delivery, and installation of such equipment.

7. Any person that operates a sterilizer and/or aerator shall submit to the APCO a copy of the purchase order for the equipment necessary to comply with the emission control requirements of this Section and with the requirements of subsection C.1, no later than the date specified pursuant to Section J.

C. Operating Requirements

No person shall operate any sterilizer or aerator unless all the following requirements are satisfied:

1. No working fluid from the sterilizer exhaust vacuum pump shall be discharged to any wastewater stream.

2. No sterilant gas shall leak from any portion of any sterilizer, aerator, control equipment, or emission collection system including, but not limited to any piping, fittings, valves, or flanges through which ethylene oxide is conveyed.

D. Exemptions

The provisions of Sections B and C shall not apply to any sterilizer and/or aerator at a stationary source where the source-wide use of ethylene oxide is 4 lb/yr or less, provided the requirements of Section E are satisfied. This exemption applies only to stationary sources where a sterilizer is operated.

E. Recordkeeping

1. Any person that operates a sterilizer shall maintain monthly records of the amount of ethylene oxide purchased, used, and returned. In addition, records showing the results of all source tests shall be maintained.

2. All records except source test records shall be retained for at least two years. Source test records shall be maintained for at least four years. All records shall be made available to the APCO upon request.

F. Reporting Requirements

Any person that operates a sterilizer and/or an aerator shall submit to the APCO the following information, in writing, by August 16, 1991:

1. The name, address, and phone number of the owner and operator of any stationary source where a sterilizer and/or an aerator is operated.

2. The number of sterilizers and aerators at the stationary source.

3. The total weight of ethylene oxide and sterilant gas used in all sterilizers at the stationary source during the year of 1990.

G. Test Methods

1. Source tests to determine compliance with the emission reduction requirements of Section B shall be conducted using ARB Test Method 431 or an acceptable test method approved by the Executive Officer of the California Air Resources Board. If a reduction in the amount of ethylene oxide across the control equipment is demonstrated, but the control efficiency can not be determined because the concentration of ethylene oxide measured at the outlet of the control equipment is below 0.2 ppm, the control equipment shall be deemed in compliance with the emission reduction requirements of Section B. In addition, the following requirements shall be met:

   a. Tests on control equipment shall be run with a typical load in the sterilizer or aerator.

   b. The inlet and outlet of the control equipment shall be sampled simultaneously during testing to measure the control efficiency.

   c. The efficiency of control equipment shall be determined under normal operating conditions. To measure the control efficiency of control equipment on the sterilizer exhaust stream, sampling shall be done during the entire duration of the first sterilizer evacuation after ethylene oxide has been introduced. To measure the control efficiency of the control equipment on an aerator exhaust stream with a constant air flow, sampling shall be done during a period of at least 60 minutes, starting 15 minutes after aeration begins. To measure the control efficiency of the control equipment on an aerator exhaust stream with a non-constant air flow, sampling shall be done during the entire duration of the first aerator evacuation after aeration begins.

   d. There shall be no dilution of the air stream between the inlet and outlet test points during the source test.

2. Leak determinations shall be conducted using ARB Test Method 21 using a portable flame ionization detector or a non-dispersive infrared analyzer calibrated with methane, or an acceptable alternative method or analytical instrument approved by the APCO. A detector with an audible alarm using a metal oxide semi-conductor sensor and with a detection level of 5 ppm or less for ethylene oxide shall be considered an acceptable alternative.

H. Violations

Failure to comply with any provision of this rule, including recordkeeping requirements, shall constitute a violation of this rule.

I. Definitions

For the purpose of this Rule, the following definitions shall apply:

1. "Aeration": The process during which residual ethylene oxide dissipates by forced air flow, through natural or mechanically assisted convection, or other means, from previously sterilized materials after the sterilization cycle is completed.

2. "Aerator": Any equipment, space, or room in which air is used to remove residual ethylene oxide from sterilized materials. An aerator is not any equipment, space, or room in which materials that have previously undergone ethylene oxide sterilization and aeration can be handled, stored, and transported in the same manner as materials that have not been sterilized with ethylene oxide.

3. "Aerator exhaust stream": All ethylene oxide contaminated effluent gases which are emitted from an aerator.

4. "Back-Draft valve exhaust stream": The effluent gas stream which results from the collection of ethylene oxide contaminated gases during unloading of the sterilizer and which is removed through a back-draft valve or rear chamber exhaust system.

5. "Control efficiency": The ethylene oxide mass or volume concentration reduction efficiency of control equipment, as measured by ARB Test Method 431 and expressed as a percentage as follows:

$$\frac{\Sigma\ EtO_{in} - \Sigma\ EtO_{out}}{\Sigma\ EtO_{in}} \times 100 = \%\ \text{Control Efficiency}$$

6. "Ethylene Oxide (C_2H_4O)": A colorless, flammable gas that has been identified as a suspected human carcinogen and a toxic air contaminant by the California Air Resources Board.

7. "Leak": A concentration of sterilant gas measured one centimeter from the source equal to or greater than:

   a. 30 ppm, as methane, for sterilant gas composed of 12 percent ethylene oxide and 88 percent chlorofluorocarbon-12 by weight.

   b. 10 ppm, as methane, for all other compositions of sterilant gas.

If a detector with an audible alarm is used, a leak shall be defined as a concentration of sterilant gas measured one centimeter from the source which causes the alarm to sound.

8. "Source-wide use of ethylene oxide": The total weight of ethylene oxide used in all sterilizers at a stationary source during a calendar year, expressed as pounds per year.

9. "Sterilant gas": Ethylene oxide or any combination of ethylene oxide and other gases used in a sterilizer.

10. "Sterilizer": Any equipment that uses ethylene oxide or an ethylene oxide mixture in any sterilization or fumigation process.

11. "Sterilizer cycle": The process which begins when ethylene oxide is introduced to a sterilizer, includes the initial purge or evacuation after sterilization and subsequent air washes, and ends after evacuation of the final air wash.

12. "Sterilizer door hood exhaust stream": The effluent gas stream which results from the collection of fugitive ethylene oxide emissions by the means of a hood over the sterilizer door, during the period in which the sterilizer door is open after the sterilizer cycle has been completed.

13. "Sterilizer exhaust stream": The ethylene oxide-contaminated effluent gases emitted from a sterilizer.

14. "Sterilizer Exhaust Vacuum Pump": A device (including any associated heat exchanger) used to evacuate sterilant gas during the sterilizer cycle, but is not a device used solely to evacuate a sterilizer prior to the introduction of ethylene oxide.

J. Compliance Schedule

1. Any person subject to the provisions of Section B.1 shall satisfy the following compliance schedule:

   a. Submit to the APCO a compliance plan pursuant to subsection B.6, by July 16, 1992.

   b. Submit to the APCO a copy of the purchase order specified pursuant to subsection B.7, by January 16, 1993.

   c. Submit to the APCO a complete application for a Permit to Operate for any sterilizer, aerator and associated control equipment and achieve final compliance with the requirements of Sections B.1 and C by July 16, 1993.

   d. Demonstrate compliance with the requirements of subsection B.1 through source testing, by September 16, 1993.

2. Any person subject to the provisions of Section B.2 shall satisfy the following compliance schedule:

   a. Submit to the APCO a compliance plan pursuant to subsection B.6, by January 16, 1992.

   b. Submit to the APCO a copy of the purchase order specified pursuant to subsection B.7, by July 16, 1992.

   c. Submit to the APCO a complete application for a Permit to Operate for any sterilizer, aerator and associated control equipment and achieve final compliance with the requirements of Sections B.2 and C by January 16, 1993.

   d. Demonstrate compliance with the requirements of subsection B.2 through source testing, by March 16, 1993.

3. Any person subject to the provisions of Section B.3 shall satisfy the following compliance schedule:

   a. Submit to the APCO a compliance plan pursuant to subsection B.6, by August 16, 1991.

   b. Submit to the APCO a copy of the purchase order specified pursuant to subsection B.7, by January 16, 1992.

   c. Submit to the APCO a complete application for a Permit to Operate for any sterilizer, aerator and associated control equipment and achieve final compliance with the requirements of Sections B.3 and C by July 16, 1992.

   d. Demonstrate compliance with the requirements of subsection B.3 through source testing, by September 16, 1992.

4. Any person subject to the provisions of Section B.4 shall satisfy the following compliance schedule:

   a. Submit to the APCO a compliance plan pursuant to subsection B.6, by January 16, 1992.

   b. Submit to the APCO a copy of the purchase order specified pursuant to subsection B.7, by July 16, 1992.

   c. Submit to the APCO a complete application for a Permit to Operate for any sterilizer, aerator and associated control equipment and achieve final compliance with the requirements of Sections B.4 and C by January 16, 1993.

   d. Demonstrate compliance with the requirements of subsection B.4 through source testing, by March 16, 1993.

5/23/79

~~This Rule shall not apply to any oil effluent water separator used~~ exclusively in conjunction with the production of crude oil, if the water fraction of the oil water effluent entering the separator contains less than 5 parts per million hydrogen sulfide, organic sulfides, or a combination thereof.

This Rule shall be effective on January 1, 1974 for all existing equipment.

Rule 62. Hazardous Materials (Adopted 5/23/72)

No hazardous materials shall be discharged from any source so as to result in concentrations at or beyond the property line in excess of any State, Federal or local standards or emission limits established.

In the absence of specific standards for particular hazardous material, the airborne concentrations of such materials shall not exceed those levels and time intervals established by the State Division of Industrial Safety or the Occupational Safety and Health Administration.

Rule 63. Separation and Combination of Emissions
(Adopted 5/23/72, Renumbered 11/21/78)

A. If air contaminants from a single source operation are emitted through two or more emission points, the total emitted quantity of air contaminants cannot exceed the quantity which would be allowable through a single emission point.

B. If air contaminants from two or more source operations are combined prior to emission and there are adequate and reliable means reasonably susceptible for confirmation and use by the Air Pollution Control District in establishing a separation of the components of the combined emission to indicate the nature, extent, quantity and degree of emission arising from each such source operation, the Rules and Regulations shall apply to each such source operation separately.

C. If air contaminants from two or more source operations are combined prior to emission and the combined emissions cannot be separated according to the requirements of Rule 63.B., the Rules and Regulations shall be applied to the combined emissions as if it originated in a single source operation subject to the most stringent limitations and requirements placed by the Rules and Regulations on any of the source operations whose air contaminants are so combined.

This Rule shall be effective on January 1, 1974 for all existing equipment.

~~Rule 64. Sulfur Content of Fuels (Adopted 5/23/72)~~

A person shall not burn within Ventura County at any time any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, except for natural gas which is limited to 15 grains per 100 cubic feet, calculated as hydrogen sulfide at standard conditions, or any liquid fuel or solid fuel having a sulfur content in excess of 0.5 percent by weight. The provisions of this Rule shall not apply to:

A. The incineration of waste gases provided that the gross heating value of such gases is less than 300 British thermal units per cubic foot at standard conditions and the fuel used to incinerate such waste gases does not contain sulfur or sulfur compounds in excess of the amounts specified in this Rule

B. The use of solid fuels in any metallurgical process

C. The use of fuels where the gaseous products of combustion are used as raw materials for other processes

D. The use of liquid or solid fuel to propel or test any vehicle, aircraft, missile, locomotive, boat or ship

E. Fuel used due to unavailability of normal fuel through act of God

This Rule shall be effective on January 1, 1974 for all existing equipment.

Rule 65. Gasoline Specifications (Adopted 5/23/72)

A person shall not sell or supply for use within Ventura County as a fuel for motor vehicles as defined by the Vehicle Code of the State of California, gasoline having a degree of unsaturation greater than that indicated by a Bromine Number of 30 as determined by ASTM Method D1159-57T modified by omission of the mercuric chloride catalyst.

Rule 66. Organic Solvents

A. Organic Materials (Adopted 5/23/72)

1. A person shall not discharge into the atmosphere more than 15 pounds of organic materials in any one day, nor more than 3 pounds in any one hour, from any article, machine, equipment or other contrivance, in which any organic solvent or any material containing organic solvent comes into contact with flame or is baked, heat-cured or heat-polymerized, in the presence of oxygen, unless said discharge has been reduced by at least 85 percent. Those portions of any series of articles, machines, equipment or ~~other contrivances designed for processing a continuous~~

6-3-99

Rule 64. Sulfur Content of Fuels (Adopted 5/23/72, Revised 6/17/80, 9/9/80, 7/5/83, 6/14/94, 4/13/99)

A. Applicability

This rule is applicable to any person who burns fuels containing sulfur compounds from any source whatsoever.

B. Requirements

1. No person shall burn at any time gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel (788 ppmv), calculated as hydrogen sulfide at standard conditions.

2. No person shall burn at any time any liquid fuel, unless the emissions from the combustion of such fuel are reduced to a level less than the emissions which would occur from the uncontrolled combustion of liquid fuels with a sulfur content of 0.5 percent, by weight.

C. Exemptions

1. The provisions of this Rule shall not apply to:

   a. The use of fuels where the gaseous products of combustion are used as raw materials for other processes.

   b. The use of liquid fuel to propel or test any vehicle, aircraft, missile, locomotive, boat or ship.

   c. The burning of sewage treatment plant waste gases provided that any supplemental fuel used complies with this rule.

   d. Any flare gas combustion, where no useful energy is produced and which is subject to Rule 54, Sulfur Compounds.

2. The monitoring/recordkeeping requirements of Subsection D shall not apply to the storage, transfer or use of the following fuels:

   a. Public Utilities Commission-regulated natural gas
   b. Propane
   c. Butane
   d. ARB-quality reformulated gasoline
   e. ARB-certified diesel fuel

   Any person claiming this exemption shall maintain records sufficient to substantiate the use of these fuels.

D. Monitoring/Recordkeeping

The monitoring/recordkeeping requirements in Subsections D.2, D.3, D.4, and D.5 become effective April 13, 2000.

1. Landfill Gas/Oilfield Gas (Initial Sampling): Unless historical measurements of hydrogen sulfide from landfill or oilfield gaseous fuels have been performed within the previous three years and are reported in writing to the District, any person combusting landfill or oilfield gas shall have the sulfur content of fuel analyzed by no later than May 13, 1999. Any person operating a new stationary source shall have the sulfur content of the fuel analyzed within 30 days after initial operation.

2. Landfill Gas/Oilfield Gas (Annual Sampling): Any person combusting landfill or oilfield gas shall have the sulfur content of the fuel analyzed at least annually.

3. Landfill Gas/Oilfield Gas (Quarterly Sampling): Monitoring of sulfur content of landfill or oilfield gaseous fuel by the operator or by his/her designee shall be at least quarterly if any of the following conditions apply:

   a. Any sulfur measurement exceeds 394 ppmv, calculated as hydrogen sulfide at standard conditions.

   b. A stationary source is new.

   c. An operator has not reported historical measurements of hydrogen sulfide of the landfill or oilfield gaseous fuel performed within the previous three years in writing to the District for a stationary source.

4. Notwithstanding the requirements of Subsection D.3, an operator may have the sulfur content of the landfill or oilfield gaseous fuel monitored annually instead of quarterly by satisfying the following provisions:

   a. During four consecutive calendar quarters, each sulfur content measurement shall not exceed 394 ppmv, calculated as hydrogen sulfide at standard conditions, and

   b. Submit a written request to the District for a reduction in monitoring frequency. This request shall contain backup documentation including monitoring reports that document the above provision. Requests for a reduction in monitoring frequency are not effective until written approval by the APCO is received by the operator.

5. Liquid Fuels: For each liquid fuel delivery, the person combusting the fuel shall obtain documents certifying compliance with VCAPCD Rule 64, or the person shall test the sulfur content of a representative sample of the fuel using a test method from Subsection E.2. Certification may be provided once for each

purchase lot, if records are kept of the purchase lot number of each delivery.

6. All records of fuel sulfur content and any records to substantiate an exemption pursuant to Subsection C.2 shall be retained for a minimum of five years, and shall be made available to District personnel upon request.

E. Test Methods

1. The sulfur content of gaseous fuels shall be determined by South Coast AQMD Method 307-94 - Determination of Sulfur in a Gaseous Matrix or by ASTM D1072-90(1994), Standard Test Method for Total Sulfur in Fuel Gases.

Alternatively, operators may use the colorimetric method ASTM D 4810-88 (Reapproved 1994) or the ASTM D4084-94 (Lead Acetate Reaction Rate Method) when measuring the sulfur content of landfill or oilfield gaseous fuels and may assume that the hydrogen sulfide content of the fuel gas adequately represents the total sulfur content. However, if the sulfur content as measured by ASTM D4810-88 or ASTM D4084-94 equals or exceeds 200 ppmv, then **only** SCAQMD Method 307-94 or ASTM D1072-90 shall be used to determine compliance.

The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis may be used subject to the verification of the dilution ratio.

Operators may use the colorimetric method ASTM D 4810-88 (Reapproved 1994) for the measurement of the sulfur content of gaseous fuels other than landfill or oilfield gas only if written approval has been granted by the District and by US EPA.

2. The sulfur content of liquid fuels shall be determined by ASTM Method D4294-98 or D2622-98. For liquid fuels, operators of electric power generation units may use the sampling and analysis methods prescribed in Code of Federal Regulations 40CFR75 Appendix D.2.2.

F. Definitions

1. "ARB Certified Diesel Fuel": Any fuel that is commonly or commercially known, sold or represented as diesel fuel No.1-D or No.2-D, pursuant to the specifications in ASTM D975-96, and is subject to California Code of Regulations, Title 13, Sections 2281 and 2282.

2. "Landfill Gas": Any gas derived through the decomposition of organic waste deposited in a solid waste disposal site, from the evolution of volatile species in the waste, or from chemical reactions of substances in the waste.

3. "Natural Gas": Natural gas is a gaseous fuel purchased or transported under a Federal Energy Regulatory Commission or a California Public Utility Commission jurisdictional tariff.

G. Violations

The failure of a person to meet any requirement of this rule, including monitoring and recordkeeping requirements, shall constitute a violation of this rule. If the results from using SCAQMD Method 307-94 indicate a violation of this rule, then it is a violation of this rule regardless of any conflicting results that may be obtained by using ASTM D4810-88 or ASTM D4084-94.

Rule 68. Carbon Monoxide (Adopted 5/23/72, Revised 6/14/77, 4/13/04)

A. Requirements

A person shall not discharge into the atmosphere carbon monoxide (CO) in concentrations exceeding 2000 ppm by volume measured on a dry basis at standard conditions.

B. Exemptions

1. This Rule shall not apply to the following equipment provided it combusts only liquid fuels, gaseous fuels, or waste gases, and emits only combustion products:

   a. Boilers
   b. Steam generators
   c. Water heaters
   d. Process heaters
   e. Space heaters
   f. Gas turbines
   g. Internal combustion engines
   h. Flares

2. This Rule shall not apply to fires set in accordance with the requirements of Rule 56.

3. This Rule shall not apply to emissions from jet engine or rocket engine test stands, or rocket propellant or rocket fuel testing devices.

C. Test Methods

Compliance shall be determined using EPA Method 10 or ARB Method 100. Any other appropriate test method may be used with prior written approval by the District, the California Air Resources Board, and the U.S. Environmental Protection Agency.

D. Definitions

1. "Open outdoor fire" means any combustion of combustible material of any type outdoors in the open, not in any enclosure, where the products of combustion are not directed through a flue.

2. "Standard Conditions": A gas temperature of 68 degrees Fahrenheit (20 degrees Celsius) and a gas pressure of 14.7 pounds per square inch (760 mm. Hg) absolute.

10/16/85

~~D. Metal Surface Coating - Thinner and Reducers~~

~~A person shall not, after November 1, 1975, use photochemically reactive solvent, as defined in Rule 66.A.10, to thin, reduce or dilute industrial metal surface coatings unless the emissions of organic materials into the atmosphere from the use of such coatings is reduced by at least 85 percent by weight.~~

Rule 67. Vacuum Producing Devices (Adopted ~~5/23/72~~, Revised 7/5/83)

A person shall not discharge into the atmosphere more than three (3) pounds of reactive organic compounds in any one hour from any vacuum producing devices or systems including hot wells and accumulators, unless said discharge has been reduced by at least 90 percent. ~~This Rule shall be effective on January 1, 1974 for all existing equipment.~~

Rule 69. Asphalt Air Blowing (Adopted 5/23/72, Revised 7/5/83)

A person shall not operate or use any article, machine, equipment or other contrivance for the air blowing of asphalt unless all gases, vapors and gas-entrained effluents from such an article, machine, equipment or other contrivance are:

A. Incinerated at temperatures of not less than 1400 degrees Fahrenheit for a period of not less than 0.3 second, or

B. Processed in such a manner determined by the Air Pollution Control District to be equally, or more, effective for the purpose of air pollution control than "A" above.

~~This Rule shall be effective on January 1, 1974 for all existing equipment.~~

~~Rule 70. Storage and Transfer of Gasoline (Adopted 6/25/74, Revised 9/16/75, 4/13/76, 7/6/76, 3/8/77, 6/14/77, 3/27/79, 12/2/80,~~ 7/5/83)

G. Exceptions

1. The provisions of this rule shall not apply to any gasoline storage container installed prior to January 1, 1965, if the only method of filling the tank has been and is through a fill connection which is offset from the container. (Revised 3/27/79)

2. The provisions of this rule shall not apply to wind machines used in agricultural operations.

3. The provisions of Sections A.3. and E.1. of this rule, requiring installation of Phase II Vapor Recovery Systems, shall not apply to any gasoline storage container installed prior to March 27, 1979, if the gasoline throughput at the facility where the container is installed ~~less than or equal to 24,000 gallons per year.~~

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 70 - STORAGE AND TRANSFER OF GASOLINE

(Adopted 6/25/74, Revised 9/16/75, 4/13/76, 7/6/76, 3/8/77, 6/14/77, 3/27/79, 12/2/80, 7/5/83, 11/29/88, 5/4/93, 5/9/95, 5/13/97, 11/14/00, 11/11/03 effective 7/1/04, 3/10/09 effective 4/1/09)

A. Applicability

The provisions of this rule shall apply to the storage and transfer of gasoline. The storage of gasoline in containers with more than 40,000 gallons capacity shall also be regulated by the provisions of Rule 71.2, Storage of Reactive Organic Compound Liquids.

B. Requirements - Gasoline Storage Containers

1. No person shall transfer or permit the transfer of gasoline into any storage container with 250 gallons or more capacity unless a permanently installed submerged fill pipe with a connection that is free of leaks, is used.

2. No person shall transfer or permit the transfer of gasoline from a gasoline delivery vessel into any storage container with 250 gallons or more capacity unless a permanently installed California Air Resources Board (CARB) certified Phase I vapor recovery system, which prevents 95 percent of the displaced vapors from being released into the atmosphere, is used.

3. All vapor and liquid pipes, hoses, and lines extending from an underground gasoline storage container to a gasoline dispenser shall be gravity drained into the underground container or to another container.

4. No person shall install a coaxial Phase I vapor recovery system unless the system was certified by CARB after January 1, 1994.

5. No person shall install a Phase I vapor recovery system, unless the system is equipped with CARB certified poppetted drybreaks or spring-loaded vapor check valves on the vapor return coupler of the system.

6. All open vent pipes on gasoline storage container(s) with more than 250 gallons capacity shall be equipped with a CARB certified pressure-vacuum relief valve. Unless otherwise specified in the applicable CARB executive order, pressure relief shall be set at 3.0 ± 0.5 inches water column and vacuum relief shall be set at 8.0 ± 2.0 inches water column. Vent pipes may be manifolded, pursuant to the applicable CARB executive order, to a single pressure-vacuum relief valve. Pressure-vacuum relief valve(s) shall be properly installed and maintained in good operating order.

7. Prior to performing any major modification to a gasoline dispensing facility, a Permit to Operate shall be obtained from the District.

8. No person shall perform or permit the "pump-out" (bulk transfer) of gasoline from a storage container subject to this rule unless:

    a. The bulk transfer is performed using a vapor collection and transfer system capable of returning the displaced vapors to the stationary storage container, or

    b. The storage container will be removed or filled with water for testing.

9. No person shall transfer or permit the transfer of gasoline from any storage container with 250 gallons or more capacity into any motor vehicle fuel container with more than 5 gallons capacity unless a permanently installed CARB-certified Phase II vapor recovery system, which prevents 95 percent of the displaced vapors from being released into the atmosphere is used.

10. No person shall:

    a. Install any balance system vapor recovery nozzle unless a vapor check valve is located in the nozzle, and

    b. Allow the operation of a balance system with more than one check valve per nozzle and hose assembly.

11. If flexible tubing is used for the connection between the riser and dispenser cabinet connection, the material shall be listed by the Underwriters' Laboratory for use with gasoline and shall be capable of maintaining electrical continuity between the riser and dispenser.

12. No person shall sell, offer for sale, allow the operation of, or install a bellows-equipped vapor recovery nozzle unless it is equipped with an insertion interlock mechanism.

13. Any gasoline dispensing nozzle equipped with a vapor recovery system shall be equipped with a coaxial hose.

14. Liquid removal devices required by CARB executive orders shall be maintained to achieve a minimum liquid removal rate of five milliliters per gallon transferred. This standard shall apply at dispensing rates exceeding five gallons per minute, unless a higher removal rate is specified by the CARB executive order.

15. An owner/operator of any gasoline dispensing facility shall conspicuously post the following signs in the immediate gasoline dispensing area:

a. "NOZZLE" operating instructions.

b. "VCAPCD" toll-free telephone number.

c. A warning sign stating "DO NOT TOP OFF TANKS"

d. Required signs shall comply with one of the following:

(1) Decal signs shall be readable from a distance of 3 feet or more and shall be located adjacent to the dispenser price indicator (per gallon) on each side next to the driveway it serves.

(2) Pump toppers shall be double-back with one sign per island and shall be readable from a distance of 6 feet or more.

(3) Permanent (non-decal) signs shall be two single-sided or one double-sided sign(s) per two (2) dispensers and shall be readable from a distance of 6 feet or more.

e. A dispenser that is never used to fuel motor vehicles shall have a sign posted on it restricting its use for vehicles.

16. No person shall offer for sale, sell, or install any new or rebuilt vapor recover equipment unless the equipment is clearly identified or marked by the certified manufacturing company and/or the certified rebuilding company as per CARB specifications.

17. Standing gasoline in Phase I spill containment devices is prohibited.

18. The hanging hardware on Phase II vapor recovery systems, which includes, but is not limited to, coaxial hose, nozzles, retractors and hose castings, shall be inspected daily.

C. Requirements - Gasoline Bulk Plants and Gasoline Terminals

1. No person shall transfer or permit the transfer of gasoline into a gasoline delivery vessel at a gasoline bulk plant unless a permanently installed and properly connected CARB certified vapor recovery system is used. This vapor recovery system shall prevent 90 percent of the displaced vapors from being released into the atmosphere. This vapor recovery system shall have a maximum emissions factor of 0.84 lbs of hydrocarbon emitted per 1000 gallons of throughput.

2. No person shall transfer or permit the transfer of gasoline into a gasoline delivery vessel at a gasoline terminal unless a permanently installed and properly connected CARB-certified vapor collection and processing system is used. This

collection and processing system shall limit the ROC emissions to 0.08 pounds per 1000 gallons of gasoline loaded. Gasoline delivery vessels at gasoline terminals shall be bottom loaded only. The vapor processing portion of the vapor collection and processing system at gasoline terminals shall consist of one of the following:

a. An adsorption system, incineration system or condensation system.

b. A vapor handling system that directs all vapors to a fuel gas system.

c. Other equipment, approved in writing by the Air Pollution Control Officer (APCO), which has been demonstrated to limit the ROC emissions to 0.08 pounds per 1000 gallons of gasoline loaded as determined by CARB Test Method TP 203.1.

3. No person shall switch load at a gasoline bulk plant or at a gasoline terminal unless such transfer is made using a permanently installed CARB-certified vapor recovery system as required by Subsection C.1 or Subsection C.2 of this rule.

D. Requirements - Gasoline Delivery Vessels

1. No person shall unload gasoline from a gasoline delivery vessel to a storage container that is equipped with a Phase I vapor recovery system required by Subsection B.2 of this rule unless the gasoline delivery vessel is permanently equipped with a vapor recovery system that has been certified by CARB pursuant to State Health and Safety Code Section 41962. This certification must be verified annually by the State Board.

2. No person shall load gasoline into a gasoline delivery vessel at a gasoline bulk plant or terminal equipped with a vapor recovery system required by Subsection C.1 or Subsection C.2 of this rule unless the delivery vessel is permanently equipped with a vapor recovery system that has been certified by CARB pursuant to State Health and Safety Code Section 41962. This certification must be verified annually by the State Board.

3. No person shall open the hatch on any gasoline delivery vessel for visual inspection, unless:

a. The duration that the hatch is open for the visual inspection is no more than three minutes;

b. Gasoline transfer or pumping has been stopped for at least 3 minutes prior to opening; and

c. The hatch is closed before gasoline transfer or pumping is resumed.

E. Operation and Maintenance Requirements

1. Any vapor recovery system or other equipment installed pursuant to any provision of this rule shall be maintained and operated in the same manner as when certified by CARB. All vapor recovery equipment shall be maintained in good working order and shall not leak.

2. Phase II vapor recovery systems shall be maintained and operated with none of the defects listed in California Code of Regulations Section 94006, Subchapter 8, Chapter 1, Part III, of Title 17, adopted 9/15/08.

3. No person shall operate, or allow the operation of, a gasoline delivery vessel required to have a vapor recovery system by Subsections D.1 or D.2 of this rule, unless:

   a. The vapor recovery system is installed and maintained in compliance with the CARB requirements for certification, and

   b. A State of California decal is displayed attesting to the vapor integrity of the vessel per California Health and Safety Code Section 41962, and

   c. The pressure-vacuum relief valve is installed and set at 90 percent of the maximum, safe pressure and vacuum ratings of the vessel.

4. Any equipment that is not operating in compliance with this rule shall be tagged "Out of Order." Except during repair activity, that tag shall not be removed and the tagged equipment shall not be used, permitted to be used, or provided for use unless the tagged equipment has been fixed or replaced.

5. Any person storing or transferring gasoline shall follow good operating practices including but not limited to: preventing gasoline spills and leaks, storing gasoline in closed containers, and disposing of gasoline in compliance with all state and local regulations.

F. Exemptions

1. This rule shall not apply to gasoline storage containers used exclusively for wind machines in agricultural operations.

2. Subsections B.2, B.6, B.7, B.8, and B.9 of this rule shall not apply to gasoline storage containers with a capacity of less than 550 gallons that are located at non-retail service stations.

3. The requirement for Phase I vapor recovery in Subsection B.2, as well as the testing requirements in Section H shall not apply to:

a. Any gasoline storage container used exclusively for agricultural operations, less than or equal to 1500 gallons capacity, and located at a facility with a gasoline throughput that has not exceeded 10,000 gallons on a thirty day rolling average.

b. Stationary sources that have not exceeded a gasoline throughput of 6000 gallons per year.

c. Mobile refuelers

4. The requirement for Phase II vapor recovery in Subsection B.9, as well as the testing requirements in Section H shall not apply to:

a. Equipment used exclusively for the transfer or storage of gasoline for equipment other than motor vehicles.

b. Stationary sources that have not exceeded a gasoline throughput of 24,000 gallons per year and have not exceeded a gasoline throughput of 10,000 gallons on a thirty day rolling average.

c. Mobile Refuelers.

5. Subsections C.1 and C.3 shall not apply to gasoline bulk plants where the average daily gasoline throughput has not exceeded 4,000 gallons on a thirty day rolling average and the gasoline throughput has not exceeded 200,000 gallons on a twelve month rolling average.

6. Subsections C.1 and C.3 shall not apply to gasoline bulk plants that load exclusively to gasoline delivery vessels that service only storage containers that are not required to be equipped with Phase I vapor recovery systems.

7. Section H, Testing Requirements and Test Methods, shall not apply to any gasoline dispensing facility located on San Nicolas Island or Anacapa Island.

8. The requirement for Phase II vapor recovery in Subsection B.9, as well as the applicable testing requirements in Section H, shall not apply to any gasoline storage container with 250 gallons or more capacity that is used to fuel a motor vehicle fleet where no less than 95 percent of the motor vehicles fueled are equipped with Onboard Refueling Vapor Recovery (ORVR) systems. To qualify, the gasoline storage container must be owned by the vehicle fleet operator. This exemption shall not apply to facilities required under state law to have Phase II vapor recovery.

9. The requirement for Phase II vapor recovery in Subsection B.9, as well as the applicable testing requirements in Section H, shall not apply to any storage container with 250 gallons or more capacity that is used to distribute E85 fuel.

G. Recordkeeping Requirements

1. Any person claiming an exemption from the provisions of this rule based on gasoline throughput shall keep the following records to substantiate the exemption:

   a. Name, address, type of facility, and permit number (if applicable); and

   b. For an exemption from the provisions of Subsection B.2 of this rule, based on the provisions of Subsection F.3.a of this rule, records showing gallons of gasoline loaded for each gasoline delivery; or

   c. For an exemption from the provisions of Subsection B.2 of this rule, based on the provisions of Subsection F.3.b of this rule, monthly gasoline throughput; or

   d. For an exemption from the provisions of Subsections B.9, C.1 or C.3 of this rule, based on the provisions of Subsections F.4.b or F.5 of this rule, daily gasoline throughput.

2. Any person claiming an exemption from provisions of this rule based on container size, shall, upon the request of the APCO:

   a. Provide records documenting the container size at the time of purchase and installation, or

   b. Conduct measurements to verify the volume of the container.

3. Any person claiming an exemption from the provisions of Subsection B.9 of this rule, based on the provisions of Subsection F.8 of this rule, shall keep the following records to substantiate the exemption:

   a. Name, address, type of facility, and permit number (if applicable); and

   b. Records showing the make, model year, vehicle identification number, and license plate number (if available) of each motor vehicle fueled from the applicable gasoline storage tank and a statement certifying that an ORVR system is in place and functional on each vehicle.

4. Reports and records of testing conducted pursuant to Section H shall be maintained. These documents shall be dated and shall contain names, addresses,

and telephone numbers of the parties responsible for the system installation and/or testing.

5. A record of all maintenance conducted on any part of the vapor recovery system shall be maintained in chronological order showing dates, description and location of any equipment replaced, and a description of the system problem that required repair. The log shall also indicate the time period and duration of each malfunction of the system.

6. Records of daily inspections required in Subsection B.18 shall be maintained. Records shall include the date and time of the inspection, the equipment inspected, and the signature of the person conducting the inspection.

7. Records shall be made available to the Air Pollution Control Officer upon request and shall be a maintained for a period of two years.

H. Testing Requirements and Test Methods

1. Except as provided in Subsection H.8, all Phase II vapor recovery systems shall demonstrate static pressure performance in accordance with the performance specifications shown in CARB Test Procedure 201.3 or 201.3b, as applicable, using CARB Test Procedure 201.3 for underground containers or CARB Test Procedure 201.3b for aboveground containers, in accordance with the following schedule:

   a. Within 45 days of (1) commencing operations at a new facility or (2) completing any major modification, and

   b. For a facility that has exceeded a gasoline throughput of greater than or equal to 100,000 gallons per year, annually thereafter.

   c. For a facility that has not exceeded a gasoline throughput of 100,000 gallons per year:

      1) Annually at any facility equipped with a vacuum-assist Phase II vapor recovery system or

      2) At least once every two years at any facility equipped with a balance Phase II vapor recovery system.

   CARB Test Procedure 201.3 shall not be required for any vapor recovery system required by a CARB executive order to use a different test method to demonstrate static pressure integrity.

2. Except as provided in Subsection H.8, compliance with the dynamic pressure

performance standard of Phase II vapor recovery systems designated on the system's CARB executive order shall be determined using CARB Test Procedure 201.4 in accordance with the following schedule:

a. Within 45 days of (1) commencing operations at a new facility or (2) completing any major modification, and

b. For a facility that has exceeded a gasoline throughput of greater than or equal to 100,000 gallons per year, annually thereafter.

c. For a facility that has not exceeded a gasoline throughput of 100,000 gallons per year, at least once every four years thereafter.

The system back pressure limits shown in CARB TP 201.4 shall be replaced by those shown on the applicable CARB executive order. CARB Test Procedure 201.4 shall not be required for any vapor recovery system required by a CARB executive order to use a different test method to demonstrate dynamic pressure performance.

Dynamic pressure performance testing shall not be required for any aboveground gasoline storage container that (1) has a dispenser mounted directly to the container and (2) is equipped with a Phase II vapor recovery system that does not have a liquid trap at any location in the vapor path between the gasoline nozzle and the storage container vapor head space during gasoline dispensing. The APCO may require documents or engineering drawings verifying exemption from this testing requirement.

3. Compliance with the liquid removal rate requirement in Subsection B.14 shall be determined using CARB Test Procedure 201.6 in accordance with the following schedule:

a. Within 45 days of (1) commencing operations at a new facility or (2) completing any major modification, and

b. For a facility that has exceeded a gasoline throughput of greater than or equal to 100,000 gallons per year, annually thereafter.

c. For a facility that has not exceeded a gasoline throughput of 100,000 gallons per year, at least once every four years thereafter.

4. The efficiency of Phase I vapor recovery systems shall be determined using CARB Test Procedure 201.1 or 201.1.a, as applicable.

5. The control efficiency of vapor recovery systems at gasoline bulk plants, as specified in Subsection C.1, shall be determined using CARB Test Method TP-

202.1, "Determination of Emission Factors of Vapor Recovery Systems of Bulk Plants."

6. The efficiency of vapor collection and processing systems at gasoline terminals, as specified in Subsection C.2, shall be determined using CARB Test Method TP-203.1, "Determination of Emission Factors of Vapor Recovery Systems of Terminals."

7. Except as provided in Subsection H.8, compliance with the air-to-liquid volume ratio performance requirement designated on a CARB executive order shall be demonstrated for all vacuum assist nozzles using the test procedure specified in the executive order in accordance with the following schedule:

   a. Within 45 days of (1) commencing operations or (2) completing any major modification, and

   b. Annually thereafter.

8. A testing frequency required in a CARB executive order shall preempt the testing frequency required in any of Subsections H.1.b, H.1.c, H.2.b, H.2.C, H.3.b, H.3.c, or H.7.b, above, provided the CARB executive order requires more frequent testing and specifies a test method corresponding to that required in the applicable subsection preempted.

9. Tests not specified in this section but specified in the applicable CARB executive order shall be performed as specified in the applicable CARB executive order.

10. The results of any test required by either this rule or a CARB executive order shall be delivered by the permittee to the District, in final written report format, no later than 14 days after completion of the subject testing.

I. Violations

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

J. Definitions

1. "Appropriate Analyzer": A hydrocarbon analyzer that meets the requirements of EPA Reference Method 21 and is calibrated with methane.

2. "Balance System": A Phase II (Stage II) vapor recovery system that operates on the principle of vapor displacement.

3. "Bottom Loaded": A gasoline delivery vessel shall be considered to be bottom loaded when the fuel transfer and vapor return lines have separate, independent,

and dedicated attachments on the truck or container, when the inlet is flush with the container bottom, and when the truck and trailer hatches remain closed during fuel transfer.

4. "CARB-Certified Vapor Recovery System": A vapor recovery system or equipment that has been certified by the State Board pursuant to Section 41954 of the Health and Safety Code.

5 "CARB Executive Orders": Orders generated by the California Air Resources Board that document the requirements of specific vapor control equipment and procedures used in Phase I and II vapor control.

6. "Coaxial Hoses or Systems": Gasoline delivery hoses, pipes, or systems that have an inner tube through which gasoline liquid is delivered and an annulus around the inner tube through which vapors are recovered, or vice-versa.

7. "E 85 Fuel": A motor fuel that contains 85 percent ethanol and 15 percent gasoline.

8. "Fleet": A group of vehicles under common operation and control by a person, company, business, corporation, organization, public entity, or any combination thereof, and are dispatched from at least one location within the District. For the purpose of this rule, each of the following facilities shall be considered a fleet:

    a) Port-related new vehicle processors
    b) New and used automobile and light truck dealers
    c) Automobile and light truck rental facilities

9. "Gasoline": Any petroleum distillate having a Reid vapor pressure of 4.0 pounds per square inch or greater, which is sold or intended for sale for use in motor vehicles or engines and is commonly or commercially known or sold as gasoline.

10. "Gasoline Bulk Plant": A gasoline storage and distribution facility that delivers gasoline to commercial or retail accounts and has not exceeded an average daily throughput of 20,000 gallons of gasoline on a thirty day rolling average.

11. "Gasoline Delivery Vessel": A truck, trailer, or railroad car with a storage device containing gasoline or gasoline vapors used to transport fuel or other petroleum products.

12. "Gasoline Terminal": A gasoline storage and distribution facility that delivers gasoline to gasoline bulk plants or to commercial or retail accounts, and has exceeded a daily throughput of 20,000 gallons of gasoline on a thirty day rolling average.

13. "Gasoline Vapors": The reactive organic compounds in the displaced vapors including any entrained liquid gasoline. (Revised 3/27/79)

14. "Insertion Interlock": Any certified mechanism that is an integral part of a bellows-equipped dispensing nozzle that prohibits the dispensing of fuel unless the bellows is compressed.

15. "Leak":

    a. The dripping at a rate of more than three (3) drops per minute of liquid containing reactive organic compounds; or

    b. An emission of gaseous reactive organic compound which causes an appropriate analyzer sampling one (1) centimeter from a source to register at least 10,000 ppm, as methane, as determined by EPA Reference Method 21.

    The following are exceptions to the above definition and are not considered by this rule to be leaks:

    c. Liquid leaks from a well maintained disconnecting transfer fitting of not more than 10 milliliters per disconnect, averaged over three disconnects.

    d. Gaseous emissions from pressure relief devices on containers when the process pressure exceeds the limit setting specified for the device.

    e. Gaseous emissions from the nozzle boot-vehicle interface on Phase II vapor recovery systems.

    f. Liquid drops or spit-backs from the nozzle boot-vehicle interface not caused by improper maintenance of the vapor recovery system. (The burden of proof for demonstrating the cause of these spit-backs is on the operator, and may be met by meeting the CARB certification criteria in the blockage and pressure drop tests.)

16. "Liquid Trap": A point along a gasoline vapor path where liquid gasoline can collect and block or impede the passage of gasoline vapors.

17. "Major Modification": The modification of an existing gasoline dispensing facility that makes it subject to the same requirements to which a new installation is subject.

    a) Modification of the Phase I system that involves the addition, replacement, or removal of an underground storage tank, or modification that causes the

tank top to be unburied, is considered a major modification of the Phase I system.

b) Either the replacement of the Phase II system or the modification of the Phase II system that involves the addition, replacement or removal of 50 percent or more of the buried vapor piping, or the replacement of dispensers, is considered a major modification of the Phase II system. The replacement of a dispenser is not a major modification when the replacement is occasioned by end user damage to a dispenser.

This definition applies only to Subsection B.7 and Section H of this rule and does not supersede the definition of major modification in CARB document D-200.

18. "Mobile Refueler": A gasoline delivery vessel equipped with a dispensing nozzle or nozzles used to fill motor vehicle fuel tanks.

19. "Onboard Refueling Vapor Recovery (ORVR)": a system built into a motor vehicle to recover and contain gasoline vapors before they reach the fuel filler spout, as required by California Code of Regulations, title 13, section 1978, or 40 Code of Federal Regulations Part 86.

20. "Phase I Vapor Recovery System": A gasoline vapor recovery system or equipment that recovers the vapors generated during the transfer of gasoline from delivery vessels into stationary storage containers.

21. "Phase II Vapor Recovery System": A gasoline vapor recovery system or equipment that recovers the vapors generated during the fueling of motor vehicles from stationary storage containers.

22. "Prior Scheduled Testing Date:" The date established by the District by which an air-to-liquid ratio performance test must be conducted at a facility pursuant to Rule 70 adopted on May 13, 1997.

23. "Rebuilt Equipment": Any component of a vapor recovery system that has undergone repair or replacement of any or all of its internal parts.

24. "Reid Vapor Pressure": The absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids, except liquefied petroleum gases, as determined by ASTM D323-89.

25. "Retail Service Station": Any new or existing motor vehicle fueling facility subject to the payment of California sales tax for gasoline sales.

26. "Submerged Fill Pipe": Any fill pipe or discharge nozzle that meets any one of the following conditions:

a. The discharge opening is entirely submerged when the liquid level is six inches above the bottom of the container.

b. When applied to a container that is loaded from the side, the discharge opening is entirely submerged when the liquid level is 18 inches above the bottom of the container.

c. When applied to a container that is loaded from the bottom, "bottom loaded", the discharge opening is entirely submerged when the liquid level is six inches above the bottom of the container.

27. "Switch Load": To transfer diesel fuel into any gasoline delivery vessel that was previously loaded with gasoline.

28. "Thirty Day Rolling Average": The arithmetic average of daily gasoline throughputs over any consecutive thirty day period.

29. "Top Off": The dispensing of gasoline to a motor vehicle or utility equipment fuel tank after the dispensing nozzle primary shutoff mechanism has engaged. The filling of those classes of vehicle tanks which, because of the configuration of the fill pipe, causes premature activation of the primary shutoff, shall not be considered topping off.

30. "Twelve Month Rolling Average": The arithmetic average of monthly gasoline throughputs over any consecutive twelve month period.

31. "Vacuum Assist System": Any Phase II vapor recovery system that utilizes a pump, blower, or other vacuum-producing device. Vacuum assist systems may also incorporate an incinerator to process any excess vapors generated by the collection system.

32. "Vapor Tight": The detection of less than 10,000 ppm hydrocarbon concentration, as determined by EPA reference Method 21, using an appropriate analyzer calibrated with methane.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 71 - CRUDE OIL AND REACTIVE ORGANIC COMPOUND LIQUIDS
(Adopted 6/20/78; Revised 3/27/79, 7/10/79, 10/4/88, 9/26/89, 9/11/90, 6/8/93, 12/13/94, 5/11/21)

A. Applicability

The provisions of this rule shall apply to the production, gathering, separation and processing of crude oil and natural gas, and the storage and transfer of petroleum material and reactive organic compound (ROC) liquids.

B. Definitions

The following definitions apply to Rules 71.1, 71.2, 71.3, 71.4, and 71.5.

1. "Appropriate analyzer": A hydrocarbon analyzer that meets the requirements of EPA Reference Method 21 and is calibrated with methane.

2. "Automatic Bleeder Vent": A floating roof vent that automatically vents air only during initial filling operations and during subsequent landings of the roof.

3. "Background": A reading expressed as methane on a portable instrument that is taken at least three meters upwind from any components to be inspected and that is not influenced by any specific emission point.

4. "Bottom-Loaded": An ROC liquid delivery vessel shall be considered to be bottom-loaded when the liquid transfer and vapor return lines have separate, independent, and dedicated attachments on the truck or tank, when the inlet is flush with the container bottom, and when the truck and trailer hatches remain closed during liquid transfer.

5. "Containment berm": A structure used solely as secondary containment for emergency spills from a tank or other device.

6. "Crude oil": Any naturally occurring, unrefined petroleum liquid.

7. "Custody transfer": The transfer of produced crude oil and/or condensate, after separation and/or treatment in production operations, from storage tanks or automatic transfer facilities to pipelines or any other form of transportation.

8. "Drilling operations pit": A pit used to receive rock cuttings, waste drilling fluids, and water run off from around a drilling rig (DOP Reserve Pit) or a pit used to accept well production for up to 48 hours until the well is brought on stream (DOP Temporary Pit).

9. "Emergency Pit": A pit used less than thirty (30) days per year to contain emergency releases of petroleum material. An emergency pit is dry when not in use.

10. "First stage production sump": A sump that receives a stream of petroleum material directly from wells or a field gathering system.

11. "Flash tank": A flash tank or separator is used in a gas dehydration unit to desorb hydrocarbon gases from the rich glycol stream by changing the pressure and temperature. The hydrocarbon gases separated by the flash tank are mostly methane, ethane, and propane.

12. "Gasoline": Any petroleum distillate having a Reid vapor pressure of 4.0 pounds per square inch or greater, which is sold or intended for sale for use in motor vehicles or engines and is commonly or commercially known or sold as gasoline.

13. "Glycol dehydrator": A glycol dehydrator consists of equipment which uses a type of glycol to dehydrate natural gas. The glycol contacts and absorbs the water vapor in the gas and becomes "rich" glycol. This glycol is then regenerated by distilling the water. The distilled or "lean" glycol is then recycled back to the absorber.

14. "Glycol regenerator vent": The glycol regenerator vent exhausts the water vapor, aromatic hydrocarbons and other reactive organic compounds from the rich glycol distillation unit. This unit is called a regenerator because it regenerates the rich glycol into lean glycol so that the glycol can be used in the absorber to dehydrate the gas.

15. "Leak":

    a. On or before December 31, 2022, a leak exists when a reading in excess of 10,000 ppm, as methane, above background, is obtained using an appropriate portable hydrocarbon analyzer and when sampling is performed according to the procedures specified in EPA Method 21 - Appendix A 40 CFR, or

    b. On or before December 31, 2022, a leak exists when the dripping of liquid containing reactive organic compounds at a rate of more than three (3) drops per minute is observed, or

    c. On or after January 1, 2023, any major gas leak, minor gas leak, major liquid leak, or minor liquid leak.

    A "leak" is not a gaseous emission from pressure relief devices on tanks or ROC delivery vessels when the process pressure exceeds the limit specified for the device. Any equipment with a minor gas leak identified by the source that is not

regulated by Rule 74.10 shall be tagged and repaired within 10 days. If the repair is not completed within the 10-day period a breakdown notification shall be submitted to the District.

16. "Lean glycol": Lean glycol is glycol that has been regenerated in a distillation unit and has a low moisture content.

17. "Loading Facility": Any aggregation or combination of organic liquid loading equipment which is located so that all the organic liquid loading outlets for such aggregation or combination of loading equipment can be encompassed within any circle of 300 feet in diameter.

18. "Major Gas Leak": The detection of total gaseous hydrocarbons equal to or in excess of 10,000 ppm as methane above background measured using EPA Method 21. A major gas leak from a pressure relief valve means the detection of total gaseous organic compounds equal to or in excess of 10,000 ppmv, as methane above background measured using EPA Method 21, unless the process pressure exceeds the limit setting specified for the device. If the process pressure exceeds the limit setting of the pressure relief valve, then this emission to the atmosphere is considered to be a "pressure release."

19. "Major Liquid Leak": A visible mist or a continuous flow of liquid that is not seal oil or other similar lubricant. Sampling of process fluids into containers shall not be considered a leak.

20. "Minor Gas Leak": The detection of total gaseous hydrocarbons equal to or in excess of 1,000 ppm as methane above background measured using EPA Method 21.

21. "Minor Liquid Leak": Any liquid leak, except seal oil or other similar lubricant, that is not a major leak and drips liquid at a rate of more than three drops per minute. Sampling of process fluids into containers shall not be considered a leak.

22. "Modified Reid vapor pressure": The Reid vapor pressure measured at tank storage temperatures using Test Method for Vapor Pressure for Petroleum Products, ASTM D 323-82.

23. "Natural gas": Any produced or marketed gas which contains the following: methane, ethane, propane, butane, or other petroleum-related gases.

24. "Petroleum material": Liquids resulting from petroleum production operations that contain more than 5 milligrams per liter of reactive organic compound (ROC) material. This definition does not include refined petroleum liquids such as lube oils or gasoline.

25. "Petroleum production permit unit": Any aggregation of equipment used exclusively for the production, gathering and separation of crude oil and natural gas which is included on a single Permit to Operate issued by the Air Pollution Control Officer or is defined as a single stationary source.

26. "Pit": A receptacle, formed primarily of earthen materials, although it may be lined with artificial materials, used to receive intermittent flows of petroleum material or crude oil. Neither a sample box of less than two (2) square feet in horizontal surface area nor a containment berm shall be considered a pit.

27. "Pond": A receptacle, formed primarily of earthen materials, although it may be lined with artificial materials, used to contain produced water from petroleum production processes for disposal or re-use. Ponds are not used for oil/water separation or evaporation.

28. "Produced water": Water associated with the production, gathering, separation and processing of crude oil.

29. "Reactive organic compound (ROC) liquid": Any reactive organic compound as defined in Rule 2 of these Rules.

30. "Rich glycol": Rich glycol is glycol which has absorbed water in the absorber or contactor of a dehydration unit prior to being distilled in the regenerator.

31. "ROC Liquid Delivery Vessel": A truck, trailer or railroad car with a storage container carrying ROC liquid or ROC liquid vapors used to transport ROC liquids including petroleum products. A vacuum truck that transfers less than 7,000 gallons of ROC liquid per load using a vacuum created by a pump permanently installed on the truck tractor or trailer shall not be considered to be an ROC delivery vessel.

32. "Second and third stage sump": A sump that receives a stream from one or more previous stage separation processes.

33. "Separator": A device, unit, or equipment used to separate a gas, liquid, or solid stream from a multicomponent stream.

34. "Smokeless flare": A smokeless flare is one which does not have any visible smoke.

35. "Storage tank": Any storage container, reservoir or tank used for the storage of organic liquids

36. "Submerged fill pipe": Any fill pipe or discharge nozzle which meets any of the following conditions:

a. The discharge opening is entirely submerged when the liquid level is six (6) inches above the bottom of the container.

b. When applied to a container which is loaded from the side, the discharge opening is entirely submerged when the liquid level is 18 inches above the bottom of the container.

c. When applied to a container which is loaded from the bottom, the discharge opening is entirely submerged when the liquid level is six (6) inches above the bottom of the container.

37. "Sump": A receptacle, formed primarily of earthen materials, although it may be lined with artificial materials, in continuous use for separating oil, water, sand or other material in petroleum production operations.

38. "Tank": A container, constructed primarily of nonearthen materials, used for the purpose of storing or holding petroleum material, or for the purpose of separating water and/or gas from petroleum material.

39. "Tank battery": Any tank, or any aggregation of tanks. An aggregation of tanks will be considered a tank battery only if the tanks are located so that no one tank is more than 150 feet from any other tank, edge to edge.

40. "Vapor loss control efficiency": A comparison of controlled emissions to those emissions which would occur from a geometrically similar fixed or cone roof tank in the same product service without a vapor control system. Base line emissions shall be calculated by using the criteria outlined in EPA document AP-42.

41. "Vapor recovery system": Any reactive organic compound vapor control system which is designed to prevent the release or venting of reactive organic compound gases to the atmosphere under normal operating conditions.

42. "Wash tank": Any tank used for the purpose of the primary separation of crude oil from petroleum material.

43. "Wastewater separator": Any mechanical device used to separate crude oil and other material from produced water in petroleum production operations.

44. "Well cellar": A lined or unlined area around one or more oil wells, allowing access to the wellhead components for servicing and/or installation of blowout prevention equipment.

Ventura
9/14/92

Rule 71.1. Crude Oil Production and Separation (Adopted 6/20/78, Revised 3/27/79, 7/10/79, 11/20/79, 7/5/83, 10/4/88, 6/16/92)

A. Applicability

The provisions of this rule shall apply to equipment used in the production, gathering, storage, processing, and separation of crude oil and natural gas from any petroleum production permit unit prior to custody transfer.

B. Requirements - Storage Tanks

1. No person shall place, hold or store any crude oil in any tank battery unless all storage tanks in the tank battery, including wash tanks, produced water tanks and wastewater separators are equipped with a properly installed, maintained, and operated vapor recovery system. The vapor disposal portion of the vapor recovery system shall consist of one of the following:

   a. A system which directs all vapors to a fuel gas system, a sales gas system, or to a flare that combusts reactive organic compounds.

   b. Any other system which processes all vapors and has a reactive organic compound vapor destruction or removal efficiency of at least 90 percent by weight.

2. Any tank exempt from Section B.1 of this rule pursuant to the provisions of Section D.1. below shall comply with the following provisions:

   a. All tanks shall be equipped with a solid roof and shall be maintained in good condition.

   b. All tanks shall be equipped with sealed hatches and pressure-vacuum relief valves. Each pressure-vacuum relief valve shall be set to at least 90 percent of the maximum allowable pressure and vacuum rating for the tank.

3. Portable tanks used to store or hold crude oil shall be equipped with both a closed cover that is impermeable to ROC vapors and a pressure-vacuum valve set by the manufacturer or according to the manufacturer's recommendations. A portable tank shall be defined as a tank that can be moved from one location to another by attachment to a motor vehicle without having to be dismantled.

C. Requirements - Produced Gas

1. The emissions of produced gas shall be controlled at all times using a properly maintained and operated system that directs all produced gas, except gas used in a tank battery vapor recovery system, to one of the following:

   a. A fuel or sales gas system

b. A flare that combusts reactive organic compounds

c. A device with an ROC destruction or removal efficiency of at least 90 percent by weight.

2. The provisions of Subsection C.1. shall not apply to the following:

a. Wells which are undergoing routine maintenance, or

b. Exploratory wells (during the first two weeks of production) if the composition of the produced gas is unknown (i.e., new reservoir) and there are no existing gas handling systems within 150 feet of the well.

D. Exemptions

1. The provisions of Subsection B.1 of this rule shall not apply to any of the following:

a. Any tank battery, including wash tanks, produced water tanks and wastewater separators, installed prior to June 20, 1978, for the purpose of processing crude oil having a modified Reid vapor pressure at the initial storage tank entry point of less than 0.5 psia.

b. Any temporary tank battery, including wash tanks, produced water tanks and wastewater separators, holding or storing crude oil from any new crude oil production well, for a period of up to ninety days following initial production from that well.

c. Any portable tank if all the following conditions are met:

(1) The tank is not used to increase the storage capacity of an existing tank battery.

(2) The tank is not located within 150 feet of a tank battery that is subject to the provisions of Subsection B.1.

(3) The tank is being used during maintenance activity at a tank battery or well and has not held or stored crude oil for more than 60 days.

2. The provisions of Subsection B.1 of this rule shall not apply during maintenance operations on vapor recovery systems or tank batteries, including wash tanks, produced water tanks and wastewater separators, if the Air Pollution Control District is notified verbally at least 24 hours prior to the maintenance operation and if the maintenance operation will take no more than 24 hours to complete.

3. The provisions of Subsections B.1 and B.2 of this rule shall not apply to any tank if the ROC content of the liquid entering the tank is less than 5 milligrams per liter.

4. The provisions of Subsections B.1 and B.2 of this rule shall not apply to any tank when it has been demonstrated to the satisfaction of the Air Pollution Control Officer that the maximum degree of achievable emission reduction has already taken place. Each demonstration shall include a cost evaluation conducted in accordance with "BACT Cost Effectiveness Procedures and Screening Levels for Costs" adopted by the Air Pollution Control Board on December 20, 1988.

E. Recordkeeping Requirements

1. Any person wishing to operate pursuant to the provisions of Section D.1.a of this rule shall keep records to substantiate the applicability of that subsection. Such records shall include, for any crude oil, the modified Reid vapor pressure in psi absolute at the initial storage tank entry point. Records shall be made available to the Air Pollution Control Officer upon request and shall be maintained for a period of four (4) years.

2. Any person claiming an exemption pursuant to Subsection D.3 of this rule may be required to justify the exemption every twelve (12) months. Such justification shall be submitted to the Air Pollution Control Officer, in writing, upon request and shall include the results of an independent laboratory analysis.

3. Any person claiming an exemption pursuant to Subsection D.1.c for any portable tank shall maintain records indicating the number of days the tank has stored or held crude oil during the maintenance operation.

F. Test Methods

1. The vapor removal efficiency in Subsections B.1. and C.1. shall be determined as follows:

   a. Measurement of ROC vapor concentration shall be determined by EPA Method 25, EPA Method 25A, or EPA Method 18.

   b. Measurement of vapor flow through pipes shall be determined by EPA Method 2A, EPA Method 2B, or EPA Method 2D.

2. The modified Reid vapor pressure shall be determined using Test Method for Vapor Pressure for Petroleum Products, ASTM D 323-82 conducted at the sample crude oil temperature equal to the temperature of the crude oil at the storage tank entry point.

3. The ROC content of crude oil in milligrams per liter shall be determined by EPA Method 8015. Samples will be analyzed using purge and trap (EPA Method 5030), and stock standards will be

prepared from gasoline. Sampling shall occur at the entry point of the device.

Amended
10/16/90

Rule 71.2. Storage of Reactive Organic Compound Liquids (Adopted 6/20/78, Revised 7/10/79, 7/5/83, 11/22/88, 9/26/89)

A. Applicability

The provisions of this rule shall apply to equipment used to store crude oil or reactive organic compound (ROC) liquids with a modified Reid vapor pressure greater psia. The provisions of this rule shall not apply to any storage equipment subject to Rule 71.1, to any gasoline storage container with a capacity equal to or less than 40,000 gallons, or to any other storage container with a capacity equal to or less than 5,000 gallons.

B. Storage Tank Requirements

1. Storage Tanks Equal to or Less Than 40,000 Gallons: A person shall not store crude oil or other reactive organic compound liquids in any storage tank with a capacity less than, or equal to 40,000 gallons unless such tank is equipped with at least one of the following:

   a. A submerged fill pipe, or

   b. One of the vapor loss control devices listed in Section C.

2. Above Ground Storage Tanks Equal to or Greater Than 10,000 Gallons and Less Than 20,000 Gallons for Crude Oil and ROC Liquids with a Modified Reid Vapor Pressure of 1.5 psia or Greater: A person shall not store crude oil or reactive organic compound liquids with a modified Reid vapor pressure equal to or greater than 1.5 psia in any above ground storage tank with a capacity equal to or greater than 10,000 gallons, and less than 20,000 gallons, unless such tank is equipped with one of the following:

   a. A pressure-vacuum relief valve with minimum pressure and vacuum settings of 90 percent of the maximum, safe pressure and vacuum ratings of the container. The pressure-vacuum relief valve shall be properly installed, properly maintained, and in good operating order; or

   b. One of the vapor loss control devices in Section C.

3. Storage Tanks Equal to or Greater Than 20,000 Gallons and Less Than 40,000 Gallons for Crude Oil and ROC Liquids with a Modified RVP of 1.5 psia or Greater: A person shall not store crude oil or reactive organic compound liquids with a modified Reid vapor pressure equal to or greater than 1.5 psia in any storage tank with a capacity of 20,000 gallons or greater but less than 40,000 gallons without using one of the vapor control devices in Section C.

4. Storage Tanks Equal to or Greater Than 40,000 Gallons for Crude Oil and ROC Liquids with a Modified RVP of 0.5 psia or Greater: A person shall not store crude oil or reactive organic compound

liquids with a modified Reid vapor pressure equal to or greater than 0.5 psia in any storage tanks with a capacity equal to or greater than 40,000 gallons without using one of the vapor control devices in Section C.

5. Organic Liquid Storage Tanks for Crude Oil and ROC Liquids with mRVP of 11 psia or Greater: A person shall not store organic liquids with a modified Reid vapor pressure greater than 11 psia in any tank unless such tank is:

   a. A pressure tank maintaining working pressures sufficient at all times to prevent organic vapor loss to the atmosphere, or

   b. Designed and equipped with a vapor loss control device in Subsection C.3 or C.4.

   A person shall not use an external floating roof tank or an internal floating roof tank to store organic liquids with a modified Reid vapor pressure of 11 psia, or greater.

C. Vapor Loss Control Devices

The following are the vapor loss control devices that satisfy the storage tank requirements of Section B.

1. External Floating Roof: A floating roof, consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and is properly installed, properly maintained and in good operating order. External floating roof seals shall comply with the criteria specified in Section D and Section E.

2. Internal Floating Roof: A fixed roof tank with an internal-floating-type cover consisting of a pan, pontoon, or double-deck that rests on the liquid surface and is properly installed, properly maintained and in good operating order. Internal floating roof seals shall comply with the criteria specified in Section D and Section F.

3. Vapor Recovery System: A closed-type vapor recovery system, consisting of a system capable of collecting all reactive organic compound vapors and gases, and one of the following: a vapor return or condensation system that connects to a gas pipeline distribution system; or a disposal system capable of processing such vapors and gases, so as to prevent their emission to the atmosphere at a vapor loss control efficiency of at least 95 percent by weight.

   Vapor recovery systems shall comply with the following requirements:

   a. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling.

b. All piping, valves and fittings shall be designed and constructed in a leak-free condition, and shall be maintained and operated in a leak-free condition so as to minimize the release of reactive organic compound vapors.

c. Pressure vacuum valves on above ground tanks shall be set to within 10 percent of the maximum allowable working pressure of the tank, and shall be properly installed, properly maintained, and in good operating order, and shall remain in a leak-free condition except when the operating pressure exceeds the valve set pressure.

4. Other Vapor Loss Control Device: Any other equipment having a vapor loss control efficiency of at least 95% by weight, of reactive organic compound vapors, provided an application for installation of such equipment is submitted to and approved by the Air Pollution Control Officer.

D. Requirements for All Closure Devices

The closure device on any external floating roof tank or any internal floating roof tank shall meet the following criteria:

1. Secondary seals shall extend from the roof to the tank shell, shall not be attached to primary seals, and shall not be shoe-mounted.

2. All openings in the roof, except pressure vacuum valves and automatic bleeder vents, shall provide a projection at least two (2) inches below the liquid surface to prevent belching of liquid and to reduce escaping vapors. All openings and fittings shall be covered and shall have gaskets at all times with no visible gap, except when in use. For inaccessible openings on internal floating roof tanks, there shall be no visible gaps as viewed from the fixed roof manway, except when the opening is in use.

3. Pressure-vacuum valves shall be set to within 10 percent of the maximum allowable working pressure of the roof, and shall be properly installed, properly maintained, and in good operating order, and shall remain in a leak-free condition except when operating pressure exceeds the valve set pressure.

4. Solid sampling or gauging wells, and similar fixed projections through a floating roof such as an anti-rotational pipe, shall meet the following conditions:

a. The well shall provide a projection at least two (2) inches below the liquid surface.

b. The well shall be equipped with a cover, seal or lid, which shall at all times be in a closed position with no gap exceeding 1/8 inch, except when the well is in use.

c. The gap between the well and the roof shall be added to the gaps measured to determine compliance of the secondary seal and in no case shall exceed 1/2 inch.

5. Slotted sampling or gauging wells shall meet the following conditions:

a. The well shall provide a projection at least two (2) inches below the liquid surface.

b. The well shall have an internal float designed to minimize the gap between the float and the well, provided that the gap in no case exceeds 1/2 inch.

c. The gap between the well and the roof shall be added to the gaps measured to determine compliance of the secondary seal and in no case shall exceed 1/2 inch.

6. Any emergency roof drain that drains back to the stored liquid shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least 90 percent of the area of the opening.

7. Any metallic shoe-type seal for which an Authority to Construct was granted on or after October 4, 1989 shall meet the following conditions:

a. One end of the shoe shall extend at least two (2) inches into the stored liquid and the other end shall extend a minimum vertical distance of 24 inches above the liquid surface.

b. The gap between the shoe and tank wall shall not exceed three (3) inches for a welded tank or five (5) inches for a riveted tank at any point from the liquid surface to 18 inches above it.

8. Any external or internal floating roof for which an Authority to Construct was granted on or after October 4, 1989 shall have at least four (4) ninety degree radial vapor barriers to minimize wind effects. An alternative device may be approved in writing by the APCO provided such device is demonstrated to be equivalent in minimizing wind effects.

E. External Floating Roof Requirements

External floating roofs shall meet the following conditions in addition to the closure device requirements in Section D.

1. There shall be no holes or tears in, or openings in the seal or seal fabric which allow the emission of reactive organic compound vapors through the secondary seal or in the primary seal envelope surrounding the annular vapor space enclosed by the roof edge, seal fabric and secondary seal.

2. Welded Tanks with Primary Metallic Shoe Seals:

   a. The cumulative length of all gaps between the primary seal and the tank shell exceeding 1/2 inch shall not be more than 10 percent, and exceeding 1/8 inch shall not be more than 40 percent of the tank circumference.

   b. No gap between the tank shell and the primary seal shall exceed 1-1/2 inches; no continuous gap greater than 1/8 inch shall exceed 10 percent of the circumference of the tank.

   c. The cumulative length of all gaps between the secondary seal and the tank shell exceeding 1/8 inch shall not be more than 5 percent of the tank circumference.

   d. No gap between the tank shell and the secondary seal shall exceed 1/2 inch.

   e. The secondary seal shall allow easy insertion of probes up to 1-1/2 inches in width in order to measure gaps in the primary seal.

3. Tanks with Primary Resilient-Toroid Seals:

   a. The cumulative length of all gaps between the tank shell and the primary or secondary seal exceeding 1/8 inch shall not be more than 5 percent of the circumference of the tank.

   b. No gap between the tank shell and the primary or secondary seal shall exceed 1/2 inch.

   c. The secondary seal shall allow easy insertion of probes up to 1/2 inch in width in order to measure gaps in the primary seal.

   d. The primary resilient toroid seal shall be liquid-mounted.

4. Riveted Tanks with Primary Metallic Shoe Seals:

   a. Gaps between the tank shell and the primary seal shall not exceed 2-1/2 inches. The cumulative length of all primary seal gaps exceeding 1-1/2 inches shall be not more than 10 percent of the circumference of the tank.

   b. The secondary seal shall consist of at least two sealing surfaces, such that the sealing surfaces prevent the emission of reactive organic compounds around the rivets. Serrated sealing surfaces are allowable if the length of serration does not exceed 6 inches. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. The cumulative length of all secondary seal gaps exceeding 1/8 inch shall be not more than five (5) percent of the circumference.

c. The secondary seal shall allow easy insertion of probes up to 1-1/2 inches in width in order to measure gaps in the primary seal.

5. Welded Tanks with Zero Gap Secondary Seals: Any secondary seal where installation or retrofit on a welded tank for which an Authority to Construct was granted on or after October 4, 1989 shall be a zero gap secondary seal. A secondary seal shall be considered to be retrofitted if at least a cumulative fifty percent of the circumference of the seal is replaced on or after October 4, 1989. A zero gap secondary seal shall meet the following conditions:

   a. No gap between the tank shell and the primary seal shall exceed 1-1/2 inches. No continuous gap in the primary seal greater than 1/8 inch shall exceed 10 percent of the circumference of the tank. The cumulative length of all primary seal gaps exceeding 1/2 inch shall be not more than 10 percent of the circumference and the cumulative length of all primary seal gaps exceeding 1/8 inch shall be not more than 40 percent of the circumference.

   b. No gap between the tank shell and the secondary seal shall exceed 0.06 inch. The cumulative length of all secondary seal gaps exceeding 0.02 inch shall be not more than five (5) percent of the circumference of the tank excluding gaps less than two (2) inches from vertical weld seams.

6. Primary Seal Inspection for External Floating Roof Tanks (Selected Locations): The primary seal envelope shall be made available for unobstructed inspection by the APCO on an annual basis at four locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, eight (8) such locations shall be made available; in all other cases, a minimum of four (4) but no more than eight (8) such locations shall be made available, except if any violations are suspected, the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference.

7. Primary Seal Inspection for External Floating Roof Tanks (Full Circumference): For tanks with secondary seals, the primary seal envelope shall be made available for unobstructed inspection by the APCO for the full circumference at the following times:

   a. Prior to installation of the secondary seal.

   b. At least every five (5) years, or every ten (10) years if the seal is a zero gap secondary seal which is installed pursuant to Subsection E.5.

   c. If the secondary seal is voluntarily removed by the owner or operator, it shall be made available for such inspection at that time. The owner or operator shall provide notification

to the APCO no less than 72 hours prior to voluntary removal of the secondary seal.

F. Internal Floating Roof Requirements

Internal floating roofs shall meet the following conditions in addition to the closure device requirements in Section D.

1. For any fixed roof tank with a new or replaced internal-floating-type cover for which an Authority to Construct was granted on or after October 4, 1989, the closure device shall consist of one of the following:

   a. A liquid mounted primary seal only, mounted in full contact with the liquid in the annular space between the tank shell and floating roof, or

   b. Two seals, one above the other, the one below shall be referred to as the primary seal and the one above shall be referred to as the secondary seal.

2. There shall be no holes or tears in, or other openings which allow the emission of reactive organic compound vapors through the primary or secondary seals.

3. For any fixed roof tank using an internal floating-type-cover, the internal-floating-type cover shall be made available for inspection each time the tank is emptied and gas freed. Visual inspections through the manholes or roof hatches on the fixed roof shall be made available on an annual basis, provided such an inspection can be conducted safely. The APCO shall be notified at least 72 hours in advance of each gas freeing.

G. Exemptions

1. The provisions of this rule shall not apply to:

   a. Any storage tank having a capacity of less than or equal to 5,000 gallons.

   b. Any storage tank containing a reactive organic compound liquid having a modified Reid vapor pressure less than 0.5 psia.

      Any person claiming exemption for a storage tank pursuant to this Subsection must maintain adequate records demonstrating that the modified Reid vapor pressure of all products stored in that tank is less than 0.5 psia.

   c. Crude oil storage tanks subject to Rule 71.1, Crude Oil Production and Separation.

   d. Gasoline storage tanks with equal to or less than 40,000 gallons capacity subject to Rule 70, Storage and Transfer of

Gasoline.

2. The provisions of Subsections B.3 and B.4 shall not apply to an emergency standby tank not equipped with a vapor loss control device when:

   a. The tank is drained of reactive organic compound liquids, or

   b. A breakdown occurs to the primary tank and the following conditions are met:

      1) The breakdown is reported as soon as reasonably possible but no later than four (4) hours after its detection.

      2) Emissions resulting from the operation of the standby tank shall be minimized.

      3) Operation of the standby tank shall not occur beyond the period of the primary tank's emergency breakdown and shall not occur more than 15 days per year.

3. The provisions of Sections C, D, E, and F shall not apply to out-of-service or empty storage tanks when undergoing cleaning, stock change, tank and roof repairs or removal of contaminated stock provided that the following is accomplished:

   a. At least 72 hours prior to such work being done, written notice is received by the APCO.

   b. The tank is in compliance with these Rules prior to notification.

   c. For floating roof tanks, when the floating roof is resting on the leg supports, the process of filling, emptying, and refilling shall be continuous and shall be accomplished as rapidly as possible. Emissions shall be minimized during the process of filling, emptying, and refilling.

   d. Vapor recovery shall be used on tanks so equipped during filling or flushing and emptying procedures prior to opening tanks for cleanout.

   e. District is notified when returning a tank to service after the above listed work has been completed.

4. The provisions of Sections C, D, E, and F, shall not apply to in-service floating roof tanks undergoing preventive maintenance, including but not limited to roof repair, primary seal inspection, or removal and installation of a secondary seal, provided that the following conditions are met:

Ventura

a. At least 72 hours prior to such work being done, written notice is received by the APCO.

b. The tank is in compliance with these Rules prior to notification.

c. Product shall move neither in nor out of the storage tank and emissions shall be minimized.

d. If an Authority to Construct is required, in accordance with Rule 10.A, then one shall be obtained prior to commencing work.

e. The time of exemption allowed under this section shall not exceed 72 hours.

5. The provisions of Subsection C.3 shall not apply to in-service tanks undergoing preventive maintenance, including but not limited to repair of regulators, fittings, deck components, hatches, valves, flame arrestors, or compressors, provided that the following conditions are met:

a. At least 72 hours prior to such work being done, written notice is received by the APCO.

b. The tank is in compliance with these Rules prior to notification.

c. District is notified when preventive maintenance work is completed.

d. Emissions are minimized during maintenance operations.

e. The time of exemption allowed under this section shall not exceed 24 hours.

H. Inspection and Reporting Requirements

1. For all primary seals, actual gap measurements shall be recorded upon installation or replacement of primary seals, or prior to installation of secondary seals, and at least every five (5) years thereafter. If the secondary seal is a "zero gap seal" as per Subsection E.5, then actual gap measurements of the primary seal shall be recorded at least every 10 years. For all secondary seals, actual gap measurements shall be recorded on an annual basis.

2. The results of each inspection shall be reported to the APCO within 30 calendar days after the inspection date.

I. Recordkeeping Requirements

Ventura

1. The operator of any tank subject to this rule shall maintain the following records:

   a. Type of liquid stored in each tank, and the modified Reid vapor pressure ranges of such liquids.

   b. The inspections reports required by Section H. Such records shall contain, at a minimum, the following information:

      1) Date of inspection and initials of inspector.

      2) Actual gap measurements between the tank shell and seals.

      3) Data, supported by calculations as necessary, to demonstrate compliance with the requirements of this rule.

      4) Any corrective actions or repairs taken to comply with the requirements of this rule and the date these actions were taken.

   c. The maintenance records where excess emissions occur during operations exempted by Subsections G.3, G.4, and G.5. These records contain, at a minimum, the following:

      1) Permit number, tank identification, type of vapor controls, and initials of personnel performing maintenance.

      2) Description of specific maintenance procedure performed.

      3) Estimate of excess emissions caused by maintenance procedure and how determined.

      4) Start and finish times and dates of maintenance procedure.

   d. The breakdown records where excess emissions occur during use of emergency standby tanks allowed by Section G.2.b. These records shall contain, at a minimum, date, time and duration of breakdown and calculation of excess emissions resulting from the breakdown.

2. Records shall be maintained for a period of at least four (4) years from the date of each entry, and such records shall be made available to the APCO upon request.

J. Test Method

1. The vapor pressure of petroleum products shall be measured using a Reid vapor pressure method at product storage temperature. The Reid Method is defined by the ASTM Method No. D-323-82 Volume 5.01,

Section 5. Organic liquids listed in Attachment 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the tank in which it is stored provided the actual storage temperature does not exceed the corresponding maximum temperature listed.

2. The test methods used for measuring the vapor loss control efficiency in subsections C.3 and C.4 shall be as follows:

   a. Measurement of vapor flow through pipes shall be determined by EPA Method 2A.

   b. Measurement of ROC vapor concentration shall be determined by EPA Method 25A or EPA Method 25B.

K. Statement of Applicability

No later than April 4, 1990, the owner or operator of any storage tank subject to this rule shall submit the following information to the APCO for each storage tank subject to this rule:

1. The location of the storage tank and APCD Permit to Operate number for the storage tank.

2. The product and modified Reid vapor pressure of the product typically stored.

3. The current compliance status of the storage tank with respect to the requirements of this rule.

4. For storage tanks with external floating roofs or internal floating roofs, the type of tank (welded or riveted), and the type of roof seals (primary and secondary).

L. Violations

Failure to comply with any provision of this rule shall constitute a violation of this rule. Each leak discovered by District personnel from equipment required to be leak-free shall constitute a violation of this rule.

M. Increments of Progress

Any person required to modify or replace an existing storage tank to comply with this rule shall submit a complete Authority to Construct application to the APCO before April 4, 1990, and shall submit to the APCO an application for a Permit to Operate and demonstrate final compliance before April 4, 1991.

ATTACHMENT 1

STORAGE TEMPERATURE VERSUS VAPOR PRESSURE

Organic Liquids	Reference Property Gravity °API	IBP °F	Max Temp. °F Not to Exceed 0.5 psia	1.5 psia
Middle Distillates				
Kerosene	42.5	350	195	250
Diesel	36.4	372	230	290
Gas Oil	26.2	390	249	310
Stove Oil	23	421	275	340
Jet Fuels				
JP-1	43.1	330	165	230
JP-3	54.7	110	--	25
JP-4	51.5	150	20	68
JP-5	39.6	355	205	260
JP-7	44-50	360	205	260
Fuel Oil				
No. 1	42.5	350	195	250
No. 2	36.4	372	230	290
No. 3	26.2	390	249	310
No. 4	23	421	275	340
No. 5	19.9	560	380	465
Residual	19-27		405	--
No. 6	16.2	625	450	--
Asphalts				
60-100 pen.	--	--	490	550
120-150 pen.	--	--	450	500
200-300 pen.	--	--	360	420

IBP = Initial Boiling Point

ATTACHMENT 1
(Continued)

Organic Compounds	Reference Properties Density lb/gal	Gravity °API	IBP °F	Max. Temp. °F Not to Exceed 0.5 (psia)	1.5 (psia)
Acetone	6.6	47	133	--	35
Acrylonitrile	6.8	41.8	173	30	62
Benzene	7.4	27.7	176	34	70
Carbon Disulfide	10.6	22.1	116	--	10
Carbon Tetrachloride	13.4	--	170	20	63
Chloroform	12.5	--	142	--	40
Cyclohexane	6.5	49.7	177	30	65
1,2 Dichloroethane	10.5	--	180	35	75
Ethyl Acetate	7.5	23.6	171	38	70
Ethyl Alcohol	6.6	47.0	173	55	85
Isopropyl Alcohol	6.6	47.0	181	62	95
Methyl Alcohol	6.6	47.0	148	30	62
Methyl Ethyl Ketone	6.7	44.3	175	30	70
Toluene	7.3	30	231	75	120
Vinylacetate	7.8	19.6	163	30	65

IBP = Initial Boiling Point

Ventura
9/14/92

Rule 71.3 Transfer of Reactive Organic Compound Liquids (Adopted 6/20/78, Revised 9/11/90, 6/16/92)

A. Applicability

The provisions of this rule shall apply to equipment used to transfer reactive organic compound (ROC) liquids with a Modified Reid Vapor Pressure (MRVP) greater than or equal to 0.5 psia. The provisions of this rule shall not apply to the transfer of gasoline or the transfer of ROC liquids via pipeline.

B. Requirements - Loading Facilities

1. No person shall transfer ROC liquids into any ROC liquid delivery vessel without either using a submerged fill pipe or bottom loading.

2. No person shall transfer ROC liquids into any ROC liquid delivery vessel from a loading facility where the total ROC liquid throughput exceeds or has exceeded after January 1, 1990, 20,000 gallons per day of ROC liquid with a MRVP of 1.5 psia or higher or 150,000 gallons per year of ROC liquid with a MRVP of 0.5 psia or higher without:

a. Using a bottom-loaded vapor recovery system that prevents the displaced vapors during loading from being released into the atmosphere. The vapor recovery system shall be capable of collecting all reactive organic compound vapors, and shall have one of the following:

1) A vapor return or condensation system that connects to a gas pipeline recovery and distribution system, or

2) A vapor disposal system capable of processing such vapors and gases with a vapor destruction or vapor removal efficiency of at least 90 percent by weight.

b. Using one of the following devices to prevent overfill:

1) A primary overfill protection system consisting of a preset fill meter with automatic flow shutoff and a secondary overfill protection system consisting of a liquid level sensor with the ability to signal high level to activate a control valve to shut off flow, or

2) A combination of overfill devices and/or procedures, submitted in writing to the APCO, that is at least as effective in preventing

overfill spillage as the system in Subsection B.2.b.1.

c. Using either a block and bleed valve system or other connectors with equivalent spill prevention characteristics.

3. Any loading operation equipment, vapor recovery system, or other equipment required by this rule shall not leak. The vapor recovery system shall be operated and maintained so that it does not cause the pressure in any delivery vessel to exceed 18 inches water gauge or the vacuum to exceed 6 inches water gauge.

C. Requirements - ROC Liquid Delivery Vessels (Effective June 1, 1991)

1. No person shall transfer ROC liquids into an ROC liquid delivery vessel using loading equipment having a vapor recovery system unless the delivery vessel is leak free and is permanently equipped with:

a. A properly installed vapor recovery system that is compatible with the loading facility.

b. A pressure-vacuum relief device for each compartment that is set at 90 percent of the maximum, safe pressure and vacuum ratings of the vessel.

c. A secondary overfill protection system compatible with the loading operation secondary overfill protection system or equivalent secondary overfill protection system, if required by Subsection B.2.b of this rule.

d. A loading connector/adapter that is compatible with those required at the loading facility.

2. No person shall fill an ROC liquid delivery vessel required to have a vapor recovery system by Subsection C.1 of this rule unless the vapor recovery system is properly operating, properly maintained, does not leak, and all hatches are closed during transfer operations.

D. Operator Inspection and Repair Requirements

1. The operator of any equipment subject to Subsection B.2 of this rule shall annually monitor one complete loading operation for leaks and for proper operation of the loading equipment and delivery vessel vapor recovery and overfill protection systems. Operators shall use EPA Method 21 for monitoring of leaks during annual inspections.

2. The operator of any equipment subject to Subsection B.2 of this rule shall notify the District no later than 72 hours after the inspection:

   a. If any leaks were detected,

   b. If the vapor recovery system, including any flare or incinerator, was not operating properly,

   c. If any hatches were opened during the filling operation,

   d. If the overfill prevention systems malfunctioned, or

   e. If any spillage of ROC liquid occurred.

3. Any leak shall be repaired to a leak free state and any vapor recovery system or overfill prevention system found malfunctioning shall be restored to a properly operating condition. These repairs shall be done as soon as practicable but no later than 5 calendar days from the detection date.

E. Exemptions

1. The provisions of this rule shall not apply to any equipment that transfers an ROC liquid with a modified Reid vapor pressure of less than 0.5 psia. Any person claiming this exemption must maintain adequate records demonstrating that the modified Reid vapor pressure of all products transferred is less than 0.5 psia.

2. The requirements of Subsection B.2 shall not apply to any loading equipment that transfers crude oil from storage tanks that are exempt from the vapor recovery requirements of Section B.1. of Rule 71.1, Crude Oil Production and Separation.

3. The requirements of Subsection B.2 shall not apply to a loading facility that transfers crude oil into any ROC delivery vessel from shipping tanks located more than 1200 feet from the loading facility. This exemption shall apply only to those loading facilities constructed prior to July 1, 1990.

4. The provisions of this rule shall not apply during the calibration of the marker inside a cargo tank when done by the Ventura County Department of Weights and Measures in accordance with their procedures.

F. Recordkeeping Requirements (Effective June 1, 1991)

1. The operator of any loading equipment subject to Subsection B.2 of this rule shall maintain a record of inspections

required by Section D of this rule and shall record, at a minimum, the following:

a. Date of inspection and operator's initials.

b. Name and location of loading equipment and amount of ROC liquid transferred.

c. Description of any leak or malfunction of the vapor recovery or overfill prevention systems.

d. Date component was repaired and type of repair, if applicable.

e. Whether or not delivery vessels hatches are closed during filling and if any spillage occurred.

f. Delivery vessel identification and name of delivery company.

Copies of the inspection report shall be retained by the operator for a minimum of 2 years after the date of an entry and shall be made available upon request to District personnel.

2. Any person claiming exemption from the vapor recovery requirements of Subsection B.2 based on the throughput of ROC liquids through the loading equipment shall maintain adequate records to substantiate that exemption that include, at a minimum:

a. Identification and location of all loading facilities where ROC liquids are loaded into an ROC delivery vessel. Indicate and identify if two or more of the loading equipment outlets are located within a circle having a diameter of 300 feet.

b. Record the gallons of ROC liquid loaded into an ROC delivery vessel on a daily basis and on an annual basis for each loading facility exempt from the vapor recovery requirements of Subsection B.2. Include operator's initials, date of loading operation, the MRVP of the liquid being transferred, and method of determining throughput for each loading operation.

3. Any person transferring ROC liquid into a vacuum truck and transporting such liquid that is manifested as required by any federal or state regulations shall record the following:

a. Date of transfer and operator's initials.

b. Location of transfer operation and estimated amount of ROC liquid transferred.

c. Destination of ROC liquid being transferred.

Copies of these records shall be collected and retained by the loading facility operator for a minimum of 2 years after the date of an entry and shall be made available upon request to District personnel.

G. Test Methods

1. The vapor pressure of petroleum products shall be measured using a modified Reid vapor pressure at product transfer temperature. The Reid method is defined by the ASTM Method No. D-323-82 Volume 5.01, Section 5. Organic liquids listed in Attachment 1 of Rule 71.2 shall be deemed exempt from the requirements of this rule if the transfer temperature does not exceed the maximum temperature listed corresponding to 0.5 psia.

2. The test method for determining the vapor removal efficiency in Subsection B.2.a.2) shall be as follows:

   a. Measurement of vapor flow through pipes shall be determined by EPA Method 2A, EPA Method 2B, or EPA Method 2D.

   b. Measurement of ROC vapor concentration shall be determined by EPA Method 25A or EPA Method 25B.

3. Monitoring for gaseous leaks shall be done using an appropriate analyzer calibrated with methane or the alternative screening procedure in EPA Reference Method 21.

H. Violations

1. Failure to comply with any provision of this rule shall constitute a violation of this rule. Each leak discovered by District personnel from equipment required to be leak free shall constitute a violation of this rule.

2. Notifications provided to the District pursuant to Subsection D.2 shall not constitute a violation of this rule.

clean copy Ventura 11/18/93

Rule 71.4 Petroleum Sumps, Pits, Ponds and Well Cellars
(Adopted 10/4/88, Revised 6/16/92, 6/8/93)

A. Applicability

This rule is applicable to sumps, pits, ponds and well cellars at facilities where crude oil or petroleum material is produced, gathered, separated, processed, or stored.

B. Requirements

1. No person shall install, maintain, or operate a first stage production sump.

2. No person shall use a second or third stage sump, a pit or a pond unless the second or third stage sump, pit or pond is equipped with a properly installed and maintained cover which does not leak, which is impermeable to ROC vapors, and which covers at least 90 percent of the liquid surface area of the sump, pit, or pond. All covers shall be closed at all times except during sampling or attended maintenance operations.

3. No person shall store crude oil or petroleum material in a well cellar except during periods of equipment maintenance or well workover. In no case shall storage occur for more than five (5) calendar days.

C. Exemptions

1. The provisions of this rule shall not apply to:

a. Drilling operations pits, if clean-up procedures are implemented within 48 hours after the drilling rig has been removed from the location, if clean-up procedures are completed within fifteen (15) calendar days, and if test production is routed to a closed top tank.

b. Emergency pits and well cellars used in an emergency, if clean-up procedures are implemented within 24 hours after each emergency occurrence and if clean-up procedures are completed within fifteen (15) calendar days.

c. Sumps, pits or ponds, if the ROC content of the liquid entering a sump, pit or pond is less than 5 milligrams per liter.

d. Any sump, pit or pond, when it has been demonstrated to the satisfaction of the Air Pollution Control Officer that the maximum degree of achievable emission reduction has already taken place. Each demonstration shall include a cost effectiveness evaluation conducted in accordance with "BACT Cost Effectiveness Procedures and Screening Levels for Costs" adopted by the Air Pollution Control Board on December 20, 1988.

ATTACHMENT 3B

2. The provisions of Section B.2 of this rule shall not apply during maintenance operations on sumps or pits if the Air Pollution Control District is notified verbally at least 24 hours prior to the maintenance operation, and if the maintenance operation will take no more than 24 hours to complete.

D. Recordkeeping Requirements

1. Any person claiming an exemption from this rule pursuant to Section C.1.c above may be required to justify the exemption every twelve (12) months. Such justification shall be submitted to the Air Pollution Control Officer, in writing, upon request and shall include the results of an independent laboratory analysis.

2. Any person storing crude oil in a well cellar during periods of equipment maintenance or well workover pursuant to Subsection B.3 shall maintain records, which may include but are not limited to workover invoice documents, indicating the date(s) the material was stored in the well cellar or the date(s) of workover activity.

3. Any person claiming an exemption from this rule pursuant to Subsections C.1.a., C.1.b. and C.2. shall maintain records to justify the exemption.

4. Records required pursuant to Subsections D.2 and D.3 shall be made available to the Air Pollution Control Officer upon request.

E. Violations

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

2. Items exempt pursuant to Section C of this Rule shall comply with the provisions of this rule if the conditions of exemption are violated.

F. Test Methods:

The ROC content of crude oil or petroleum material in milligrams per liter shall be determined by EPA Method 8015. Samples will be analyzed using purge and trap (EPA Method 5030), and stock standards will be prepared from gasoline. Sampling shall occur at the entry point of the device.

VENTURA

2/24/95

Rule 71.5 Glycol Dehydrators (Adopted 12/13/94)

A. Applicability

This rule is applicable to glycol dehydrators anywhere natural gas is dehydrated.

B. Requirements

1. No person shall operate a gas dehydration system unless the Reactive Organic Compound (ROC) emissions from the glycol regenerator vents are controlled using one of the following:

a. Condenser/Vapor Disposal: ROC emissions are collected and condensed by a condenser/separator system that directs all uncondensed ROC emissions to a vapor recovery/disposal system. The vapor disposal portion of the system shall consist of one of the following:

1) A system that directs all vapors to a fuel gas system or a sales gas system, or

2) A flare, incinerator, thermal oxidizer or reboiler, which meets the requirements of Subsection B.1.b, below, or

3) Any other system that processes all vapors and has a ROC vapor destruction or removal efficiency of at least 95 percent, by weight. Systems subject to this requirement shall test for compliance upon installation, and not less than once every 24 months thereafter.

b. Flare/Incinerator: All ROC emissions are combusted by a flare or incinerator. This system shall have all of the following features, as a minimum:

1) Operate continually in a smokeless mode.

2) Electronic controlled ignition system with a malfunction alarm system if the pilot flame fails.

3) Liquid knock out system to condense any condensable vapors.

4) Sight glass ports, if the flame is not visible.

c. Any other ROC emission control system that controls glycol regenerator vent ROC emissions by at least 95 percent, averaged over 1 hour or that controls glycol regenerator vent ROC emissions to a level no higher than 1.7 pounds of ROC per million dry standard cubic feet of gas dehydrated, averaged over 1 hour. Systems subject to this requirement shall test for compliance upon installation and not less

than once every 24 months thereafter.

The control efficiency shall be determined by the following:

Measurements of ROC emissions from the uncontrolled vent are compared with measurements of ROC emissions from all vapors emitted from the emission control system under the following similar operating conditions: glycol flowrate, reboiler temperature, gas flowrate, and gas moisture removal efficiency.

2. The condensed hydrocarbon liquid stream from the glycol dehydration vents shall be stored and handled in a manner that will not cause or allow evaporation of ROC into the atmosphere, except as allowed by Section D, Exemptions, of Rule 71.1, Crude Oil Production and Separation.

3. Emission control systems shall be maintained in a leak-free condition.

C. Exemption

The requirements of Section B shall not apply to any glycol dehydrator that is operated less than 200 hours per year, as demonstrated and recorded by the continuous measurement of an operating parameter of the unit or by the cumulative measurement of the operating hours of the unit.

D. Recordkeeping

1. The operator of any glycol dehydrator subject to this rule shall maintain a current file of the following information to assist with rule compliance:

   a. Facility name, APCD permit number
   b. Location, size of glycol dehydrator reboiler (MMBTU/hr), amount of gas dehydrated (MMSCFD) and type of glycol used
   c. Description of any installed ROC control system
   d. Flow diagram of dehydrator and any ROC controls
   e. Maintenance records of the ROC control system
   f. Source test reports, as required by Subsections B.1.c or B.1.a.3.

2. Any source claiming the exemption in Section C for units operating less than 200 hours per year shall maintain a monthly record of hours operated.

3. All dated records shall be retained for at least two (2) years from the date of each entry. All records shall be made available to District personnel upon request.

E. Test Methods

1. Glycol Dehydrator Vent Testing:

a. ROC emissions from a glycol dehydrator vent shall be determined by the glycol material balance method described in Subsection E.1.b or according to a test protocol which shall be submitted to the District and approved in writing by the APCO prior to testing. Such protocols shall be suitable to the specific unit tested and shall provide:

1) For the difficulties of determining ROC in the presence of high steam concentrations,

2) Either total capture of condensible and noncondensible exhaust or isokinetic sampling of a representative portion thereof if the the glycol dehydration unit processes 15 MMSCFD or more of natural gas, on a dry basis,

3) For condensation of steam and retention of condensate and a representative portion of noncondensible gas for analysis,

4) For determination of ROC concentration in the noncondensible gas by EPA Method 25, 25A, 25B, or 18,

5) For determination of ROC in condensate by Method 8015 (Total Petroleum Hydrocarbons),

6) For isokinetic sampling and separation of condensibles which conforms to EPA Method 5, and

7) For exhaust flow rate measurements which conform to EPA Method 2 or 2A.

b. The glycol material balance method may be used if a flash tank is operating upstream of the glycol dehydration vent. The purpose of the flash tank is to remove gas from the glycol. This method is based on a material balance calculation using the difference in ROC content between the rich and lean glycol streams. For the purpose of this calculation, glycol shall not be considered to be an ROC. The glycol circulation rate shall be based on the rated pump output and/or flow rate measurements.

Samples shall be collected at process pressures using evacuated stainless steel cylinders connected to bypass loops on the rich and lean glycol lines. The glycol shall be circulated through the cylinders for a minimum of 5 minutes. The liquid and gas phases of the glycol samples shall be analyzed separately, and the volumes of the liquid and gas present in the cylinders shall be measured using the following air displacement apparatus:

1) Place sample cylinder in a vertical configuration with bottom connected to a glycol drain.

2) The top of the cylinder is connected to a three way valve with one exit leading to a tedlar bag for gas collection and the other leading to a 1 liter graduated burette (initially filled with distilled water) followed by a 2 liter separatory funnel.

Gas-phase samples shall be analyzed for nonmethane hydrocarbons (ROC) using gas chromatography (GC) according to EPA Method ASTM E260-91. Gas samples shall be injected directly in the gas chromatograph (GC) followed by a photoionization detector (PID) or flame ionization detector (FID) analyzer.

For the liquid samples, EPA Test Methods SW-846 shall be followed for sample preparation and analysis. Analysis of the sample for ROC content (Total Petroleum Hydrocarbons) shall be determined by EPA Method 8015.

All the C6 through C9 compounds shall be quantified and should include: alkyl pentanes, cyclopentanes, alkyl hexanes, cyclo hexane, benzene, toluene, alkyl benzenes, and xylene.

2. Vapor Disposal System Testing:

The ROC emissions from a vapor disposal system in Subsection B.1.a.3 and the ROC emissions from the emission control system in Subsection B.1.c, shall be determined as follows:

a. Measurement of ROC vapor concentration shall be determined by EPA Method 18, EPA Method 25, or EPA Method 25A.

b. Measurement of vapor flow through pipes shall be determined by EPA Methods 2 or 2A.

F. Violations

Failure to comply with any provision of this rule, including the requirement to maintain records, shall constitute a violation of this rule.

G. Increments of Progress

Any person required to install or replace equipment to comply with this rule shall submit to the APCO a complete application for an Authority to Construct no later than July 1, 1995, and shall submit to the APCO an application for a Permit to Operate and demonstrate compliance no later than July 1, 1996.

ventura

1/28/92

Rule 74.1. Abrasive Blasting (Adopted 7/6/76, Revised 7/5/83, 9/5/89, 11/12/91)

A. Applicability

The provisions of this rule apply to any abrasive blasting operation.

B. Requirements

1. General Provisions

a. Except as provided in Subsections B.1.b, B.2, or B.3, all abrasive blasting operations shall be conducted within a permanent building.

b. An abrasive blasting operation conducted under one or more of the following conditions is not required to be conducted within a permanent building:

1) Steel or iron shot/grit is used exclusively;

2) The item to be blasted exceeds eight feet in any dimension; or

3) The surface being blasted is situated at its permanent location or no further away from its permanent location than is necessary to allow the surface to be blasted.

c. Any abrasive blasting operation conducted in accordance with Subsections B.1.b.2) and B.1.b.3) must use:

1) Wet abrasive blasting;

2) Hydroblasting;

3) Vacuum blasting; or

4) Dry Blasting with certified abrasives.

2. Pavement Marking

Surface preparation for raised traffic delineating markers and pavement marking removal using abrasive blasting shall be performed by wet abrasive blasting, hydroblasting, or vacuum blasting with the following exceptions, for which dry blasting with certified abrasive may be used:

a. Removal or surface preparation for immediate application of pavement markings when less than 1,000 square feet of removal or surface preparation is involved; or

b. **Surface preparation for raised traffic delineating markers when less than 1,000 square feet of surface preparation is involved.**

3. Stucco and Concrete

Abrasive blasting of stucco and concrete shall be performed by wet abrasive blasting, hydroblasting, or vacuum blasting with the following exceptions, for which dry blasting with a certified abrasive may be used:

a. **Window and door returns and frames;**

b. **Eaves, overhangs and ceilings;**

c. **Sweep abrasive blasting except for stucco surfaces;**

d. **Completely shrouded structures or blast areas that effectively control emissions;**

e. Abrasive cleaning operations, other than aggregate exposure or paint removal related to new concrete construction or repair activity, if such operations are performed onsite.

4. Certified Abrasives

Only abrasives certified in accordance with Section 92530 of the California Code of Regulations shall be used for permissible outdoor blasting. Packages or containers for certified abrasives shall be legibly and permanently labeled with each of the following:

a. The manufacturer's name or identification trade name;

b. The grade, weight proportion of components in abrasive blends, brand name of the abrasive, or brand names and grades of components of abrasive blends; and

c. The statement "ARB certified for permissible dry outdoor blasting."

C. Prohibitions

1. Visible Emission Standards

Visible emission evaluation of abrasive blasting operations shall be conducted in accordance with Section 92400 of the California Code of Regulations.

a. No person shall discharge into the atmosphere from any abrasive blasting operation, which is conducted outside a permanent building, any air contaminant for a period or

periods aggregating more than three minutes in any one hour which is:

1) As dark or darker in shade as that designated as No. 2 on the Ringlemann chart, as published by the United States Bureau of Mines, or

2) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection 1.a.1).

b. No person shall discharge into the atmosphere from any abrasive blasting operation, which is conducted within any permanent building, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

1) As dark or darker in shade as that designated as No. 1 on the Ringlemann chart, as published by the United States Bureau of Mines, or

2) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection 1.b.1).

2. Nuisance Prohibition

Compliance with all provisions of this Rule does not exempt any person from complying with District Rule 51, Section 41700 of the Health and Safety code, or any State statutory or common law nuisance prohibition.

D. Definitions

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

1. "Abrasives": Any material used in abrasive blasting operations including but not limited to sand, slag, steel shot, garnet or walnut shells.

2. "Abrasive blasting": The operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against that surface.

3. "Abrasive blasting equipment": Any equipment utilized in abrasive blasting operations.

4. "Air contaminant": As defined in Rule 2 of these Rules.

5. "Certified abrasive": Any abrasive certified by the Air Resources Board (ARB) in accordance with Section 92530 of the California Code of Regulations.

6. "Hydroblasting": Any abrasive blasting using high pressure liquid as the propelling force.

7. "Permanent building": A building used, in whole or in part, for sandblasting operations.

8. "Person": 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 or any officer or employee thereof. "Person" also means the United States Government or its agencies to the extent authorized by federal law.

9. "Sandblasting": Abrasive blasting.

10. "Steel or iron shot/grit": Abrasives which meet either the Society of Automotive Engineers (SAE) recommended practices J827 and J444 or Steel Founders' Society of America Standards 21-68 or 20T-66, as those practices and standards existed on 2/24/84.

11. "Sweep abrasive blasting": A method of cleanup performed to achieve surface uniformity or impurity removal after wet blasting, hydroblasting, or vacuum blasting operations.

12. "Vacuum blasting": Any abrasive blasting in which the spent abrasive, surface material, and dust are immediately collected by a vacuum device.

13. "Wet abrasive blasting": Any abrasive blasting using compressed air as the propelling force, which in the judgment of the Air Pollution Control Officer uses an amount of water adequate to minimize the plume to comply with the requirements of Section C.1. of this Rule.

ATTACHMENT 3

RULE 74.2 - ARCHITECTURAL COATINGS

(Adopted 6/19/79, Revised 12/2/80, 9/21/82, 11/22/83, 10/21/86, 4/2/91, 8/11/92, 11/13/2001, 01/12/2010 11/10/2020)

A. Applicability

Except as provided in Subsection F.1, this rule is applicable to any person who markets, supplies, sells, offers for sale, or manufactures, blends, or repackages any architectural coating for use within the District, as well as any person who applies or solicits the application of any architectural coating within the District.

B. Requirements

1. VOC Content Limits: Except as provided in Subsections B.2 and B.3, no person shall: (i) manufacture, blend, or repackage for use within the District; (ii) supply, sell, market, or offer for sale for use within the District; or (iii) solicit for application or apply within the District, any architectural coating with a VOC content in excess of the corresponding limit specified in the following Table. Limits are expressed as VOC Regulatory (unless otherwise specified) thinned to the manufacturer's maximum recommendation, excluding colorant added to the tint bases.

TABLE 2: COATING VOC LIMITS[1]

COATING CATEGORY	CURRENT LIMIT(g/l)	LIMIT (g/l) EFFECTIVE 7/1/2021
Default		50
Flat Coatings	50	
Nonflat Coatings	100	50
Nonflat – High Gloss Coatings	150	50
Specialty Coatings		
Basement Specialty Coatings	400	
Bituminous Roof Coatings	50	
Bituminous Roof Primers	350	
Bond Breakers	350	
Building Envelope Coating		50
Concrete Curing Compounds	350	
Concrete/Masonry Sealers	100	
Driveway Sealer	50	
Dry Fog Coatings	150	50
Faux Finishing Coatings	350	
Fire Resistive Coatings	350	150
Floor Coatings	100	50
Form-Release Compounds	250	100
Graphic Arts Coatings (Sign Paints)	500	
High Temperature Coatings	420	
Industrial Maintenance Coatings	250	

[1] The specified existing limits remain in effect unless revised limits are listed in a subsequent column.

COATING CATEGORY	CURRENT LIMIT(g/l)	LIMIT (g/l) EFFECTIVE 7/1/2021
Low Solids Coatings*	120	
Magnesite Cement Coatings	450	
Mastic Texture Coatings	100	
Metallic Pigmented Coatings	500	
Multi-Color Coatings	250	
Pre-Treatment Wash Primers	420	
Primers, Sealers, and Undercoaters	100	
Reactive Penetrating Sealer	350	
Recycled Coatings	250	
Roof Coatings	50	
Roof Coatings, Aluminum	400	100
Rust Preventative Coatings	250	
Shellacs: Clear	730	
Shellacs: Opaque	550	
Specialty Primers, Sealers & Undercoaters	100	
Stains: Exterior/Dual Stains Interior Stains	250	 100 250
Stone Consolidants	450	
Swimming Pool Coatings	340	
Tile and Stone Sealers		100
Traffic Marking Coatings	100	
Tub and Tile Refinish Coatings	420	
Waterproofing Membranes	250	100
Wood Coatings	275	
Wood Preservatives	350	
Zinc-Rich Primer	340	

2. Coating Categorization and Most Restrictive VOC Limits:
If a coating meets the definition in Section J for one or more specialty coating categories that are listed in Table 1 in Subsection B.1, then that coating is not required to meet the VOC limits for Flat, Nonflat, or Nonflat – High Gloss coatings, but is required to meet the VOC limit for the applicable specialty coating listed in Table 1.

Except for the specialty coating categories specified below, if a coating is recommended for use in more than one of the specialty coating categories listed in Table 1, the most restrictive or lowest VOC content limit shall apply. This requirement applies to: usage recommendations that appear anywhere on the coating container or label, or in any sales, advertising, or technical literature supplied by or available from a manufacturer, their website, or anyone acting on their behalf.

a. Aluminum roof coatings
b. Basement specialty coatings

* Limit is expressed as VOC Actual.

c. Bituminous roof primers
d. High temperature coatings
e. Industrial maintenance coatings
f. Low-solids coatings
g. Metallic pigmented coatings
h. Pretreatment wash primers
i. Reactive penetrating sealers
j. Shellacs
k. Specialty primers, sealers, and undercoaters
l. Stone consolidants
m. Tub and tile refinish coatings
n. Wood coatings
o. Wood preservatives
p. Zinc-rich primers

3. a. Sell-Through of Coatings: A coating manufactured prior to the effective date specified for that coating in Table 1 in Subsection B.1, and that complied with the standards in effect at the time the coating was manufactured, may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, such coating may be applied at any time, both before and after the specified effective date. This Section B.3.a does not apply to any coating or colorant that does not display the date or date-code required by Subsection C.1.

b. Sell-Through of Colorants: A colorant manufactured prior to the effective date specified for that colorant in Table 2 in Subsection B.6, and that complied with the standards in effect at the time the colorant was manufactured, may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, such colorant may be applied at any time, both before and after the specified effective date. This Section B.3.b does not apply to any coating or colorant that does not display the date or date-code required by Subsection C.1.

4. Painting Practices: All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.

5. Thinning: No person who applies or solicits the application of any architectural coating shall apply or solicit the application of any coating that is thinned to exceed the applicable VOC limit specified in Table 1 in Subsection B.1.

6. Colorants: Effective July 1, 2021, no person within the District shall, at the point of sale of any architectural coatings subject to the VOC coating limits in Subsection B.1, add to such coating any colorant that contains VOC in excess of the corresponding applicable VOC limit specified in the following Table 2. Colorant added at the factory or at the worksite is not subject to the VOC limit in Table 2. The point of sale includes retail outlets that add colorant to a coating container to obtain a specific color.

TABLE 2: VOC LIMITS FOR COLORANTS
Grams of VOC per liter of Colorant
Less Water and Less Exempt Compounds

COLORANT ADDED TO	VOC LIMIT
	EFFECTIVE 7/1/2021
Architectural Coating excluding Industrial Maintenance (IM) Coating	50
Solvent-Based IM Coating	600
Waterborne IM Coating	50
Wood Coating	600

7. Coatings Not Listed in Table1 in Subsection B.1: For any coating that does not meet any of the definitions for the specialty coatings categories listed in Table 1 in Subsection B.1, the default VOC content limit shall apply.

8. Industrial Maintenance Coatings: No person shall apply or solicit the application within the District of any industrial maintenance coatings, except non-sacrificial anti-graffiti coatings, for residential use, or for use in areas such as office space and meeting rooms of industrial, commercial or institutional facilities not exposed to such extreme environmental conditions described in the definition of industrial maintenance coatings.

9. A manufacturer, distributor, or seller of a coating that meets the requirements of this rule including container labeling requirements, shall not be liable for noncompliant use unless the manufacturer, distributor, or seller advertises, markets, recommends or specifies the use of that coating in a noncompliant manner, or sells the coating to customers located in the District if such sale is prohibited by the requirements of this rule.

C. Container Labeling Requirements

Each manufacturer of any architectural coating subject to this rule shall display the information listed below on the coating container (or label) in which the coating is sold or distributed:

1. Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the California Air Resources Board or with the Air Pollution Control Officer.

2. Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation shall specify that the coating is to be applied without thinning.

3. VOC Content: Each container of any coating subject to this rule shall display one of the following values in grams of VOC per liter of coating:

   a. Maximum VOC content as determined from all potential product formulations; or

b. VOC content as determined from actual formulation data; or
c. VOC content as determined using the test methods in Subsection G.1.

If the manufacturer does not recommend thinning, the container must display the VOC content, as supplied. If the manufacturer recommends thinning, the container must display the VOC content, including the maximum amount of thinning solvent recommended by the manufacturer.

If the coating is a multi-component product, the container must display the VOC content as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing. VOC content shall be determined as defined in Section J.

4. Industrial Maintenance Coatings**:** The labels of all Industrial Maintenance coatings shall prominently display the statement "For industrial use only" or "For professional use only" or "Not for residential use" or "Not intended for residential use."

5. Rust Preventative Coatings: The labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only." 7. Specialty Primers, Sealers and Undercoaters: The labels of all specialty primers, sealers, and undercoaters shall prominently display the statement "Specialty Primer, Sealer, Undercoater."

6. Stone Consolidants: The labels for all stone consolidants shall display the statement: "Stone Consolidants – For Professional Use Only."

7. Wood Coatings: The labels of all Wood coatings shall prominently display the statement: "For Wood Substrates Only."

8. Zinc-Rich Primers: The labels of all Zinc-Rich primers shall prominently display the statement: "For professional use only" or "For industrial use only" or "Not for residential use" or "Not intended for residential use."

9. Faux Finishing Coatings: The labels of all clear topcoat Faux Finishing coatings shall prominently display the statement: "This product can only be sold or used as part of a Faux Finishing coating system."

10. Reactive Penetrating Sealers: All Reactive Penetrating Sealers shall prominently display the label, "Reactive Penetrating Sealer."

11. Effective July 1, 2021, each manufacturer of any colorant subject to this rule shall display the information listed below on the container (or label) in which the colorant is sold or distributed.

a **Date Code:** The date the colorant was manufactured, or a date code representing the date, shall be indicated on the label, lid, or bottom of the container. If the manufacturer uses a date code for any colorant, the manufacturer shall file an explanation of each code with the APCO.

b. **VOC Content:** Each container of any colorant subject to this rule shall display one of the following values in grams of VOC per liter of colorant:

1) Maximum VOC Content as determined from all product formulations; or
2) VOC Content as determined from actual formulation data; or
3) VOC Content as determined using the test methods in Section G.

If the colorant contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.

D. Calculation of VOC Content: For the purpose of determining compliance with the VOC content limits in Subsection B.1 or B.6, the VOC content of a coating or colorant shall be determined as defined in Section J. The VOC content of low solids coatings shall be determined in accordance with Section J.. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured. If the manufacturer does not recommend thinning, the VOC content shall be calculated for the product as supplied. If the manufacturer recommends thinning, the VOC content shall be calculated including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multi-component product, the VOC content shall be calculated as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content shall include the VOCs emitted during curing.

E. Reporting Requirements

1. Sales Data: A responsible official from each manufacturer shall upon request of the Executive Officer of the Air Resources Board, or his or her delegate, provide data concerning the distribution and sales of architectural coatings. The responsible official shall within 180 days provide information, including but not limited to:

   a. Name and mailing address of the manufacturer;
   b. Name, address, and telephone number of a contact person;
   c. Name of the coating product as it appears on the label and the applicable coating category;
   d. Whether the product is marketed for interior or exterior or both;
   e. Number of gallons sold in California in containers greater than one liter (1.057 quart) and equal to or less than one liter (1.057 quart);
   f. VOC Actual content and VOC Regulatory content in grams per liter. If thinning is recommended, list the VOC Actual content and VOC Regulatory content after maximum recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately. If the coating is a multi-component product, provide the VOC content as mixed or catalyzed.
   g. Names and CAS numbers of the VOC constituents in the product;
   h. Names and CAS numbers of any exempt organic compounds in the product;
   i. Whether the product is marketed as solventborne, waterborne or 100 percent solids;
   j. Description of resin or binder in the product;
   k. Whether the coating is a single-component or multi-component product;
   l. Density of the product in pounds per gallon;
   m. Percent by weight of: solids, all volatile materials, water, and any exempt organic compounds;
   n. Percent by volume of: solids, water, and any exempt organic compounds.

2. All sales data listed above in Subsection E.1 shall be maintained by the responsible official for a minimum of three years. Sales data submitted by the responsible official to the Executive Officer of the ARB may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17, CCR Sections 91000-91022.

F. Exemptions

1. This rule shall not apply to:
   a. Any architectural coating that is supplied, sold, offered for sale or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging;

   b. Any aerosol coating product.

   c. Any facility which applies coatings to test specimens for purposes of research and development of those coatings.

2. Except for the reporting requirements in Section E, this rule shall not apply to any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less, provided the coating containers are not bundled together to be sold as a unit that exceeds one liter (1.057 quart), and provided the label or product literature does not suggest combining multiple containers so that the combination does not exceed one liter (1.057 quart). This restriction against bundling small containers shall not apply to small container kits where each container in the kit is a separate and unique product, and it shall not apply to containers packed together for shipping to a retail outlet.

3. Colorant added at the factory or at the worksite is not subject to the VOC limits in Table 2. In addition, containers of colorant sold at the point of sale for use in the field or on a job site are also not subject to the VOC limits in Table 2.

G. Testing Procedures:

1. Volatile Organic Compound Content: To determine the physical properties of a coating in order to perform the calculations in Section J.69 or J.71, the reference method for VOC content is EPA Method 24, incorporated by reference in Subsection G.4.i, or South Coast AQMD Method 313 “Determination of VOC by Gas Chromatography-Mass Spectrometry” or ASTM Test Method 6886 “Standard Test Method for Determination of the Weight Percent Individual VOCs in Waterborne Air-Dry Coatings by Gas Chromatography”, except as provided in Subsections G.2 and G.3. An alternative method to determine the VOC content of coatings is the SCAQMD Method 304-91 (Revised February 1996), incorporated by reference in Subsection G.4.j. The exempt compounds content shall be determined by test methods referenced in Subsections G.4.f, G.4.g, or G.4.h, as applicable. To determine the VOC content of a coating, the manufacturer may use USEPA Method 24, or an alternative method as provided in Subsection G.2, formulation data, or any reasonable means for predicting that the coating has been formulated as intended (e.g. quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 test results will govern, except when an alternative method is approved as specified in Subsection G.2. The APCO may require the manufacturer to conduct a Method 24 analysis.

2. Alternative Equivalent Test Methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Subsection G.1, after review and approval in writing by the staffs of the District, ARB and United States Environmental Protection Agency, may also be used.

3. Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of U.S. Environmental Protection Agency Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in Section G.4.k. This method has not been approved for methacrylate multicomponent coatings used for purposes other than as traffic marking coatings or for other classes of multicomponent coatings.

4 Test Methods: The following test methods are incorporated by reference herein, and shall be used to test coatings subject to provisions of this rule:

a. Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM Designation E119-18ce1, "Standard Test Methods for Fire Tests of Building Construction Materials," (see Subsection J.xx, Fire-Resistive Coating).

b. Tile and Stone Sealers; Performance criteria for penetration of dense tile shall be determined by ASTM C373 "Standard Test Method for Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products, Ceramic Tiles and Glass Tiles, " or by ASTM C97/C97M "Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone," or by ASTM C642 "Standard Test Method fo Density, Absorption and Voids in Hardened Concrete."

Static coefficient of friction shall be determined by American National Standard Specification for Ceramic Tile (ANSI A137.1).

Water vapor transmission shall be determined by ASTM E96/96M "Standard Test Method for Water Vapor Transmission of Materials."

c. Gloss Determination**:** The gloss of a coating shall be determined by ASTM Designation D523-14(2018), "Standard Test Method for Specular Gloss," (see Subsections J.22, J.39, and J.40, Flat Coating, Nonflat Coating, and Nonflat High Gloss Coating,).

d. Metal Content of Coatings**:** The metallic content of a coating shall be determined by South Coast Air Quality Management District Method 318-95,"Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction," South Coast Air Quality Management District "Laboratory Methods of Analysis for Enforcement Samples," (see Subsections J.3, J.20, and J.37, Aluminum Roof Coatings, Faux Finish Coatings, and Metallic Pigmented Coating).

e. Acid Content of Coatings**:** The acid content of a coating shall be determined by ASTM Designation D1613-06, "Standard Test Method for Acidity in Volatile

Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products," (see Subsection J.46, Pre-Treatment Wash Primers).

f. Exempt Compounds – Siloxanes**:** Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section G by Bay Area Air Quality Management District Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," Bay Area Air Quality Management District Manual of Procedures, Volume III, adopted 11/6/96, (see Subsection J.68, Volatile Organic Compounds, and Subsection G.1).

g. Exempt Compounds – Acetone, Methyl Acetate, t-Butyl Acetate, Parachlorobenzotrifluoride (PCBTF)**:** These exempt compounds shall be analyzed as exempt compounds for compliance with Section G by ASTM D6133-02, Standard Test Method for Acetone, Methyl Acetate, t-Butyl Acetate, or p-Chlorobenzotrifluoride Content of Solventborne and Waterborne Paints, Coatings, Resins and Raw Materials by Direct Injection Into a Gas Chromatograph (see Subsection J.68, Volatile Organic Compounds, and Subsection G.1).

h. Other Exempt Compounds**:** Exempt organic compound content, other than as determined in Subsections G.4.f or G.4.g shall be determined by using CARB Method 432, "Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings (September 12, 1998); or CARB Method 422, "Determination of Volatile Organic Compounds in Emissions from Stationary Sources (January 22, 1987); or South Coast AQMD Method 303-91, "Determination of Exempt Compounds" (February 1993) (see Subsection J.68, Volatile Organic Compounds, and Subsection G.1)

i. VOC Content of Coatings**:** The VOC content of a coating shall be determined by U.S. Environmental Protection Agency Method 24 as it exists in appendix A of 40 Code of Federal Regulations (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings," (see Subsection G.1)

j. Alternative VOC Content of Coatings**:** The VOC content of coatings may be analyzed either by U.S. Environmental Protection Agency Method 24, or South Coast AQMD Method 313 "Determination of VOC by Gas Chromatography-Mass Spectrometry", or South Coast Air Quality Management District Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," South Coast Air Quality Management District "Laboratory Methods of Analysis for Enforcement Samples," (see Subsection G.1)

k. Methacrylate Traffic Marking Coatings**:** The VOC content of methacrylate multi-component coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multi-component Coatings Used as Traffic Marking Coatings, " (September 11, 1998), (see Subsection G.3).

l. Hydrostatic Pressure for Basement Specialty Coatings: ASTM D7088-04, "Standard Practice fro Resistance to Hydrostatic Pressure for Coatings Used in Below-Grade Applications Applied to Masonry" (see Subsection J.6).

m. Tub and Tile Refinish Coating Adhesion: ASTM D4585-/D4585M-18, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D3359-17, "Standard Test Method for Measuring Adhesion by Tape Test" (see Subsection J.65).

n. Tub and Tile Refinish Coating Hardness: ASTM D3363-05 (2011)e2, "Standard Test Method for Film Hardness by Pencil Test" (see Subsection J.65).

o. Tub and Tile Refinish Coating Abrasion Resistance: ASTM D4060-14, "Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser" (see SubsectionJ.65).

p. Tub and Tile Refinish Coating Water Resistance: ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D714-02, "Standard Test Method for Evaluating Degree of Blistering of Paints" (see Subsection J.65).

q. Waterproofing Membrane: ASTM C836-06, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course" (see Subsection J.72).

r. Mold and Mildew Growth for Basement Specialty Coatings: ASTM D3273-00, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber" and ASTM D3274-95, "Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation" (see Subsection J.6).

s. Reactive Penetrating Sealer – Water Repellency: ASTM C67/C67M-18, "Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile"; or ASTM C97/C97M-18, "Standard Test Method for Absorption and Bulk Specific Gravity of Dimension Stone"; or ASTM C140/C140M-18a, "Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units" (See Subsection J.48).

t. Reactive Penetrating Sealer – Water Vapor Transmission: ASTM E96/E96M-05, "Standard Test Method for Water Vapor Transmission of Materials" (See Subsection J.48).

u. Reactive Penetrating Sealer – Chloride Screening Applications: National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures" (See Subsection J.48).

v. Stone Consolidants: ASTM E2167-01, "Standard Guide for Selection and Use of Stone Consolidants" (see Subsection J.60).

w. Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM D4214-98, "Standard Test Methods for Evaluating the Degree of Chalkiness of Exterior Paint Films," (see Subsection J.58).

x. Building Envelope – Air Permeance: ASTM E2178-13, "Standard Test Method for Air Permeance of Building Materials" (See Subsection J.10)

y. Building Envelope – Water Resistivity: ASTM E331-00(2016), "Standard Test Method For Water Penetration Of Exterior Windows, Skylights, Doors, And Curtain Walls By Uniform Static Air Pressure Difference" or ASTM E96/96M-16, "Standard Test Methods For Water Vapor Transmission Of Materials" (See Subsection J.10)

5. All test methods referenced in this rule shall be the version most recently approved by the appropriate government entities.

H. Violations

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

I. Severability

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

J. Definitions:

1. "Adhesive": Any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

2. "Aerosol Coating Product": A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application or for use in specialized equipment for ground traffic/marking applications.

3. "Aluminum Roof Coating": A coating labeled and formulated exclusively for application to roofs and containing at least 84 grams of elemental aluminum pigment per liter of coating (at least 0.7 pounds per gallon). Pigment content shall be determined in accordance with SCAQMD Method 318-95, incorporated by reference in Subsection G.4.d.

4. "Appurtenances"**:** Any accessory to a stationary structure coated at the site of installation, whether installed or detached, including-but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lampposts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.

5. "Architectural Coating": A coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, to fields or lawns, or to curbs. Coatings applied in shop applications or to

nonstationary structures, such as airplanes, ships, boats, railcars and automobiles, are not considered to be architectural coatings for the purposes of this rule, nor are adhesives.

6. “Basement Specialty Coating”: A clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaces to provide a hydrostatic seal for basements and other below-grade surfaces and that meets or exceeds the following criteria:

   a. Capable of withstanding at least 10 psi hydrostatic pressure as determined in accordance with ASTM D7088-17, which is incorporated by reference in Subsection G.4.l.

   b. Must be resistant to mold and mildew growth, and must achieve a microbial growth rate of 8 or more (10 is no growth) as determined in accordance with ASTM D3273-16 and ASTM D3274-09(2017), incorporated by reference in Subsection G.4.r.

7. "Bitumens": Black or brown materials including, but not limited to, asphalt, tar, pitch and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons that are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

8. "Bituminous Roof Coating": A coating that incorporates bitumens that is labeled and formulated exclusively for roofing.

9. "Bituminous Roof Primer": A primer that incorporates bitumens that is labeled and formulated exclusively for roofing and intended for the purpose of preparing a weathered or aged surface or improving the adhesion of subsequent surfacing components.

10. “Building Envelope”: The ensemble of exterior and demising partitions of a building that enclose conditioned space.

11. "Bond Breaker": A coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

12. "Coating": A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.

13. "Colorant": A concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating after packaging in sale units to produce the desired color.

14. "Concrete Curing Compound": A coating labeled and formulated for application to freshly poured concrete to perform one or more of the following functions:
   a. Retard the evaporation of water; or
   b. Harden or dustproof the surface of freshly poured concrete.

15. “Concrete/Masonry Sealer”: A clear or opaque coating that is labeled and formulated primarily for application to concrete and masonry surfaces to perform one or more of the following functions:
   a. Prevent penetration of water; or

b. Provide resistance against abrasion, alkalis, acids, mildew, staining or ultraviolet light; or
c. Harden or dustproof the surface of aged or cured concrete.

16. “Default Coating”: Any specialty coating (those other than flat or nonflat coatings) that is not defined in this Section J as any other coating category.

17. “Driveway Sealer”: A coating labeled and formulated for application to worn asphalt driveway surfaces to perform one or more of the following functions:
a. Fill cracks; or
b. Seal the surface to provide protection; or
c. Restore or preserve the appearance.

18. "Dry Fog Coating (Dry Fall)": A coating labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

19. "Exempt Organic Compounds": Shall be as defined in Rule 2 of these rules. Exempt compounds content of a coating shall be determined by test methods as referenced in Subsections G.4.f, G.4.g, or G.4.h, as applicable.

20. "Faux Finishing Coating": A coating labeled and formulated to meet one or more of the following criteria:
a. A glaze or textured coating used to create artistic effects, including but not limited to: dirt, suede, old age, smoke damage, and simulated marble and wood grain; or

b. A decorative coating used to create a metallic, iridescent, or pearlescent appearance that contains at least 48 grams of pearlescent mica pigment or other iridescent pigment per liter of coating as applied; or

c. A decorative coating used to create a metallic appearance that contains less than 48 grams of elemental metallic pigment per liter of coating as applied, when tested in accordance with SCAQMD Method 318-95, incorporated by reference in Subsection G.4.d; or

d. A decorative coating used to create a metallic appearance that contains 48 grams or greater of elemental metallic pigment per liter of coating as applied and which requires a clear topcoat to prevent the degradation of the finish under normal use conditions. The metallic pigment content shall be determined in accordance with SCAQMD Method 318-95, incorporated by reference in Subsection G.4.d; or
e. A clear topcoat to seal and protect a Faux Finishing coating that meets the one of the above criteria. This clearcoat shall be offered for sale, sold and applied solely as part of a Faux Finishing coating system, and must be labeled in accordance with Subsection C.9.

21. "Fire-Resistive Coating": A coating labeled and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials. The Fire-Resistive category includes sprayed fire resistive materials and intumescent fire-resistive coatings that are used to bring structural materials into compliance with federal, state, and local building codes. The fire-resistive coating and the testing agency

must be approved by building code officials. The Fire-Resistive coating shall be tested in accordance with ASTM Designation E119-18ce1, incorporated by reference in Subsection G.4.a.

22. "Flat Coating": A coating that does not meet the criteria listed under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to ASTM Designation D523-14(2018), incorporated by reference in Subsection G.4.c.

23. "Floor Coating": An opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, garage floors, and other horizontal surfaces which may be subject to foot traffic. The Floor Coating category is not intended for products that are applied to industrial floors, public bathroom floors, or jail floors. In addition, clear coatings for wood floors are not subject to the VOC limits of this coating category. Those types of products would be covered by other categories (e.g., Concrete/Masonry Sealers, Industrial Maintenance Coatings, Wood Coatings, etc.)

24. "Form Release Compound": A coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some material other than concrete.

25. "Formulation Data": The actual product recipe which itemizes all the ingredients contained in a product including VOCs and the quantities thereof used by the manufacturer to create the product. Safety Data Sheets (SDS) are not considered formulation data.

26. "Graphic Arts Coating (sign paint)": A coating labeled and formulated for hand-application by artists using brush, airbrush, or roller techniques to indoor and outdoor signs (excluding structural components) and murals, including lettering enamels, poster colors, copy blockers, and bulletin enamels.

27. "High Temperature Coating": A high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 400°F (204°C).

28. "Industrial Maintenance Coating": A high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to substrates, including floors, exposed to one or more of the following extreme environmental conditions listed below and labeled as specified in Subsection C.4.
    a. Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation.
    b. Acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, or chemical mixtures, or solutions.
    c. Repeated exposure to temperatures above 250°F (121°C).
    d. Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents.
    e. Exterior exposure of metal structures and structural components.

29. "Interior Stains": Stains labeled and formulated exclusively for use on interior surfaces.

30. "Intumescent": A material that swells as a result of heat exposure, thus increasing in volume and decreasing in density.

31. "Low-Solids Coating": A coating containing one pound or less of solids per gallon (0.12 kilogram or less of solids per liter) of coating material as recommended for application by the manufacturer. The VOC content for Low-Solids coatings shall be determined in accordance with Subsection J.69.

32. "Magnesite Cement Coating": A coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

33. “Manufacturer’s Maximum Recommendation”: The maximum recommendation for thinning that is indicated on the label or lid of the coating container.

34. “Market”: To facilitate sales through third party vendors including, but not limited to, catalog or ecommerce sales that bring together buyers and sellers. For the purpose of this rule, market does not mean to generally promote or advertise coatings.

35. "Mastic Texture Coating": A coating labeled and formulated to cover holes and minor cracks, and to conceal surface irregularities, and is applied in a single coat of at least 10 mils (0.010 inch) dry film thickness.

36. “Medium Density Fiberboard (MDF): A composite wood product, panel, molding, or other building material composed of cellulosic fibers (usually wood) made by dry forming and pressing of a resinated fiber mat.

37. "Metallic Pigmented Coating": A coating that is labeled and formulated to provide a metallic appearance. Metallic Pigmented coatings must contain at least 48 grams of elemental metallic pigment (excluding zinc) per liter of coating as applied, when tested in accordance with SCAQMD Method 318-95, incorporated by reference in Subsection G.4.d. The Metallic-Pigmented Coating category does not include Roof Coatings or Zinc-Rich Primers.

38. "Multi-Color Coating": A coating that is packaged in a single container and that exhibits more than one color when applied in a single coat.

39. "Nonflat Coating": A coating that does not meet the criteria under any other definition in this rule and that registers a gloss of 15 or greater on an 85 degree meter and 5 or greater on a 60 degree meter according to ASTM Designation D523-14 (2018), incorporated by reference in Subsection G.4.c.

40. "Nonflat- High Gloss Coating": A coating that registers a gloss of 70 or greater on a 60 degree meter according to ASTM Designation D523-14 (2018), incorporated by reference in Subsection G.4.c.

41. “Particleboard”: A composite wood product panel, molding, or other building material composed of a cellulosic material (usually wood) in the form of discrete particles, as distinguished from fibers, flakes, or strands, that are pressed together with resin.

42. “Pearlescent”: Exhibiting various colors depending on the angles of illumination and viewing, as observed in mother-of-pearl.

43. “Pigmented”: This means containing colorant or dry coloring matter, such as an insoluble powder, to impart color to a substrate.

44. “Plywood”: A panel product consisting of layers of wood veneers or composite core pressed together with resin. Plywood includes panel products made by either hot or cold pressing (with resin) veneers to a platform.

45. "Post-Consumer Coating": A finished coating generated by a business or consumer that has served their intended end uses, and is recovered from or otherwise diverted from the waste stream for the purpose of recycling.

46. "Pre-treatment Wash Primer": A primer which contains at least one-half percent acid, by weight, when tested in accordance with ASTM Designation D1613-06, incorporated by reference in Subsection G.4.e, that is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

47. "Primer, Sealer, and Undercoater": A coating labeled and formulated for one or more of the following purposes:
    a. To provide a firm bond between the substrate and the subsequent coatings; or
    b. To prevent subsequent coatings from being absorbed by the substrate; or
    c. To prevent harm to subsequent coatings by materials in the substrate; or
    d. To provide a smooth surface for the subsequent application of coatings; or
    e. To provide a clear finish coat to seal the substrate; or
    f. To block materials from penetrating into or leaching out of a substrate.

48. “Reactive Penetrating Sealer”: A clear or pigmented coating that is labeled and formulated for application to above-grade concrete and masonry to provide protection from water and waterborne contaminants, including but not limited to, alkalis, acids, and salts. Reactive Penetrating Sealers must meet all of the following criteria:
    a. Used only for reinforced concrete bridge structures for transportation projects within 5 miles of the coast or above 4,000 feet elevation; or for restoration and/or preservation projects on registered historic buildings that are under the purview of a restoration architect.
    b. Penetrate into concrete and masonry substrates and chemically react to form covalent bonds with naturally occurring minerals in the substrate.
    c. Line the pores of concrete and masonry substrates with a hydrophobic coating, but does not form a surface film.
    d. Improve water repellency at least 80 percent after application on a concrete or masonry substrate. This performance must be verified on standardized test specimens per ASTM C67 or ASTM C97/97M or ASTM C140.
    e. Provide a breathable waterproof barrier for concrete or masonry surfaces that does not prevent or substantially retard water vapor transmission. This performance must be verified in standardized test specimens per ASTM E96/E96M or ASTM D6490.
    f. Meet the performance criteria listed in the National Cooperative Highway Research Report 244 (1981) or later versions, surface chloride screening applications, for products labeled and formulated for vehicular traffic.

    Reactive Penetrating Sealers must be labeled in accordance with Subsection C.10.

49. "Recycled Coating": An architectural coating formulated such that it contains a minimum of 50 percent by volume post-consumer coating, with a maximum of 50 percent by volume secondary industrial materials or virgin materials.

50. "Residential": Areas where people reside or lodge, including, but not limited to, single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels and hotels.

51. "Roof coating": A non-bituminous coating labeled and formulated exclusively for application to roofs and for the primary purpose of preventing penetration of the substrate by water, or reflecting heat and ultraviolet radiation.

52. "Rust Preventative Coating": A coating formulated to prevent the corrosion of metal surfaces for one or more of the following applications:
    a. Direct-to-metal coating; or
    b. Coating intended for application over rusty, previously coated surfaces.

    The Rust Preventative category does not include the following:
    c. Coatings that are required to be applied as a topcoat over a primer; or
    d. Coatings that are intended for use or used on wood or any other nonmetallic surface.

    Rust Preventative coatings are for metal substrates only and must be labeled as such, in accordance with the labeling requirements in Subsection C.5.

53. "Secondary Industrial Materials ": Products or by-products of the paint manufacturing process that are of known composition and have economic value but can no longer be used for their intended purpose.

54. “Semitransparent Coating”: A coating that contains binders and colored pigments and is formulated to change the color of the surface, but not conceal the grain pattern or texture.

55. "Shellac": A clear or opaque coating formulated solely with the resinous secretions of the lac beetle (*Laciffer lacca*) and formulated to dry by evaporation without a chemical reaction.

56. "Shop Application": Application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing coatings).

57. "Solicit": To require for use or to specify, by written or oral contract.

58. "Specialty Primer, Sealer and Undercoater": A coating labeled as specified in Subsection C.7 and that is formulated for application to a substrate to block water-soluble stains resulting from: fire damage; smoke damage; or water damage.

59. "Stain": A semitransparent or opaque coating labeled and formulated to change the color of a surface but not conceal the grain pattern or texture. Stains labeled and formulated exclusively for use on interior surfaces are only subject to VOC limits for Interior stains.

60. “Stone Consolidant”: A coating that is labeled and formulated for application to stone to repair historical structures that have been damaged by weathering or other decay mechanisms. Stone Consolidants must penetrate into stone to create bonds between

particles and consolidate deteriorated material. Stone Consolidants must be specified and used in accordance with ASTM E2167-01, incorporated by reference in Subsection G.4.v. Stone Consolidants are for professional use only and must be labeled as such, in accordance with the labeling requirements of Subsection C.6.

61. "Swimming Pool Coating": A coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals. Swimming pool coatings include coatings used for swimming pool repair and maintenance.

62. "Tile and Stone Sealers": Clear or pigmented sealers that are used for sealing tile, stone, or grout to provide resistance against water, alkalis, acids, ultraviolet light or staining and which meet one of the following subcategories:
    a. Penetrating sealers are polymer solutions that cross-link in the substrate and must meet the following criteria:
        1) A fine particle structure to penetrate dense tile such as porcelain with absorption as low as 0.10 percent per ASTM C373, ASTM C97/C97M, or ASTM C642.
        2) Retain or increase static coefficient of friction per ANSI A137.1.
        3) Not create a topical surface film on the tile or stone, and
        4) Allow vapor transmission per ASTM E96/96M.
    b. Film forming sealers which leave a protective film on the surface.

63. "Tint Base": An architectural coating to which colorant is added after packaging in sale units to produce a desired color.

64. "Traffic Marking Coating": A coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways. This coating category shall also include methacrylate multicomponent coatings used as traffic marking coatings. The VOC content of methacrylate multicomponent coatings shall be determined by the procedures in 40 CFR Part 59, Subpart D, Appendix A.

65. "Tub and Tile Refinish Coating": A clear or opaque coating that is labeled and formulated exclusively for refinishing the surface of a bathtub, shower, sink, or countertop. Tub and Tile Refinish coatings must meet all of the following criteria:
    a. The coating must have a scratch hardness of 3H or harder and a gouge hardness of 4H or harder. This must be determined on Bonderite 1000, in accordance with ASTM D3363-05 (2011)e2, incorporated by reference in Subsection G.4.n.

    b. The coating must have a weight loss of 20 milligrams or less after 1000 cycles. This must be determined with CS-17 wheels on Bonderite 1000, in accordance with ASTM D4060-14, incorporated by reference in Subsection G.4.o.

    c. The coating must withstand 1000 hours or more of exposure with few or no #8 blisters. This must be determined on unscribed Bonderite, in accordance with ASTM D4585-99 and ASTM D714-02, incorporated by reference in Subsection G.4.p.

d. The coating must have an adhesion rating of 4B or better after 24 hours of recovery. This must be determined on unscribed Bonderite, in accordance with ASTM D4585-/D4585M-18 and ASTM D3359-17, incorporated by reference in Subsection G.4.m.

66. “Veneer”: Thin sheets of wood peeled or sliced from logs for use in the manufacture of wood products such as plywood, laminated veneer lumber, or other products.

67. “Virgin Materials”: Materials that contain no post-consumer coatings or secondary industrial materials.

68. "Volatile Organic Compounds (VOC)": Shall have the same meaning as Reactive Organic Compounds (ROC) as defined in Rule 2 of these rules.

69. “VOC Actual”: The weight of VOC per volume of coating and is calculated by the following equation:

$$\text{VOC Actual} = \frac{W_s - W_w - W_{es}}{V_m}$$

Where: VOC Actual = Grams of VOC per liter of coating (also known as “Material VOC”)
W_s = Weight of volatile compounds (grams)
W_w = Weight of water (grams)
W_{es} = Weight of exempt organic compounds (grams)
V_m = Volume of coating or colorant (liters)

70. "VOC Content": The weight of VOC per volume of coating. VOC content is VOC Regulatory, as defined in Subsection J.71, for all coatings or colorants except those in the Low Solids category. For coatings or colorants in the Low Solids category, the VOC content is VOC Actual, as defined in Subsection J.69. If the coating is a multi-component product, the VOC content is VOC Regulatory as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.

71. "VOC Regulatory”: The weight of VOC per volume of coating or colorant, less the volume of water and exempt organic compounds, and is calculated by the following equation:

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

Where : VOC Regulatory = Grams of VOC per liter of coating or colorant, less water and exempt organic compounds (also know as “Coating VOC”)
W_s = Weight of volatile compounds (grams)
W_w = Weight of water (grams)
W_{es} = Weight of exempt organic compounds (grams)
V_m = Volume of coating or colorant material (liters)
V_w = Volume of water (liters)
V_{es} = Volume of exempt organic compounds (liters)

72. "Waterproofing Membrane": A clear or opaque coating that is labeled and formulated for application to concrete and masonry to provide a seamless waterproofing membrane that prevents any penetration of liquid water into the substrate. Waterproofing Membranes are intended for the following waterproofing applications: below-grade surfaces, between concrete slabs, inside tunnels, inside concrete planters, and under flooring materials. Waterproofing Membranes must meet the following criteria:

a. Coating must be applied in a single coat of at least 25 mils (at least 0.025 inch) dry film thickness; and

b. Coatings must meet or exceed the requirements contained in ASTM C836/C836M-18, incorporated by reference in Subsection G.4.q.

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

73. "Wood Coatings": Coatings labeled and formulated for application to wood substrates only. The Wood Coatings category includes the following clear and semitransparent coatings: lacquers; varnishes; sanding sealers; penetrating oils; clear stains; wood conditioners used as undercoats; and wood sealers used as topcoats. The Wood Coatings category also includes the following opaque wood coatings: opaque lacquers; opaque sanding sealers; and opaque lacquer undercoaters. The Wood Coatings category does not include the following: clear sealers that are labeled and formulated for use on concrete or masonry; or coatings intended for substrates other than wood.

Wood Coatings must be labeled for "For Wood Substrates Only," in accordance with Subsection C.7.

74. "Wood Preservative": A coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with both the U.S. EPA under Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code (USC) Section 136, *et seq.*) and with the California Department of Pesticide Regulation.

75. "Wood Substrate": A substrate made of wood, particleboard, plywood, medium density fiberboard, rattan, wicker, bamboo, or composite products with exposed wood grain. Wood products do not include items comprised of simulated wood.

76. "Zinc-Rich Primer": A coating that meets all of the following specifications:

a. Coating contains at least 65 percent metallic zinc powder or dust by weight of total solids.

b. Coating is formulated for application to metal substrates to provide a firm bond between the substrate and subsequent coatings.

c. Coating is intended for professional use only and is labeled as such in accordance with labeling requirements in Subsection C.9.

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Table of Standards (Specialty Coatings – Organized by Substrate)[2]

[2]Table of Standards Organized by Substrate is for illustrative purposes only, and does not in any way modify the definitions of coating categories in Section J.

SUBSTRATE	SPECIALTY COATING CATEGORY	CURRENT LIMIT[3,4]	EFFECTIVE 7/1/2021
Asphalt	Driveway Sealer	50	
Concrete/Masonry	Basement Specialty	400	
	Bond Breaker	350	
	Concrete Curing Compounds	350	
	Concrete/Masonry Sealers	100	
	Magnesite Cement	450	
	Mastic Texture Coating	100	
	Reactive Penetrating Sealer	350	
	Stone Consolidants	450	

[3] The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
[4] Conversion factor: one pound VOC per gallon (U.S.) = 119.83 grams VOC per liter.

SUBSTRATE	SPECIALTY COATING CATEGORY	CURRENT LIMIT[5,6]	EFFECTIVE 7/1/2021
	Swimming Pool	340	
	Waterproofing Membrane	250	100
Floor	Floor Coatings	100	50
Metal	Pre-Treatment Wash Primer	420	
	Rust Preventative	250	
Roof	Aluminum Roof Coating	400	100
	Bituminous Roof Coating	50	
	Bituminous Roof Primer	350	
	Roof Coatings	50	
Wood	Wood Coatings	275	
	Wood Preservatives	350	
Various Substrates	Building Envelope Coating		50
	Dry Fog Coating	150	50
	Faux Finishing	350	
	Fire Resistive	350	150
	Form Release Compound	250	100
	Graphic Arts Coatings	500	
	High Temperature	420	
	Industrial Maintenance	250	
	Low-Solids Coating	120	
	Metallic Pigmented	500	
	Multi-Color	250	
	Primers, Sealers & Undercoaters	100	
	Recycled Coatings	250	
	Shellac –Clear	730	
	Shellac – Opaque	550	
	Stains (Exterior/Dual)	250	100
	Interior Stains	250	
	Traffic Marking	100	
	Tub & Tile Refinishing	420	
	Zinc-Rich Primers	340	

[5] The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
[6] Conversion factor: one pound VOC per gallon (U.S.) = 119.83 grams VOC per liter.

6-19-92

Ventura
6/19/92

Rule 74.3. Paper, Fabric and Film Coating Operations (Adopted 5/29/79, Revised 7/5/83, 3/27/90, 12/10/91)

A. Applicability

The provisions of this rule shall apply to any application process involving the coating of paper, fabric or film.

B. Requirements

1. No person shall use or apply coating material in any applicable application process unless:

   a. The coating material contains less than 265 grams of reactive organic compound material per liter of coating applied, less water and less exempt organic compounds; or

   b. Reactive organic compound emissions from the application process are less than 120 grams per liter of coating applied, less water and less exempt organic compounds. Compliance shall be determined on an inventory basis using a rolling 24 hour average; or

   c. Reactive organic compound emissions from the application process are reduced by a combined capture and destruction efficiency of no less than 90 percent, averaged over a rolling 24 hour period. Destruction efficiency shall be measured across an emission control device.

      If the coating applied contains more than 1200 grams of ROC per liter of coating applied, less water and less exempt solvent, then, in addition to the above, emissions shall be limited to 120 grams of ROC per liter of coating applied, less water and less exempt solvent, using a rolling 24 hour average.

2. Containers and mixing equipment not controlled pursuant to Subsection B.1.b or B.1.c and containing reactive organic compound material shall not leak and shall be covered when in use. Covers shall not be required when adding or removing material or during cleaning operations.

3. No person shall use clean-up solvent in any applicable operation unless:

   a. The solvent contains less than 200 grams of reactive organic compound per liter of material used; or

   b. The reactive organic compound emissions from clean-up operations are less than 120 grams per liter of clean-up solvent used, as specified in Subsection B.1.b, or are collected and reduced as specified in Subsection B.1.c.

ATTACHMENT 3

C. Exemptions

The provisions of Subsections B.1.b and B.1.c shall not apply during the first twenty-four (24) hours of a scheduled carbon adsorption system start-up. The District shall be notified no later than twenty-four (24) hours prior to any start-up performed pursuant to this provision. In addition, emissions shall be continuously monitored and a written excess emissions report shall be submitted to the District within ten (10) working days of the end of the occurrence. An operator shall invoke this provision no more than six (6) times in any one calendar year.

D. Recordkeeping Requirements

The operator of any operation subject to the provisions of Section B of this rule shall maintain records that include, at a minimum, the following data:

1. For Subsections B.1.a, B.1.b and B.3, formulation data for each coating, diluent or clean-up solvent used or applied, including name of supplier, name and identification number, total density in pounds per gallon, total volatiles content, water content, exempt solvent content, reactive organic compound content (all in weight percent), and the density of any solids applied.

2. For Subsection B.1.b, hourly coating consumption data, including coating identification number, amount of coating applied, diluent identification number, and amount of diluent used. For Subsection B.1.a, the same information is required on a daily basis.

3. For Subsection B.1.b, process information necessary to determine the volume of coating applied, less water and less exempt organic compounds.

4. For Subsection B.1.c, hourly control equipment data for each coating line, including control device in operation and capture and destruction efficiency.

5. For Subsection B.3.a, clean-up solvent consumption data, including solvent identification number and amount of solvent used, on a daily basis.

6. For Subsection B.3.b, daily solvent consumption data, including solvent identification number and amount of solvent used.

The operator shall maintain all records for a period of 2 years after the date of each entry. The records shall be available for inspection by the District upon request.

E. Test Methods

1. Reactive organic compound emissions for compliance source tests shall be determined by using ARB Method 100 or EPA Methods 18, 25 or 25A. Exempt organic compounds shall be determined by using ARB Method 422.

2. The reactive organic compound content of paper, fabric or film coating material shall be determined by using EPA Method 24. Exempt organic compounds shall be determined by using ARB Method 432.

3. Compliance with the capture efficiency requirements in Subsection B.1.c shall be based on criteria set forth in 40 CFR Part 60, Subpart SSS, Standards of Performance for New Stationary Sources; Magnetic Tape Manufacturing Industry; Final Rule, dated October 3, 1988.

F. Violations

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

G. Definitions

For the purpose of this Rule, the following definitions apply:

1. "Application process": Any portion of a paper, fabric or film coating operation where surface coatings are applied and/or cured, including the coating applicator and heating ovens.

2. "Clean-up solvent": Any solvent used in clean-up operations, excluding hand-wiping.

3. "Exempt organic compounds": Compounds listed in Rule 2 as exemptions to the definition of "Reactive organic compounds."

4. "Fabric coating": Any decorative or protective coating or reinforcing material applied on or impregnated into textile fabric, vinyl coated textile fabric, or vinyl sheets.

5. "Film coating": Any coating applied in a web coating process on any film substrate other than paper or fabric, including, but not limited to, typewriter ribbons, photographic film, magnetic tape, and metal foil gift wrap.

6. "Grams of ROC per liter, less water and less exempt organic compounds": The ROC content of a material, excluding water and excluding those compounds specified in the definition of "Reactive Organic Compounds" in Rule 2. The following equation shall be used to calculate ROC content:

$$\text{Grams of ROC per Liter of Coating Less Water and Less Exempt Compound} = \frac{Ws - Ww - Wes}{Vm - Vw - Ves}$$

where Ws = Weight of volatile compounds (grams)
Ww = Weight of water (grams)
Wes = Weight of exempt organic compounds (grams)
Vm = Volume of material (liters)
Vw = Volume of water (liters)
Ves = Volume of exempt organic compounds (liters)

7. "Grams of ROC per liter of material": The weight of ROC per volume of material. The following equation shall be used to calculate ROC content:

$$\text{Grams of ROC per liter of material} = \frac{Ws - Ww - Wes}{Vm}$$

where: Ws = Weight of volatile compounds in grams
Ww = Weight of water in grams
Wes = Weight of exempt compounds in grams
Vm = Volume of material in liters

8. "Inventory basis": The reactive organic compound emissions from the process, in grams, divided by the volume of coating solution input to the process, less water and less exempt organic compounds, in liters, over a specified time period.

For processes controlled by a carbon adsorption system, reactive organic compound emissions shall be determined from control device efficiency data (ratio of ROC concentration input to ROC concentration output) and the total amount of coating solution applied, from process records.

9. "Leak":

a. The dripping at a rate of more than three (3) drops per minute of liquid containing reactive organic compound material; or

b. An emission containing gaseous reactive organic compound material which causes an appropriate analyzer, when sampling one (1) centimeter from a source, to register at least 10,000 ppmv, as methane and as determined by EPA Reference Method 21. Excepted are emissions from pressure relief devices when the process pressure exceeds the limit setting specified for the device and emissions from pneumatic control valves required to bleed gas during valve activation; or

c. An emission containing gaseous reactive organic compound material which causes a soap bubble score of 3 or greater using the alternative screening procedure in EPA Reference Method 21. Excepted are emissions from pressure relief devices when the process pressure exceeds the limit setting specified for the device and emissions from pneumatic control valves required to bleed gas during valve activation.

10. "Paper coating": Any coating applied on or impregnated into paper, including, but not limited to, adhesive tapes and levels, book covers, post cards, office copier paper, drafting paper, and pressure sensitive tape.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

Rule 74.4. Cutback Asphalt

(Adopted 6/19/79, Revised 7/5/83)

A. No person shall cause or allow the use or application of rapid cure cutback asphalt for highway or street paving or maintenance, nor manufacture, sell, or offer for sale cutback asphalt for such use or application.

B. No person shall cause or allow the use or application of cutback asphalt for highway or street paving or maintenance, nor manufacture, sell, or offer for sale cutback asphalt for such use or application in this District except as specified below:

1. Where the cutback asphalt is to be used solely as a penetrating prime coat;

2. Where the National Weather Service official forecast of the high temperature for the 24-hour period following application is below 50oF (10oC).

C. In the South Zone of the District no person shall cause or allow the use or application of an emulsified asphalt containing petroleum solvents (diluents) in excess of three percent by volume or cutback asphalt for highway or street paving or maintenance, nor manufacture, sell, or offer for sale such asphalts for such use or application. The provisions of this section shall not apply to cutback asphalt manufactured in this District for shipment and use outside this District.

D. Road oils used for highway or street paving or maintenance applications shall contain no more than 0.5 percent of organic compounds which boil at less than 500oF as determined by ASTM D402.

E. Definitions: For the purpose of this Rule the following definitions apply:

1. "Asphalt" means an oil asphalt or a homogeneous mixture of refined liquid and solid asphalts suitable for use in the manufacture of asphalt concrete.

2. "Cutback asphalt" means paving grade asphalts liquified with petroleum distillate and as further defined by American Society for Testing and Materials (ASTM) specifications as follows:

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Rapid cure type: ASTM D2028-76

Medium cure type: ASTM D2027-76
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3. "Dust palliative" means any light application of liquified asphalt (cutback or emulsified asphalt) for the express purpose of controlling loose dust.

4. "Emulsified asphalt" means any asphalt liquified with water containing an emulsifier. The two kinds of emulsions most pertinent are the anoinic and cationic types.

5. "Penetrating prime coat" means any appliation of asphalt to an absorbent surface to penetrate and bind the aggregate surface and promote adhesion between it and the new superimposed construction. Prime coats do not include dust palliatives or tack coats.

6. "Road oils" shall be synonomous with slow cure asphalts.

7. "Tack coat" means any application of asphalt applied to an existing surface to provide a bond between new surfacing and existing surface and to eliminate slippage planes where the new and existing surfaces meet.

04/5/91

Rule 74.5.1 Petroleum Solvent Dry Cleaning (Adopted 12/4/90)

A. Applicability

The requirements of this rule apply to any petroleum solvent dry cleaning operation.

B. Emission Control Requirements

No person shall operate any petroleum solvent dry cleaning operation unless one of the following requirements is satisfied:

1. A solvent recovery dryer is installed that reduces reactive organic compound (ROC) emissions by at least 90 percent by weight. For the purpose of determining compliance with this subsection, an overall solvent consumption rate of less than 5.0 pounds (lb) per 100 lb dry weight of articles cleaned for facilities which do not operate a still, or 8.0 lb per 100 lb dry weight of articles cleaned for facilities which do operate a still, shall be deemed in compliance, or;

2. All exhaust gases from drying tumblers and drying cabinets are vented through an add-on control device which reduces ROC emissions by at least 90 percent by weight, or;

3. Equipment is installed that is equivalent in terms of reducing ROC emissions to that prescribed in subsection B.1, and is approved in writing by the Air Pollution Control Officer (APCO).

C. Filtration Equipment Requirements

No person shall operate any petroleum solvent filtration system unless one of the following requirements is satisfied:

1. A cartridge filter is installed and operated, or;

2. A filter system or process that reduces the petroleum solvent content in all filtration wastes to no greater than 1.0 lb per 100 lb dry weight of articles cleaned is installed and operated, and is approved in writing by the APCO.

D. Operating Requirements

No person shall operate any petroleum solvent dry cleaning equipment unless all of the following requirements are satisfied:

1. No solvent liquid or solvent vapor shall leak from any portion of the equipment. Leaking equipment shall not be operated.

2. Solvents and spent solvents shall be stored in closed containers, which may be equipped with vents if approved by the APCO.

3. All washer lint traps, button traps, access door and other parts of the equipment, where solvent may be exposed to the atmosphere,

shall be kept closed at all times except as required for proper operation or maintenance.

4. All cartridge filters shall be drained in the filter housing for at least 24 hours before disposal or for at least 12 hours provided that they are subsequently dried in a closed container which is vented to a control device which reduces ROC emissions by at least 90 percent by weight, and is approved in writing by the APCO.

5. All dry cleaning wastes, including but not limited to waste solvent, still wastes, filter wastes, and drained cartridge filters shall be stored in sealed containers or underground tanks and shall be disposed of in accordance with California hazardous waste disposal regulations as described in the most recent version of Title 22, Division 4, Chapter 30 of the California Code of Regulations.

6. Articles which have been cleaned shall be transferred to the dryer within five minutes after their removal from the washer, or shall be stored in closed transfer carts.

7. The solvent recovery dryer shall remain closed and the recovery phase shall continue until there is no visible flow in the sight glass of the condenser for at least one minute.

E. Recordkeeping Requirements

Any person that operates a petroleum solvent dry cleaning operation shall maintain records on a daily basis or on the date performed showing the dry weight of articles cleaned, all solvent purchases, solvent inventory, disposed solvent, and the starting and ending times of all cartridge filter draining and drying operations. In addition, records showing compliance with California hazardous waste disposal regulations shall be maintained. These records shall be retained for at least two years and shall be made available to the APCO upon request.

F. Test Methods

1. Compliance with the 90 percent emission reduction requirements in subsections B.1 and B.2 shall be determined by EPA Method 25A.

2. The solvent content of filtration wastes, from any filter system subject to the provisions of subsection C.2, shall be determined by ASTM Method D322.

3. Solvent vapor leak determinations shall be made using EPA Method 21.

G. Violations

Failure to comply with any provision of this rule, including recordkeeping requirements, shall constitute a violation of this rule.

H. Definitions

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

1. "Cartridge filter": A discrete filter unit containing paper and/or activated carbon that traps and removes contaminants from petroleum solvent.

2. "Dry weight of articles cleaned": The weight of articles prior to being cleaned in petroleum solvent.

3. "Overall solvent consumption rate": The amount of solvent emitted to the atmosphere divided by the dry weight of articles cleaned. The amount of solvent emitted shall be determined by subtracting any change in solvent inventory and any disposed solvent from the amount of solvent purchased. To ensure that a normal range of variations in fabrics is represented, this calculation shall be based on at least 4,000 lb, but not more than 6,000 lb dry weight of articles cleaned.

4. "Petroleum solvent": A petroleum distillate that exists as a liquid under standard conditions.

5. "Petroleum solvent dry cleaning operation": Any operation using petroleum solvent for the cleaning of fabrics or leather. The operation includes, but is not limited to, washers, dryers, filters, stills, holding tanks, pumps, attendant piping and valves.

6. "Sealed container": A container used to store dry cleaning solvent or waste that has a tight fitting lid and walls which are impervious to the solvent.

7. "Solvent liquid leak": Any liquid petroleum solvent leak of more than 3 drops per minute.

8. "Solvent recovery dryer": A class of dry cleaning dryers that employ a condenser to condense and recover solvent vapors evaporated in a closed loop stream of heated air, together with the piping and ductwork used in the installation of this device.

9. "Solvent vapor leak": Any petroleum solvent leak which is a visible mist or which causes an appropriate analyzer sampling one centimeter from the source to register more than 50,000 ppm, as methane.

10. "Transfer cart": A cart or container used to transfer wet articles from the washer to the dryer that has a lid and walls which are impervious to the solvent.

I. Compliance Schedule

1. Any person that operates a petroleum dry cleaning operation consuming more than 10,000 liters (2,642 gallons) of solvent per year shall submit to the APCO an application for an Authority to Construct for the equipment needed to comply with Sections B and C, no later than July 1, 1991, and achieve final compliance with Sections B and C, no later than July 1, 1992.

2. Any person that operates a petroleum dry cleaning operation consuming 10,000 liters (2,642 gallons) or less of solvent per year shall submit to the APCO an application for an Authority to Construct for the equipment needed to comply with Sections B and C, no later than July 1, 1992, and achieve final compliance with Sections B and C, no later than July 1, 1993.

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Rule 74.5.2 Synthetic Solvent Dry Cleaning (Adopted 12/4/90, Revised 5/9/95)

A. Applicability

The requirements of this rule apply to any synthetic solvent dry cleaning operation, which is not subject to the requirements of the Airborne Toxic Control Measure, "Emissions of Perchloroethylene from Dry Cleaning Operations" (California Code of Regulations, Volume 17, Section 93109, et seq).

B. Emission Control Requirements

No person shall operate any synthetic solvent dry cleaning operation unless one of the following requirements is satisfied:

1. All exhaust gases from drying tumblers and drying cabinets are vented through a carbon adsorber which reduces the emission of synthetic solvent to the atmosphere to no more than 100 ppm averaged over a period of one minute and measured before dilution during the drying cycle, or;

2. All exhaust gases from drying tumblers and drying cabinets are vented through a control device, other than a carbon adsorber, which reduces the emission of synthetic solvent to the atmosphere by at least 90 percent by weight. For the purpose of determining compliance with this subsection, a refrigerated condenser which is operated in compliance with subsection C.7*, shall be deemed in compliance.

C. Operating Requirements

No person shall operate any synthetic solvent dry cleaning equipment unless all of the following requirements are satisfied:

1. No solvent liquid or solvent vapor shall leak from any portion of the equipment. Leaking equipment shall not be operated.

2. All washer lint traps, button traps, access door and other parts of the equipment, where synthetic solvent may be exposed to the atmosphere, shall be kept closed at all times except when required to be open for proper operation or maintenance.

3. Solvent still waste shall not contain more than 0.6 pound (lb) of synthetic solvent per lb of wet waste.

4. All cartridge filters shall be drained in the filter housing for at least 24 hours before disposal or for at least 12 hours provided that they are subsequently dried in a closed container which is vented to a control device which satisfies the requirements of Section B, and is approved in writing by the Air Pollution Control Officer (APCO).

5. Any other filtration or distillation system may be used if the system reduces synthetic solvent losses below 1 lb per 100 lb of

dry weight of articles cleaned, and is approved in writing by the APCO.

6. All dry cleaning wastes, including but not limited to waste solvent, still wastes, filter wastes, and drained cartridge filters shall be stored in sealed containers or underground tanks and shall be disposed of in accordance with California hazardous waste disposal regulations as described in the most recent version of Title 22, Division 4, Chapter 30 of the California Code of Regulations.

7. The air temperature at the outlet of the refrigerated condenser shall reach 45°F or less during the cool-down period. A temperature gauge with a minimum range of 0°F to 150°F shall be installed on the condenser outlet duct.

D. Equipment Requirements

Effective December 4, 1990, no person shall install any dry cleaning washer and/or drying tumbler which uses synthetic solvents unless such equipment consists of a dry to dry unit which satisfies the requirements of Section B. The requirements of this section shall not apply to the relocation of existing equipment which is permitted by the Air Pollution Control District.

E. Exemptions

The provisions of Section B shall not apply to any synthetic solvent dry cleaning operation consuming 1200 liters (320 gallons) or less of synthetic solvent per year, where the washers and/or drying tumblers were installed before December 4, 1990, provided the requirements of subsection F.1 are satisfied.

F. Recordkeeping Requirements

1. Any person that operates a synthetic solvent dry cleaning operation shall maintain records on a daily basis or on the date performed showing all solvent purchases, and the starting and ending times of all cartridge filter draining and drying operations. In addition, monthly solvent inventory records, and records showing compliance with California hazardous waste disposal regulations shall be maintained.

2. Any person subject to the requirements of subsection C.5* shall maintain daily records of the dry weight of articles cleaned.

3. Any person that operates a carbon adsorber for the purpose of controlling emissions from a synthetic solvent dry cleaning operation shall maintain records on a daily basis or on the date performed showing the dates on which the carbon adsorber was regenerated.

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4. All records shall be retained for a minimum of two years from the date of each entry. All records shall be made available to the APCO upon request.

G. Test Methods

1. Compliance with the emission reduction requirements in subsections B.1 and B.2 shall be determined by EPA Method 18.

2. The synthetic solvent content of the wastes specified in subsection C.3*, and wastes from systems subject to subsection C.5* shall be determined by ASTM Method D322, as modified below. ASTM Method D322 shall be modified by using a Bidwell-Sterling type distillation trap, calibrated using a hydrophobic solvent with a specific gravity greater than water, in place of the gasoline trap.

3. Solvent vapor leak determinations shall be made using EPA Method 21.

H. Violations

Failure to comply with any provision of this rule, including recordkeeping requirements, shall constitute a violation of this rule.

I. Definitions

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

1. "Cartridge filter": A discrete filter unit containing paper and/or activated carbon that traps and removes contaminants from synthetic solvent.

2. "Dry to dry unit": Dry cleaning equipment which combines the functions washing and drying in one unit and where articles to be cleaned are placed in the unit and are not removed until the drying cycle is complete.

3. "Dry weight of articles cleaned": The weight of articles prior to being cleaned in synthetic solvent.

4. "Drying cabinet": Dry cleaning equipment consisting of an enclosure in which articles are hung to dry and used only to dry articles which would be damaged by the heat and tumbling action of a drying tumbler.

5. "Drying tumbler": Dry cleaning equipment used to dry articles which have been previously cleaned in synthetic solvent.

6. "Sealed container": A container used to store dry cleaning solvent or waste that has a tight fitting lid and walls which are impervious to the solvent

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7. "Solvent liquid leak": Any liquid synthetic solvent leak of more than 3 drops per minute.

8. "Solvent vapor leak": Any synthetic solvent leak which is a visible mist or which causes an appropriate analyzer sampling one centimeter from the source to register more than 100 ppm, as methane.

9. "Synthetic solvent": Any halogenated solvent including, but not limited to 1,1,1,trichloroethane and trichlorotrifluoroethane (CFC-113).

10. "Synthetic solvent dry cleaning operation": Any operation using synthetic solvent for the cleaning of fabrics or leather. The operation includes, but is not limited to washers, dryers, filters, stills, holding tanks, pumps, attendant piping and valves.

* Clerical correction made

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.6 - SURFACE CLEANING AND DEGREASING
(Adopted 5/29/79, Revised 1/20/81, 7/5/83, 9/12/89, 5/8/90, 12/10/91, 7/9/96, 11/10/98, 1/8/02, 11/11/03, 11/10/20)

A. Applicability

The requirements of this rule shall apply to any person who performs solvent cleaning activities, and any person who manufactures or supplies solvents for use in solvent cleaning activities in Ventura County, except as noted in Section E of this rule. This rule does not apply to the use of solvent with an ROC content of 25 grams per liter or less.

B. Requirements

1. Solvent Requirements

a) On or before December 31, 2021, no person shall perform solvent cleaning using solvent that exceeds the following limits:

	Maximum Limits (As Applied)		
Solvent Cleaning Activity	ROC Composite Partial Pressure (mm Hg @ 20°C)		ROC Content (grams/liter)
Application equipment cleanup and all other cleanup of uncured coatings, adhesives, inks, or resins	33	And	900
Cleaning of electronic components, electrical apparatus components, medical devices, or aerospace components	33	And	900
All other solvent cleaning	----		25

b) On or after January 1, 2022, no person shall perform solvent cleaning using solvent that exceeds the following limits:

	Maximum Limits (As Applied)
Solvent Cleaning Activity	ROC Content (grams/liter)
Application equipment cleanup and all other cleanup of uncured coatings, adhesives, inks, or resins	25

Cleaning of electronic components, electrical apparatus, or aerospace components conducted inside a degreaser	100
Medical devices and pharmaceuticals, including repair and maintenance of tools, equipment and machinery	800
Medical devices and pharmaceuticals – general work surfaces cleaning	600
All other solvent cleaning	25

2. Cleaning Devices and Methods Requirements

No person shall perform solvent cleaning using a solvent with an ROC content greater than 25 grams per liter unless one of the following cleaning devices or methods is used:

a. Wipe cleaning where solvent is dispensed to wipe cleaning materials from containers that are kept closed to prevent evaporation, except while dispensing solvent or replenishing the solvent supply;

b. Non-atomized solvent flow, dip, or flush method where pooling on surfaces being cleaned is prevented or drained, and all solvent runoff is collected in a manner that enables solvent recovery or disposal. The collection system shall be kept closed to prevent evaporation except while collecting solvent runoff or emptying the collection system;

If the cleaning method has a solvent capacity more than one gallon, a cold cleaner or remote reservoir cold cleaner meeting the equipment and operating requirements of Section C and D of this rule shall be used to comply with this subsection.

c. Application of solvent from a hand held spray bottle, squirt bottle or other closed container with a capacity of one liter or less;

d. A properly used enclosed gun washer or low emission spray gun cleaner.

3. Prohibitions

a. No person shall allow liquid cleaning solvent to leak from any equipment or container.

b. No person shall specify, solicit, supply, or require any cleaning solvent or solvent cleaning equipment intended for uses governed by this rule if such use would violate this rule. This prohibition applies to all written and oral contracts under which solvent cleaning operations subject to this rule are to be conducted at any location in Ventura County.

c. No person shall use more than one gallon per week of solvents containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these solvents, in a total concentration greater than 5 percent by weight, for cold cleaning except in a cold cleaner operated in accordance with National Emission Standards for Halogenated Solvent Cleaning, 40 CFR Parts 9 and 63, Subpart T, Sections 63.460 through 63.469 (Degreasing MACT Standards). Any person that uses the above solvent in quantities less than one gallon per week shall maintain records of the volume and formulation of such solvent on an as-used basis (recording use each day such material is used). Records shall be saved for at least two (2) years from the date of each record and shall be made available to District personnel upon request.

4. Storage and Disposal

a. All ROC-containing solvents shall be stored in non-absorbent, non-leaking containers that shall be kept closed at all times except when filling or emptying.

b. Waste solvent and waste solvent residues shall be disposed of properly. Spent cleanup solvents may be classified as hazardous waste. The owner or operator shall obtain approval from applicable local, state, or federal water pollution control agency prior to disposing of spent solvents into the sewer or storm drain systems .

5. Control Equipment: In lieu of the requirements of subsections B.1 and B.2 of this rule, solvent cleaning emissions may be controlled by an emission control system that maintains a combined capture and control efficiency of at least 85 percent, by weight, of the emissions generated by the solvent cleaning activity, and results in an emission rate lower than that achieved by section B.1 and B.2 of this rule, as approved in writing by the APCO.

6. Compliance Statement Requirement: The manufacturer of any solvent subject to this rule shall designate on the solvent container or on separate data sheets the maximum volatile organic compound (VOC) content as supplied. The VOC content shall be expressed as grams of VOC per liter of material. On or before December 31, 2021, any solvent manufactured and intended for use in compliance with the ROC composite partial pressure limits in subsection B.1 shall list the ROC composite partial pressure of the solvent expressed as mm Hg @ 20°C.

C. Equipment Requirements for Cold Cleaners

1. All cold cleaners, except remote reservoir cold cleaners, shall be equipped with the following devices:

   a. A drying rack suspended above the solvent, or other facility for draining cleaned parts such that the drained solvent is returned to the cleaner.

   b. A cover that prevents the solvent from evaporating when not processing work in the cleaner. If high volatility solvent is used, the cover must be a sliding, rolling, or guillotine (bi-parting) type that is designed to easily open and close, or it must be designed to be easily operated with one hand.

   c. A freeboard height of at least 6 inches (15.2 centimeters), if low volatility solvent is used.

   d. At least one of the following control devices, if high volatility solvent is used:

      1) A freeboard height such that the freeboard ratio is at least 0.75.

      2) A water cover if the solvent is insoluble in and heavier than water.

      3) An emission collection and control system meeting the requirements of subsection B.5.

   e. A permanent conspicuous mark locating the maximum allowable solvent level that conforms with the applicable freeboard height requirement in Subsection C.1.c or Subsection C.1.d.1.

   f. A permanent conspicuous label or sign summarizing the applicable operating requirements appropriate for cold cleaning operations.

2. Remote reservoir cold cleaners shall be equipped with the following devices:

   a. A permanent conspicuous label or sign summarizing the applicable operating requirements appropriate for cold cleaning operations.

   b. A sink-like work area that is sloped sufficiently towards the drain to preclude pooling of solvent.

   c. A single drain hole, less than 100 square centimeters (15.5 square inches) in area, for the solvent to flow from the sink into the enclosed reservoir.

   d. A freeboard height of at least 6 inches (15.2 centimeters).

e. A cover for the drain when no work is being processed in the cleaner and high volatility solvent is used. If low volatility solvent is used, a cover is not required.

D. Operating Requirements for Cold Cleaners

Any person who operates a cold cleaner shall conform to the following operating requirements:

1. The operator shall drain cleaned parts of all solvent until dripping ceases to ensure that the drained solvent is returned to the cleaner.

2. Solvent agitation, where necessary, shall be achieved using pump recirculation, a mixer, or ultrasonics. Air agitation shall not be used unless a control system meeting the requirements of subsection B.5 is used.

3. If a solvent flow is utilized, only a solid fluid stream (not a fine, atomized, or shower type spray) shall be used unless a control system meeting the requirements of subsection B.5 is used.

4. The pressure of the solvent flow system shall be such that liquid solvent does not splash outside the container.

5. No person shall remove or open any required device designed to cover the solvent unless work is being processed in the cleaner or maintenance is being performed on the cleaner.

6. The cleaning equipment and emission control equipment shall be operated and maintained in proper working order.

7. The cleaning of porous or absorbent materials such as cloth, leather, wood, or rope is prohibited. This provision shall not apply to paper gaskets or paper filters.

E. Exemptions

1. This rule shall not apply to:

a. Cleaning activities using Clean Air Solvent, or a solvent with an ROC-content no more than 25 grams per liter as applied.

b. The use of up to 160 fluid ounces of non-refillable aerosol cleaning products per day, per facility.

c. Janitorial cleaning including graffiti removal.

d. Cleaning carried out in vapor degreasers or motion picture film cleaning equipment.

e. Cleaning operations subject to any of the following rules:

Rule 74.3, Paper, Fabric and Film Coating Operations
Rule 74.5.1, Petroleum Solvent Dry Cleaning
Rule 74.5.2, Synthetic Solvent Dry Cleaning
Rule 74.19, Graphic Arts Operations
Rule 74.19.1, Screen Printing Operations
Rule 74.21, Semiconductor Manufacturing

f. Stripping of cured coating (e.g.; stripping), cured adhesive (e.g.; debonding, unglueing), cured ink, or cured resin.

g. The use of solvent for purposes other than solvent cleaning activities.

2. Subsection B.1 of this rule shall not apply to:

a. Cleaning operations required to comply with any ROC content and/or composite vapor pressure limit in any of the following rules:

Rule 74.12, Surface Coating of Metal Parts and Products
Rule 74.13, Aerospace Assembly and Component Manufacturing Operations
Rule 74.14, Polyester Resin Material Operations
Rule 74.18, Motor Vehicle and Mobile Equipment Coating Operations
Rule 74.20, Adhesives and Sealants
Rule 74.24, Marine Coating Operations
Rule 74.24.1, Pleasure Craft Coating Operations
Rule 74.30, Wood Products Coatings

b. Cleaning of ultraviolet lamps used to cure ultraviolet inks coatings, adhesives or resins.

c. Cleaning of solar cells, laser hardware, scientific instruments, or high-precision optics.

d. Cleaning conducted in laboratory tests and analyses including quality assurance/quality control applications, or bench scale or short-term (less than 2 years) research and development programs.

e. Removal of elemental sodium from the inside of pipes and lines.

f. Cleaning of mold release compounds from molds.

g. Cleaning of tools used to cut or abrade cured magnetic oxide coatings.

h. Cleaning of aerospace assembly and subassembly surfaces that are exposed to strong oxidizers or reducers such as nitrogen tetroxiode, liquid oxygen or hydrazine.

i. Cleaning of paper gaskets.

j. Cleaning of clutch assemblies where rubber is bonded to metal by means of an adhesive.

k. Cleaning of hydraulic actuating fluid from filters and filter housings.

l. Removal of explosive materials and constituents from equipment associated with manufacturing, testing or developing explosives.

m. Facility wide use of less than 1 gallon per week of non-compliant solvent where compliant solvents are not available. Any person claiming this exemption shall maintain records of the volume and formulation of non-compliant solvent used on an as-used basis (recording use each day such material is used). Records shall be saved for at least five (5) years from the date of each record and shall be made available to District personnel upon request.

3. Subsections B.1 and B.2 shall not apply to aircraft engine gas path cleaning or stationary gas turbine gas path cleaning using solvent with an ROC content of 200 g/l or less, as applied.

F. Recordkeeping Requirements

The following records are required to demonstrate compliance with Rule 74.6. Records shall be saved for at least five (5) years from the date of each record. All such records shall be made available to District personnel upon request.

1. Maintain a current material list showing each ROC containing material used in solvent cleaning activities. The list shall summarize the following information:

a. Solvent name and manufacturer's description.

b. All intended uses of the solvent at the facility, classified as follows:

1) Cleanup, including application equipment cleaning, or
2) Cleaning of electronic components, electrical apparatus components, medical devices, or aerospace components, or

3) Solvent used pursuant to an exemption in Section E (specify the exemption claimed) or

c. The ROC content in units of grams of ROC per liter of material (and ROC composite partial pressure in units of mm Hg @ 20C, if applicable) of the solvent.

d. If the solvent is a mix of materials blended by the operator, record the mix ratio.

2. When compliance is achieved through the use of add-on control equipment pursuant to section B.5 of this rule, maintain records on a daily basis of key operating parameters for the emission control equipment, including, but not limited to:

a. Hours of Operation;

b. Routine and nonroutine maintenance; and

c. All information needed to demonstrate continuous compliance with section B.5 of this rule, such as temperatures, pressures, and or flowrates.

G. Test Methods

The following test methods shall apply. Other test methods determined to be equivalent and approved in writing by both the APCO and USEPA may also be used.

1. The ROC content of materials shall be determined by EPA Test Method 24. (40 C.F.R. 60, Appendix A). The ROC content of materials containing 50 g/l of ROC or less shall be determined by the most recent version of South Coast Air Quality Management District (SCAQMD) Method 313 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry) or any other alternative test methods approved by the U.S. EPA, CARB, and the District.

2. The control efficiency of a ROC collection device shall be determined using the U.S. EPA methods 2, 2A or 2D for measuring flow rates and EPA Methods 25, 25A, or 25B for measuring total gaseous organic concentrations at the inlet and outlet of the ROC emission control device. U.S. EPA Method 18 or CARB Method 422 shall be used to determine the emissions of exempt compounds

3. The efficiency of a collection device shall be determined in accordance with the U.S. EPA technical guideline document, “Guidelines for Determining Capture Efficiency,” dated January 9, 1995. Individual capture efficiency test runs subject to U.S. EPA technical guidelines shall be determined by:

a. Applicable U.S. EPA Methods 204, 204A, 204B, 204C, 204D, 204E, and/or 204F; or
b. Any other method approved by U.S. EPA, the California Air Resources Board, and the Air Pollution Control Officer.

4. The identity of components in solvents shall be determined using manufacturer's formulation data or by using ASTM E168-67, ASTM E169-87, or ASTM E260-85.

5. On or before December 31, 2021, ROC composite partial pressure of a solvent shall be calculated using a widely accepted published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances", Elsevier Scientific Publishing Co., New York (1973); Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company; CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985). The true vapor pressure of a component in a solvent mix may be determined by ASTM Method D2879-86. The ROC composite partial pressure of a solvent mix consisting entirely of ROC may be determined by ASTM Method D2879-86.

5. The active and passive solvent losses from spray gun cleaning systems shall be determined using South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" dated October 3, 1989. The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105 mm Hg at 20 ^{o}C. The minimum test temperature shall be 15 ^{o}C.

7. Initial boiling point of solvent shall be determined by ASTM 1078-78 or by using a published source such as listed in subsection G.5.

H. Violations

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

I. Definitions

1. "Adhesive": A substance that is used to bond one surface to another.

2. "Aerosol Product": A hand-held non-refillable container that expels pressurized product by means of a propellant induced force.

3. "Aerospace Component": Any raw material, partial or completed fabricated part, assembly of parts, or completed unit of any aircraft, helicopter, missile, or space vehicle, including mockups and prototypes.

4. "Application Equipment": Equipment used to apply coatings, inks adhesives or resins including but not limited to: spray guns, rollers, brushes, and printing presses. Most application equipment cleanup activities are regulated by source specific rules rather than Rule 74.6.

5. "Clean Air Solvent": A solvent certified by the South Coast Air Quality Management District as a Clean Air Solvent.

6. "Cleanup": The removal of uncured coating, adhesive, ink or resin from any surface, including application equipment, oversprayed surfaces, and hands.

7. "Coating": A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.

8. "Cold cleaner": Any batch operated equipment designed to contain liquid solvent that is operated below the solvent's boiling point to carry out solvent cleaning operations.

9. "Cured Coating, Cured Ink, Cured Adhesive, or Cured Resin": Coating, ink, adhesive or resin that is dry to the touch.

10. "Electrical Apparatus Components": Components such as wires, windings, stators, rotors, magnets, contacts, relays, energizers, and connections in an apparatus that generates or transmits electrical energy including, but not limited to: alternators, generators, transformers, electric motors, cables, and circuit breakers, except for the actual cabinet in which the components are housed. Electrical components of graphic arts application equipment and hot-line tools are also included in this category.

11. "Electronic Component": That portion of an assembly, including circuit card assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and other electrical fixtures, except for the actual cabinet in which the components are housed.

12. "Freeboard height": For cold cleaners, freeboard height is the distance from the top of the solvent to the top of the tank. For remote reservoir cold cleaners, it is the distance from the top of the solvent drain to the top of the tank.

13. "Freeboard ratio": The freeboard height divided by the smaller of the length or width of the degreaser.

14. "Gun Washer": Electrically or pneumatically operated system that is designed to clean spray application equipment while enclosed. A gun washer may also be

considered a gun cleaning system that consists of spraying solvent into an enclosed container using a snug fitting.

15. "High Precision Optic": An optical element used in an electro-optical device and is designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes in light energy levels.

16. "High Volatility Solvent": Any solvent that is not low volatility solvent.

17. "Hot-Line Tool": A specialized tool used primarily on the transmission systems, sub-transmission systems and distribution systems for replacing and repairing circuit components or for other types of work with electrically energized circuits.

18. "Ink: Any fluid or viscous composition used in printing, impressing, or transferring an image onto a substrate.

19. "Janitorial Cleaning": The cleaning of building or facility components, such as the floor, ceiling, walls, windows, doors, stairs, bathrooms, furnishings and the exterior surfaces of office equipment. Janitorial Cleaning does not include the cleaning of process equipment such as piping, storage vessels and work benches.

20. "Liquid Leak": A visible liquid solvent leak from a container at a rate of three or more drops of liquid solvent per minute, or a visible liquid mist.

21. "Low emission spray gun cleaner": Any spray equipment cleanup device that has passive solvent losses of no more than 0.6 grams per hour and has active solvent losses of no more than 15 grams per operating cycle as defined by the test method in Subsection G.6.

22. "Low Volatility Solvent": Unheated solvent with an ROC composite partial pressure of 2 mm Hg or less @ 20°C.

23. "Medical Device": An instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar article, including any component, raw material, or accessory, or any equipment primarily used to manufacture or repair such contrivance, that meets any one of the following conditions:

    a. It is intended for use in the diagnosis of disease or other condition, or in the cure, mitigation, treatment, or prevention of disease.

    b. It is intended to affect the structure or any function of the body.

    c. It is defined in the National Formulary or the United States Pharmacopoeia, or any supplement to them.

24. "Mold Release Compound": A substance applied to a mold, form or pattern to prevent materials from sticking to surfaces.

25. "Non-absorbent Containers": Containers made of nonporous material that do not allow the migration of liquid solvent through them.

26. "Non-atomized Solvent Flow": The use of a solvent in the form of a liquid stream without atomization.

27. Non-leaking Containers": Containers without liquid leaks.

28. "Passive Solvent Losses:" Emissions resulting from natural vaporization of solvent from spray gun cleaning equipment not being used in a cleaning cycle.

29. "Reactive Organic Compound (ROC)": As defined in Rule 2.

30. "Remote Reservoir Cold Cleaner": A device in which solvent is moved through a sink-like work area for cleaning parts and drains immediately, without forming a pool, through a single drain hole less than 100 square centimeters (15.5 square inches) in area into an enclosed container that is not accessible for soaking parts.

31. ROC Composite Partial Pressure": On or before December 31, 2020, the sum of the partial pressures of the compounds defined as ROCs. ROC composite partial pressure is calculated as follows:

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

Where:

W_i = Weight of the "i"th ROC compound, in grams

W_w = Weight of water, in grams

W_e = Weight of the "e"th exempt organic compound, in grams

MW_i = Molecular weight of the "i"th ROC compound, in g/(g-mole)

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

MW_e = Molecular weight of the "e"th exempt compound, in g/(g-mole)

PP_c = ROC composite partial pressure at 20 C, in mm Hg

VP_i = Vapor pressure of the "i"th ROC compound at 20 C, in mm Hg.

32. "ROC Content": The ROC content of a solvent in units of grams of ROC per liter of material is calculated by the following equation:

$$\text{ROC Content} = \frac{Ws - Ww - Wes}{Vm}$$

Where: Ws = Weight of volatile compounds in grams
Ww = Weight of water in grams
Wes = Weight of exempt organic compounds in grams
Vm = Volume of material in liters

33. "Resin": An organic material with little or no tendency to crystallize that is used as the basic components of plastics and/or as a component of surface-coating formulations. Includes but is not limited to polyester resin and silicone polymers.

34. "Runoff": Liquid that flows or drips off of a surface being cleaned.

35. "Scientific Instrument": An instrument (including the components, assemblies, and subassemblies used in their manufacture) and associated accessories and reagents that is used for the detection, measurement, analysis, separation, synthesis, or sequencing of various compounds.

36. "Solvent": Any ROC-containing liquid used to perform solvent cleaning.

37. "Solvent Capacity": The volume of solvent contained in a solvent cleaning device. For a solvent cleaning device connected to a solvent supply reservoir by piping or other passage, the solvent capacity is the volume of the solvent reservoir.

38. "Solvent Cleaning": The use of solvent to remove loosely held uncured adhesive, uncured ink, uncured coating, uncured resin, or other contaminants which include, but are not limited to, dirt, soil, lubricants, coolant, moisture, grease, and fingerprints from parts, products, tools, machinery, equipment, or general work areas.

39. "Stripping": The removal of cured coating, cured ink, cured adhesive, or cured resin.

40. "Thin Metal Laminating:" A process of bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 mil.

41. "Volatile Organic Compound (VOC)": Shall have the same meaning as Reactive Organic Compounds (ROC) as defined in Rule 2 of these Rules.

42. "Wipe Cleaning": The method of cleaning a surface by physically rubbing it with a material or device such as a rag, paper, brush or cotton swab moistened with a solvent.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.6.1 - BATCH LOADED VAPOR DEGREASERS

(Adopted 11/11/03 - effective 7/1/04, Amended 11/10/20)

A. Applicability

The requirements of this rule shall apply to batch loaded vapor degreasers.

B. Equipment Requirements

All batch loaded vapor degreasers shall be equipped with the following equipment:

1. A primary condenser and circumferential trough.

2. A freeboard ratio of at least 1.0

3. A water separator. A water separator is not required if the solvent in use forms an azeotrope with water.

4. A snug fitting cover that is free of cracks, holes or other defects, and is designed to be easily operated without disturbing the vapor zone, such as a sliding, rolling or bi-parting cover. If the degreaser opening is larger than 1 square meter (10.8 square feet) the cover must be mechanically assisted by a spring loaded, counterweighted, sliding, rolling or powered system.

5. A high vapor cutoff thermostat.

6. For degreasers with spray capability, a spray pump control switch.

7. For degreasers with a water-cooled primary condenser, a condenser water flow switch.

8. A permanent conspicuous label or sign summarizing the applicable operating requirements appropriate for batch loaded vapor degreasing operations.

9. An automated parts handling system.

10. At least one of the following control devices:

    a. A superheated vapor zone

    b. A refrigerated freeboard chiller operated such that the chilled air blanket temperature, measured at the center of the air blanket, is no greater than 40% of the boiling point of the solvent, in degrees Fahrenheit, for solvents

that do not form azeotropes with water, or 50% of the boiling point, in degrees Fahrenheit, for solvents that form azeotropes with water.

C. Operating Requirements

Any person who operates a batch loaded vapor degreaser shall conform to the following operating requirements:

1. The cover shall be closed whenever work is not being processed in the degreaser.

2. The following sequence shall be followed for start up and shut down:

   a. When starting up the degreaser, the cooling system shall be turned on before, or simultaneously with, the sump heater.

   b. When shutting down the degreaser, the sump heater shall be turned off before, or simultaneously with, the cooling system.

   c. The degreaser shall be covered whenever the cooling system is turned off.

3. If a solvent spray is utilized, then all spraying shall be done within the vapor zone in a manner that does not cause turbulence at the air-vapor interface. Only a solid fluid stream (not a fine, atomized or shower type spray) shall be used. The pressure of the solvent spray shall be low enough to prevent solvent from splashing out of the degreaser.

4. The workload area shall not be more than one half of the degreaser's air-vapor interface surface area.

5. The degreaser shall not be located in an area where drafts greater than 9.1 meters per minute (30 feet per minute) occur.

6. Solvent carryout shall be minimized by the following measures:

   a. Limit the speed of any powered hoist used to move parts in and out of the degreaser to less than 3.4 meters per minute (11.2 feet per minute).

   b. Degrease the work load in the vapor zone until condensation ceases.

   c. Tip out pools of solvent on the cleaned parts before removal from the degreaser. Drain cleaned parts until dripping ceases.

   d. Do not drain parts in the cold air layer.

   e. Do not remove parts from the degreaser until they are visually dry.

7. No solvent shall be visually detectable in the water exiting the water separator.

8. The degreasing equipment and emission control equipment shall be operated and maintained in proper working order.

9. No person shall remove or open any required device designed to cover the solvent unless work is being processed in the degreaser or maintenance is being performed on the degreaser.

10. Ventilation fans shall not be positioned in such a way as to direct airflow near the degreaser openings.

11. If equipped with a superheated vapor zone, parts and parts baskets shall remain in the vapor zone for at least the minimum dwell time, as specified by the manufacturer.

12. The degreasing of porous or absorbent materials such as cloth, leather, wood, or rope is prohibited.

D. Prohibition

No person shall allow liquid cleaning solvent to leak from any equipment or container.

E. Storage and Disposal

1. All ROC-containing solvents shall be stored in non-absorbent, non-leaking containers that shall be kept closed at all times except when filling or emptying.

2. Waste solvent and waste solvent residues shall be disposed of properly. Spent cleanup solvents may be classified as hazardous waste. The owner or operator shall obtain approval from applicable local, state, or federal water pollution control agency prior to disposing of spent solvents into the sewer or storm drain systems.

F. Alternative Cleaning System: In lieu of the requirements of Section B, or C of this rule, degreaser emissions may be controlled by an emission control system that maintains a combined capture and control efficiency of at least 85 percent, by weight, of the emissions generated by the degreasing activity, and results in an emission rate lower than that achieved by section B, or C of this rule, as approved in writing by the APCO.

G. Exemptions

1. This rule shall not apply to cleaning activities using Clean Air Solvent, or a solvent with an ROC-content no more than 25 grams per liter as applied.

2. Subsections B.9 and B.10 shall not apply to batch loaded vapor degreasers with an open-top surface area less than 1 square foot or a solvent capacity less than 2 gallons, provided the degreasers emit less than 55 pounds of ROC each calendar month.

H. Recordkeeping Requirements

1. Each time solvent is added to the degreaser, record the volume of solvent added. Each time waste solvent and residues are removed, record the volume removed.

2. Maintain records of the type of solvent being used including records of its initial boiling point.

3. The ROC content of material, as used (expressed in g/L (lb/gal))

Records shall be saved for at least five (5) years from the date of each record. All such records shall be made available to District personnel upon request.

I. Test Method

The following test method shall apply. Other test methods determined to be equivalent and approved in writing by the APCO and by EPA may also be used.

1. Compliance with subsection C.5 shall be determined by measuring the length of time for a visible smoke cloud to move one foot (0.3 meters) horizontally in the area directly above the degreaser. If the measured time is more than 2 seconds, compliance is demonstrated.

2. The ROC content of materials shall be determined by EPA Test Method 24 (40 C.F.R. 60, Appendix A). The ROC content of materials containing 50 g/l of ROC or less shall be determined by the most recent version of SCAQMD Method 313 (Determination of Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry) or any other alternative test methods approved by the USEPA, CARB, and the District.

3. The control efficiency of a ROC control system's control device(s) shall be determined using EPA Methods 2, 2A or 2D for measuring flow rates and EPA Methods 25, 25A, or 25B for measuring total gaseous organic concentrations at the inlet and outlet of the ROC emission control system's control device. EPA Method 18 or ARB Method 422 shall be used to determine the emissions of exempt compounds.

4. The efficiency of a collection device shall be determined in accordance with the U.S. EPA technical guideline document, “Guidelines for Determining Capture Efficiency,” dated January 9, 1995. Individual capture efficiency test runs subject to U.S. EPA technical guidelines shall be determined by:

   a. Applicable U.S. EPA Methods 204, 204A, 204B, 204C, 204D, 204E, and/or 204F; or
   b. Any other method approved by U.S. EPA, the California Air Resources Board, and the Air Pollution Control Officer.

5. The identity of components in solvents shall be determined using manufacturer's formulation data or by using ASTM E168-67, ASTM E169-87, or ASTM E260-85.

J. Violations

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

K. Definitions

1. "Air Vapor Interface": The top of the solvent-vapor layer, and the air touching this layer.

2. "Automated Parts Handling System": A mechanical device such as a hoist that carries all parts and parts baskets at a controlled speed from the initial loading of soiled or wet parts through the removal of the cleaned or dried parts.

3. "Batch loaded vapor degreaser": Any nonconveyorized, boiling solvent degreasing equipment.

4. "Circumferential Trough": A receptacle located below the primary condenser that conveys condensed solvent and atmospheric moisture to a water separator.

5. "Condenser Water Flow Switch": A safety switch that turns off the sump heat if the condenser water fails to circulate or rises above the design operating temperature.

6. "Degreaser": A container for solvent and articles being cleaned that includes a facility for draining solvent from surfaces such that the drained solvent is returned to the container.

7. "Freeboard height": For batch loaded vapor degreasers, the distance from the solvent vapor-air interface to the top of the degreaser tank.

8. "Freeboard ratio": The freeboard height divided by the smaller of the length or width of the degreaser.

9. "High Vapor Cutoff Thermostat": A manually reset switch that shuts off the sump heat if the temperature at the air-vapor interface rises above the designed operating level.

10. "Liquid Leak": A visible liquid solvent leak from a container at a rate of three or more drops of liquid solvent per minute, or a visible liquid mist.

11. "Non-absorbent Containers": Containers made of nonporous material that do not allow the migration of the liquid solvent through them.

12. "Non-atomized Solvent Flow": The use of a solvent in the form of a liquid stream without atomization.

13. Non-leaking Containers": Containers without liquid leaks.

14. "Primary Condenser": A series of circumferential cooling coils on the inside walls of a vapor degreaser through which a chilled substance is circulated or recirculated to provide continuous condensation of rinsing solvent vapors, thereby creating a concentrated solvent vapor zone.

15. "ROC Content": The ROC content of a solvent in units of grams of ROC per liter of material is calculated by the following equation:

$$\text{ROC Content} = \frac{Ws - Ww - Wes}{Vm}$$

Where: Ws = Weight of volatile compounds in grams
Ww = Weight of water in grams
Wes = Weight of exempt organic compounds in grams
Vm = Volume of material in liters

16. "Refrigerated Freeboard Chiller": Any equipment mounted above the condenser equipment that carry a refrigerant to provide a chilled air blanket above the solvent vapor, to reduce emissions from a vapor degreaser.

17. "Solvent": Any ROC-containing liquid used to perform solvent cleaning.

18. "Spray Pump Control Switch": A safety switch that prevents the spray pump from operating if the vapor level falls below the design operating level.

19. "Superheated Vapor Zone": A region located within the vapor zone of a degreaser where solvent vapors are heated at least 10 degrees Fahrenheit above the solvent's boiling point.

20. "Water Separator": A device that isolates water from a solvent or a mixture of solvents by a variety of means including, but not limited to, extraction, evaporation, distillation, drying, adsorption, or filtration.

3/26/96

Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries and Chemical Plants (Adopted 5/29/79, Revised 7/3/84, 1/10/89, 10/10/95)

A. Applicability

The following provisions shall apply to any owner or operator of a chemical plant or a petroleum refinery, as defined in Subsections L.5 and L.26, respectively.

B. Identification Requirements

By April 10, 1996, the owner or operator shall visibly and clearly identify all major and critical components that service gases or liquids that contain any ROC. This identification, which is for inspection, repair, replacement, and recordkeeping purposes, shall consist of labels, tags, or other such system approved by the APCO in writing that enables the District or the operator to locate and identify each individual component.

C. Operation Requirements

1. No person shall use any component if such component is emitting a major gas leak or any major or minor liquid leak. Emissions from any component that has been tagged by the operator (in accordance with Subsection D.4) for repair or that has been repaired and is awaiting reinspection shall not be in violation of this subsection.

2. Open-ended Valves: All open-ended valves shall be equipped with a cap, blind flange, plug, or second closed valve that is attached to the open-ended valve to seal the open end at all times, except during any operations requiring process fluid flow through the open-ended line. If a second closed valve is used, the process side valve shall be closed first, after the completion of any operations requiring flow through the open-ended valve.

3. Sampling Systems: No owner or operator shall cause a major liquid leak to occur while sampling or collecting process fluid. Each sampling system shall collect the purged process fluid for recycle or disposal. Sampling of process fluids into containers shall not be considered a major liquid leak.

4. Hatches: Hatches shall be closed at all times, except during sampling, adding of process materials or attended maintenance operations.

5. Effective April 10, 1996, any component leak that is vented through a stack or contained in any other confined air stream shall be transported in a closed-vent system to a vapor recovery system. The vapor disposal portion of the vapor recovery system shall consist of one of the following:

a. A system which directs all vapors to a fuel gas system, a sales gas system, or a flare that combusts ROC.

b. Any other system that processes all vapors and has a ROC vapor destruction or removal efficiency of at least 90 percent, by weight.

D. Inspection Requirements

1. The owner or operator shall:

a. Physically inspect all accessible operating pumps, compressors, and pressure relief devices (PRDs) in service for leaks and indications of leaks once during every eight-hour operating period or every operating shift, whichever is longer. Any gaseous leak that is identified during this inspection of components shall be measured by EPA Reference Method 21.

b. Inspect all PRDs at least quarterly for leaks using EPA Reference Method 21. The period between inspections shall not exceed 110 consecutive days.

c. Inspect all components, except PRDs, at least monthly for leaks according to EPA Reference Method 21.

d. Inspect all new, replaced or repaired fittings, including flanges and threaded connections, for leaks using EPA Reference Method 21:

1) Immediately after being placed into service, or

2) Within 30 days after being placed into service if a leak detection system that involves pressurization of the system with nitrogen, water or other inert substance, which has been approved in writing by the APCO, is used prior to the fitting being placed into service.

2. If a component is found to be not leaking any major gas leak or any major liquid leak for three consecutive monthly inspections using EPA Method 21, then the component shall be inspected not less than quarterly, except for flanges and threaded connections, which shall be inspected not less than annually. The inspection schedule for that component shall revert back to monthly when a subsequent major gas leak or major liquid leak from that component is detected.

3. If an operating pump is found to be not leaking any liquid leak for ten consecutive physical inspections, then the operating pump shall be physically inspected not less than weekly. The inspection schedule for that pump shall revert back to every eight-hour operating period or every operating shift, whichever is longer, when a subsequent liquid leak from that pump is detected.

4. Upon detection of a leaking component, a readily visible tag shall be affixed to that component. The tag shall remain in place until the leaking component is repaired, reinspected, and found in compliance with the requirements of this Rule.

   If the leak is gaseous, the owner or operator shall include the following on the tag: date and time when the leak is detected; date and time when the leak is measured; and the hydrocarbon concentration (ppmv) using EPA Reference Method 21. This leak measurement shall be performed as soon as possible but no later than 24 hours after detection.

   If the leak is liquid, the owner or operator shall include the following on the tag: date and time of leak detection; and whether the leak is minor or major.

E. Repair Requirements

1. The owner or operator shall immediately minimize all component leaks following detection.

2. The owner or operator shall successfully repair, replace, or eliminate all leaks from noncritical components within the time period in accordance with Table 1, Repair Periods. For gaseous leaks, the repair period shall start at the time of leak measurement. For liquid leaks, the repair period shall start at the time of leak detection.

Table 1, Repair Periods

Type of Leak	Period (days)[a]
Minor Gas Leak	14
Major Gas Leak	5
Major Gas Leak over 50,000 ppmv	1[b]
Minor Liquid Leak	2[b]
Major Liquid Leak	1[b]

3. The owner or operator shall reduce the ROC concentration of any vapors being emitted from a PRD to a level of no more than 200 ppmv above background as soon as practicable, but no later than 3 days after any emergency release.

4. The owner or operator shall reinspect any repaired or replaced component using EPA Reference Method 21 within 30 days after the repair or replacement.

5. For major gas leaks or major liquid leaks from any critical compressor, pump, PRD or valve, the owner or operator shall

[a] Day means a 24 hour period.
[b] Unless prohibited by state safety standards or 29 CFR 1910.

replace or retrofit the leaking component with one of the control technology options listed in Table 2 or with Best Available Control Technology (BACT) equipment, as approved by the APCO in writing, within one year from the date of leak detection, or during the next critical process unit shutdown, whichever occurs first.

For minor gas leaks or minor liquid leaks from critical components, or for major gas leaks or major liquid leaks from critical components other than compressors, pumps, PRDs or valves, the owner or operator shall successfully repair or replace all leaking components within one year from leak detection or during the next critical process unit shutdown, whichever occurs first.

Within 72 hours of detecting a major gas leak or major liquid leak from a critical compressor, pump, PRD or valve, the operator shall notify the District of the leak(s) unless the operator has already complied with the repair/retrofit requirements of this subsection (E.5).

Table 2
Component Control Technology Replacement/Retrofit Options

Component	Control Technology Options
Compressor:	1. Enclose shaft seals and vent to vapor recovery/disposal. 2. Oil film or gas seal. 3. Face-type seal.
Pump:	1. Enclose shaft seals and vent to vapor recovery/disposal. 2. Sealless pump. 3. Double mechanical seals.
PRD:	1. Vent to vapor recovery/disposal. 2. Rupture disc.
Valve:	1. Bellows seals. 2. Graphite, PFE or PTFE stack chevron seal rings in a live-loaded packing gland.

6. For a compressor, pump, PRD or valve that incurs 5 repair actions for a major gas or major liquid leak within a continuous 12 month period, the owner or operator shall replace or retrofit the leaking component with one of the control technology options listed in Table 2 or with BACT equipment, as approved by the APCO in writing, within one year from date of leak detection. The operator shall notify the District in writing within 72 hours once a compressor, pump, PRD or valve has had 5 repair actions for a major gas leak or major liquid leak in the previous 12 months

unless the operator has already complied with the repair/retrofit requirements of this subsection (E.6).

F. Exemptions

1. A PRD may be exempted from the requirement of Subsection D.1.b if the PRD is inspected annually for leaks in accordance with EPA Reference Method 21 and the PRD is protected by a rupture disc and there are no leaks. The rupture disc shall be replaced no later than 3 days after a pressure release.

2. The identification, operation, and inspection requirements (Sections B, C, and D) shall not apply to the following:

   a. Pumps, compressors, and PRDs that are equipped with a closed-vent system to a vapor recovery system. The vapor disposal portion of the vapor recovery system shall consist of one of the following:

      1) A system which directs all vapors to a fuel gas system, a sales gas system, or a flare that combusts ROC.

      2) Any other system that processes all vapors and has a ROC vapor destruction or removal efficiency of at least 90 percent, by weight.

   b. Underground components.

   c. One-half inch and smaller stainless steel tube fittings which have been inspected by the operator to be leak-free using EPA Method 21.

   d. Components in vacuum service.

   e. The following cases that meet applicable criteria for exemption and are verified in the Operator Management Plan:

      1) Components exclusively handling fluids with an ROC concentration of 10 percent by weight or less.

      2) Components exclusively handling fluids if the weight percent evaporated is 10 percent or less at 150 degrees Celsius in accordance with Test Method ASTM D86-82.

3. The inspection requirements in Section D shall not apply to facilities having a Standard Industrial Classification (SIC) Code of 2844 and manufacture perfumes, cosmetics or other toiletries.

4. An owner or operator may petition the APCO for exemption from the repair requirements in Subsections E.5 and E.6 by submitting a cost evaluation for retrofitting or replacing a compressor, pump, PRD or valve. Each petition shall include a cost-effectiveness

evaluation conducted in accordance with "BACT Cost-Effectiveness Procedures and Screening Levels for Costs," adopted by the Air Pollution Control Board on December 20, 1988. Any owner or operator requesting this exemption shall pay an exemption evaluation fee in accordance with Rule 44, Exemption Evaluation Fee.

The cost analysis shall be based on the retrofit cost of the component if a retrofit is feasible. If the component cannot be retrofitted, then the following control option with the lower cost shall be used in the cost analysis:

- Component replacement with the lowest cost control technology option that is a designated control for that component from Table 2.
- Enclosing the component seal and venting to a vapor recovery system.

Evidence of costs shall include written bids from vendors, published price lists, or other verifiable cost information. The potential emission reduction from the component retrofit/replacement shall be based on the ROC emissions over the previous 12 months. ROC emissions from a critical process unit shutdown shall be included if those emissions are associated with a critical leaking component. APCO-approved emission factors or source tests shall be used to quantify emissions.

G. Operator Management Plan

1. Each operator of a petroleum refinery or chemical plant shall submit an operator management plan to the APCO. The APCO shall determine whether the operator management plan meets the requirements of this rule and notify the operator on the acceptance or rejection of the plan. The operator management plan shall include:

   a. Identification of each process unit and, by diagram or other location/tracking system, identification of each component (except for flanges and threaded fittings), subject to any requirements of this rule.

   b. Critical process units and critical components.

   c. A listing and description of all components for which an exemption is being claimed. Applicable test reports shall be included to qualify the exempt status of each component.

   d. The inspection schedule to be followed.

   e. Maintenance procedures and practices that will be taken to affect leak repairs on the various components and equipment subject to this rule.

f. Identification and description of any known hazard which may affect the safety of APCD personnel.

2. An existing operator management plan shall be updated no later than April 10, 1996 to include any provision that is needed to show compliance with this rule.

H. Recordkeeping

1. Each operator subject to this rule shall maintain an inspection log for component liquid leaks and component gaseous leaks, containing, at a minimum, the following data:

a. Name and location of any process unit where leaking components or equipment were found.

b. Type of component or equipment, component identifier, and identification of process fluid.

c. For gaseous leaks: Date and time of leak detection, date and time of leak measurement, analyzer reading (ppmv) of the leak, and method of leak measurement.

d. For liquid leaks: Date and time of leak detection and whether leak is a minor or major leak.

e. Date of leak repair and description of repair action.

f. Date of recheck and analyzer reading (ppmv) after leak is repaired.

g. Identification of leaks from critical components that cannot be repaired until process unit turnaround.

h. Total number of components inspected, and total number of leaking components found.

i. Maintenance and calibration records of appropriate analyzer used in the EPA Method 21 measurements.

2. The inspection log shall be retained by the operator for a minimum of 2 years after the latest date of an entry.

3. The inspection log shall be made available to APCD personnel upon request.

I. Reporting

No later than January 30 of each year, each operator subject to this rule shall submit to the APCO a report for the previous year's inspection and maintenance activities which:

1. Includes a copy of the leak detection and repair records for any leak detected during the previous year.

2. Provides an annual update to the Operator Management Plan including any changes to component identifications, component diagrams, exemptions, inspection schedule, or any other changes to the inspection and maintenance program. If no changes to the Plan have occurred over the past 12 months, then the operator shall indicate this in the annual report.

J. Test Methods

1. Measurement of total organic compounds concentrations (ppmv) from gaseous leaking components shall be performed using EPA Reference Method 21 after the analyzer has been calibrated with methane.

2. The ROC concentration of fluids shall be determined using ASTM E260-91, or updated versions of this method, approved by the EPA and referenced in 40 CFR 60.

3. Determination of the weight percentage of evaporated compounds of liquids shall be performed in accordance with ASTM Method D 86-82.

4. Determination of the control efficiency of any ROC control equipment shall be performed in accordance with EPA Method 25, 25A, or South Coast AQMD Method 25.1.

K. Violations

The failure of a person to meet any requirement of this Rule shall constitute a violation of this rule. Each leak discovered by District personnel shall constitute a violation of Section C.1 of this Rule.

L. Definitions

1. "Accessible Component": Any component located less than 15 feet above ground when access is required from the ground, or any component located under 6 feet away from a platform when access is required from the platform.

2. "Agitator": Any device or machine used to stir, shake, mix or blend chemicals.

3. "Appropriate Analyzer": A hydrocarbon analyzer that meets the requirements of EPA Reference Method 21 and is calibrated with methane.

4. "Background": is defined as the reading on an appropriate analyzer determined at least 3 meters up-wind from the component or equipment to be inspected and uninfluenced by any specific emission point.

5. "Chemical Plant:" Any facility engaged in producing organic or inorganic chemicals and/or manufacturing products by chemical processes. Any facility or operation that has 282, 284, or 286 as the first three digits in their Standard Industrial Classification

(SIC) Code as determined from the Standard Industrial Classification Manual published in 1972 (or any more recent update) by the Executive Office of the President, Office of Management and Budget.

6. "Closed-vent system": Any system that is not open to the atmosphere and is composed of piping, connections, and, if necessary, flow-inducing devices that transport gases or vapors from a piece or pieces of equipment to a vapor recovery or disposal system.

7. "Component": Any pump, compressor, pressure relief device, open-ended line, agitator, valve, fitting, flange, connection, diaphragm, hatch, sight glass, meter or other fugitive emission source.

8. "Compressor": Any device used to compress gases and/or vapors.

9. "Critical Component": Any component that would require the shutdown of the associated critical process unit in order to be repaired.

10. "Critical Process Unit": Any process unit that has no standby equipment available, that cannot be bypassed, and where it would be technically infeasible to repair leaks from that process unit without removing it from service.

11. "Critical Process Unit Shutdown": A work practice or operational procedure that stops production from a critical process unit. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a critical process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not critical process unit shutdowns.

12. "Fitting": A component used to attach or connect pipes, piping details to other equipment. These components include but are not limited to flanges, threaded connections, and other connectors.

13. "Fugitive Emission Source": A source of fugitive emissions is any equipment that leaks where the emission is not confined to a stack or duct.

14. "Hatch": Any covered opening system that provides access to a tank or container, usually through the top deck.

15. "Leak:": A major gas leak, major liquid leak, minor gas leak, or minor liquid leak.

16. "Leak Minimization": Leak minimization means reducing a leak to the lowest achievable level using best modern practices including but not limited to tightening, adjusting, or adding sealing

material without shutting down the process which the component serves.

17. "Leak Repair": A leak repair is any corrective action taken for the purposes of reducing a component leak to the lowest achievable level below the applicable minor gas or minor liquid leak standard using best modern practices.

18. "Major Component": Any 4-inch or larger valve, any 5 horsepower or larger pump, any compressor, or any 4 inch or larger pressure relief device.

19. "Major Gas Leak": A major gas leak for any component, except pressure relief devices, means the detection of total gaseous organic compounds in excess of 10,000 ppmv, as methane, above background measured according to the test procedures in Subsection J.1 of this rule.

    A major gas leak for a pressure relief device means the detection of total gaseous organic compounds in excess of 200 ppmv as methane above background as measured according the test procedures in Section J.1 of this rule, unless the process pressure exceeds the limit setting specified for the PRD.

20. "Major Liquid Leak": A major liquid leak is a visible mist or cloud or a continuous flow of liquid that contains ROC and that is not a seal oil or other similar lubricant. Sampling of process fluids into containers shall not be considered a major liquid leak.

21. "Minor Component": A minor component is any component that is not a major component.

22. "Minor Gas Leak": A minor gas leak for any component means the detection of total gaseous organic compounds in excess of 1,000 ppmv but not more than 10,000 ppmv, as methane, above background measured according to the test procedures in Subsection J.1 of this rule.

23. "Minor Liquid Leak": Any liquid leak containing ROC that is not a major liquid leak and drips at a rate of more than 3 drops per minute, excluding leaks from seal oil or other similar lubricant.

24. "Owner or Operator": Any person who owns, operates, leases, controls, or supervises an emissions source or air pollution control equipment.

25. "Person": Any individual, corporation, company, partnership, or any other legal entity or their legal representative.

26. "Petroleum Refinery": Any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking, rearrangement, or reforming of

unfinished petroleum derivatives, as defined in the SIC Code 2911, Petroleum Refining.

27. "Physical Inspection": This means performing a survey to identify signs or evidence of leaking liquid, visible mist, audible leaks, vapor plume, odor or any other indications of a leak.

28. "Pressure Relief Device" (PRD): Any pressure relief valve, rupture disc, or any other equipment designed to relieve pressure within a process line when the static pressure reaches a setpoint.

29. "Pressure Relief Valve": Any valve that is automatically actuated by upstream static pressure, and used for safety or emergency purposes.

30. "Pump": Any device used to transport fluids by the addition of mechanical energy.

31. "Rupture Disc": A diaphragm held between flanges for the purpose of isolating a reactive organic compound from the atmosphere or from a downstream pressure relief valve.

32. "Tag": A tag is a piece of paper, metal or plastic that is attached to something for identification or other information. A tag may also be some other system approved in writing by the APCO that demonstrates to District personnel that the operator has detected a component leak awaiting repair and contains all of the information required to be on tags by this rule.

33. "Vacuum service": In-Vacuum service means that the equipment is operating at an internal pressure that is at least 0.73 in. of Hg below ambient pressure.

34. "Valve": Any device that regulates or isolates the fluid flow in a pipe, tube, or conduit by means of an external actuator.

35. "Vapor Control System": Any system that is not open to the atmosphere and is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a vapor recovery or disposal system.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

Rule 74.8. Refinery Vacuum Producing Systems, Wastewater Separators and Process Turnarounds

(Adopted 6/19/79, Revised 7/5/83)

A. Requirements for Refinery Vacuum Producing Systems

1. A person shall not use any vacuum producing system at a petroleum refinery for handling reactive organic compounds unless all reactive organic compounds are prevented from entering the atmosphere to the extent required by Section A.2.

2. Compliance with Section A.1 of this Rule shall be accomplished in part by:

   a. Containing all uncondensed reactive organic compound vapors emitted from vacuum producing systems and piping those vapors to a firebox, a flare, or adding said vapors to refinery fuel gas or feedstocks; or

   b. Controlling uncondensed reactive organic compound vapors emitted from vacuum producing systems by methods which the Air Pollution Control Officer has determined will not allow any such vapors to be emitted to the atmosphere.

3. A person shall enclose until introduced to a sewer all streams of water containing reactive organic compounds which have been condensed in a condenser associated with a vacuum device in a petroleum refinery. Any gaseous reactive organic compounds emitted from the enclosure shall be collected and disposed of in a manner required by Section A.2 of this Rule.

B. Requirements for Refinery Wastewater Separators

1. A person shall not use any inlet distribution header or compartment of a wastewater separator at a petroleum refinery unless said heater or compartment is equipped with:

   a. A solid cover with all openings sealed totally enclosing the compartment liquid contents, except for such breathing vents as are structurally necessary; or

   b. A floating cover which extends to within 0.125 inches of the wall of said compartment or header at all points on the perimeter of the cover except over a cumulative length of no more than three percent of the perimeter, the cover shall extend to within 0.5 inches of the wall; or

   c. Controls which the Air Pollution Control Officer has determined will reduce reactive organic compound gas emissions from said compartment or header to or below the mass emission rate which would occur if controls described in B.1.a or B.1.b were applied.

2. All gauging and sampling devices in the compartment cover shall be equipped with a cover that is in a closed position at all times except when the devices are in actual use or when the compartment does not contain reactive organic compounds.

C. Requirements for Refinery Process Turnaround

1. A person shall not vent reactive organic compounds to the atmosphere during the process depressurization of the vessel purging steps of a refinery process turnaround.

2. Compliance with Section C.1 of this Rule shall be accomplished by venting all uncondensed reactive organic compound gases to a fuel gas system or to a flare, or by other methods which the Air Pollution Control Officer has determined will prevent said gases from being emitted to the atmosphere.

3. Upon receipt and validation of documentation of the infeasibility of using existing control facilities to control the purge gas stream from a process vessel, the Air Pollution Control Officer may exempt that process vessel from those requirements of Section C.2 which would otherwise require the control of such purge gases. The necessity to install valves or piping or to purge the process vessel at a lower rate than would otherwise be used shall not constitute grounds for exemption.

D. Definitions - For the purpose of this Rule, the following definitions apply:

1. "Vacuum Producing Systems mean:

   a. Steam ejectors with contact condensers, including hot wells;

   b. Steam ejectors with surface condensers, including hot wells; and

   c. Mechanical vacuum pumps.

2. "Wastewater Separators" means any device used for separating organic liquids from refinery wastewater.

3. "Process Turnaround" means the operation of unit (i.e., reactors, fractionators, etc.) shutdown.

4. "Reactive Organic Compound" means any compound of carbon excluding carbon monoxide, carbon dioxide, carbon acid, metallic carbides, carbonates, and methane.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.9 - STATIONARY INTERNAL COMBUSTION ENGINES
(Adopted 7/21/81, Revised 7/2/85, 9/5/89, 12/3/91, 12/21/93, 11/14/00, 11/8/05)

A. Applicability

This rule applies to any stationary spark-ignited or diesel internal combustion engine rated at 50 or more horsepower, operated on any gaseous fuel, including liquid petroleum gas (LPG), or liquid fuel, and not subject to the provisions of Rule 74.16.

B. Requirements

1. Except as noted in Subsection B.1.a, the owner or operator of a stationary internal combustion engine to which this rule is applicable shall limit emissions from that engine to no more than the following:

Engine Type	NOx (ppmv)	ROC (ppmv)	CO (ppmv)
Rich-burn, general	25	250	4500
Lean-burn, general	45	750	4500
Diesel	80	750	4500
Rich-burn, waste gas	50	250	4500
Lean-burn, waste gas	125	750	4500

where ppmv = parts per million by volume at 15 percent oxygen on a dry basis
NOx = oxides of nitrogen
ROC = reactive organic compounds
CO = carbon monoxide

a. Carbon monoxide emissions from any engine installed after November 8, 2005, shall be limited to 2000 ppm by volume at 15 percent oxygen on a dry basis.

2. In lieu of compliance with a NOx emission limit in Subsection B.1, engines may achieve and maintain a percent NOx reduction by weight limit specified below, as measured concurrently across an emission control device:

Rich-burn, general	96 percent
Lean-burn, general	94 percent
Diesel	90 percent

3. No person shall allow the discharge into the atmosphere of ammonia (NH_3) in excess of 20 ppmv from any emission control device installed and operated pursuant to the requirements of Subsections B.1 or B.2 above.

4. The owner or operator of a stationary internal combustion engine shall perform a biennial source test to verify compliance with all applicable emission limits. A source test shall consist of the average of three (3) runs, with data from each run averaged over 15 consecutive minutes.

5. The owner or operator of a stationary internal combustion engine shall perform a screening analysis of NOx and CO emissions on a quarterly basis unless:

   a. the biennial source test specified in Subsection B.4 is required, or

   b. the engine operated less than 32 hours in each of the three months of the applicable quarter, as measured by a non-resettable elapsed operating hour meter.

   The operator shall notify the APCD by telephone 24 hours prior to any quarterly screening analysis.

C. Engine Operator Inspection Plan

The operator of an engine subject to the provisions of Subsection B.1 or B.2 of this rule shall submit to the District an Engine Operator Inspection Plan for review and approval by the Air Pollution Control Officer in writing. The plan shall be updated after any change in operation. For new engines and modifications to existing engines, issuance of the Permit to Operate shall be contingent on approval of the plan. The operator may request a change to the plan at any time.

The Plan shall include the following:

1. The manufacturer, model number, rated horsepower, and combustion method (i.e., rich-burn, lean-burn or diesel) of the engine.

2. A description of the NOx control system installed on the engine (if any), including type (e.g., nonselective catalyst, "clean-burn" combustion) and manufacturer, as well as a description of any ancillary equipment related to the control of emissions (e.g., automatic air/fuel ratio controller, fuel valves).

3. The company identification number and the location of the engine by a schematic of the affected facilities.

4. A specific emission inspection procedure to assure that the engine is operated in continual compliance with the provisions of this rule. The procedure shall include an inspection schedule. At a minimum, inspections shall be conducted quarterly unless the engine operated less than 32 hours in each of the three months of the applicable quarter, as measured by a non-resettable elapsed operating hour meter.

5. Each preventative or corrective maintenance procedure or practice that will be used to maintain the engine and NOx control system in continual compliance with the

provisions of this rule, including the response time for both corrective action and reinspection.

D. Exemptions

The provisions of Sections B, C and E of this rule shall not apply to the operation of stationary internal combustion engines used under the following conditions:

1. Engines rated at less than 50 brake horsepower.

2. Engines operated less than 200 hours per calendar year. Engines claiming this exemption shall be required to install and operate a non-resettable elapsed operating hour meter.

3. Emergency standby engines operated during either an emergency or maintenance operation. Maintenance operation is limited to 50 hours per calendar year. Engines claiming this exemption shall be required to install and operate a non-resettable elapsed operating hour meter.

4. Engines used in research or teaching programs.

5. Engines used directly and exclusively for agricultural operations necessary for the growing of crops or the raising of fowl or animals.

6. Engine test stands used for evaluating engine performance.

7. All engines rated at less than 100 horsepower, emitting NOx at not more than 5 gm/bhp-hr (shaft), and utilized as a qualified cogeneration facility permanently displacing the use of a specified boiler or boilers. This exemption shall apply to only those engines installed prior to December 31, 1988. A qualified cogeneration facility is one meeting the requirements of 18 CFR Part 292 Subpart B Section 292.205.

8. Diesel engines with a permitted capacity factor of 15 percent or less.

9. Diesel engines used to power cranes and welding equipment.

10. Diesel engines operated on San Nicolas island and Anacapa Island.

E. Recordkeeping Requirements

1. The owner or operator of any engine subject to the provisions of Section B of this rule shall maintain an inspection log containing, at a minimum, the following data:

   a. Identification and location of each engine subject to the provisions of this rule,

b. Date and results of each screening analysis and inspection,

c. A summary of any emissions corrective maintenance taken, and

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

The operator shall maintain the inspection log for a period of 2 years after the date of each entry. The log shall be available for inspection by the District upon request.

2. For each engine exempt from quarterly screening analysis pursuant to Subsection B.5.b and inspection pursuant to Subsection C.4, the owner or operator shall record total hours of operation each month. Records shall be maintained for a period of 2 years after the date of each entry.

F. Reporting Requirements

1. Within 45 days of the end date of each permit renewal period, the operator of a permitted engine subject to the provisions of this rule shall provide the District with the following information:

a. Engine manufacturer, model number, operator identification number, and location.

b. A summary of maintenance reports during the renewal period, including quarterly screening data if applicable.

2. For each engine exempt pursuant to Subsection D.2, total annual operating hours shall be reported annually. For each engine exempt pursuant to Subsection D.3, total annual hours of maintenance operation shall be reported annually. Reports shall be provided to the District after every calendar year by February 15.

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G. Test Methods

1. Oxides of nitrogen emissions for compliance source tests shall be determined by using ARB Method 100.

2. Carbon monoxide emissions for compliance source tests shall be determined by using ARB Method 100.

3. Reactive organic compound emissions for compliance source tests shall be determined by using EPA Method 25 or EPA Method 18, referenced to methane.

4. Oxygen content for compliance source tests shall be determined by using ARB Method 100.

5. Screening analyses shall be performed using a portable analyzer either verified by the Environmental Protection Agency or approved in writing by the APCO. The

portable analyzer shall be calibrated, maintained and operated in accordance with the recommendations of the manufacturer.

6. Ammonia emissions shall be determined using Bay Area Air Quality Management District Method ST-1B, dated 1/20/82.

7. Non-resettable elapsed operating hour meters shall be maintained in accordance with the recommendations of the manufacturer.

H. Violations

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

2. It is the responsibility of the engine operator to demonstrate to the satisfaction of the Air Pollution Control Officer that an engine subject to the provisions of this rule is being operated in continuous compliance with all applicable provisions of this rule.

   An engine shall be in violation if it is operated out of compliance with an approved Engine Operator Inspection Plan. However, if data from a source test of the engine operating under identical conditions indicates that the engine is in compliance with the requirements of this rule, then a violation will not have occurred. The source test shall be conducted at the engine operator's expense.

I. Definitions

1. "Diesel Engine": A compression ignited two or four-stroke engine in which liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition.

2. "Emergency Standby Engine": An internal combustion engine used only as follows:

   a. When normal power line or natural gas service fails.
   b. For the emergency pumping of water for either fire protection or flood relief.

   An emergency standby engine may not be operated to supplement a primary power source when the load capacity or rating of the primary power source has been either reached or exceeded.

3. "Engine Rating": The output of an engine as determined by the engine manufacturer and listed on the nameplate of the unit, regardless of any derating.

4. "Lean-burn Engine": Any two or four-stroke spark-ignited engine that is not a rich-burn engine.

5. "Maintenance Operation": The use of an emergency standby engine and fuel system during testing, repair and routine maintenance to verify its readiness for emergency standby use, or to facilitate the training of personnel on emergency activities.

6. "Oxides of Nitrogen": The sum of nitric oxide (NO) and nitrogen dioxide (NO_2) in flue gas, collectively expressed as nitrogen dioxide.

7. "Permitted Capacity Factor": The annual permitted fuel use divided by the manufacturers specified maximum hourly fuel consumption times 8760 hours per year.

8. "Rich-burn Engine": A two or four-stroke spark-ignited engine where the manufacturers original recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio is less than or equal to 1.1.

9. "Stationary Internal Combustion Engine": Any internal combustion engine of the reciprocating type that is operated at a site for more than one year or is attached to a foundation.

10. "Stoichiometric Air/Fuel Ratio": The chemically correct air/fuel ratio where all fuel and all oxygen in the air/fuel mixture will be consumed.

11. "Waste Gas": Fuel gas produced at either waste water/sewage treatment facilities or landfills containing no more than 25 percent by volume supplemental gas.

6/23/98

Rule 74.10. Components at Crude Oil and Natural Gas Production and Processing Facilities. (Adopted 9/29/81, Revised 9/22/87, 5/28/91, 6/16/92, 03/10/98)

A. Applicability

The following provisions shall apply to crude oil and gas production facilities, pipeline transfer stations, and natural gas processing facilities.

B. Identification Requirements

The operator shall identify all leaking components that cannot be immediately repaired. This identification shall consist of readily visible labels, tags, or other such system approved by the APCO, in writing, that enables the District and the operator to locate and identify each leaking component. Identification tags and labels shall remain visible for at least one year from the date attached.

C. Operating Requirements

1. Hatches shall be closed at all times except during sampling, adding of process material through the hatch, or attended maintenance operations.

2. No person shall use a component that emits a major gas leak, major liquid leak or minor liquid leak and the applicable maximum leak threshold for that component category, as listed in Attachment 1, has been exceeded at the facility in any calendar quarter. The provisions of this subsection shall not apply to components that are tagged and repaired in accordance with Sections D and F of this Rule.

D. Operator Inspection Requirements

1. Inspection Requirements - Natural Gas Processing Plants: Operators shall inspect with or without instrumentation all accessible operating pump seals, compressor seals, and pressure relief valves in service for leaks or indications of leaks once during every operating shift or every eight-hour period, whichever is greater.

2. Inspection Requirements - Oil and Gas Production Facilities and Pipeline Transfer Stations: Operators shall inspect with or without instrumentation all operating pump seals, compressor seals, pressure relief valves in service, and polished rod stuffing boxes for leaks or indications of leaks as follows:

   a. Inspection frequency at manned facilities shall be at least once per day except when operators do not report to work at a facility at any time during that day.

   b. Inspection frequency at unmanned facilities shall be at least once per week.

3. Any gaseous leaks or indications of gaseous leaks discovered by inspection, that cannot be immediately repaired, shall be measured

using EPA Method 21. The operator shall perform this leak measurement as follows:

a. For leaks detected during normal business hours, the leak measurement shall be performed as soon as feasible but no later than 24 hours after detection. If this 24 hour deadline occurs on a weekend or holiday, then the deadline is shifted to the end of the next normal business day.

b. For leaks detected during holidays, weekends or after business hours, the leak measurement shall be performed as soon as feasible but no later than the end of the next normal business day.

4. Immediately after being placed into service, an operator shall inspect all new, replaced or repaired fittings, including flanges and threaded connections, for leaks using EPA Method 21.

5. Operators shall inspect all components, except for the following, at least every calendar quarter for gaseous leaks using EPA Method 21.

a. Inaccessible components or unsafe to monitor components shall be inspected for leaks by the operator at least annually using EPA Method 21.

b. Threaded connections and flanges shall be inspected for leaks by the operator using EPA Method 21 annually, unless the operator has designated them in the Operator Management Plan as exempt from all inspection requirements and subject to a zero leak threshold.

6. A pressure relief valve shall be inspected using EPA Method 21 within 3 calendar days after every known pressure release.

7. Upon detection, operators shall affix a visible, weatherproof tag to all leaking components awaiting repair. The tag shall remain affixed until the component is repaired free of leaks as shown by re-inspection.

If the leak is gaseous, the operator shall include the following on the tag: date and time of leak detection, date and time of leak measurement; and the concentration (ppmv) measured using EPA Method 21.

If the leak is liquid, the operator shall include the following on the tag: date and time of leak detection; and whether leak is minor or major.

A tag may also be some other system approved in writing by the APCO that demonstrates to District personnel that the operator has detected a component leak awaiting repair and contains all of the information required to be on tags by this Subsection.

8. Notwithstanding the requirements of Subsection D.5, operators may inspect components annually instead of quarterly at a facility by satisfying all the following provisions, except that compressor seals, pressure relief valves, polished rod stuffing boxes, and pump seals shall not be eligible for this reduction in inspection frequency:

a. During 4 consecutive calendar quarters, successfully operate and maintain all components at the facility so that no more than 0.5 percent of the total components inspected, excluding polished rod stuffing boxes, have liquid leaks or major gas leaks that have not been immediately repaired.

b. A Notice of Violation from the District for a violation of Subsection C.2 was not received by the operator for the facility during the previous twelve months.

c. Submit a written request to the District for a reduction in inspection frequency. This request shall contain backup documentation including inspection reports that demonstrates that the above performance level in Subsection D.8.a has been achieved. Requests for a reduction in inspection frequency are not effective until written approval by the APCO is received by the operator.

9. An annual inspection frequency approved in Subsection D.8 shall revert to the inspection frequency specified in Subsection D.5 should the sum of liquid leaks and major gas leaks, not including leaks from polished rod stuffing boxes, exceed 0.5 percent of the total components inspected per inspection period or should the operator receive a Notice of Violation from the District for violation of Subsection C.2 for that facility.

E. Operator Management Plan Requirements

1. Each operator shall submit an Operator Management Plan to the APCO for approval. If the APCO fails to respond to the Plan in writing within 90 days after it has been received, then it shall be deemed approved. No provision in the Plan, approved or not, shall conflict with or take precedence over any provision of this rule. The Plan shall identify any component exempt from this rule or part of this rule, and describe the procedures which the operator intends to use to comply with the requirements of this rule. The Plan shall include:

a. Establishment of a data base of every leaking component that cannot be immediately repaired. The following parameters shall be included:

1) Identification number, name or code.

2) Component type, process unit and location.

3) Dates found leaking and repair description for each leak found.

This identification provision is for inspection, repair, replacement and recordkeeping purposes.

b. Identification of critical process units.

c. Identification of components for which exemption from this rule is being claimed under Section G.1 of this Rule. Gaseous streams and liquid streams, exempted by Subsections G.1.a, G.1.b, G.1.c, or G.1.e shall be verified by analysis

of the ROC concentrations, and the results of such analyses shall be included.

d. Identification of liquid streams or components for which exemption is being claimed from the operator inspection requirements under Subsection G.3. The results of any testing used to qualify a stream for exemption shall be included.

e. Whether flanges or threaded fittings are exempt from all inspection requirements and subject to a zero leak threshold or whether flanges or threaded fittings are subject to annual inspection requirements and a one percent leak threshold as specified in Attachment 1.

f. The inspection schedule to be followed.

g. Identification and description of any known hazard which may affect the safety of APCD personnel.

h. Identification of unmanned production facilities, if applicable.

2. The operator shall be required, upon written request by the APCO, to re-qualify, by analysis, the exemption(s) from the rule or part of the rule (Subsections G.1 and G.3) if the exemption(s) may no longer be valid based on the changed composition of the process stream. The results of that analysis and any modification to the Plan shall be submitted to the District within 90 calendar days after receipt of the District request.

3. If the exempt status of a component is affected by a revision to this rule, then the Plan shall be modified accordingly by June 10, 1998.

4. Existing operator management plans shall be updated no later than September 10, 1998, to include any provision that is needed to show compliance with this rule.

5. Beginning September 10, 1998, each operator shall submit to the APCO, for approval in writing, an annual report to update the Operator Management Plan by no later than January 30 of each year. This report shall include any changes to exemptions, inspection schedule, or any other changes to the inspection and maintenance program. If no changes to the Plan have occurred over the past 12 months, then the operator shall indicate this in the annual report.

   If the APCO fails to respond to the Plan update in writing within 90 days after it has been received, then it shall be deemed approved. No provision in the Plan, approved or not, shall conflict with or take precedence over any provision of this rule.

F. Operator Repair Requirements

1. The operator shall minimize all component leaks immediately if feasible but no later than 1 hour following detection during normal business hours. Component leaks detected during holidays, weekends and after business hours shall be immediately minimized if feasible but not later than the next normal business day.

2. Any noncritical component found leaking shall be replaced or repaired to a leak free condition, within the time periods in Table 1. For gaseous leaks, the repair period shall start at the time of leak measurement. For liquid leaks, the repair period shall start at the time of leak detection. If the Table 1 deadline for repairing any major gas leak or any liquid leak falls on a Saturday, Sunday or holiday, then the deadline shall be shifted to the next normal business day.

Table 1. REPAIR PERIODS

Type of Leak	Time Period (days)[a]	
	Onshore	Offshore
Minor Gas Leak (1,000 to 10,000 ppm)	14	14
Major Gas Leak (10,000 to 50,000 ppm)	5	5
Major Gas Leak (>50,000 ppm)	1 [b,c,d]	5 [d]
Major Liquid Leak	1 [b,c]	5
Minor Liquid Leak	2 [b]	5

3. The operator shall re-inspect repaired or replaced components for leaks as soon as practicable using EPA Method 21, but not later than one calendar month after the date on which the component is repaired.

4. Any component leak identified by District personnel shall be repaired and inspected as required by Section F.

5. Any open-ended line found to be leaking shall be sealed with a blind flange, cap, plug, or a second closed valve at all times except during operations requiring process fluid flow through the open-ended line or valve. If a second closed valve is used, the process side valve shall be closed first, after the completion of any operations requiring flow through the open-ended valve.

6. For major gas leaks (>50,000 ppm) or major liquid leaks from any critical compressor seal, pump seal, pressure relief valve or valve that cannot be repaired within the repair periods set forth in Table 1, the operator shall replace or retrofit the leaking component with Best Available Control Technology (BACT) equipment, as approved by the APCO in writing, within one year from the date of leak detection, or during the next critical process unit shutdown, whichever occurs first.

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a Day means a 24 hour period starting at time of leak detection for liquid leaks and starting at time of leak measurement for gas leaks. For 5 or 14 day deadlines only, the deadline shall be at midnight on the fifth or fourteenth day, respectively.

b Unless prohibited by Cal OSHA standards or 29 CFR 1910.

c Components at oil and gas production facilities shall be repaired within two days of leak detection for liquid leaks and within two days of leak measurement for gaseous leaks.

d The repair period may be extended for noncritical components having major leaks (> 50,000 ppm) if the component is removed from service until repaired.

For gas leaks less than or equal to 50,000 ppm or minor liquid leaks from critical components, or for leaks from critical components other than compressor seals, pump seals, pressure relief valves or valves, the owner or operator shall successfully repair or replace all leaking components within one year from leak detection or during the next critical process unit shutdown, whichever occurs first.

The operator shall notify the District in writing within 3 months after detecting a major gas leak (> 50,000 ppm) or major liquid leak from a critical compressor seal, pump seal, pressure relief valve, or valve if such leak cannot be repaired within the repair periods set forth in Table 1.

7. For a compressor seal, pump seal, pressure relief valve or valve that emits a total of 5 major leaks within a continuous 12 month period, the operator shall replace or retrofit the leaking component with BACT equipment, as approved by the APCO in writing, within one year from date of leak detection. The operator shall notify the District in writing within 3 months after a compressor, pump, pressure relief valve, or valve has had 5 major leaks in the previous 12 months.

G. Exemptions

1. The requirements of this rule shall not apply to the following components that are verified in the Operator Management Plan:

   a. Components, not at natural gas processing plants, with gaseous streams with ROC concentrations of 10 percent, by weight or less.

   b. Components at natural gas processing plants with gaseous streams with ROC concentrations of one percent, by weight or less.

   c. Components, not at natural gas processing plants, in liquid service, with ROC concentrations of 10 percent, by weight or less.

   d. Underground components.

   e. Components exclusively handling fluids if the fluid weight evaporated is 10 percent or less at 150 degrees Celsius.

2. The operator inspection requirements of Section D shall not apply to the following components. All other requirements of this rule shall still apply.

   a. Pump seals, compressor seals, and pressure relief valves that are equipped with a closed-vent system to a vapor recovery system. The vapor disposal portion of the vapor recovery system shall consist of one of the following:

      1) A system which directs all vapors to a fuel gas system, a sales gas system, or a flare that combusts ROC.

2) Any other system that processes all vapors and has a ROC vapor destruction or removal efficiency of at least 90 percent, by weight.

b. One-half inch and smaller stainless steel tube fittings that have been determined to be leak-free.

c. Components in vacuum service.

d. Flanges or threaded connections that are designated in the Operator Management Plan as subject to the zero leak threshold specified in Attachment 1.

3. The operator inspection requirements of Subsections D.1, D.2, D.4 and D.5 shall not apply to components that are inspected with or without instrumentation on a quarterly basis and are at oil and gas production facilities or pipeline transfer stations that handle liquids with the following properties and specified vapor recovery systems:

a) Liquid having an API gravity of 20 degrees or less after the point of primary separation;

b) Liquid having an API gravity between 20 and 30 degrees which are located either:

1) Downstream of a wellhead equipped with a casing vapor recovery system, provided that the vapor recovery system is operated at a pressure of less than 10 psig; or

2) After the point of primary separation of oil and gas, provided the separation vessel is equipped with a vapor recovery system and is operated at a pressure of less than 25 psig.

4. An owner or operator may petition the APCO for exemption from the replacement or retrofit requirements in Subsections F.6 and F.7 by submitting a cost evaluation for retrofitting or replacing a compressor, pump, pressure relief valve, or valve. Each petition shall include:

a. A cost-effectiveness evaluation conducted in accordance with "BACT Cost-Effectiveness Procedures and Screening Levels for Costs," adopted by the Air Pollution Control Board on December 20, 1988. The cost analysis shall be based on the retrofit cost of the component if a retrofit is feasible. If the component cannot be retrofitted, then the following control option with the lower cost shall be used in the cost analysis:

1) Component replacement with the lowest feasible cost BACT option.

2) Enclosing the component seal and venting to a vapor recovery system.

b. Evidence of costs with written bids from vendors, published price lists, or other verifiable cost information. The potential emission reduction from the component

retrofit/replacement shall be based on the ROC emissions over the previous 12 months. ROC emissions from a critical process unit shutdown shall be included if those emissions are associated with a critical leaking component. APCO-approved emission factors or source tests shall be used to quantify emissions.

H. Recordkeeping Requirements

1. Any person subject to this Rule shall maintain an inspection log. The inspection log shall contain at least the following:

   a. Location, type, description, and name or code of each leaking component inspected that cannot be immediately repaired, and name of associated operating unit.

   b. For liquid leaks that cannot be immediately repaired: Date and time of leak detection and whether leak is major or minor.

   c. For gaseous leaks that cannot be immediately repaired: Date and time of leak detection, date and time of leak measurement, analyzer reading (ppmv) of the leak, and whether the leak is major or minor.

   d. Date that leak referenced in Subsections H.1.b or H.1.c is repaired to a leak-free condition, description of repair action, and date and emission level of re-check.

   e. Identification of leak as critical if the component is critical.

   f. Maintenance and calibration records of appropriate analyzer used in the EPA Method 21 measurements.

2. Where a functional pressure relief has been detected, the operator shall record:

   a. Location, operating unit identification, and date of detection.

   b. Date of inspection of the pressure relief device after it was detected, and analyzer reading from EPA Method 21.

3. The inspection log shall be retained by the operator for a minimum of 2 years after the date of an entry.

4. The inspection log shall be made available upon request to District personnel.

I. Test Methods

1. Gaseous leaks from components shall be inspected or determined by EPA Method 21 by using an appropriate analyzer calibrated with methane. The calibration, maintenance, and operation of the appropriate analyzer shall follow the manufacturer's recommendations.

2. The ROC concentration, by weight, of process streams shall be measured by ASTM E168-88 (General Techniques of Infrared Qualitative Analysis), ASTM E169-87 (General Techniques of Ultraviolet Quantitative Analysis), or ASTM E260-85 (Gas Chromatography), or updated versions of these methods approved by EPA and published in the 40 CFR Part 60.

3. Weight percentage of evaporated compounds of liquids shall be determined using ASTM Method D 86-82.

4. The API gravity of crude oil shall be determined using ASTM Method D287.

J. Violations

The failure of a person to meet any requirements of this rule shall constitute a violation of this rule. Each leak exceeding the applicable maximum leak threshold in Attachment 1 discovered by District personnel will be considered to be a violation.

K. Definitions

1. "Background": A reading expressed as methane on a portable instrument that is taken at least three meters upwind from any components to be inspected and that is not influenced by any specific emission point.

2. "Closed-vent system": Any system that is not open to the atmosphere and is composed of piping, connections, and, if necessary, flow-inducing devices that transport gases or vapors from a piece or pieces of equipment to a vapor recovery or disposal system.

3. "Component": Any valve, stuffing box, dump lever arm, open ended line, fitting, pump seal, compressor seal, pressure relief valve, diaphragm, hatch, sight glass or meter.

   For the purpose of complying with the Operating Requirements in Subsection C.2, any fugitive emissions leak originating at a tank seam, broken pipe or any other nondesigned opening in a process unit shall be considered an "other component" leak for the purpose of Attachment 1.

4. "Compressor Seal": A compressor is a device used to compress gases and/or vapors. The compressor seal is the sealing mechanism that prevents leakage from around the rotating shaft.

5. "Critical Component": Critical component is any component which would require the shutdown of a critical process unit if these components were shutdown. These components must be identified by the source in their Operator Management Plan, which must be approved by the APCO.

6. "Critical Process Unit": Any process unit, except for an onshore stuffing box, that has no standby equipment available, that cannot be bypassed, and that would be technically infeasible to repair leaks from that process unit without shutting it down and opening the process unit to atmosphere.

7. "Critical Process Unit Shutdown": A work practice or operational procedure that stops production from a critical process unit or part of a critical process unit.

8. "Crude Oil and Gas Production Facility": An onshore or offshore facility at which crude petroleum and natural gas production and handling are conducted, as defined in the SIC Code as Industry No. 1311, Crude Petroleum and Natural Gas.

9. "Facility": A facility is any "stationary source" as defined in Rule 2 of these rules.

10. "Fitting": A component used to attach or connect pipes or piping details, including but not limited to flanges and threaded connections.

11. "Hatch": Any covered opening system that provides access to a tank or container. For the purposes of this rule, a bolted, rectangular-like access panel/doorway on a tank or container shall not be considered to be a hatch, but rather an "other" component.

12. "Holiday": Any company-designated holiday that has been stated in an official company policy document.

13. "Inaccessible Component": Any component located over fifteen feet above ground when access is required from the ground; or any component located over six feet away from a platform when access is required from the platform.

14. "Leak": Any major gas leak, minor gas leak, major liquid leak or minor liquid leak. A leak is not a gaseous emission from a pneumatic control valve if it occurs when the valve is in the act of opening or closing.

15. "Leak Minimization": Reducing a leak to the lowest achievable level using best modern and safe practices including but not limited to tightening, adjusting, or adding sealing material without shutting down the process which the component serves.

16. "Leak Repair": Any corrective action taken for the purposes of reducing a component leak to the lowest achievable level or at least below 1,000 ppmv for gas leaks and three drops per minute for liquid leaks using the best modern practices.

17. "Major Gas Leak": The detection of total gaseous hydrocarbons in excess of 10,000 ppm as methane above background measured using EPA Method 21.

    A major gas leak from a pressure relief valve means the detection of total gaseous organic compounds in excess of 10,000 ppmv, as methane above background measured using EPA Method 21, unless the process pressure exceeds the limit setting specified for the device. If the process pressure exceeds the limit setting of the pressure relief valve, then this emission to the atmosphere is considered to be a "pressure release."

18. "Major Liquid Leak": A visible mist or a continuous flow of liquid that is not seal oil or other similar lubricant. Sampling of process fluids into containers shall not be considered a leak.

19. "Minor Gas Leak": The detection of total gaseous hydrocarbons in excess of 1,000 ppm as methane above background measured using EPA Method 21.

20. "Minor Liquid Leak": Any liquid leak, except seal oil or other similar lubricant, that is not a major leak and drips liquid at a rate of more than three drops per minute. Sampling of process fluids into containers shall not be considered a leak.

21. "Natural Gas Processing Facility": A facility engaged in the separation of natural gas liquids from field gas and/or fractionation of the liquids into natural gas products, such as ethane, propane, butane, and natural gasoline. Excluded from the definition are compressor stations, dehydration units, sweetening units, field treatment, underground storage facilities, liquefied natural gas units, and field gas gathering systems unless these facilities are located at a natural gas processing plant.

22. "Normal Business Hours/Day": Any time from 7 a.m. to 4 p.m. from Monday through Friday.

23. "Notice of Violation": An official notice to an operator for violating a requirement of this rule which may result in District enforcement action.

24. "Open ended line": Any valve, except safety relief valves, having one side of the valve seat in contact with the process fluid and one side open to the atmosphere.

25. "Pipeline Transfer Station": A facility that handles the transfer or storage of crude oil in pipelines.

26. "Platform": Any raised, permanent, horizontal surface that provides access to components.

27. "Polished Rod Stuffing Box": A packing device used on oil and gas production well heads compressed around a reciprocating rod. This device may be used for the dual purpose of lubricating the polished rod and preventing fluid leaks.

28. "Pressure Relief Valve": A valve that is automatically actuated by upstream static pressure, and used for safety or emergency purposes.

29. "Pump Seal": A device used to transport fluids. The pump seal is the sealing mechanism used to prevent leaks from around the rotating shaft.

30. "Reactive Organic Compound (ROC)": Any reactive organic compound as defined in Rule 2 of these rules.

31. "Rupture Disc": A diaphragm held between flanges for the purpose of isolating a reactive organic compound from the atmosphere or from a downstream pressure relief valve.

32. "Tag": A piece of paper, metal or plastic that is attached to something for identification or other information. A tag may also be some other system approved in writing by the APCO that demonstrates to District personnel that the operator has detected

a component leak awaiting repair and contains all of the information required to be on tags by this rule.

33. "Unmanned Facility": A remote facility or worksite that has no permanent sited personnel and is greater than five miles from the closest manned facility, owned or operated by the same business. Permanently-sited personnel are person(s) that regularly report to work at that location.

34. "Unsafe-to-Monitor Components": Components installed at locations that would prevent the safe inspection or repair of components as defined by OSHA standards or in provisions for worker safety found in 29 CFR 1910.

35. "Vacuum service": Equipment operating at an internal pressure that is at least 0.73 in. of Hg below ambient pressure.

36. "Valve": Any device that regulates the flow of fluid in a piping system by means of an external actuator acting to permit or block passage of fluid excluding the attached flange and the flange seal.

37. Vapor Control System": Any system that is not open to the atmosphere and is composed of piping, connections and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a vapor recovery or disposal system.

ATTACHMENT 1

COMPONENT LEAK THRESHOLDS

This Attachment defines the leak thresholds for the operating requirements in Subsection C.2.

COMPONENT	NO. OF COMPONENTS INSPECTED	MAXIMUM NUMBER OF MAJOR GAS LEAKS OR LIQUID LEAKS	Effective Date
Hatches		0	9/22/87
Open Ended Lines		0	9/22/87
Flanges or Threaded Connections (If designated in the Operator Management Plan as exempt from inspection requirements)		0	9/22/87
Valves (not open ended)	250 or less	5	9/22/87
	More than 250	2% of number of components inspected	9/22/87
Other Components[+]	200 or less	2	9/22/87
	More than 200	1% of number of components inspected	9/22/87

[+] Other components in Attachment 1 are all components (including flanges and threaded connections not exempt from operator inspection requirements) except polished rod stuffing boxes, dump lever arms, hatches, valves, and open ended lines.

6/21/11

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.11 - NATURAL GAS-FIRED WATER HEATERS
(Adopted 4/9/85, revised 5/11/10)

The provisions of this rule shall apply to any person selling, offering for sale, or installing natural gas-fired water heaters, including mobile home water heaters, rated at less than 75,000 Btu per hour in Ventura County.

A. Requirements

1. Until July 1, 2010, a person shall not sell, offer for sale, or install in Ventura County any natural gas-fired residential water heater that emits nitrogen oxides in excess of 40 nanograms of NOx (calculated as NO_2) per joule of heat output (93 lb per billion Btu).

2. After July 1, 2010, except as specified in Subsection A.3, no person shall sell, offer for sale, or install within Ventura County any natural gas-fired water heater unless the water heater is certified pursuant to Section B to a NOx emission level of less than or equal to:

   a). 10 nanograms of NOx (calculated as NO_2) per joule of heat output (23 lb per billion Btu of heat output); or

   b) 15 ppmv at 3% O_2, dry (17.5 lb per billion Btu of heat input).

3. After July 1, 2010, no person shall sell, offer for sale, or install within Ventura County any natural gas-fired mobile home water heater unless the water heater is certified pursuant to Section B to a NOx emission level of less than or equal to:

   a) 40 nanograms of NOx (calculated as NO_2) per joule of heat output (93 lb per billion Btu of heat output); or

   b) 55 ppmv at 3% O_2, dry (71 lb per billion Btu of heat input).

B. Certification

1. The requirements of Section D notwithstanding, applicable equipment certified by the South Coast Air Quality Management District in accordance with the certification requirements in Section (d) of SCAQMD Rule 1121, adopted September 3, 2004, shall be considered certified for use in Ventura County.

2. Compliance Report

Prior to the sale of any model of water heater in Ventura County, the manufacturer shall submit to the Air Pollution Control Officer a Compliance Report documenting its certification pursuant to Section B of this rule. The Compliance Report shall contain the following information:

(a) Compliance Statement

A statement that the water heater model is in compliance with Section B of this rule. The statement shall be signed by the manufacturer and dated, and shall attest to the accuracy of all statements.

(b) General Information

(1) Name and address of manufacturer,

(2) Brand name of water heater,

(3) Model number, as it appears on the water heater rating plate, and

(4) Description of each model water heater being certified.

(5) A copy of the letter from the South Coast Air Quality Management District certifying the water heater model.

C. Identification of Complying Water Heaters

The manufacturer shall display the model number, the date of manufacture, and the certification status, as determined in Section B of this rule, of an applicable unit on both the permanent nameplate and the packaging.

D. Enforcement

1. The APCO may require a NOx and CO_2 emission test when necessary to verify compliance. Testing shall be conducted according to the South Coast Air Quality Management District Protocol For Nitrogen Oxides Emissions Compliance Testing For Natural Gas-Fired Water Heaters And Small Boilers, dated March 1995 (amended January 1998).

2. The APCO may periodically inspect distributors, retailers, and installers of water heaters located in the District and conduct such tests as are deemed necessary to insure compliance with the provisions of this rule.

E. Exemptions

The provisions of this rule shall not apply to:

1. Water heaters with a rated heat input of 75,000 Btu per hour or greater.

2. Water heaters used in recreational vehicles.

F. Definitions

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

1. "Btu": British thermal unit or units.

2. "Heat input": The heat of combustion released by fuels burned in a unit based on the higher heating value of fuel, excluding the enthalpy of incoming combustion air.

3. "Heat output": The product obtained by multiplying the recovery efficiency, as defined by Title 20, California Administrative Code, Chapter 2, Subchapter 4, Article 4, Section 1603 and 1607, by the heating value of the input fuel furnished to the water heater.

4. "Mobile Home": A structure built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities. The structure typically includes plumbing, heating, air conditioning, and electric systems and may be transportable in one or more sections. Excluded are self-propelled vehicles and recreational vehicles.

5. "Rated Heat Input Capacity": The gross heat input capacity specified on the nameplate of either the unit or the burner.

6. "Recreational vehicle": A motor home, travel trailer, truck camper, or camping trailer, with or without motive power, designed for human habitation for recreational, emergency, or other occupancy, as defined pursuant to California Health and Safety Code § 18010.

7. "Water heater": A device that heats water at a thermostatically-controlled temperature for delivery on demand. Water is heated by the combustion of either liquid and/or gaseous fuel and withdrawn for use external to the vessel at pressures not exceeding 160 psig. The device includes the apparatus by which heat is generated and all controls and equipment necessary to prevent water temperatures from exceeding 210^{o}F (99^{o}C).

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.11.1 - LARGE WATER HEATERS AND SMALL BOILERS

(Adopted 9/14/99, revised 9/11/12)

A. Applicability

Until January 1, 2013, the provisions of this rule shall apply to any person selling, offering for sale, or installing, a new natural gas-fired water heater, boiler, steam generator or process heater with a rated heat input capacity greater than or equal to 75,000 BTU/hr and less than or equal to 2,000,000 BTU/hr in Ventura County.

After January 1, 2013, the provisions of this rule shall apply to any person selling, offering for sale, or installing, a new natural gas-fired water heater, boiler, steam generator or process heater with a rated heat input capacity greater than or equal to 75,000 BTU/hr and less than 1,000,000 BTU/hr in Ventura County.

B. Requirements

1. Until January 1, 2014, no person shall ~~not~~ sell, offer for sale, or install in Ventura County any new unit with a rated heat input capacity of greater than or equal to 75,000 BTU/hr and less than or equal to 400,000 BTU/hr that does not meet the following criteria:

   a. Oxides of nitrogen emissions shall not exceed 40 nanograms per joule of heat output (93 pounds per billion BTU), or 55 parts per million, and

   b. The unit is certified in accordance with Section C.

2. After January 1, 2014, no person shall sell, offer for sale, or install in Ventura County any new unit with a rated heat input capacity of greater than or equal to 75,000 BTU/hr and less than or equal to 400,000 BTU/hr that does not meet the following criteria:

   a. Oxides of nitrogen emissions shall not exceed 14 nanograms per joule of heat output (32.5 pounds per billion BTU), or 20 parts per million, and

   b. The unit is certified in accordance with Section C.

   Subsection B.2.a shall not apply to units specifically designed to heat swimming pools, hot tubs or spas. For such units, oxides of nitrogen emissions shall not exceed 40 nanograms per joule of heat output (93 pounds per billion BTU), or 55 parts per million.

3. Until January 1, 2013, no person shall ~~not~~ sell, offer for sale, or install in Ventura County any new unit with a rated heat input capacity of greater than 400,000 BTU/hr and less than or equal to 2,000,000 BTU/hr that does not meet the following criteria:

   a. Oxides of nitrogen emissions shall not exceed 30 parts per million and carbon monoxide emissions shall not exceed 400 parts per million, and

   b. The unit is certified in accordance with Section C.

4. After January 1, 2013, no person shall sell, offer for sale, or install in Ventura County any new unit with a rated heat input capacity of greater than 400,000 BTU/hr and less than 1,000,000 BTU/hr that does not meet the following criteria:

   a. Oxides of nitrogen emissions shall not exceed 20 parts per million and carbon monoxide emissions shall not exceed 400 parts per million, and

   b. The unit is certified in accordance with Section C.

C. Certification

1. Every subject unit offered for sale in Ventura County shall be certified by the Air Pollution Control Officer (APCO). On or before the applicable compliance date specified in Subsections B.1 or B.2, and thereafter at least 30 days prior to the date of proposed sale in Ventura County, the manufacturer shall submit a compliance report for each applicable new or modified unit by model. Certification shall be valid for three (3) years from the date of written approval by the APCO.

   a. For each model certified, the manufacturer shall obtain from an independent testing laboratory a certification source test verifying compliance with the emission limits in Section B. Source tests shall be conducted on a randomly selected unit no more than 90 days prior to the date of proposed sale of the model in Ventura County. Tests shall be conducted and reports shall be prepared according to Attachment A of this rule.

   b. The compliance report shall contain the following information:

      1). General Information

         i Name and address of manufacturer,

         ii Brand name,

iii Model number, as it appears on the permanent nameplate, and

iv Description of the model being certified, including burner type and rated heat input capacity.

2). A report on the source test specified in Subsection C.1.a

3). A signed and dated statement attesting to the accuracy of all statements and information in the Compliance Report.

2. The requirements of Subsection C.1 notwithstanding, applicable equipment certified by the South Coast Air Quality Management District in accordance with the requirements of SCAQMD Rule 1146.2, adopted May 5, 2006, shall be considered certified for use in Ventura County.

D. Identification of Complying Water Heaters

The manufacturer shall display both the model number, the date of manufacture, and the certification status, as determined in Section C of this rule, of an applicable unit on the permanent nameplate. If the permanent nameplate is obscured by packaging, the model number and certification status shall also appear on the packaging.

E. Enforcement

1. The APCO may periodically inspect distributors, retailers, and installers of water heaters located in the District and require such tests as are deemed necessary to ensure compliance with the provisions of this rule.

2. Oxides of nitrogen emissions are measured as nitrogen dioxide using CARB Method 100. Parts per million measurements are by volume and referenced to three (3) percent stack gas oxygen on a dry basis. Field emission tests shall be conducted on units fired at maximum rated capacity, or as near thereto as practicable.

F. Definitions

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

1. "Boiler, Steam Generator": Any external combustion equipment fired with liquid and/or gaseous fuel and used to produce either steam or hot water. These terms do not include any unfired waste heat recovery boiler that is used to recover sensible heat from a combustion device.

2. "Heat Output": The product H_O as defined in Section 9.3 of the South Coast Air Quality Management District *Protocol* cited in Attachment A.

3. "New Unit": Any applicable water heater, boiler, steam generator or process heater sold, offered for sale, or installed after January 1, 2014, for units subject to the requirements of Subsection B.2 or January 1, 2013, for units subject to the requirements of Subsection B.4.

4. "Process Heater": Any external combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from combustion gases to water or process streams. Process Heater does not include any kiln or oven used for drying, baking, cooking, calcinating or vitrifying or any fuel-fired degreasing or metal finishing equipment.

5. "Rated Heat Input Capacity": The gross heat input capacity specified on the nameplate of either the unit or the burner.

6. "Unit": A water heater, boiler, steam generator or process heater.

7. "Water Heater": A device that heats water at a thermostatically-controlled temperature for delivery on demand. Water is heated by the combustion of either liquid and/or gaseous fuel and withdrawn for use external to the vessel at pressures not exceeding 160 psig. The device includes the apparatus by which heat is generated and all controls and equipment necessary to prevent water temperatures from exceeding 210^{O}F (99^{O}C).

Attachment A
Certification Source Tests

Certification source tests, as specified in Subsection C.1, shall be conducted according to "*Nitrogen Oxides Emissions Compliance Testing for Natural Gas-Fired Water Heaters and Small Boilers*," Protocol, South Coast Air Quality Management District, Source Testing and Engineering Branch, Applied Science and Technology.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.12 - SURFACE COATING OF METAL PARTS AND PRODUCTS
(Adopted 11/19/85, Revised 8/26/86, 5/16/89, 11/17/92, 1/10/95, 9/10/96, 11/11/03, 4/8/08)

A. Applicability

The provisions of this rule apply to any person who applies or specifies the use of surface coatings to metal parts or products.

Any person who applies or specifies the application of surface coatings to either stationary structures or their appurtenances is subject to Rule 74.2 instead of this rule.

Any person who applies or specifies the application of surface coatings to aerospace vehicles or components is subject to Rule 74.13 instead of this rule.

Any person who applies or specifies the application of surface coatings to motor vehicles or mobile equipment or their parts or components is subject to Rule 74.18 instead of this rule.

Any person who applies or specifies the application of surface coatings to marine or fresh water vessels or their parts or components is subject to Rule 74.24 instead of this rule.

Any person who applies or specifies the application of surface coatings to pleasure craft or their parts or components or commercial boatyard operations is subject to Rule 74.24.1 instead of this rule.

B. Requirements

1. *Coating Reactive Organic Compounds (ROC) Content Limits:* On or before July 7, 2008, no person shall apply any coating with an ROC content in excess of the following limits, as applied:

ROC Limits
Grams Per Liter (g/L), or
Pounds per Gallon (lb/gal) of Coating,
Less Water and Exempt Organic Compounds

	Air Dried		Baked	
Coating	g/L	lb/gal	g/L	lb/gal
All coatings except for the following:	340	2.8	275	2.3
Camouflage	420	3.5	360	3.0
Extreme Performance	420	3.5	360	3.0

Etching Filler	420	3.5	420	3.5
Heat Resistant	420	3.5	360	3.0
High Gloss	420	3.5	360	3.0
High Performance Architectural	420	3.5	420	3.5
High Temperature	420	3.5	420	3.5
Laboratory Furniture	340	2.8	340	2.8
Metallic	420	3.5	360	3.0
Mold Seal	420	3.5	420	3.5
Pan Backing	420	3.5	420	3.5
Pretreatment Wash Primer	340	2.8	275	2.3
Silicone Release	420	3.5	420	3.5
Solar Absorbent	420	3.5	360	3.0
Vacuum Metalizing	420	3.5	420	3.5

After July 7, 2008, no person shall apply any coating with an ROC content in excess of the following limits, as applied:

ROC Limits
Grams Per Liter (g/L), or
Pounds per Gallon (lb/gal) of Coating,
Less Water and Exempt Organic Compounds

	Air Dried		Baked	
Coating	g/L	lb/gal	g/L	lb/gal
All coatings except for the following:	275	2.3	275	2.3
Multi-Component not listed below	340	2.8	275	2.3
Camouflage	420	3.5	360	3.0
Extreme Performance	420	3.5	360	3.0
Etching Filler	420	3.5	420	3.5
Heat Resistant	420	3.5	360	3.0
High Gloss (Multi-Component)	420	3.5	360	3.0
High Performance Architectural	420	3.5	420	3.5
High Temperature	420	3.5	420	3.5
Metallic	420	3.5	360	3.0
Mold Seal	420	3.5	420	3.5
Pan Backing	420	3.5	420	3.5
Pretreatment Wash Primer	340	2.8	275	2.3
Silicone Release	420	3.5	420	3.5
Solar Absorbent	420	3.5	360	3.0

Vacuum Metalizing	420	3.5	420	3.5

2. *Add-on Control Equipment Option:* In lieu of complying with the coating ROC content limits specified in Subsection B.1, air pollution control equipment may be used provided:

    a. The combined capture and control device efficiency reduces emissions by at least 90 percent by weight, and

    b. The Air Pollution Control Officer (APCO) issues written approval for such equipment in the form of an Authority to Construct and Permit to Operate, and

    c. When operating a thermal incinerator, the combustion temperature of the incinerator is continuously monitored.

    d. When operating a catalytic incinerator, the exhaust and inlet gas temperatures of the incinerator are continuously monitored, and

    e. When operating a carbon adsorber or control device other than a thermal or catalytic incinerator, the control device efficiency is continuously monitored, and

    f. The equipment and monitors are used in accordance with vendor or manufacturer specifications.

3. *Transfer Efficiency:* No person shall apply coatings subject to this rule except by using properly operated equipment and by using one or more of the following:

    a. Electrostatic application, operated at a minimum of 60 kV;

    b. Flow coat application;

    c. Dip coat application;

    d. High volume, low pressure application (HVLP);

    e. Hand application methods;

    f. Any other application method that is demonstrated to achieve at least 65 percent transfer efficiency.

4. *Surface Preparation and Cleanup:*

   a. After July 7, 2008, no person shall use a material for substrate surface cleaning that has an ROC content exceeding 25 grams per liter of material.

      On or before July 7, 2008, no person shall use any material which contains more than 70 grams of ROC per liter of material for substrate surface cleaning. Substrate surface cleaning performed in a degreasing unit shall not be subject to this ROC content limit.

   b. After July 7, 2008, no person shall use a material for either spray equipment cleaning or cleanup that has an ROC content exceeding 25 grams per liter of material.

      On or before July 7, 2008, no person shall use organic solvent for cleanup unless:

      1) An enclosed gun washer or "low emission spray gun cleaner" that has been approved in writing by the APCO is properly used for spray equipment cleaning, and

      2) The ROC composite partial pressure of organic solvent used for cleanup, including spray equipment cleaning, is less than 45 mm Hg at 20 ^{o}C.

5. All ROC containing materials, including, but not limited to surface coatings, cleanup solvents, or surface preparation materials shall be stored in closed containers which are nonabsorbent and do not leak.

6. *Coating Compliance Statement:* The manufacturer of coatings subject to this rule shall designate on product labels or data sheets, the ROC content or the Volatile Organic Compounds (VOC) content of coatings including coating reducers and catalysts, as supplied. This designation shall include recommendations regarding thinning, reducing, or mixing with any other ROC containing materials, and express the coating ROC or VOC content on an as applied basis when used in accordance with the manufacturer's recommendations. All letters and numbers used to designate ROC or VOC content on product labels shall be visible and legible.

7. *Liquid Cleaning Material Compliance Statement:* The manufacturer of liquid cleaning materials used in coating operations shall designate on product labels or data sheets:

   a. On or before July 7, 2008, the ROC content and ROC Composite Partial Pressure of cleaning materials as supplied.

b. After July 7, 2008, the ROC content of cleaning materials as supplied.

This designation shall include recommendations regarding mixing with any other ROC containing materials, and express the cleaning material ROC content when used in accordance with the manufacturer's recommendations. All letters and numbers used to designate ROC or VOC content on product labels shall be visible and legible.

8. *Prohibition of Specifications:* No person shall specify, solicit or require the application of any coating to any metal part or product, or the use of any equipment cleaning solvent, if such application or use would violate this rule. This prohibition applies to all written and oral contracts for which any coating subject to this rule is to be applied to any metal part or product at any location in Ventura County.

9. Any person wishing to use a coating having an ROC content greater than that specified on his permit to operate shall apply for a permit modification. Such coating shall not have an ROC content exceeding the applicable limit specified in Subsection B.1.

C. Exemptions

1. Subsection B.1 of this rule does not apply to any one coating provided:

   a. No complying coatings are available, and

   b. Total usage of all non-complying coatings has not exceeded 55 gallons in any calendar year.

   Any person claiming this exemption shall demonstrate the lack of available coatings to the APCO on an annual basis.

2. This rule does not apply to:

   a. Aircraft or aerospace vehicle coating operations

   b. Marine vessel exteriors

   c. Motor vehicle and mobile equipment coating.

   d. Aerosol coating products.

3. The provisions of this rule, except Subsection B.8, shall not apply to any stationary source that emits less than 200 pounds of ROC in every rolling period of 12 consecutive calendar months from metal parts and products coating operations. Any person claiming this exemption shall maintain monthly records

to substantiate this claim. Emissions from aerosol products, cold cleaners, and vapor degreasers shall not be included in this determination.

4. Subsection B.4.a does not apply to any metal parts coating operation where total usage of non-complying substrate surface cleaners does not exceed five gallons per rolling 12-month period. Any person claiming this exemption shall maintain monthly operational records to substantiate this claim.

D. Recordkeeping Requirements

1. Any person subject to this rule shall:

a. Maintain a current list of all coatings that provides all information necessary to evaluate compliance, including the following, as applicable:

1) The name and manufacturer of each coating and any catalysts and reducers used with each coating

2) Mix ratio of components used in coatings

3) ROC content of coatings, as applied

4) Coating category from Subsection B.1 of each coating used.

b. Maintain records which show the following for each ROC containing material used for cleanup, including equipment cleaning, and each ROC containing material used for substrate surface cleaning:

1) Type

2) ROC content in grams per liter of material

3) On or before July 7, 2008, composite ROC partial pressure of organic solvent (cleaning materials only).

c. Maintain records of the monthly volume of each complying coating and ROC containing liquid used for equipment clean-up and surface preparation and daily volume of each noncompliant coating used.

d. Any person using an emission control system as a means of complying with this rule shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities. Key system operating parameters are those necessary to ensure compliance with subsection B.2 such as temperatures, pressures and flow rates.

2. All lists and records shall be maintained for a minimum of two (2) years from the date of each entry and shall be available to District personnel upon request.

E. Test Methods

1. The reactive organic compounds content of coatings and liquid cleaning materials, shall be determined using EPA Reference Method 24 (40 CFR 60, Appendix A).

2. Transfer efficiency shall be determined in accordance with the South Coast Air Quality Management District method entitled "Spray Equipment Transfer Efficiency Test Procedure for Equipment Users."

3. ROC composite pressure of a solvent shall be calculated using a widely accepted published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company, CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985). The true vapor pressure of a component in a solvent mix may be determined by ASTM Method D2879-86. The ROC composite pressure of a solvent mix consisting entirely of ROC may be determined by ASTM Method D2879-86.

4. Capture efficiency shall be determined according to EPA Guidelines for Determining Capture Efficiency, dated January 9, 1995, and 40 CFR 51, Appendix M, Methods 204-204F as applicable. Control device efficiency shall be determined by 40 CFR 60, Appendix A, Methods 18, 25 or 25A.

5. The acid content of pretreatment wash primers and etching fillers shall be determined by ASTM D1613-85.

6. The solids content of etching fillers shall be determined using EPA Reference Method 24.

7. The metal content of metallic coatings shall be determined by Spectrographic Method 311 in the South Coast Air Quality Management District manual, "Laboratory Methods of Analysis for Enforcement Samples."

8. The active and passive solvent losses from spray gun cleaning systems shall be determined using South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" dated October 3, 1989. The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105 mm Hg at 20^{o} C. The minimum test temperature shall be 15^{o} C.

9. High Volume-Low Pressure (HVLP) equipment shall be identified by either test air cap measurements or an inlet pressure measurement that, when used with specifications published by the manufacturer, establishes that gun is being operated as specified in Subsection G.24.

F. Violations

Failure to comply with any provision of this rule, including the maintenance of records, is a violation of this rule.

G. Definitions

1. "Active Solvent Losses": Emissions during all steps of a spray gun equipment cleaning operation, expressed as grams of solvent loss per cleaning cycle.

2. "Aerosol Coating Product": A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand held application, or for use in specialized equipment for ground traffic/marking applications.

3. "Aircraft or Aerospace Vehicle": A fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle.

4. "Air-Dried Coating": Any coating which is not heated above 90^{o}C (194^{o}F) for the purpose of curing or drying.

5. "Baked Coating": Any coating which is cured or dried in an oven where the oven air temperature exceeds 90^{o}C (194^{o}F).

6. "Camouflage Coating": A coating that functions to conceal equipment from detection.

7. "Capture Efficiency": The percentage of ROC used, emitted, evolved, or generated by the operation, that are collected and directed to an air pollution control device.

8. "Carbon Adsorber": A device that adsorbs ROC from a gaseous stream onto the surface of activated carbon.

9. "Catalytic Incinerator": A device that burns ROC in air using a material that increases the rate of combustion without itself undergoing a net chemical change in the process. Common catalyst materials include but are not limited to, platinum alloys, chromium, copper oxide, and cobalt.

10. "Cleanup": The removal of uncured coating from any surface.

11. "Coating": A material applied to a metal surface as a film to beautify and/or protect the surface.

12. "Control Device Efficiency": The percentage by weight of ROC entering a control device that is not emitted to the atmosphere.

13. "Electrostatic Application": The charging of atomized paint droplets to cause deposition by electrostatic attraction.

14. "Etching Filler": A coating that contains less than 23 percent solids by weight and at least 1/2 percent acid by weight, and is used instead of a pretreatment wash primer on a metal substrate prior to a primer.

15. "Exempt Organic Compounds": As defined in Rule 2, Definitions, of these rules.

16. "Extreme Performance Coating": Any coating except a zinc filled primer, a laboratory furniture coating, or a pretreatment coating that is exposed to any of the following conditions:

    a. Industrial-grade detergents, cleaners, or abrasive scouring agents.

    b. Unprotected shipboard conditions.

    c. Frequent or chronic exposure to salt water, corrosives, caustics, acids, or oxidizing chemicals.

    d. Other similar or more harsh environmental conditions as determined in writing by the APCO.

17. "Grams of ROC per liter of coating, less water and exempt organic compounds": The weight of ROC per combined volume of ROC and coating solids calculated as follows:

$$\text{Grams of ROC per Liter of Coating Less Water and Less Exempt Organic Compounds} = \frac{Ws - Ww - Wes}{Vm - Vw - Ves}$$

Where:
Ws = Weight of volatile compounds (grams)
Ww = Weight of water (grams)
Wes = Weight of exempt organic compounds (grams)
Vm = Volume of material (liters)
Vw = Volume of water (liters)
Ves = Volume of exempt organic compounds (liters)

18. "Grams of ROC per liter of material": The weight of ROC per volume of material calculated as follows:

$$\text{Grams of ROC per Liter of Material} = \frac{Ws - Ww - Wes}{Vm}$$

Where:
Ws = Weight of volatile compounds (grams)
Ww = Weight of water (grams)
Wes = Weight of exempt organic compounds (grams)
Vm = Volume of material (liters)

19. "Gun Washer": Electrically or pneumatically operated system that is designed to clean spray application equipment while enclosed. A gun washer may also be considered a gun cleaning system that consists of spraying solvent into an enclosed container using a snug fitting.

20. "Hand Application Methods": The application of coatings by nonmechanical hand-held equipment including but not limited to paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags and sponges.

21. "Heat Resistant Coating": Any applied coating that, after curing, must withstand a temperature of at least 204^{o} C (400^{o} F) during normal use.

22. "High Gloss Coating (Multi-Component)": Any multi-component coating which when tested in accordance with ASTM Test Method D523-89 has a reflectance of 85 percent or more on a 60 degree meter.

23. "High Performance Architectural Coating": Any coating used to protect architectural subsections and which is required to meet the specifications of the Architectural Aluminum Manufacturer Association's publication number AAMA 605.2-1992.

24. "High Temperature Coating": Any coating that after curing, must withstand a temperature of at least 538 ^{o}C (1000 ^{o}F) during normal use.

25. "High Volume-Low Pressure Application (HVLP)": Equipment used to apply coatings by means of a spray gun designed to be operated and operated between 0.1 and 10 pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns.

26. "Leak": The dripping of three or more drops per minute of ROC containing liquids.

27. "Low Emissions Spray Gun Cleaner": Any properly used spray equipment cleanup device which has passive solvent losses of no more than 0.6 grams per

hour and has active solvent losses of no more than 15 grams per operating cycle as determined by the test method in Subsection E.8.

28. "Metallic Coating": Any coating, except zinc filled primer, which contains 5 grams of metal particles per liter of coating, as applied, where such particles are visible in the dried film.

29. "Metal Part or Product": Any component or complete unit fabricated from metal, not including stationary structures or their appurtenances, marine vessel exteriors, aerospace vehicles and components, and motor vehicles and mobile equipment.

30. "Mold-Seal Coating": The initial coating applied to a new or repaired mold to prevent products from sticking to the mold.

31. "Multi-Component Coating": A coating requiring the addition of one or more separate components, commonly known as catalyst or hardener, prior to application to form an acceptable dry film.

32. "One-Component Coating": Any coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner or reducer, necessary to reduce the viscosity, is not considered a component.

33. "Operation": The coating, surface preparation, and cleaning of metal parts or products and any associated activities including but not limited to the cleaning of coating application equipment.

34. "Pan Backing Coating": Any coating applied to the surface of pots, pans, or other cooking utensils that are exposed directly to a flame or other heating elements.

35. "Passive Solvent Losses:" Emissions resulting from natural vaporization of solvent from spray gun cleaning equipment not being used in a cleaning cycle.

36. "Powder Coating": Any coating applied as fine particle solids with less than 4 percent by weight ROC or other liquid carriers.

37. "Pretreatment Wash Primer": Any coating which contains at least one half percent acid by weight to provide surface etching, corrosion resistance, adhesion, and ease of stripping when applied to a metal surface.

38. "Reactive Organic Compounds": As defined in Rule 2, Definitions, of these rules.

39. ROC Composite Partial Pressure": The sum of the partial pressures of the compounds defined as ROCs. ROC composite partial pressure is calculated as follows:

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

Where:
W_i = Weight of the "i"th ROC compound, in grams
W_w = Weight of water, in grams
W_e = Weight of the "e"th exempt organic compound, in grams
MW_i = Molecular weight of the "i"th ROC compound, in g/(g-mole)
MW_w = Molecular weight of water, in g/(g-mole)
MW_e = Molecular weight of the "e"th exempt compound, in g/(g-mole)
PP_C = ROC composite partial pressure at 20 C, in mm Hg
VP_i = Vapor pressure of the "i"th ROC compound at 20 C, in mm Hg.

40. "ROC Content": For coatings, ROC (VOC) content means the grams of ROC per liter of coating, less water and less exempt organic compounds. For liquid cleaning materials and other ROC containing materials, ROC content means the grams of ROC per liter of material.

41. "Silicone Release Coating": Any coating which contains silicone resin and functions to prevent food from sticking to metal surfaces such as baking pans.

42. "Solar Absorbent Coating": Any coating which has as its prime purpose the absorption of solar radiation.

43. "Substrate Surface Cleaning": Cleaning of a substrate to remove dirt, oils, and other contaminants. Substrate surface cleaning is typically done prior to the application of surface coatings, adhesive bonding materials, or sealants.

44. "Thermal Incinerator": A device that burns ROC in air by direct application of heat. Thermal incinerators are usually equipped with burners, refractory lined chambers, heat recovery equipment, and process controllers.

45. "Transfer Efficiency": The ratio of the weight of coating solids adhering to the part being coated to the weight of coating solids used in the application process expressed as a percentage.

46. "Vacuum Metalizing Coating": Any undercoat applied to a substrate prior to application of a metal film, or an overcoat applied directly to the metal film.

47. "Volatile Organic Compounds (VOC)": Reactive organic compounds (ROC).

48. "Zinc Filled Primer": Any coating which has an elemental zinc content of not less than 240 grams/liter (2.0 pounds per gallon) as applied.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.13 - AEROSPACE ASSEMBLY AND COMPONENT MANUFACTURING OPERATIONS

(Adopted 4/15/86, Revised 10/13/87, 1/22/91, 9/10/96, 11/11/03, 09/11/12)

A. Applicability

This rule is applicable to the manufacturing, assembling, coating, masking, bonding, paint stripping, and surface cleaning of aerospace components and the cleanup of equipment associated with these operations. Where Rule 74.12, Surface Coating of Metal Parts and Products, applies to the coating or cleaning of metal parts, including but not limited to tooling operations, this rule shall not apply.

B. Requirements

1. Aerospace Coatings and Adhesives: No person shall apply to any aerospace component, any coating, or adhesive with an ROC content in excess of the following limits, as applied:

	Limits Grams of ROC Per Liter, or Pounds per Gallon of Coating (or Adhesive), Less Water and Exempt Organic Compounds	
COATING or ADHESIVE	Grams per Liter	Pounds per Gallon
Adhesion Promoter	850	7.1
Adhesives		
Non-Structural	250	2.1
Structural		
Autoclavable	50	0.4
Nonautoclavable	850	7.1
Adhesive Bonding Primers	780	6.5
Antichafe Coating	600	5.0
Barrier Coatings	420	3.5
Clear Topcoat	520	4.3
Conformal Coating	750	6.3
Dry Lubricative Materials		
Fastener Manufacturing	250	2.1
Nonfastener Manufacturing	880	7.3
Electric/Radiation Effect Coatings	800	6.7
Fastener Sealants	675	5.6
Fire Resistant Coatings		
Civilian (Interior)	650	5.4

COATING or ADHESIVE	Grams per Liter	Pounds per Gallon
Flight Test Coatings Used on Missiles		
or Single-Use Target Craft	420	3.5
All Others	600	5.0
Fuel Tank Coatings	420	3.5
Fuel Tank Adhesives	620	5.2
High Temperature Coating	850	7.1
Impact Resistant Coating	420	3.5
Maskants - Chemical Milling	250	2.1
Optical Anti-Reflective Coating	700	5.8
Pretreatment Coatings	780	6.5
Primers Not Resistant		
To Phosphate Esters	350	2.9
Phosphate Ester-		
Resistant Primers	350	2.9
Rain Erosion-Resistant Coating	420	3.5
Scale Inhibitor	880	7.3
Sealant	600	5.0
Solid Film Lubricants		
Fastener Manufacturing	250	2.1
Solid Film Lubricants		
Fastener Installation	880	7.3
Nonfastener Manufacturing	880	7.3
Space Vehicle Coatings		
Electrostatic Discharge Protection	800	6.7
Other Space Vehicle Coatings	1000	8.3
Space Vehicle Adhesives	800	6.7
Temporary Protective Coatings	250	2.1
Topcoats	420	3.5
Unicoats (Self-Priming Topcoats)	420	3.5
Wing Coating	420	3.5
Wire Coatings		
Electronic	420	3.5
Anti-Wicking	420	3.5
Pre-Bonding Etching	420	3.5
Phosphate Ester Resistant Ink	925	7.7

2. Solvent Cleaning:

a. Solvent Cleaning: No person shall use a solvent for solvent cleaning, or engine gas path cleaning excluding stripping coatings or cleaning coating application equipment unless:

1) The solvent contains less than 200 grams of ROC per liter of material, as applied, or

2) The ROC composite partial pressure of the solvent is less than or equal to 25 mm Hg at a temperature of 20^{o} C.

b. Coating Application Equipment Cleaning:

No person shall use materials containing ROC for the cleaning of equipment used in coating operations unless an enclosed system or enclosed gun washer is used according to the manufacturer's recommendations and is closed when not in use.

No person shall use materials containing ROC for the cleaning of coating application equipment unless:

1) An enclosed gun washer or "low emission spray gun cleaner" that has been approved in writing by the APCO is properly used for spray equipment cleaning, and

2) The ROC composite partial pressure of solvent cleaner used is less than 5 mm Hg at 20^{o}C, or the ROC content of the solvent cleaner is 25 grams per liter (0.21 lb/gal) or less (Effective Dec 1, 2012).

3. Coating Strippers: No person shall use a coating stripper unless it contains less than 300 grams of ROC per liter, as applied, or unless its ROC composite partial pressure is 9.5 mm Hg or less at 20 ^{o}C.

4. Storage of ROC Containing Materials: All ROC-containing materials including, but not limited to, surface coatings, cleanup solvents, or surface preparation materials shall be stored in closed containers which are nonabsorbent and do not leak. These storage containers shall be closed except when filling or emptying.

5. Coating Transfer Efficiency: No person shall apply coatings except by using properly operated coating application devices and by using:

a. Electrostatic application operated at a minimum of 60 kV,

b. Flow coat application,

c. Dip coat application,

d. Hand application methods,

e. High volume, low pressure spraying (HVLP): If a spray gun is used, the end user shall demonstrate that the spray gun meets the definition of HVLP in design and use. HVLP equipment shall be identified by either

test air cap measurements or an inlet pressure measurement that, when used with specifications published by the manufacturer that reference the corresponding spray nozzle size, establishes that the gun is being operated as specified in Subsection G.27.

f. Alternative Application Method: Any other alternative method that achieves a transfer efficiency equivalent to, or higher than one of the application methods listed in Subsections B.5.a, B.5.b, B.5.c, B.5.d, or B.5.e. Written approval of the APCO shall be obtained for each alternative method prior to use.

6. Add-on Control Equipment Option: A person may comply with provisions of Subsection B.1 or Subsection B.2 by using air pollution control equipment provided that:

a. The combined capture and control efficiency reduces emissions by at least 85 percent by weight, and

b. Written approval for such equipment in the form of an Authority to Construct and Permit to Operate is received from the APCO.

7. Prohibition of Solicitation: No person shall solicit, specify or require any other person to use in the District any coating, adhesive, solvent, spray equipment, or control equipment that does not meet the limits or requirements of this rule.

8. Coating Compliance Statement: The manufacturer of coatings subject to this rule shall designate on product labels or data sheets, the ROC content or the Volatile Organic Compounds (VOC) content of coatings including coating reducers and catalysts, as supplied. This designation shall include recommendations regarding thinning, reducing, or mixing with any other ROC containing materials, and express the coating ROC or VOC content on an as applied basis when used in accordance with the manufacturer's recommendations. All letters and numbers used to designate ROC or VOC content on product labels shall be visible and legible.

9. Liquid Cleaning Material Compliance Statement: The manufacturer of liquid cleaning materials used in coating operations shall designate on product labels or data sheets the ROC content and ROC Composite Partial Pressure of cleaning materials as supplied. This designation shall include recommendations regarding mixing with any other ROC containing materials, and express the cleaning material ROC content when used in accordance with the manufacturer's recommendations. All letters and numbers used to designate ROC or VOC content on product labels shall be visible and legible.

10. Low-Solids Adhesives, Coatings, Primers or Sealant: The appropriate ROC limits in Subsection B.1 shall be expressed in grams of ROC per liter of material as defined in Subsection G.30.

C. Exemptions

1. This rule, except section B.7, shall not apply to any stationary source that emits less than 200 pounds of ROC in every rolling period of 12 consecutive calendar months from aerospace assembly and component manufacturing operations. Emissions from cold cleaners, vapor degreasers, and aerosol products, shall not be included in this determination.

   Any person claiming this exemption shall provide operational records, data and calculations, as determined by the APCO to be necessary, to substantiate this claim.

2. Subsection B.1 of this rule shall not apply to any one coating or adhesive provided:

   a. No complying coating or adhesive is available, and

   b. Any coating with separate formulations used in volumes of less than 20 gallons in any calendar year at a stationary coating source provided that the total usage of all noncomplying coatings (excluding noncomplying adhesives) has not exceeded 200 gallons annually, or

   c. Any adhesive with separate formulations used in volumes of less than 10 gallons in any calendar year at a stationary coating source.

   Any person claiming this exemption shall demonstrate the lack of an available coating or adhesive to the APCO on an annual basis.

3. The provisions of Subsection B.2.a of this rule shall not apply to the cleaning of aerospace assembly and subassembly surfaces that are exposed to strong oxidizers or reducers such as nitrogen tetroxide, liquid oxygen or hydrazine.

4. The provisions of Subsection B.5 shall not apply to the application of coatings that contain less than 20 grams of ROC per liter of coating less water and less exempt organic compounds.

5. This rule shall not apply to aerosol coating products.

6. This rule shall not apply to solvent cleaning conducted inside of a degreaser. Solvent cleaning inside of a degreaser shall be subject to the requirements of Rule 74.6 or Rule 74.6.1, as applicable.

D. Recordkeeping

1. Any person subject to this rule shall:

   a. Maintain a current list of all coatings and adhesives that provides all information necessary to evaluate compliance, including the following, as applicable:

      1) The name and manufacturer of each coating and adhesive and any catalysts and reducers used with each coating or adhesive
      2) Mix ratio of components used
      3) ROC content , as applied (Less Water and Exempt Organic Compounds except for Low-Solids Coatings or Adhesives, which are expressed as Grams of ROC per liter of Material)
      4) Category from Subsection B.1

   b. Maintain records which show the following for each ROC containing material used for cleanup, including equipment cleaning, and each ROC containing material used for solvent cleaning:

      1) Type
      2) ROC content in grams per liter of material
      3) Composite ROC partial pressure of organic solvent (where applicable)

   c. Maintain records of the monthly volume of each complying coating, adhesive, and ROC-containing liquid used for solvent cleaning or stripping, and daily volume of each noncompliant coating , adhesive, stripper, or cleaning solvent. Any person claiming the coating or adhesive small-use exemption in Subsection C.2 shall maintain records of each exempt coating or adhesive used on a monthly basis.

   d. Any person using an emission control system as a means of complying with this rule shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities.

2. Any person subject to this rule shall record any coating or adhesive intended for use in any of the specialty categories listed below. This record shall be available for review and shall include the manufacturer name, product ID number, specialty category, ROC limit as applied, and information to support that the specialty coating or adhesive has been specified for the intended application.

Adhesion Promoter Coating	Antichafe Coating
Electric/Radiation Effect Coating	Fuel Tank Adhesive
High Temperature Coating	Optical Anti-Reflective Coating

3. Such records shall be maintained for a minimum of two (2) years and shall be available for inspection by the APCO. A longer period of time for record retention may be specified by a permit condition.

E. Test Methods

1. Coating ROC content and solvent ROC content shall be determined using EPA Reference Method 24 or its constituent methods. The ROC content of coatings or solvents containing exempt organic compounds shall be determined by CARB Test Method 432.

2. The solid content of pretreatment coatings shall be determined using ASTM Method D2369-95, "Standard Test for Volatile Content of Coatings." The acid content of pretreatment coatings shall be determined using ASTM Method D1639-90(1996)e1, Standard Test Method for Acid Value of Organic Coating Material."

3. The test method for determining the fire resistance of an interior coating shall be Federal Aviation Administration required Ohio State University Heat Release, Fire and Burn Tests.

4. ROC composite pressure of a solvent or stripper shall be calculated using a widely accepted published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company, CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985). The true vapor pressure of a component in a solvent mix may be determined by ASTM Method D2879-97, "Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope." The ROC composite pressure of a solvent mix consisting entirely of ROC may be determined by ASTM Method D2879-97.

5. The active and passive solvent losses from spray gun cleaning systems shall be determined using South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" dated October 3, 1989. The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105 mm Hg at 20 ^{o}C. The minimum test temperature shall be 15 ^{o}C.

6. Transfer efficiency shall be determined in accordance with the South Coast Air Quality Management District method entitled "Spray Equipment Transfer Efficiency Test Procedure for Equipment Users" (May 24, 1989). Spray equipment HVLP equivalency shall be determined by using South Coast AQMD's "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns" (September 26, 2002).

7. The capture and control device efficiency of any air pollution control equipment shall be determined according to EPA's technical document, "Guidelines for Determining Capture Efficiency," January 9, 1995, and40 CFR 51, Appendix M, Methods 204-204F, as applicable:
Methods 204, Criteria for and Verification of a Permanent or Temporary Total Enclosure
Method 204A, VOC content in Liquid Input Stream
Method 204B, VOC Emissions in Captured Stream
Method 204C, VOC Emissions in Captured Stream (Dilution Technique)
Method 204D, VOC Emissions in Un-captured Stream from Temporary Total Enclosure
Method 204E, VOC Emissions in Un-captured Stream from Building Enclosure, and
Method 204F, VOC Content in Liquid Input Streams (Distillation Approach)
The calculation of control device efficiency shall be determined only during periods of continuous coating operations and shall be averaged over the duration of the coating operation not to exceed 24 hours.

F. Violations

Failure to comply with any provision of this rule, including the requirement to maintain records, shall constitute a violation of this rule.

G. Definitions

1. "Adhesion Promoter": A primer used to promote wetting and form a chemical bond with the subsequently applied sealant or other elastomer.

2. "Adhesive": A substance that is used to bond one surface to another surface by attachment.

3. "Adhesive Bonding Primer": A primer applied to aerospace componentsto increase adhesive or adhesive film bond strength.

4. "Aerosol Coating Product"; A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand held application, or for use in specialized equipment for ground traffic/marking applications.

5. "Aerospace Component": Any raw material, partial or completed fabricated part, assembly of parts, or completed unit of any aircraft, helicopter, missile, or space vehicle, including mockups and prototypes.

6. "Antichafe Coating": A coating applied to areas of moving aerospace components which may rub during normal operation.

7. "Anti-Wicking Wire Coating": The outer coating of a wire which prevents fluid wicking into the insulation of the wire.

8. "Barrier Coating": A coating applied in a thin film to fasteners to inhibit dissimilar metal corrosion and to prevent galling.

9. “Capture Efficiency”: The percentage of ROC used, emitted, evolved, or generated by the operation, that is collected and directed to an air pollution control device.

10. "Coating": A material which is applied to a surface and which forms a film in order to beautify and/or protect such surface.

11. "Conformal Coating": A coating applied to electrical conductors and circuit boards to protect them against electrical discharge damage and/or corrosion.

12. “Degreaser”: A container for solvent and articles being cleaned that includes a facility for draining solvent from surfaces such that the drained solvent is returned to the container.

13. "Dry Lubricative Coating": A coating consisting of lauric acid, cetyl alcohol, waxes, or other non-cross linked or resin-bound materials which act as a dry lubricant or protective coat.

14. "Electric- or Radiation-Effect Coating": An electric-effect coating is electrically conductive. A radiation-effect coating helps in the prevention of radar detection.

15. "Electronic Wire Coating": The outer electrical insulation coating applied to tape insulation of a wire specifically formulated to smooth and fill edges.

16. "Electrostatic Application": A sufficient charging of atomized paint droplets to cause deposition principally by electrostatic attraction. This application shall be operated at a minimum 60 KV.

17. "Exempt Organic Compounds": As defined in Rule 2, of these rules.

18. "Fire Resistant Coating - Civilian (Interior)": A cabin interior coating that passes Federal Aviation Administration standards using the Ohio State University Heat Release, Fire and Burn Tests.

19. "Flight Test Coating": A coating applied to an aircraft prior to flight testing to protect the aircraft from corrosion and to provide required marking during flight test evaluation.

20. "Fuel Tank Adhesive": An adhesive used to bond components exposed to fuel and which must be compatible with fuel tank coatings.

21. "Fuel Tank Coating": A coating applied to the interior of a fuel tank or areas of an aircraft that are continuously wetted by fuel to protect it from corrosion and/or bacterial growth.

22. "Grams of ROC per liter of Coating, less water and exempt organic compounds": The weight of ROC per combined volume of ROC and coating solids, calculated using the following equation:

$$\text{Grams of ROC per Liter of Coating Less Water and Exempt Organic Compound} = \frac{Ws - Ww - Wes}{Vm - Vw - Ves}$$

Where:
- Ws = Weight of volatile compounds (grams)
- Ww = Weight of water (grams)
- Wes = Weight of exempt organic compounds (grams)
- Vm = Volume of material (liters)
- Vw = Volume of water (liters)
- Ves = Volume of exempt organic compounds (liters)

23. "Grams of ROC per Liter of Material": The weight of ROC per volume of material calculated as follows:

$$\text{Grams of ROC per Liter of Material} = \frac{Ws - Ww - Wes}{Vm}$$

Where:
- Ws = Weight of volatile compounds (grams)
- Ww = Weight of water (grams)
- Wes = Weight of exempt organic compounds (grams)
- Vm = Volume of material (liters)

24. "Gun Washer": Electrically or pneumatically operated system that is designed to clean spray application equipment while enclosed. A gun washer may also be

considered a gun cleaning system that consists of spraying solvent into an enclosed container using a snug fitting.

25. "Hand Application Methods": The application of coatings, sealants, or adhesives, by nonmechanical hand-held equipment including but not limited to paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags and sponges.

26. "High Temperature Coating": A coating that must withstand temperatures of more than 350^{o}F.

27. "High Volume Low Pressure Application (HVLP)": Equipment used to apply coatings by means of a spray gun designed to be operated and operated between 0.1 and 10 psig air pressure measured dynamically at the center of the air cap and at the air horns.

28. "Impact Resistant Coating": A flexible coating that protects aerospace components, such as aircraft landing gear, and landing gear compartments, and other surfaces subject to abrasive impacts from runway debris.

29. "Low emission spray gun cleaner": Any properly used spray equipment cleanup device which has passive solvent losses of no more than 0.6 grams per hour and has active solvent losses of no more than 15 grams per operating cycle as defined by the test method in Subsection E.5.

30. “Low-Solids Adhesive, Coating, Primer or Sealant”: An adhesive, coating, primer, or sealant that has less than one pound of solids per gallon of material (120 grams of solids per liter of material). Such solids are the non-volatiles remaining after a sample is heated at 110^{o}C for one hour.

31. "Maskant for Chemical Milling": A coating applied directly to an aerospace component to protect surface areas when chemical milling such component.

32. "Non-Structural Adhesive": An adhesive that bonds non-load carrying aircraft components in noncritical applications.

33. "Optical Anti-Reflective Coating": A coating with a low reflectance in the infrared and visible wavelength range and is used for anti-reflection on or near optical and laser hardware.

34. "Phosphate Ester Resistant Wire Ink Coating": A coating that is used for surface identification or mark on aerospace wire or cable which inhibits the corrosion caused by contact with phosphate ester type hydraulic fluids.

35. "Pretreatment Coating": A coating which contains no more than 12 percent solids by weight, and at least one-half percent acid, by weight, to provide surface

etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion and ease of stripping.

36. "Primer": A coating applied directly to an aerospace component for purposes of corrosion prevention, protection from the environment, functional fluid resistance and adhesion of subsequent coatings.

37. "Rain Erosion Resistant Coating": A coating that protects leading edges, flaps, stabilizers, and engine inlet lips against erosion caused by rain during flight.

38. "Reactive Organic Compounds (ROC)": As defined in Rule 2.

39. ROC Composite Partial Pressure": The sum of the partial pressures of the compounds defined as ROCs. ROC composite partial pressure is calculated as follows:

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

Where:

W_i = Weight of the "i"th ROC compound, in grams
W_w = Weight of water, in grams
W_e = Weight of the "e"th exempt organic compound, in grams
MW_i = Molecular weight of the "i"th ROC compound, in g/(g-mole)
MW_w = Molecular weight of water, in g/(g-mole)
MW_e = Molecular weight of the "e"th exempt compound, in g/(g-mole)
PP_c = ROC composite partial pressure at 20 C, in mm Hg
VP_i = Vapor pressure of the "i"th ROC compound at 20 C, in mm Hg.

40. "Scale Inhibitor": A coating that is applied to the surface of a part prior to thermal processing to inhibit the formation of tenacious scale.

41. "Sealant": A viscous semisolid material that fills voids in order to seal out water, fuel, and other liquids and solids, and in some cases air movement.

42. "Solid Film Lubricant": A very thin coating consisting of a binder system containing as its chief pigment material one or more of the following: molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE) or other solids that act as a dry lubricant between faying surfaces.

43. "Space Vehicle Coating": A coating applied to vehicles designed to travel beyond earth's atmosphere, including but not limited to, rocket or satellite coatings.

44. "Stripper": A volatile liquid applied to remove a maskant for chemical processing, cured or dried paint, cured or dried paint residue or temporary protective coating.

45. "Structural Adhesive - Autoclavable": An adhesive used to bond load-carrying aircraft components and is cured by heat and pressure in an autoclave.

46. "Structural Adhesive - Nonautoclavable": An adhesive cured under ambient conditions and is used to bond load-carrying aircraft components or other critical functions, such as nonstructural bonding near engines.

47. “Solvent Cleaning”: The use of solvent to remove loosely held uncured adhesive, uncured ink, uncured coating, uncured resin, or other contaminants which include, but are not limited to, dirt, soil, lubricants, coolant, moisture, grease, and fingerprints from parts, products, tools, machinery, equipment, or general work areas.

48. "Temporary Protective Coating": A coating applied to an aerospace component to protect it from mechanical and environmental damage during manufacturing or shipping.

49. "Topcoat": A coating applied over a primer for purposes such as appearance, identification, or protection.

50. "Transfer Efficiency": The ratio of the weight or volume of coating solids adhering to the part being coated to the weight or volume of coating solids used in the application process, expressed as a percentage.

51. "Unicoat": A coating that is applied directly to an aerospace component for purposes of corrosion protection, environmental protection and functional fluid resistance that is not subsequently topcoated. A unicoat is used in lieu of the application of a primer and a topcoat.

52. "Wing Coating": A coating that is corrosion resistant and is resilient enough to withstand the flexing of wings.

53. "Wire Prebonding Etchant": A nonadditive surface treatment process to provide bondability of aerospace wire coatings to the underlying insulation layer.

Rule 74.14 Polyester Resin Material Operations
(Adopted 11/24/87, revised 5/26/92, 4/12/05)

A. Applicability

This rule is applicable to the manufacture of products from or the use of polyester resin material, including touch-up, repair and rework activities.

B. Requirements

1. All polyester resin material shall comply with at least one of the following requirements:

a. For all formulations, the monomer content of the material shall be no more than the percentages specified below, by weight, as applied:

Polyester Resin Material	Current Limits	Effective 07/01/05
Clear Gel Coat	50	-
For Marble Resins	-	40
All Other Resins	-	44
Pigmented Gel Coat	45	-
White and Off White	-	30
Non-White	-	37
Primer	-	28
Specialty Gel Coats	-	48
General Purpose Resin	35	-
Marble or Cultured Resins	-	10 or 32 as supplied, no filler
Solid Surface Resins	-	17
Tub/Shower Resins	-	24 or 35 as supplied, no filler
Lamination Resins	-	31 or 35 as supplied, no filler
Fire Retardant Resin	50	38
Corrosion Resistant Resin	50	48
High Strength Resin	50	40
All Other Resins	-	35

b. Application of the material shall occur using a closed-mold system.

Complying formulations shall not be thinned or diluted with any ROC or changed in any manner that may increase ROC emissions after testing, but prior to or during application.

2. Airless, air-assisted airless, electrostatic, or high volume-low pressure spray equipment shall be used in any spray application, except for touch-up or repair

using a hand-held, air-atomized spray gun utilizing an attached resin container of no more than one quart capacity.

3. Cleaning material used on lines, rollers, brushes, spray equipment and personnel, shall be either a Clean Air Solvent or shall not exceed 25 grams ROC per liter of material as applied.

4. In lieu of compliance with the provisions of Subsection B.1 and B.2, a person may elect to reduce reactive organic compound emissions from the application process by a total capture and control efficiency of at least 90 percent by weight. Control efficiency shall be continuously monitored across an emission control device, the results of which shall be averaged over a rolling 24 hour period. Touch-up or repair work shall not be excluded from this subsection.

5. All materials containing reactive organic compounds, used or unused, including but not limited to semi-solid or liquid polyester resin materials and solid or liquid cleaning materials, shall be stored in closed containers and shall not leak.

C. Exemptions

1. The provisions of Section B of this rule shall not apply to stationary sources using not more than 20 gallons per month of polyester resin material.

D. Recordkeeping

A person subject to the provisions of this rule shall maintain the following records. Such records shall be made available to the APCO upon request and shall be maintained for not less than two years from the date of each entry. The records shall contain:

1. Monthly reports (initialed by operator) of the manufacturer and product number of each polyester resin material and cleaning material used.

2. The monomer content in percent by weight of each polyester resin material used, both as applied and as supplied. For cleaning material, the ROC content in grams of ROC per liter of material as applied. Documentation shall be available to support these records.

3. Daily reports of the continuous control efficiency monitoring information required in Subsection B.4, if applicable. Daily reports shall include the quantity and type of polyester resin material used.

A person operating under the provisions of Subsection C.1 of this rule shall, in lieu of Subsections 1, 2, and 3 above, maintain monthly records of the amount of polyester resin material used.

E. Test Methods

1. Compliance with the requirements of Subsections B.1 a shall be determined using EPA Method 24. Material tested shall be non-catalyzed.

2. The capture and control efficiency of air pollution control equipment shall be determined according to EPA's technical document, "Guidelines for Determining Capture Efficiency," January 9, 1995, and methods in 40 CFR 52.741 (a) (4) (iv), Control Device Efficiency Testing and Monitoring.

3. Compliance with the grams of ROC per liter of material requirements in Subsection B.3 of this rule shall be determined using EPA Method 24.

F. Violations

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

G. Definitions

1. "Clean Air Solvent": A solvent certified by the South Coast Air Quality Management District as a Clean Air Solvent.

2. "Closed-mold System": A method of forming objects from polyester resins that involves placing the polyester resin material in a confining mold cavity and applying pressure and/or heat.

3. "Corrosion-resistant resin": Polyester resin material used to make products for corrosion resistant applications such as, but not limited to, tooling, fuel or chemical tanks, boat hulls, pools and outdoor spas.

4. "Cure": To transform or polymerize material from a liquid state to a solid or semi-solid state in which the desired physical properties, including hardness, are achieved.

5. "Electrostatic": A sufficient charging of atomized droplets to cause deposition principally by electrostatic attraction. This application method shall operate at a minimum of 60 kilovolts.

6. "Exempt Organic Compounds": As defined in Rule 2.

7. "Filler": A finely divided inert (non-ROC) material that is added to the resin to enhance its mechanical properties and extend its volume. Fillers include, but are not limited to, silica, carbon black, talc, mica and calcium carbonate.

8. "Fire retardant resin": Polyester resin material used to make products that are resistant to flame or fire.

9. "Gel Coat": A polyester resin material, either pigmented or clear, used to provide laminated surfaces with exterior cosmetic enhancement and improved resistance to degradation from exposure to the elements.

10. "General purpose resin": Polyester resin material that is not corrosion resistant, fire retardant, high-strength, or gel coats.

11. "Grams of ROC per Liter of Material": The weight of ROC per volume of material, as calculated by the equation,

Grams of ROC per Liter of Material = $(W_S-W_W-W_{ES})/V_M$

Where

W_S = weight of volatile compounds in grams
W_W = weight of water in grams
W_{ES} = weight of exempt organic compounds in grams
V_M = volume of total material in liters

12. "High-strength resin": Polyester resin material with a casting tensile strength of 10,000 psi or more, used to manufacture high performance products.

13. "High Volume-Low Pressure (HVLP)": Equipment used to apply coatings by means of a spray gun designed to be operated and operated between 0.1 and 10 pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns.

14. "Monomer": An organic compound that combines with itself or other similar compounds to become a cured thermoset resin.

15. "Lamination resins": Orthophthalate, isophthalate and dicyclopentadiene (dcpd) resins used in composite system consisting of layers of reinforcement fibers and resins.

16. "Marble or cultured resins": Orthophthalate and modified acrylic isophthalate resins used for the fabrication of cast products.

17. "Polyester Resin Material": Unsaturated polyester resins, such as isophthalic, orthophthalic, halogenated, bisphenol A, vinyl ester, or furan resins; cross-linking agents, catalysts, gel coats, inhibitors, accelerators, promoters, and any other material containing ROC and used in a manufacturing process. Inert filler and cleaning material is specifically excluded from this definition.

18. “Primer Gel Coat”: A gel coat used to coat the surface of composite parts prior to top-coat painting in the automotive, aerospace, marine and home building industries.

19. "Repair": That portion of the fabrication process that requires the addition of polyester resin materials to portions of a previously fabricated product in order to mend damage immediately following normal fabrication operations.

20. "ROC": Reactive Organic Compound, as defined in Rule 2.

21. "Solid surface resins": Resins used without gel coats to fabricate homogenous solid surface products.

22. "Specialty gel coats": Gel coats used for tooling or in conjunction with fire retardant, corrosion resistant or high-strength materials.

23. "Touch-up": That portion of the fabrication process that is necessary to cover minor imperfections.

24. "Tub/shower resin": Dicyclopentadiene (dcpd) resins, along with orthophthalate and isophthalate resins, used to fabricate bathware products.

1/24/95

Rule 74.15. Boilers, Steam Generators and Process Heaters (Adopted 3/28/89, Revised 12/3/91, 11/8/94)

A. Applicability

1. The provisions of this rule shall apply to boilers, steam generators and process heaters used in all industrial, institutional and commercial operations, except as follows:

   a. Utility electric power generating units and any auxiliary boiler used with a utility electric power generating unit.

   b. Water heaters.

B. Requirements

1. No person shall allow the discharge into the atmosphere from any boiler, steam generator or process heater with a rated heat input capacity of equal to, or greater than, five (5) million BTU's per hour, and an annual heat input rate of equal to, or greater than, 9×10^9 BTU's per calendar year, oxides of nitrogen emissions in excess of 40 parts per million volume. Carbon monoxide emissions from units subject to this rule shall not exceed 400 ppmv.

   Units subject to the above provisions shall test for compliance not less than once every 24 months.

2. Any boiler, steam generator or process heater with a rated heat input capacity of equal to, or greater than, five (5) million BTU's per hour, and having an annual heat input rate of <u>less</u> than 9×10^9 BTU's per calendar year, shall comply with one of the following requirements:

   a. The unit shall be operated in a manner that maintains stack gas oxygen concentrations at less than or equal to three (3) percent on a dry basis for any 15-consecutive-minute averaging period. Units subject to this provision shall test for compliance every six (6) months; or

   b. The unit shall be operated using a stack gas oxygen trim system set at three (3) percent oxygen. The tolerance of the setting shall be ± five (5) percent. Units subject to this provision shall test for compliance every twelve (12) months; or

   c. The unit shall be tuned at least twice per calendar year, at intervals from four (4) to eight (8) months apart, in accordance with the procedure described in Attachment 1 for forced draft fired equipment or Attachment 2 for natural draft fired equipment, except as follows:

      1) If the unit operates less than six continuous months per calendar year, one tune-up per calendar year shall

Attachment C2

be required. Continuity shall be broken after downtime of greater than seven (7) days.

2) If the unit is operated less than ten (10) days per calendar year, no tune-up shall be required.

; or

d. The unit shall comply with the emission and testing requirements of Subsection B.1.

3. In lieu of compliance with the provisions of Subsection B.1 of this rule, the pilot burners associated with Units H-1 and H-2 on District Permit to Operate 0271 shall meet an alternate NOx emission limit of 90 ppmv.

C. Exemptions

1. The provisions of this rule shall not apply to any boiler, steam generator or process heater with a rated heat input capacity of less than five (5) million BTU's per hour.

2. The provisions of Subsection B.1 of this rule shall not apply to any boiler, steam generator or process heater operated on alternate fuel under the following conditions:

a. Alternate fuel use is required due to the curtailment of natural gas service to the individual unit by the natural gas supplier. Alternate fuel use in this case shall not exceed the period of natural gas curtailment.

b. Alternate fuel use is required to maintain the alternate fuel system. Alternate fuel use in this case shall not exceed 50 hours per year.

The tune-up requirements specified in Section B.2.c shall not be required for alternate fuel use.

3. The provisions of Subsection B.1 of this rule shall not apply to the use of an emergency standby unit when a breakdown occurs to the primary unit, and the breakdown is reported pursuant to the breakdown reporting requirements of Rule 32. Emissions resulting from the operation of the standby unit shall not exceed the total annual or hourly permitted emission rate of the primary unit. Operation of the standby unit shall not occur beyond the period of the primary unit's emergency breakdown.

4. The provisions of Subsection B.1 of this rule shall not apply during the cold startup of an applicable unit. For units with a rated heat input capacity of equal to, or greater than, one hundred (100) million BTU's per hour, the duration of this exemption shall not exceed three (3) hours. For units with a rated heat input capacity of less than one hundred (100) million BTU's per hour, the duration of this exemption shall not exceed one (1) hour.

5. The provisions of Subsection B.1 of this rule shall not apply during excess emission occurrences associated with the ramp-up and ramp-down procedures used for transition between the pilot burners and the main burners associated with Units H-1 and H-2 on District Permit to Operate 0271. For each ramp-up or ramp-down event, cumulative periods of exemption shall not exceed three (3) hours.

D. Recordkeeping Requirements

1. Any person subject to the provisions of Subsection B.2 of this rule shall install a totalizing fuel meter for each applicable unit and for each fuel. The meter shall be used to demonstrate that each unit operates at or below the applicable heat input level.

   Meters shall be accurate to ± one (1) percent, as certified by the manufacturer in writing. Totalizing fuel meter readings shall be recorded monthly, shall be maintained for a period of four (4) years, and shall be made available for inspection by the Air Pollution Control Officer upon request.

2. Any person subject to the provisions of Subsection B.2.c of this rule shall submit a report to the District twelve (12) months after achieving compliance with Subsection B.2.c. Reports shall continue to be submitted every twelve (12) months. This report shall verify that each tune-up has been performed and that the results were satisfactory. The report shall contain all information or documentation that the Air Pollution Control Officer may determine, in writing, to be necessary.

3. Any person utilizing alternate fuel, pursuant to the provisions of Subsection C.2 of this rule, shall maintain permanent daily records of each occurrence. Each record shall include the type of fuel, the quantity of fuel, and the duration of the occurrence. Records shall be maintained for a period of four (4) years and shall be available for inspection by the Air Pollution Control Officer upon request.

E. Test Methods

1. Compliance with the emission requirements in Section B shall be determined using the following test methods:

   a. Oxides of Nitrogen - ARB Method 100
   b. Carbon Monoxide - ARB Method 100
   c. Stack Gas Oxygen - ARB Method 100

2. Emission tests resulting in compliance determinations for the requirements of Subsection B.1 and B.3 shall be conducted on units in "as-found" operating condition. However, no emission test for this rule shall be conducted during start-up, shutdown or under breakdown conditions.

3. The NOx parts per million emission limitation specified in Subsection B.1 and B.3 is expressed as nitrogen dioxide. The limitations for both NOx and CO are referenced at three (3) percent volume stack gas oxygen on a dry basis averaged over 15 consecutive minutes.

F. Violations

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

2. Any unit subject to the provisions of Subsection B.2 shall comply with the provisions of Subsection B.1 if the unit operates during any twelve (12) month period at a total annual heat input rate greater than the applicable annual heat input rate specified in Subsection B.2.

G. Definitions

1. "Boiler, Steam Generator": Any external combustion equipment fired with liquid and/or gaseous fuel and used to produce steam. These terms do not include any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.

2. "Cold startup procedure": The process of bringing an applicable unit and its associated emission control device up to operating temperature after the unit has experienced zero fuel flow for a period of time and is considered cold. An applicable unit shall be considered cold if the temperature of the flue gas leaving the economizer outlet is less than 100 degrees F.

3. "Process Heater": Any combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from combustion gases to water or process streams. Process Heater does not include any kiln or oven used for drying, baking, cooking, calcinating or vitrifying or any fuel-fired degreasing or metal finishing equipment.

4. "Rated Heat Input Capacity": The heat input capacity specified on the nameplate of the unit's burner. If the burner has been permanently altered or modified such that the maximum heat input is different than the input capacity specified on the nameplate, and this alteration or modification has been approved in writing by the Air Pollution Control Officer, then the new maximum heat input shall be considered as the rated heat input capacity.

5. "Unit": Any boiler, steam generator or process heater as defined in Subsections G.1 and G.2 of this rule.

6. "Water Heater": A device that heats water to a thermostatically-controlled temperature of no more than 210 degrees Fahrenheit for delivery on demand.

H. Increments of Progress

1. For units subject to Subsection B.1 and with a rated heat input capacity of equal to or greater than ten (10) million BTU's per hour, complete Authority to Construct applications shall be submitted to the APCD before March 1, 1990, and final compliance shall be demonstrated before September 1, 1991.

2. For units subject to Subsection B.1 and with a rated heat input capacity of equal to or greater than five (5) million BTU's per hour, but less than ten (10) million BTU's per hour, complete Authority to Construct applications shall be submitted to the APCD before March 1, 1991, and final compliance shall be demonstrated before March 1, 1992.

3. For units subject to Subsections B.2, final compliance shall be demonstrated by March 1, 1990.

ATTACHMENT 1

Equipment Tuning Procedure[1]
for Forced Draft Fired Equipment

Nothing in this Equipment Tuning Procedure shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurors, National Fire Prevention Association, the California Department of Industrial Relations (Occupational Safety and Health Division). the Federal Occupational Safety and Health Administration, or other relevant regulations and requirements.

1. Operate the unit at the firing rate most typical of normal operation. If the unit experiences significant load variations during normal operation, operate it at its average firing rate.

2. At this firing rate, record stack gas temperature, oxygen concentration, and CO concentration (for gaseous fuels) or smoke-spot number[2] (for liquid fuels), and observe flame conditions after unit operation stabilizes at the firing rate selected. If the excess oxygen in the stack gas is at the lower end of the range of typical minimum values[3], and if the CO emissions are low and there is not smoke, the unit is probably operating at near optimum efficiency - at this particular firing rate. However, complete the remaining portion of this procedure to determine whether still lower oxygen levels are practical.

3. Increase combustion air flow to the furnace until stack gas oxygen levels increase by one to two percent over the level measured in Step 2. As in Step 2, record the stack gas temperature, CO concentration (for gaseous fuels) or smoke-spot number (for liquid fuels), and observe flame conditions for these higher oxygen levels after boiler operation stabilizes.

4. Decrease combustion air flow until the stack gas oxygen concentration is at the level measured in Step 2. From this level gradually reduce the combustion air flow, in small increments. After each increment, record

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1. This tuning procedure is based on a tune-up procedure developed by KVB, Inc. for the EPA.

2. The smoke-spot number can be determined with ASTM Test Method D-2156 or with the Bacharach method. ASTM Test Method D-2156 is included in a tuneup kit that can be purchased from the Bacharach Company.

3. Typical minimum oxygen levels for boilers at high firing rates are:

   1. For natural gas: 0.5% - 3%
   2. For liquid fuels: 2% - 4%

the stack gas temperature, oxygen concentration, CO concentration (for gaseous fuels) and smoke-spot number (for liquid fuels). Also observe the flame and record any changes in its condition.

5. Continue to reduce combustion air flow stepwise, until one of these limits in reached:

   a. Unacceptable flame conditions - such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability.

   b. Stack gas CO concentrations greater than 400 ppm.

   c. Smoking at the stack.

   d. Equipment-related limitations - such as low windbox/furnace pressure differential, built in air-flow limits, etc.

6. Develop an O_2/CO curve (for gaseous fuels) or O_2/smoke curve (for liquid fuels) similar to those shown in Figures 1 and 2 using the excess oxygen and CO or smoke-spot number data obtained at each combustion air flow setting.

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

Fuel	Measurement	Value
Gaseous	CO Emissions	400 ppm
#1 & #2 oils	smoke-spot number	number 1
#4 oil	smoke-spot number	number 2
#5 oil	smoke-spot number	number 3
Other oils	smoke-spot number	number 4

The above conditions are referred to as CO or smoke threshold, or as the minimum excess oxygen level.

Compare this minimum value of excess oxygen to the expected value provided by the combustion unit manufacturer. If the minimum level found is substantially higher than the value provided by the combustion unit manufacturer, burner adjustments can probably be made to improve fuel and air mixing, thereby allowing operation with less air.

8. Add 0.5 to 2.0 percent to the minimum excess oxygen level found in Step 7 and reset burner controls to operate automatically at this higher stack gas oxygen level. This margin above the minimum oxygen level accounts for fuel variations, variations in atmospheric conditions, load changes, and nonrepeatability or play in automatic controls.

9. If the load of the combustion unit varies significantly during normal operation, repeat Steps 1-8 for firing rates that represent the upper and lower limits of the range of the load. Because control adjustments at one firing rate may affect conditions at other firing rates, it may not be possible to establish the optimum excess oxygen level at all firing rates. If this is the case, choose the burner control settings that give best performance over the range of firing rates. If one firing rate predominates, settings should optimize conditions at that rate.

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

Figure 1

Oxygen/CO Characteristic Curve

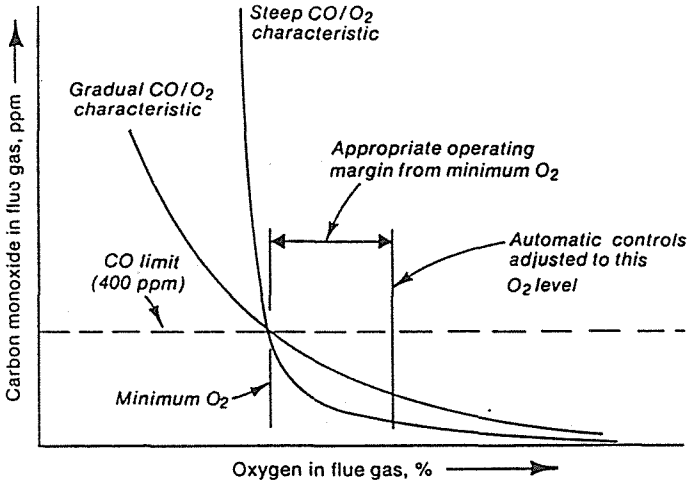
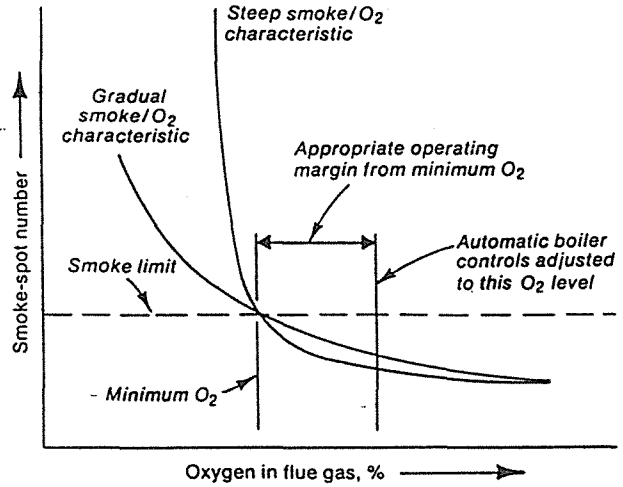


Figure 2

Oxygen/Smoke Characteristic Curve



ATTACHMENT 2

Equipment Tuning Procedure
for Natural Draft-Fired Equipment

Nothing in this Equipment Tuning Procedure shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurors, National Fire Prevention Association, the California Department of Industrial Relations (Occupational Safety and Health Division). the Federal Occupational Safety and Health Administration, or other relevant regulations and requirements.

1. Preliminary Analysis

   a. Verify that the boiler, steam generator, or process heater (unit) is operating at the lowest pressure or temperature that will satisfy load demand. This pressure or temperature will be used as a basis for comparative combustion analysis before and after tuneup.

   b. Verify that the unit operates for the minimum number of hours and days necessary to perform the work required.

   c. Verify that the size of air supply openings is in compliance with applicable codes and regulations. Air supply openings must be fully open when the burner is firing and air flow must be unrestricted.

   d. Verify that the vent is in good condition, properly sized and free from obstruction.

   e. Perform a combustion analysis (CO, O2, etc.) at both high and low fire, if possible. Record all data, as well as the following:

      (1) Inlet fuel pressure at burner at high and low firing rates.
      (2) Pressure above draft hood or barometric damper at high, medium and low firing rates.
      (3) Steam pressure, water temperature, or process fluid pressure or temperature entering and leaving the unit.
      (4) Inlet fuel use rate if meter is available.

2. Checks & Corrections

   a. Clean all dirty burners or burner orifices. Verify that fuel filters and moisture traps are in place, clean, and operating properly. Confirm proper location and orientation of burner diffuser spuds, gas canes, etc. Replace or repair damaged or missing burner parts.

b. Remove external and internal sediment and scale from heating surfaces.

c. Verify that the necessary water or process fluid treatment is being used. Confirm flushing and/or blowdown schedule.

d. Repair all leaks. In addition to the high-pressure lines, check the blow-off, drain, safety valve, bypass lines and, if used, the feed pump.

3. Safety Checks

a. Test primary and secondary low water level controls.

b. Check operating and limit pressure and temperature controls.

c. Check pilot safety shut off operation.

d. Check safety valve pressure setting and verify that the setting is consistant with unit load requirements.

e. Check limit safety control and spill switch.

4. Adjustments

Perform the following checks and adjustments on a warm unit at high fire:

a. Adjust unit to fire at the maximum inlet fuel use rate: record fuel manifold pressure.

b. Adjust draft and/or fuel pressure to obtain acceptable, clean combustion at both high, medium and low firing rates. The carbon monoxide (CO) value should not exceed 400 parts per million (PPM) at 3% O2.

Verify that unit light-offs are smooth and safe. Perform a reduced fuel pressure test at both high and low firing rates in accordance with the manufacturers instructions.

c. Check and adjust the modulation controller. Verify proper, efficient and clean combustion through the range of firing rates.

When optimum performance has been achieved, record all data.

5. Final Test

Perform a final combustion analysis on the warm unit at high, medium and low firing rates, if possible. Record data obtained from combustion analysis, as well as the following:

a. Inlet fuel pressure at burner at high and low firing rates.

b. Pressure above draft hood or barometric damper at high, medium and low firing rates.

c. Steam pressure, water temperature, or process fluid pressure or temperature entering and leaving the unit.

d. Inlet fuel use rate if meter is available.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.15.1 - BOILERS, STEAM GENERATORS, AND PROCESS HEATERS
(Adopted 5/11/93, Revised 6/13/95, 6/13/00, 9/11/12, 6/23/15)

A. Applicability

The provisions of this rule apply to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a rated heat input capacity equal to or greater than 1 million BTU per hour and less than 5 million BTU per hour. Both stationary and portable process heaters are subject to this rule. Applicable gaseous fuels include natural gas, landfill gas, biogas, liquefied petroleum gas (LPG), and produced oilfield gas.

B. Requirements

1. No person shall allow the discharge into the atmosphere, from any boiler, steam generator, or process heater with an annual heat input rate of equal to or greater than 1.8×10^9 BTU, oxides of nitrogen (NOx) emissions in excess of 30 parts per million volume (ppmv). Carbon monoxide (CO) emissions from units subject to this rule shall not exceed 400 ppmv.

2. **Emission Limits for New and Replacement Boilers and Steam Generators and Process Heaters:**

   a. No person shall allow the discharge into the atmosphere, from any new or replacement natural gas-fired boiler, steam generator, or process heater with a rated heat input capacity of equal to or greater than 1 million BTU/hr and less than or equal to 2 million BTU/hr, oxides of nitrogen emissions in excess of 20 ppmv or 0.025 lbs/MMBTU heat input. Carbon monoxide emissions shall not exceed 400 ppmv. In addition prior to installation, each device shall be certified by the South Coast Air Quality Management District in accordance with the requirements of SCAQMD Rule 1146.2, adopted May 5, 2006.

   b. After January 1, 2016, no person shall allow the discharge into the atmosphere, from any **new or replacement** boiler, steam generator, or process heater fired with a rated heat input capacity of greater than 2 million BTU/hr and less than 5 million BTU/hr oxides of nitrogen emissions in excess of the following limits:

CATEGORY	LIMITS
Units fired on Natural Gas- Atmospheric	12 ppm or 0.015 lbs/MMBTU heat input
Units fired on Natural Gas- Pressurized	9 ppm or 0.011 lbs/MMBTU heat input
Units fired on Landfill Gas	25 ppm or 0.031 lbs/MMBTU heat input
Units fired on Biogas	15 ppm or 0.019 lbs/MMBTU heat input
Units fired on Liquefied Petroleum Gas	20 ppm or 0.025 lbs/MMBTU heat input
Units fired on Produced Oilfield Gas - Atmospheric	15 ppm or 0.019 lbs/MMBTU heat input
Units fired on Produced Oilfield Gas – Pressurized	12 ppm or 0.015 lbs/MMBTU heat input

Carbon monoxide emissions shall not exceed 400 ppmv or 0.30 lbs/MMBTU.

3. Any boiler, steam generator, or process heater with an annual heat input rate of equal to or greater than 0.3 x 10^9 BTU and less than 1.8 x 10^9 BTU (less than 2.8 x 10^9 BTU for portable oil well dewaxing process heaters) shall comply with one of the following requirements:
   a. The unit shall be tuned every 6 months or after 750 hours of operation since the previous tune-up, whichever occurs last, but in no case less than once per calendar year. The unit shall be tuned in accordance with the procedure described in Attachment 1 for forced draft-fired equipment or Attachment 2 for natural draft-fired equipment; or

   b. The unit shall comply with the emission and testing requirements of Subsection B.4.

4. Test Requirements

   a. Units with a rated heat input capacity greater than 2 million BTU/hr, and subject to the provisions of Subsection B.1, shall test for compliance upon initial installation and then not less than once every 24 months.

   b. Units with a rated heat input capacity of greater than 2 million BTU/hr, and subject to the provisions of Subsection B.2.b shall test for compliance upon initial installation and then not less than once every 48 months.

   c. Units with a rated heat input capacity of less than or equal to 2 million BTU/hr, and subject to the provisions of Subsection B.1 or B.2.a, shall test for compliance upon initial installation and then not less than once every 48 months. The first source test on this test schedule shall be 48 months after the last source test conducted prior to September 11, 2012.

   d. All units subject to emission limits shall perform an annual screening analysis of NOx and CO emissions unless a source test specified in either Subsection B.4.a, B.4.b, or B.4.c is required that year. The deadline for performing this annual screening is no later than the yearly anniversary date of the last source test. The operator shall notify the APCD by telephone, fax, or email, 24 hours prior to any screening analysis.

C. Exemptions

1. The provisions of Section B of this rule shall not apply to any unit operated on alternate fuel under the following conditions:

a. Alternate fuel use is required due to the curtailment of natural gas service to the individual unit by the natural gas supplier. Alternate fuel use in this case shall not exceed the period of natural gas curtailment.

b. Alternate fuel use is required to maintain the alternate fuel system. Alternate fuel use in this case shall not exceed 50 hours per year.

2. The emission limits in Subsection B.1 shall not apply to any portable oil well dewaxing process heater if the annual heat input rate is less than 2.8×10^9 BTU.

D. Recordkeeping Requirements

1. Any person owning and/or operating a boiler, steam generator, or process heater with an annual heat input rate of less than 2.8×10^9 BTU and not subject to the requirements of Subsection B.1 shall install a totalizing fuel meter for each applicable unit and for each fuel. Meters shall be accurate to ± one (1) percent, as certified by the manufacturer in writing. Fuel consumption for each unit shall be compiled monthly into a rolling twelve (12) calendar month report.

2. Any person subject to the provisions of Subsection B.3.a shall submit a report to the Air Pollution Control Officer (APCO) within forty-five (45) days after achieving first compliance with Subsection B.3.a. Reports shall continue to be submitted every twelve (12) months. The report shall verify that each tune-up has been performed and the results were satisfactory. The report shall contain all information and or documentation that the APCO may determine, in writing, to be necessary.

3. Any person subject to the provisions of Subsection B.4.d shall submit a report to the APCO within forty-five (45) days after first achieving compliance with the subsection. Reports shall continue to be submitted every twelve (12) months. The report shall contain all information and or documentation that the APCO may determine, in writing, to be necessary. Any person subject to the provisions of Subsection B.4.d, shall record the results of all screenings in an annual test log, and this log shall be made available to APCD personnel upon request. This log shall indicate the date of the screening, the NOx and CO emissions measured at 3% Oxygen (calculated as NO_2), the applicable NOx and CO limits for the unit, and any action taken, if applicable.

4. Any person utilizing alternate fuel, pursuant to the provisions of Subsection C.1 of this rule, shall maintain daily records of each occurrence. Each record shall include the type of fuel, the quantity of fuel, and the duration of the occurrence.

5. All records required by Subsection D shall be maintained for a period of four (4) years and shall be available for inspection by the APCO upon request.

E. Test Methods

1. Compliance with the emission requirements in Section B shall be determined using ARB Method 100 for Oxides of Nitrogen, Carbon Monoxide, and Stack Gas Oxygen. An alternative procedure for determining emission compliance in units of lb/MMBTU heat input shall be determined using the South Coast AQMD "Compliance Protocol for the Measurement of Nitrogen Dioxide, Carbon Monoxide, and Oxygen From Sources Subject to SCAQMD Rules 1146 and 1146.1" dated March 10, 2009.

2. Emission tests resulting in compliance determinations for the requirements of Subsection B.1 or B.2 shall be conducted on units in "As-found" operating condition.

3. The NOx parts per million emission limitation specified in Subsection B.1 and B.2 is expressed as nitrogen dioxide. The limitations for both NOx and CO are referenced at three (3) percent volume stack gas oxygen on a dry basis averaged over 15 consecutive minutes.

4. Screening analyses required pursuant to Subsection B.4.d shall be performed using a portable analyzer calibrated, maintained, and operated in accordance with the manufacturer's specifications or as approved in writing by the APCO. Portable analyzer operators shall undergo training, on the operation and maintenance of the analyzer.

F. Violations

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

2. Any unit subject to the provisions of Subsection B.3 shall comply with the provisions of Subsection B.1 if the unit operates during any rolling twelve (12) month period at a total annual heat input rate greater than the applicable annual heat input rate specified in Subsection B.3.

3. Any unit previously operating at an annual heat input rate of less than 0.3×10^9 BTU shall comply with the applicable provisions of Subsection B.1 or Subsection B.3 if the unit operates during any rolling twelve (12) month period at a total annual heat input rate greater than 0.3×10^9 BTU.

4. An applicable unit shall be in violation if, according to a screening analysis, it is operated out-of-compliance with the requirements of either Subsection B.1 or B.2 as follows. All out-of-compliance screening analyses shall be reported to the District within seven (7) calendar days. The unit shall be corrected and a second screening analysis or source test shall be performed within fourteen (14) calendar

days of the initial screening analysis. The results of the second analysis shall be reported to the District within seven (7) days. If the unit remains out-of-compliance, a violation has occurred.

G. Definitions

1. "Alternate Fuel": Any fuel that is permitted to be used due to natural gas curtailment by the natural gas supplier because of limited availability.

2. “Atmospheric Unit”: Any natural gas or produced oilfield gas fired unit with a non-sealed combustion chamber in which natural draft is used to exhaust combustion gases.

3 "Annual Heat Input": The actual amount of heat released by fuels burned in a unit during a twelve (12) calendar month rolling period, based on the fuel's higher heating value. The annual heat input shall be calculated as the sum of the previous 12 monthly fuel use rates multiplied by the fuel's higher heating value.

4. “Biogas”: A gaseous mixture of methane and carbon dioxide produced by the bacterial decomposition of organic waste and used as a fuel, including, but not limited to, digester gas.

5 "Boiler or Steam Generator": Any external combustion equipment fired with liquid and/or gaseous fuel and used to produce steam or to heat water. Boiler or Steam Generator does not include any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.

6. “Landfill Gas”: Any gas derived through any biological process from the decomposition of waste buried within a waste disposal site.

7. “Liquefied Petroleum Gas (LPG)”: An organic compound having a vapor pressure not exceeding that allowed for commercial propane that is composed predominantly of the following hydrocarbons, either by themselves or as mixtures: propane, propylene, butane, and to a lesser extent butylenes, and that is stored and transported under pressure in a liquid state.

8. “Natural Gas”: Any mixture of gaseous hydrocarbons containing at least 80 percent methane by volume, as determined using Standard Method ASTM D1945-03(2010) or later revision.

9. "New or Replacement Boiler, Steam Generator, or Process Heater": Any applicable unit sold, offered for sale, or installed after January 1, 2013, pursuant to Subsection B.2.a or after January 1, 2016, pursuant to Subsection B.2.b.

10. “Open Heated Tank”: Any non-pressurized self-heated tank that may include a cover or doors that can be opened or detached to put in or remove parts,

components or other material for processing in the tank. Tanks heated solely by an electric heater, boiler, thermal fluid heater, or heat recovered from another process using heat exchangers are excluded from this definition.

11. "Portable Oil Well Dewaxing Process Heater": Any portable process heater mounted on a truck or trailer that is used to heat and circulate fluid (usually crude oil) around oil well production tubing or oil flow lines to remove paraffin wax (a natural occurring constituent of crude oil) to prevent loss of oil production caused by wax plugging of the unit.

12. "Pressurized Unit": Any unit that does not meet the criteria needed to qualify as an atmospheric unit.

13. "Process Heater": Any external combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from combustion gases to water or process streams. For the purpose of rule applicability, process heater does not include any of the following combustion sources:
    a. Kiln, oven, open heated tank, dehydrator, dryer, crematory, incinerator, calciner, cooker, roaster, or furnace.,
    b. Unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment,
    c. Fuel-fired degreasing or metal finishing equipment including parts washers and metal heat treating or metal furnaces,
    d. Afterburner, vapor incinerator, or thermal or catalytic oxidizers used as an emission control device.
    e. Glass melting furnace,
    f. Tenter frame, fabric or carpet dryer.

14. "Produced Oilfield Gas": Any mixture of gaseous hydrocarbons produced in the oil field containing less than 80 percent methane by volume, as determined using Standard Method ASTM D1945-03(2010) or later revision.

15. "Rated Heat Input Capacity": The heat input capacity specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than the heat input capacity specified on the nameplate, the new maximum heat input shall be considered as the rated heat input capacity. This alteration or modification can be through either burner alteration or modification or installation of a fixed orifice. The new maximum heat input must be certified, in writing, by the manufacturer or installer and engineering calculations supporting the new maximum heat input rating must be submitted to the APCO.

16. "Tenter Frame Dryer": Any cloth dryer that hold the edges of the material as it is dried in order to control shrinkage.

17. "Therm": 100,000 BTU.

18. "Unit": Any boiler, steam generator, or process heater as defined in Subsections G.5, G.9, and G.13 of this rule.

ATTACHMENT 1

Equipment Tuning Procedure
for Forced Draft-fired Equipment[1]

Nothing in this Equipment Tuning Procedure shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurers, National Fire Prevention Association, the California Department of Industrial Relations (Occupational Safety and Health Division), the Federal Occupational Safety and Health Administration, or other relevant regulations and requirements.

1. Operate the unit at the firing rate most typical of normal operation. If the unit experiences significant load variations during normal operation, operate it at its average firing rate.

2. At this firing rate, record stack gas temperature, oxygen concentration, and CO concentration (for gaseous fuels) or smoke-spot number[2] (for liquid fuels), and observe flame conditions after unit operation stabilizes at the firing rate selected. If the excess oxygen in the stack gas is at the lower end of the range of typical minimum values[3], and if the CO emissions are low and there is not smoke, the unit is probably operating at near optimum efficiency - at this particular firing rate. However, complete the remaining portion of this procedure to determine whether still lower oxygen levels are practical.

3. Increase combustion air flow to the furnace until stack gas oxygen levels increase by one to two percent over the level measured in Step 2. As in Step 2, record the stack gas temperature, CO concentration (for gaseous fuels) or smoke-spot number (for liquid fuels), and observe flame conditions for these higher oxygen levels after boiler operation stabilizes.

4. Decrease combustion air flow until the stack gas oxygen concentration is at the level measured in Step 2. From this level gradually reduce the combustion air flow, in small increments. After each increment, record

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[1]. This tuning procedure is based on a tune-up procedure developed by KVB, Inc. for the EPA.

[2]. The smoke-spot number can be determined with ASTM Test Method D-2156 or with the Bacharach method.

[3]. Typical minimum oxygen levels for boilers at high firing rates are:

1. For natural gas: 0.5% - 3%
2. For liquid fuels: 2% - 4%

the stack gas temperature, oxygen concentration, CO concentration (for gaseous fuels) and smoke-spot number (for liquid fuels). Also observe the flame and record any changes in its condition.

5. Continue to reduce combustion air flow stepwise, until one of these limits in reached:

   a. Unacceptable flame conditions - such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability.

   b. Stack gas CO concentrations greater than 400 ppm.

   c. Smoking at the stack.

   d. Equipment-related limitations - such as low windbox/furnace pressure differential, built in air-flow limits, etc.

6. Develop an 0_2/CO curve (for gaseous fuels) or 0_2/smoke curve (for liquid fuels) similar to those shown in Figures 1 and 2 using the excess oxygen and CO or smoke-spot number data obtained at each combustion air flow setting.

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

Fuel	Measurement	Value
Gaseous	CO Emissions	400 ppm
#1 & #2 oils	smoke-spot number	number 1
#4 oil	smoke-spot number	number 2
#5 oil	smoke-spot number	number 3
Other oils	smoke-spot number	number 4

   The above conditions are referred to as CO or smoke threshold, or as the minimum excess oxygen level.

   Compare this minimum value of excess oxygen to the expected value provided by the combustion unit manufacturer. If the minimum level found is substantially higher than the value provided by the combustion unit manufacturer, burner adjustments can probably be made to improve fuel and air mixing, thereby allowing operation with less air.

8. Add 0.5 to 2.0 percent to the minimum excess oxygen level found in Step 7 and reset burner controls to operate automatically at this higher stack gas oxygen level. This

margin above the minimum oxygen level accounts for fuel variations, variations in atmospheric conditions, load changes, and nonrepeatability or play in automatic controls.

9. If the load of the combustion unit varies significantly during normal operation, repeat Steps 1-8 for firing rates that represent the upper and lower limits of the range of the load. Because control adjustments at one firing rate may affect conditions at other firing rates, it may not be possible to establish the optimum excess oxygen level at all firing rates. If this is the case, choose the burner control settings that give best performance over the range of firing rates. If one firing rate predominates, settings should optimize conditions at that rate.

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

Figure 1

Oxygen/CO Characteristic Curve

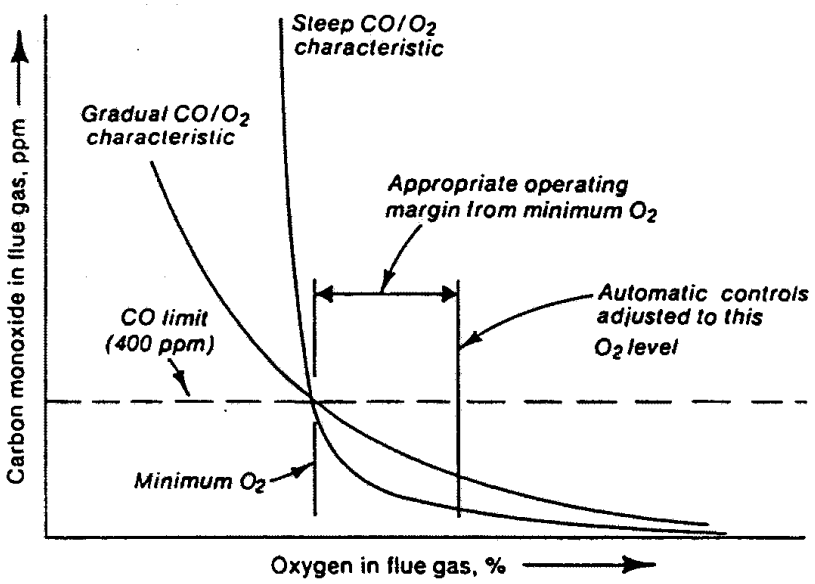
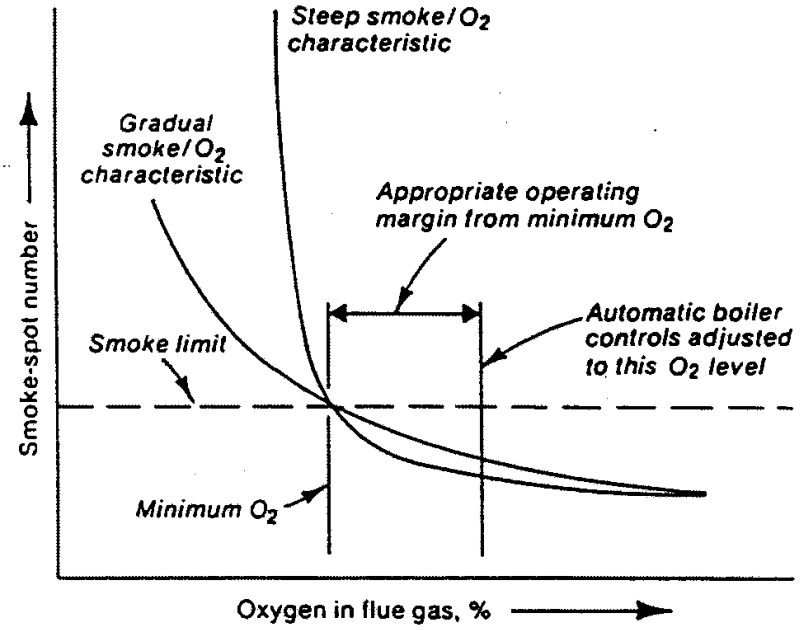


Figure 2

Oxygen/Smoke Characteristic Curve



ATTACHMENT 2

Equipment Tuning Procedure
for Natural Draft-Fired Equipment

Nothing in this Equipment Tuning Procedure shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurers, National Fire Prevention Association, the California Department of Industrial Relations (Occupational Safety and Health Division). the Federal Occupational Safety and Health Administration, or other relevant regulations and requirements. Steps in the Procedure not applicable to specific units may be omitted.

1. Preliminary Analysis

   a. Verify that the boiler, steam generator, or process heater (unit) is operating at the lowest pressure or temperature that will satisfy load demand. This pressure or temperature will be used as a basis for comparative combustion analysis before and after tune-up.

   b. Verify that the unit operates for the minimum number of hours and days necessary to perform the work required.

   c. Verify that the size of air supply openings is in compliance with applicable codes and regulations. Air supply openings must be fully open when the burner is firing and air flow must be unrestricted.

   d. Verify that the vent is in good condition, properly sized and free from obstruction.

   e. Perform a combustion analysis (CO, O_2, etc.) at both high and low fire, if possible. Record all data, as well as the following:

      (1) Inlet fuel pressure at burner at high and low firing rates.
      (2) Pressure above draft hood or barometric damper at high, medium and low firing rates.
      (3) Steam pressure, water temperature, or process fluid pressure or temperature entering and leaving the unit.
      (4) Inlet fuel use rate if meter is available.

2. Checks & Corrections

   a. Clean all dirty burners or burner orifices. Verify that fuel filters and moisture traps are in place, clean, and operating properly. Confirm proper location and

orientation of burner diffuser spuds, gas canes, etc. Replace or repair damaged or missing burner parts.

b. Remove external and internal sediment and scale from heating surfaces.

c. Verify that the necessary water or process fluid treatment is being used. Confirm flushing and/or blowdown schedule.

d. Repair all leaks. In addition to the high-pressure lines, check the blow-off, drain, safety valve, bypass lines and, if used, the feed pump.

3. Safety Checks

a. Test primary and secondary low water level controls.

b. Check operating and limit pressure and temperature controls.

c. Check pilot safety shut off operation.

d. Check safety valve pressure setting and verify that the setting is consistent with unit load requirements.

e. Check limit safety control and spill switch.

4. Adjustments

Perform the following checks and adjustments on a warm unit at high fire:

a. Adjust unit to fire at the maximum inlet fuel use rate: record fuel manifold pressure.

b. Adjust draft and/or fuel pressure to obtain acceptable, clean combustion at both high, medium and low firing rates. The carbon monoxide (CO) value should not exceed 400 parts per million (PPM) at 3% O_2.

Verify that unit light-offs are smooth and safe. Perform a reduced fuel pressure test at both high and low firing rates in accordance with the manufacturers instructions.

c. Check and adjust the modulation controller. Verify proper, efficient and clean combustion through the range of firing rates.

When optimum performance has been achieved, record all data.

5. Final Test

Perform a final combustion analysis on the warm unit at high, medium and low firing rates, if possible. Record data obtained from combustion analysis, as well as the following:

a. Inlet fuel pressure at burner at high and low firing rates.

b. Pressure above draft hood or barometric damper at high, medium and low firing rates.

c. Steam pressure, water temperature, or process fluid pressure or temperature entering and leaving the unit.

d. Inlet fuel use rate if meter is available.

Ventura County APCD
4/5/91

Rule 74.16 Oilfield Drilling Operations (Adopted 1/8/91)

A. Applicability

The provisions of this rule shall apply to all oilfield drilling operations.

B. Requirements

1. All drilling operations shall be powered by grid power unless exempted by Section C of this rule.

In the event of power outage or other emergency, sufficient power may be generated on-site to ensure safety and to prevent damage to equipment.

2. All drilling operations that are exempt from Subsection B.1 shall meet the following requirements:

a. NO_x emissions from drilling engines, or any exhaust stack of multiple engines permanently manifolded together, shall not exceed 515 ppm corrected to 15% oxygen. This emission limit may be adjusted as follows:

The STANDARD is 515 ppm NOx, corrected to 15% oxygen at an engine STANDARD EFFICIENCY of 33%.

$$\text{EMISSION LIMIT} = \frac{(\text{STANDARD}) \times (\text{UNIT EFFICIENCY})}{(\text{STANDARD EFFICIENCY})}$$

UNIT EFFICIENCY = The output from an engine divided by the energy input. Any engine with an efficiency lower than 33% is allowed a 33% UNIT EFFICIENCY for the purpose of this calculation. Any engine model which has been tested by the manufacturer, in the configuration being used, where the manufacturer's test data documents an efficiency greater than 33%, will be allowed to use the greater efficiency as the UNIT EFFICIENCY. The STANDARD EFFICIENCY is 33%.

b. Compliance with Subsection B.2.a shall be demonstrated annually by source testing. Where permitted equipment subject to this rule is inactive or operating outside Ventura County, source testing may be postponed until no later than 10 days after the date that such equipment resumes operations in Ventura County. A source test conducted in any other California Air District may be used to demonstrate compliance, subject to written approval by the APCO.

c. Drilling engines certified by the manufacturer to emit 6.9 grams of NO_x per brake horsepower-hour or less based on a California Air Resources Board (ARB) approved heavy duty offroad engine testing procedure

shall be deemed in compliance with Subsection B.2.a and shall not be subject to the annual source test requirements in Subsection B.2.b provided that the following additional requirements are met:

1) The emission control configuration of each such engine shall be maintained to manufacturer's specifications.

2) The operator shall submit a maintenance and inspection plan, subject to APCO approval, that ensures each such engine is maintained to manufacturer's specifications.

3) Each such engine shall also be subject to any ARB approved smog check program developed for heavy duty offroad engines.

d. Notwithstanding Subsection B.2.c, any manufacturer certified engine subsequently found to emit more than 6.9 grams of NO_x per brake horsepower-hour using an ARB approved testing procedure for heavy duty offroad engines shall be in violation of this rule.

C. Exemptions

1. An oil company may petition the APCO for exemption from Subsection B.1 by submitting a cost evaluation for grid powered drilling. Best Available Control Technology cost guidelines shall be used to determine cost effectiveness. The most economical location to connect to a sufficient source of grid power shall be identified in the analysis. The cost of control shall be based solely on the installation of sufficient and compatible electric capacity to the drill site to fully power all drilling operations.

   The cost analysis shall show that the most economical method of supplying sufficient and compatible electric capacity to the drill site was determined by comparing sources such as, but not limited to: a bid from a drilling contractor fully equipped for electric drilling; renting or leasing electric equipment; or purchasing electric equipment. For the purpose of the cost analysis, capital cost for the purchase of reusable electricity handling and conditioning equipment shall be amortized over its useful life. The potential emission reduction shall be calculated based on an estimate of the total NO_x and ROC emissions from the drilling project as proposed.

2. Until June 1, 1995, any drilling operations consuming less than 500 gallons of fuel in any day, drilling a hole with a total measured depth less than 5000 feet from the surface, shall not be subject to Subsection B.2 of this rule. This exemption may be claimed only when Exemption C.1 has been

approved based on emissions from the exempt rig. The operator shall provide the District with sufficient data to develop an average emission factor for the rig expressed in pounds of NOx and ROC per gallon of fuel burned.

D. Recordkeeping

The operator of any engines subject to this rule shall maintain the following records on site.

1. Daily records of the amount of fuel consumed (in gallons) at each drilling site in Ventura County.

2. Daily records of the equipment's location in Ventura County.

3. For drilling operations powered by grid power, daily records of fuel consumption and hours of operation for any standby engine or power generating equipment.

All records shall be saved for a period of at least two years from the date of each entry and shall be submitted to the APCO upon request.

E. Test Methods

Source tests required by Subsection B.2.b shall be performed utilizing CARB Method 100. The source test period shall be a minimum of 60 minutes for each engine. Engine load shall average at least 40 percent of rated load over the test period or shall follow an ARB approved multiple load testing cycle for heavy duty offroad engines. The average engine load during the test shall be determined by monitoring the engine output or may be based on the amount of fuel consumed during the test and the engine efficiency. Source test plans shall be preapproved in writing by the APCO.

F. Violations

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

G. Definitions

1. "Drilling Operations": Activities powered by nonvehicular internal combustion engines for the purpose of drilling or redrilling oil wells, injection wells, or gas wells. For the purpose of this rule, drilling operations do not include operations at any existing well where the derrick is a part of an oil well production service unit as defined in the California Vehicle Code.

2. "Drilling Engines": Drill rig engines over 50 HP including but not limited to engines supplying power to drawworks, rotary tables, mud pumps, mud mixers and auxiliary generators.

3. "Grid Power": Electricity conveyed by power lines connected physically and contractually to the Southern California Edison System, or any electricity generated by equipment permitted by the District and having permitted emissions commensurate with an emission rate of not more than 1.0 pound of NOx per Megawatt-hour of electricity produced.

4. "Oil Company": The person contracting the drilling rig and/or the person who applies for an Authority to Construct for the well.

H. Compliance Schedule

1. All drilling operations commencing after January 8, 1992, shall be in compliance with the provisions of this rule.

2. After January 8, 1992, no person shall operate or contract the operation of any drilling rig in Ventura County that does not hold a valid APCD Permit to Operate. The owner or operator of the rig should submit permit applications at least three months prior to initial use to allow sufficient time for permit processing.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.18 - MOTOR VEHICLE AND MOBILE EQUIPMENT COATING OPERATIONS

(Adopted 1/28/92, Revised 12/13/94, 9/10/96, 11/11/08)

A. Applicability and Purpose

The provisions of this rule apply to any person who manufactures, distributes, supplies, sells, offers for sale, applies or solicits the use of, automotive coatings for motor vehicles, mobile equipment, and their parts or components. The purpose of this rule is to limit reactive organic compound (ROC) emissions from coatings and solvents used in production, repair, refinish, or maintenance operations where motor vehicles, mobile equipment, and associated parts and components are coated.

B. Requirements

1. No person shall coat any vehicles, mobile equipment, or their associated parts and components, using any coating with a Reactive Organic Compound (ROC) content in excess of the following limits:

Limits
Grams of ROC per Liter of Coating, As Applied, Less Water and Exempt Organic Compounds

Coating Category	Effective November 11, 2008	Effective January 1 2009	Effective January 1, 2010
Adhesion Promoter	840		540
Clear Coating	250		
Color Coating	760	420	
Multi-Color Coating	840	680	
Pretreatment Coating	780	660	
Primer	250		
Primer Sealer	340		250
Single-Stage Coating Nonmetallic/Noniridescent	420		340
Single Stage Metallic/Iridescent Coating	520		340
Temporary Protective Coating	420	60	
Truck Bed Liner Coating	840	310	
Underbody Coating	840	430	
Uniform Finish Coating	840	540	

Water-Reducible Electrophoretic Brake Component Coating	440		
Any other coating type (default)	840	250	

2. Most Restrictive ROC Limit. If anywhere on the container of any automotive coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a person, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in Subsection B.1, then the lowest ROC content limit shall apply.

3. Alternative Compliance (Add-on Control Equipment Option):

   A person may comply with the provisions of Subsection B.1 (coating limits) by using an emission control system provided that:

   a. The combined control and capture efficiency shall reduce total organic compound (TOC) emissions from an emission collection system by at least 85 percent, by weight, and

   b. Written approval in the form of an Authority to Construct and a Permit to Operate for such equipment is received from the Air Pollution Control Officer (APCO).

   c. Any approved emission control system shall be maintained and used at all times in proper working condition.

4. Coating Application Methods (Transfer Efficiency): No person shall apply any coating to any motor vehicle or mobile equipment or their associated parts and components unless one of the following methods is properly used:

   a. Hand application methods including, but not limited to: brush, dip or roller

   b. Electrophoretic dip coating

   c. Electrostatic application, operated at a minimum of 60 KV

   d. High-Volume, Low-Pressure (HVLP) spray equipment: If a spray gun is used, the end user shall demonstrate that the spray gun meets the definition of HVLP in design and use. A satisfactory demonstration shall be based on the manufacturer's published technical material on the design of the gun and by a demonstration of the operation of the spray gun using an air pressure tip gauge from the spray gun manufacturer.

   e. Alternative Application Method: Any other alternative method that achieves a transfer efficiency equivalent to, or higher than, one of the application methods

listed in Subsections B.4.a, B.4.b, B.4.c, or B.4.d. Written approval of the APCO shall be obtained for each alternative method prior to use.

5. Prohibition of Specification: No person shall solicit or require for use or specify the application of any automotive coating or cleaning solvent on any motor vehicle, mobile equipment, or their associated parts or components if such use or application results in a violation of the provisions of this Rule. The prohibition of this Subsection shall apply to all written or oral contracts, including, but not limited to job orders, under the terms of which any coating or solvent which is subject to the provisions of this Rule is to be applied to any motor vehicle, mobile equipment, or their associated parts and components at any physical location within the District.

6. Prohibition of Sale:

   a. Except as provided in Subsections B.6.b and B.6.c, no person shall manufacture, blend, repackage for sale, supply, offer for sale or sell, or distribute within the District, any coating that is regulated by Subsection B.1, of this Rule if the application of such product is prohibited, at the time of sale.

   b. The prohibition in Subsection B.6.a shall apply to the sale of any coating that will be applied at any physical location within the District and shall not apply to any coating shipped outside of the District for use outside of the District, sold in the District for use outside the District, or manufactured in the District for use outside the District.

   c. The prohibition in Subsection B.6.a shall not apply to the sale of coatings where the emissions to the atmosphere from the application of those coatings are controlled by an APCD-approved emission control system that meets the requirements of Subsection B.3.

   d. Any person claiming an exemption from the sales prohibition as allowed by Subsection B.6.b or B.6.c shall keep a detailed log of each automotive coating and component manufactured, blended, repackaged for sale, supplied, sold, offered for sale, or distributed that lists:
      1). The quantity manufactured, blended, repackaged for sale, or distributed, including size and number of containers;

      2) The VOC regulatory and VOC actual for coatings;

      3) To whom they were supplied, sold, offered for sale, or distributed, or for whom they were manufactured, blended, or repackaged for sale including the name, address, phone number, retail license number, and valid district permit number

4) Identification of which exemption is being utilized.

7. Compliance Statement Requirements:

a. For each individual automotive coating or coating component, the manufacturer and repackager shall include the following information on product data sheets or an equivalent medium:

1). The VOC actual for coatings and VOC regulatory for coatings, expressed in grams per liter;
2). The weight percentage of volatiles, water, and exempt compounds;
3). The volume percentage of water and exempt compounds; and
4). The density of the material (in grams per liter).

b. For each individual ready to spray mixture (based on the manufacturer's and repackager's stated mix ratio), the manufacturer and repackager shall include the following information on product data sheets, or an equivalent medium:

1) The VOC actual for coatings and VOC regulatory for coatings, expressed in grams per liter;
2) The weight percentage of volatiles, water, and exempt compounds;
3) The volume percentage of water and exempt compounds; and
4) The density of the material (in grams per liter)

c. The manufacturer and repackager of a cleaning solvent subject to this rule shall include the VOC content, as supplied, expressed in grams per liter, on product data sheets, product labels, or an equivalent medium.

8. Surface Preparation and Cleaning Operations: The requirements of this subsection shall apply to any person using organic solvent for surface preparation and cleaning operations.

a. Until January 1, 2010, no person shall use organic solvent for cleaning operations, unless,

1) An enclosed gun washer or "low emission spray gun cleaner" that has been approved in writing by the APCO is properly used for spray equipment cleaning, and

2) The ROC composite partial pressure of organic solvent used for cleanup, including spray equipment cleaning, is less than 45 mm Hg at a temperature of 20^{O}C .

b. Until January 1, 2010, no person shall use ROC-containing materials which have an ROC content exceeding 200 grams per liter of material for substrate surface preparation prior to coating.

c. Effective January 1, 2010, no person shall use a solvent for any cleaning operation that has an ROC content exceeding 25 grams per liter of material.

9. Storage of ROC-Containing Materials: All automotive coating components, automotive coatings and solvents including all ROC-containing materials shall be stored in closed vapor-tight, non-leaking, nonabsorbent containers, except while adding or removing them from containers.

10. Prohibition of Possession:

a. Coatings: No person shall possess at any automotive refinishing facility, any automotive coating that is not in compliance with Subsection B.1 (unless Alternative Compliance is used pursuant to Subsection B.3), or any aerosol coating that is not in compliance with CARB regulations.

b. Solvents: Effective January 1, 2010, no person shall possess at any automotive refinishing facility, any solvent designated by labels or technical data sheets as applicable for automotive cleaning operations that has an ROC content exceeding 25 grams per liter of material, excluding:

1) Paint strippers or paint removers having labels or technical data sheets indicating the primary purpose of the product is to remove cured coatings.

2) Surface preparation cleaning solvents listed in an approved Low Usage Exempt Surface Prep Cleaner Compliance Plan and identified by a unique label, tag or sticker that is described in the Compliance Plan.

11. Air Toxic Control Measure for Coatings Containing Hexavalent Chromium or Cadmium: No person shall apply any coatings to any motor vehicle, mobile equipment, or their parts or components, if that coating contains hexavalent chromium or cadmium.

12. Spray Booth and Prep Stations: No person shall apply any coating to any motor vehicle, mobile equipment, or their parts or components, unless that application is performed within a properly maintained and operated stationary Spray Booth or properly maintained and operated Prep Station.

13. Labeling Requirements: All letters or numbers on product labels designating VOC or ROC content shall be visible and legible.

a. The manufacturer or repackager of automotive coatings shall include the applicable use category(ies), and the VOC actual for coatings and VOC regulatory for coatings, as supplied, expressed in grams per liter on all coating containers. Alternatively, the coating manufacturer may include other container

label information that enables the determination of compliance with the ROC content limits in Subsection B.1., use of which has been approved in writing by the APCO.

b. The manufacturer and repackager of solvents subject to this rule shall include on all containers the VOC content for solvents, as supplied, expressed in grams per liter.

14. OSHA Standards for Spray Finishing Using Flammable and Combustible Materials: No person shall operate an automotive coating operation unless all provisions of California OSHA standards are met including, but not limited to CCR Title 8, Division 1, Chapter 4, Subchapter 7, Group 20 (Flammable Liquids), Article 137 (Spray Coating Operations).

These standards are referenced because of the flammability hazard posed by acetone-based cleaners, which may be used to comply with provisions of this rule. In no event shall the APCD be liable to any person or business using these cleaners.

C. Exemptions

1. Any motor vehicle or mobile equipment coating operation which uses only hand-held, nonrefillable aerosol coating cans, 16 ounces or less (NET WT), shall be exempt from this rule.

2. This rule does not apply to any aerosol coatings that are in compliance with regulations and requirements adopted by the California Air Resources Board (California Code of Regulation, Title 17, Subchapter 8.5, Section 94522).

3. This rule shall not apply to any automotive coating that is sold, supplied, or offered for sale in 0.5 fluid ounce or smaller containers intended to be used by the general public to repair tiny surface imperfections.

4. With prior written approval of the APCO, the requirements of Subsection B.12, Spray Booths and Prep Stations, shall not apply to the coating of motor vehicle(s) which due to shape or size, cannot reasonably be contained in any available substitute spray booth. A person wishing to qualify for this exemption must comply with the following requirements:

a. A written petition must be submitted to the APCO stating the motor vehicle(s) to be coated, the size of the substitute spray booth available, the physical size of the motor vehicle(s) (i.e. length, width, and height), number of motor vehicle(s) to be coated, estimated volume of coating used, and the ROC content, , and lead content of each coating used.

b. The coatings used shall not contain any lead with the exception of weld-thru primers.

c. If the APCO grants written approval, then such approval shall:
   1) Be valid only for the coating operation and coatings specified in the petition,

   2) Contain limits on coating volume,

   3) and may contain a time limit not to exceed one year.

5. The requirements of Subsection B.12, Spray Booths and Prep Stations, shall not apply to the application of:
   a. Any undercoat that does not contain lead, and is:

      1) Limited to one major panel or

      2) Applied to an interior part of a motor vehicle, where that part can only be coated while the motor vehicle is immobilized.

   b. Any weld-thru primer.

   c. Any coating that does not contain lead and is applied to a motor vehicle engine compartment or a mating assembly of engine and suspension components.

6. The requirements of B.4 (Transfer Efficiency), and B.12 (Spray Booths) shall not apply to mobile automotive touch-up coating operations provided that:
   a. Application is done using either a paint brush or an air brush with a cup that holds no more than 4 ounces of paint, and

   b. Coatings applied contain no lead .

7. The requirements of B.12 (Spray Booths) shall not apply to touch-up coating of vehicles, mobile equipment, or their associated parts or components using a paint brush or roller.

8. This rule shall not apply to a "Clean Air Solvent," which has been certified in writing by the South Coast AQMD, and which is defined in SCAQMD Rule 102.

9. This rule shall not apply to the possession or use of any non-aerosol glass cleaner as long as the cleaner is used solely for cleaning glass and is identified as a glass cleaner on its applicator. Only those cleaners identified by the manufacturer on container labels,

sales, and technical literature as formulated for the cleaning of glass shall qualify for this exemption.

10. This rule shall not apply to any agricultural sources of air pollution, which means a source of air pollution or a group of sources used in the production of crops, or the raising of fowl or animals located on contiguous property under common ownership or control.

11. Color coatings manufactured prior to January 1, 2009, which have an ROC content greater than 420 grams per liter but less than 760 grams per liter, may be possessed, sold, supplied, offered for sale, or applied until July 1, 2009.

12. The solvent cleaning ROC content requirement in Subsection B.8.c. shall not apply to any person using a surface preparation cleaner, predesignated as exempt in an approved compliance plan, which is used to remove dust, grease, wax, or any other contaminant from a surface prior to sanding provided all the following requirements have been met:

    a. Prior written approval of the APCO has been obtained on a Low-Usage Exempt Surface Preparation Cleaner Compliance Plan that has all of the following information:

        1) List of all exempt surface preparation cleaners to be used including Name of Product, Product Number, Product Manufacturer and Container Sizes.

        2) Description of label or sticker to be placed on each container, which designates it as a low-use exempt surface preparation cleaner. All such labeled cleaners shall be listed in the plan inventory to qualify for exempt status.

        3) The MSDS or Product Data Sheet for each exempt surface preparation cleaner that provides VOC information that can be used to calculate pounds of VOC per container. An aerosol cleaner shall be assumed to be 100 percent by weight VOC unless it contains an exempt VOC as defined by VCAPCD Rule 2, Exempt Organic Compounds.

        4). Name of Vendor for each exempt surface preparation cleaner.

    b. Total usage of all exempt surface preparation cleaners shall be limited so that total VOC emissions do not exceed 130 pounds per calendar year per stationary source based solely on purchase records for that year with no emission credit for any waste solvent generation.

    c. The VOC content of non-aerosol cleaners shall not exceed 6.51 pounds of VOC per gallon.

d. Wipe cleaning solvents shall be dispensed so that containers are closed except when dispensing solvent or replenishing solvent supply.

13. The provisions of Subsection B.13, Labeling Requirements, shall not apply to any coating manufactured prior to July 1, 2008, provided that the relevant date of manufacture or date code information is submitted to APCD upon request by district personnel.

D. Recordkeeping Requirements

1. Any person subject to this rule shall:

a. Maintain and have available at all times, on site, and make available to District personnel upon request, a current list of in-house coatings and cleaning solvents that provides all of the data necessary to evaluate compliance, including the following information for each coating and cleaning solvent, as applicable:

1) Material name, product ID and product manufacturer.

2) Mix ratio of components used specific to each coating.

3) ROC content of coating as applied (less water and less exempt organic compounds), and ROC content for each cleaning solvent.

4) Coating category from Subsection B.1 that corresponds with each coating used, and whether a material is a coating or cleaning solvent.

5) Whether or not a coating contains any lead, if that coating is applied outside of a spray booth or prep station.

6) VOC Regulatory of each coating used, as documented by a current manufacturer's data sheet.

7) VOC Actual of each cleaning solvent used, as documented by a current manufacturer's data sheet.

b. Maintain monthly purchase records showing all coatings and cleaning solvents purchased for that month, available upon request by APCD personnel, that have the following information:

1) For each coating, the coating category from Subsection B.1;
2) Product manufacturer and product number; and
3) Volume of product purchased including container size and quantity of containers purchased.

c. Maintain monthly records or manifests of the amount cleaning solvent recycled or disposed of. All hazardous waste must be disposed of in a manner that complies with all local, state, and federal regulations.

2. Any person using an emission control system pursuant to Subsection B.3 as a means of complying with this rule shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of TOC emission producing activities. Key system operating parameters are those necessary to ensure compliance with subsection B.3 including, but not limited to, temperatures, pressure drops, and air flow rates.

3. All records shall be retained for a minimum of two years from the date of each entry and shall be made available to District personnel upon request.

E. Test Methods

The following test methods are incorporated by reference herein, and shall be used to test emission sources subject to the provisions of this rule. A source is in violation of this rule if any measurement by any of the listed applicable test methods exceeds any standard of this rule.

1. ROC Content of Coatings or Solvents: Coating ROC content shall be determined using EPA Method 24 (40 CFR Part 60 Appendix A, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings"). Compliance with the prohibition of sale (Subsection B.6) shall be determined by measuring the ROC content of each and every component of a coating or coating system which has been reduced using the manufacturer's recommended type and maximum amount of reducer.

2. Exempt Organic Compound Content of Coatings: The exempt organic compound content of coatings or solvents shall be determined using ASTM Method D6133-02, Standard Test Method for Acetone, p-Chlorobenzotrifluoride, Methyl Acetate, or t-Butyl Acetate Content of Solventborne and Waterborne Paints, Coatings, Resins, and Raw Materials by Direct Injection into a Chromatograph. Exempt organic compound content, other than as determined above, shall be determined by using CARB Method 432, "Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings" (September 12, 1998); CARB Method 422, "Determination of Volatile Organic Compounds in Emissions from Stationary Sources" (January 22, 1987); or South Coast AQMD Method 303-91, "Determination of Exempt Compounds" (February 1993).

3. The measurement of acid content of pretreatment coatings shall be done in accordance with ASTM Method D 1613-03 , Standard Test Method for Acidity in Volatile

Solvents, and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products.

4. The measurement of the metal and silicon content of metallic/iridescent coatings shall be determined by Method 311 (Determination of Percent Metal in Metallic Coatings by Spectrographic Method) of the SCAQMD "Laboratory Method of Analysis for Enforcement Samples."

5. The presence of hexavalent chromium in a coating shall be determined using ASTM Method D 3718-85a.

6. The presence of lead or cadmium in a coating shall be determined using ASTM Method D 3335-85a.

7. Control and Capture Efficiency: The capture and control efficiency of emission control systems shall be determined as specified in U.S. EPA's "Guidelines for Determining Capture Efficiency," (January 9, 1995) and 40 CFR 51, Appendix M, Methods 204-204f as applicable. Total organic emissions of emission control systems shall be determined using EPA Method 25 or 25A. A source is in violation if the measured overall TOC capture and control efficiency of the emission control system is less than 85 percent.

8. Transfer Efficiency: Spray equipment transfer efficiency shall be determined by using South Coast AQMD's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User," (May 24, 1989).

9. HVLP Equivalency: Spray Equipment HVLP equivalency shall be determined by using South Coast AQMD's "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns"(September 26, 2002).

10. Alternative Test Methods: The use of other test methods may be used in place of test methods specified in this rule if they are determined to be equivalent or better and approved, in writing, by the Air Pollution Control Officer, CARB and U.S. EPA.

F. Violations

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

G. Definitions:

1. "Adhesion Promoter": Any coating, which is labeled and formulated to be applied to uncoated plastic surfaces to facilitate bonding of subsequent coatings, and on which a subsequent coating is applied.

2. "Aerosol Coating Product": Any pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application.

3. "Associated Parts and Components": Structures, devices, pieces, modules, sections, assemblies, subassemblies, or elements of motor vehicles or mobile equipment which may or may not be attached to motor vehicles or mobile equipment at the time of coating the structure, device, piece, module, section, assembly, subassembly, or element. Associated parts and components do not include circuit boards.

4. "Automotive Coating": Any coating or coating component used or recommended for use in motor vehicle or mobile equipment coating, refinishing, service, maintenance, repair, restoration, or modification, except metal plating activities. Any reference to automotive refinishing or automotive coating made by a person on the container or in product literature constitutes a recommendation for use in motor vehicle or mobile equipment refinishing.

5. "Automotive Coating Component": Any portion of a coating, including, but not limited to, a reducer or thinner, toner, hardener, and additive, which is recommended by any person to distributors or end users for use in an automotive coating, or which is supplied for or used in an automotive coating. The raw materials used to produce the components are not considered automotive coating components.

6. "CARB": The abbreviation for the California Air Resources Board.

7. "Cleaning Operations": The removal of uncured adhesives, inks or coatings, or contaminants, including but not limited to, dirt, soil, or grease, from motor vehicles, mobile equipment, associated parts and components, parts, products, tools, machinery, equipment, or general work areas. Cleaning operations include, but are not limited to, substrate surface preparation and spray gun cleaning and exclude janitorial cleaning.

8. "Clear Coating": Any coating that contains no color-producing pigments and is labeled and formulated for application over a color or clear coating.

9. "Coating": A material which is applied to a surface and forms a solid film in order to beautify, preserve, repair, or protect such a surface.

10. "Color Coating": Any pigmented coating, excluding adhesion promoters, primers, and multi-color coatings, that requires a subsequent clear coating and which is applied over a primer, adhesion promoter, or color coating. Color coatings include metallic/iridescent color coatings.

11. “Cured Coating, Cured Ink, or Cured Adhesive”: is a coating, ink, or adhesive, which is dry to the touch.

12. "Electrophoretic Dip": A coating application method where the coating is applied by dipping the component into a coating bath and an electrical potential difference exists between the component and the bath.

13. "Electrostatic Spray Application": Any method of spray application of coatings where an electrostatic attraction is created between the part to be coated and the paint particles.

14. “Emission Control System”: Any combination of capture systems and control devices used to reduce Total Organic Compound (TOC) emissions from automotive coating operations.

15. “EPA”: The abbreviation for the United States Environmental Protection Agency.

16. "Exempt Organic Compounds": As defined in Rule 2 of these Rules, except that tert-butyl acetate shall be considered an exempt organic compound when determining compliance with this Rule.

17. "Grams of ROC per Liter of Coating Less Water and Exempt Organic Compounds"(VOC Regulatory): The weight of ROC per combined volume of ROC and coating solids and can be calculated by the following equation:

$$\text{Grams of ROC per Liter of Coating Less Water and Less Exempt Organic Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:
W_s = Weight of volatile compounds (grams)
W_w = Weight of water (grams)
W_{es} = Weight of exempt organic compounds (grams)
V_m = Volume of material (liters)
V_w = Volume of water (liters)
V_{es} = Volume of exempt organic compounds (liters)

18. "Grams of ROC per Liter of Material"(VOC Actual): The weight of ROC per volume of material and can be calculated by the following equation:

$$\text{Grams of ROC per Liter of Material} = \frac{W_s - W_w - W_{es}}{V_m}$$

Where: W_S = Weight of volatile compounds (grams)
W_W = Weight of water (grams)
W_{es} = Weight of exempt organic compounds (grams)
V_m = Volume of material (liters)

19. "High-Volume, Low-Pressure Application (HVLP)": Equipment used to apply coatings by means of a spray gun designed to be operated and operated between 0.1 and 10 psig air pressure measured dynamically at the center of the air cap and at the air horns.

20. "Immobilized": A vehicle is immobilized or incapable of being moved, only when an engine or wheel has been removed so that the engine or wheel compartments can be coated.

21. "Interior Motor Vehicle Part": Any interior part of the motor vehicle, including but not limited to the engine, engine compartment, wheel well, suspension component or passenger compartment, that is not a "major panel" or exterior motor vehicle panel.

22. “Janitorial Cleaning”: The cleaning of building or facility components including, but not limited to, floors, ceilings, walls, windows, doors, stairs, bathrooms, furnishings, and exterior of office equipment, and excludes the cleaning of work areas, where manufacturing, coating, or repair activity is performed.

23. "Major Panel": Any exterior motor vehicle panel including but not limited to the roof, hood, doors, quarter panel, fender, bumper, soft bumper cover, deck lid, luggage lid, rear body panel, cowl top panel, rocker panel, and front header panel.

24. "Metallic/Iridescent Topcoat": Any topcoat which contains more than 5 g/l (.042 lb/gal) of iridescent particles, composed of metal as metallic particles or silicon as mica particles, as applied, where such particles are visible in the dried film.

25. “Mobile Automotive Coating Touch-Up Operations:” A portable automotive coating operation that is limited to small repair jobs where application of coatings may only be performed with a paint brush or an air brush with a cup that holds no more than 4 ounces of paint.

26. "Mobile Equipment": Any equipment which may be drawn or is capable of being driven on rails or a roadway, including, but not limited to, trains, railcars, truck bodies, truck trailers, camper shells, mobile cranes, forklifts, bulldozers, tractors, concrete mixers, street cleaners, golf carts, all terrain vehicles, implements of husbandry. and hauling equipment used inside and around airports, docks, depots, and industrial and commercial plants, utility bodies, or implements of husbandry or agriculture.

27. "Motor Vehicle": A vehicle which is self-propelled vehicle, including but not limited to, cars, trucks, buses, golf carts, vans, motorcycles, tanks, or armored personnel carriers..

28. “Multi-Color Coating”: Any coating that exhibits more than one color in the dried film after a single application, is packaged in a single container, and hides surface defects on areas of heavy use, and which is applied over a primer or adhesion promoter.

29. "Prep Station": Any spraying area that meets the requirements for a "Limited Spraying Area" from Section 45.207 of the Uniform Fire Code and that prevents the escape to the atmosphere of overspray particulate using properly maintained filters and positive mechanical ventilation.

30. "Pretreatment Coating": Any coating which contains a minimum of 0.5% acid, by weight, and not more than 16% solids by weight, and is necessary to provide surface etching and is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and adhesion.

31. "Primer": Any coating, which is labeled and formulated for application to a substrate to provide 1) a bond between the substrate and subsequent coats, 2) corrosion resistance, 3) a smooth substrate surface, or 4) resistance to penetration of subsequent coats, and on which a subsequent coating is applied. Primers may be pigmented.

32. "Primer Sealer": Any coating, which is labeled and formulated for application prior to the application of a color coating for the purpose of color uniformity, or to promote the ability of an undercoat to resist penetration by the color coating.

33. "Reactive Organic Compound (ROC)": As defined in Rule 2 of these rules. The term "volatile organic compound" (VOC) is equivalent to ROC.

34. "Reducer": Any volatile liquid used to reduce the viscosity of the coating. This liquid may be solvents, diluents or mixtures of both.

35. “Single-Stage Coating”: Any pigmented coating, excluding primers and multi-color coatings, labeled and formulated for application, without a subsequent clear coat. Single-stage coatings include both single-stage metallic/iridescent coatings and single-stage nonmetallic or non-iridescent coatings.

36. “Solvent”: An ROC-containing material used to perform cleaning operations.

37. “Spot Repair”: The repair of an area on a motor vehicle, piece of mobile equipment, or associated parts or components of less than 1 square foot.

38. "Spray Booth": Any power ventilated structure of varying dimensions and construction provided to enclose or accommodate a spraying operation and which meets the Uniform Fire Code. A spray booth shall confine and limit, by dry or wet filtration, the escape to the atmosphere of overspray particulate matter.

39. "Temporary Protective Coating": Any coating which is labeled and formulated for the purpose of temporarily protecting areas from overspray or mechanical damage.

40. "Transfer Efficiency": The ratio of the weight of coating solids which adhere to the object being coated to the weight amount of coating solids used in the application process, expressed as a percentage.

41. "Truck Bed Liner Coating": Any coating, excluding clear, color, mult-color, and single stage coatings, labeled and formulated for application to a truck bed to protect it from surface abrasion.

42. "Underbody Coating" Any coating labeled and formulated for the application to wheel wells, the inside of door panels or fenders, the underside of a trunk or hood, or the underside of the motor vehicle.

43. "Uniform Finish Coating": Any coating labeled and formulated for application to the area around a spot repair for the purpose of blending a repaired area's color or clear coat to match the appearance of an adjacent area's existing coating.

44. "VOC": The term "volatile organic compound" or VOC is equivalent to ROC.

45. "VOC Actual for Coatings": This means the same as "Grams of ROC per Liter of Material," which does not involve subtraction of water or exempt organic compounds as is performed in the VOC regulatory calculation.

46. "VOC Regulatory for Coatings": This means the same as "Grams of ROC per Liter of Coating Less Water and Exempt Organic Compounds." VOC and ROC have the same meaning.

47. "Water-Reducible Electrophoretic Brake Component Coating": Any coating that is applied to vehicle brakes or brake components via an electrophoretic dip coating process in an aqueous solution.

48. "Weld-Thru Primer": Any primer applied from an aerosol can, 16 ounces or less, to bare steel prior to welding that steel area. The purpose of the weld-thru primer is to inhibit corrosion in the weld area.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.19 - GRAPHIC ARTS
(Adopted 8/11/92, Revised 9/10/96, 4/10/2001, 11/11/2003, 06/14/2011)

A. Applicability

The provisions of this rule apply to:

1. Any person who applies any ink, coating, adhesive, fountain solution, or solvent containing Reactive Organic Compounds (ROC) as part of a graphic arts operation.

2. Any person who manufactures or supplies any ink, coating, adhesive, fountain solution, or solvent containing ROC sold for use in a graphic arts operation in the District.

B. Requirements

1. Inks, Coatings, and Adhesives: No person shall apply the following inks, coatings, or adhesives with an ROC content in excess of the following limits:

ROC Limits
Grams of ROC per Liter (Pounds of ROC per Gallon) of Coating, Ink, or Adhesive, Less Water and Exempt Organic Compounds

Category	Limits
Inks	300 (2.5)
Flexographic Inks on Porous Substrates	225 (1.88)
Coatings	300 (2.5)
Adhesives	150 (1.25)

For low-solids inks, coatings or adhesives, which have 120 grams per liter (1 pound per gallon) or less of solids, the ROC content is on a grams per liter of material basis.

2. Fountain Solution: Until January 1, 2012, no person shall apply fountain solution with an ROC content in excess of the following limits:

Limits
Grams of ROC per Liter (Pounds of ROC per Gallon) of Material

Category	Effective Dates Limits
Fountain Solution	80 (0.67)
Fountain Solution-Refrigerated	100 (0.83)

The l00 g/l (0.83 lb/gal) limit shall only apply to refrigerated fountain solutions that are cooled to 55^{o}F or less at the supply tank. A visible or easily accessible

temperature readout shall be installed, and a sensor shall measure the fountain solution temperature at the supply tank connected to the operating press.

Effective January 1, 2012, no person shall apply any fountain solution with an ROC Content in excess of any of the following limits:

FOUNTAIN SOLUTION LIMITS BY PRINTING METHOD	LIMITS ROC CONTENT[1] (Percent by weight - applied	LIMITS ROC CONTENT (Grams per Liter - applied)
a. HEATSET WEB-FED OFFSET LITHOGRAPHIC PRINTING		
1) If no refrigeration and contains alcohol:	1.6	16
2) If refrigerated below 55°F and contains alcohol	3.0	30
3) If no alcohol in fountain solution	5.0	50
b. NON-HEATSET WEB-FED OFFSET LITHOGRAPHIC PRINTING (Use of alcohol prohibited in this fountain solution)	5.0	50
c. SHEET-FED LITHOGRAPHIC PRINTING if maximum sheet size is greater than 11X17 inches or if total solution reservoir is greater than one gallon:		
1) If no refrigeration and contains alcohol	5.0	50
2) If refrigerated below 55°F and contains alcohol	8.5	85
3) If no alcohol in fountain solution	5.0	50
d. ALL OTHER PRESSES NOT LISTED ABOVE		
1) If no refrigeration	8.0	80
2) If refrigerated below 55°F	10.0	100

Any refrigerated chiller used shall be equipped with a visible or easily accessible temperature gauge, and the sensor shall measure the fountain solution temperature at the supply tank connected to the operating press.

Effective January 1, 2012, no person shall use any fountain solution that contains alcohol in any Non-Heatset web-fed offset lithographic printing operation.

[1] The ROC Content of Fountain Solutions is based on the ROC weight divided by the full weight of the applied solution including any exempt compounds.

3. Until January 1, 2012, no person shall use a solvent to perform solvent cleaning in excess of the applicable ROC content and ROC Composite Partial Pressure limits set forth below:

SOLVENT CLEANING ACTIVITY	LIMITS ROC g/l (lb/gal) of Material		LIMITS ROC Composite Partial Pressure mm Hg @ 20°C
a. Surface Preparation	70 (0.58)		Not Applicable
b. Repair and Maintenance Cleaning	50 (0.42)		Not Applicable
c. Cleaning of Coatings or Adhesives Application Equipment	950 (7.9)	AND	33
d. Cleaning of Ink Application Equipment			
1) General, unless listed below	100 (0.83)	AND	3
2) Flexographic Printing			
a)Specialty Flexographic	810 (6.8)	AND	21
b)Other Flexographic	100 (0.83)	AND	3
3) Gravure Printing			
a)Publication	900 (7.5)	AND	25
b)Packaging	100 (0.83)	AND	3
4) Lithographic or Letter Press Printing			
a)Roller Wash -	300 (2.5)	OR	10
b)Blanket Wash	300 (2.5)	OR	10
c)Metering Roller Cleaner	300 (2.5)	OR	25
d)Plate Cleaner	300 (2.5)	OR	25
5) Radiation Curing Ink	800 (6.7)	AND	33

Effective January 1, 2012, no person shall use a solvent to perform solvent cleaning in excess of the applicable ROC content limits set forth below:

SOLVENT CLEANING ACTIVITY	LIMITS ROC Content (as applied) Grams of ROC per Liter of Material g/l (lb/gal)
a. Surface Preparation of Substrate	25 (0.21)
b. Repair and Maintenance Cleaning	25 (0.21)
c. Other Press Parts	25 (0.21)
d. Cleaning of Coatings or Adhesives Application Equipment	25 (0.21)
e. Cleaning of Ink Application Equipment	
1) General, unless listed below	25 (0.21)
2) Flexographic Printing	
a)Specialty Flexographic	100 (0.83)
b)Other Flexographic	25 (0.21)
3) Gravure Printing	
a)Publication	100 (0.83)
b)Packaging	25 (0.21)
4) Lithographic or Letter Press Printing	
a)Roller Wash	100 (0.83)
b)Blanket Wash	100 (0.83)
c)Metering Roller Cleaner	100 (0.83)
d)Plate Cleaner	100 (0.83)
e)Removable Press Components	25 (0.21)
5) Radiation Curing Ink Removal	100 (0.83)

4. Cleaners Containing Methylene Chloride: No person shall use a solvent for cleaning purposes if that cleaner contains any methylene chloride.

5. No person shall perform cleaning operations unless one of the following cleaning devices or methods is used:

   a. Wipe cleaning;

   b. Remote reservoir cold cleaner;

   c. Spray bottles or containers with a maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;

   d. Cleaning equipment utilizing a closable solvent container. The solvent container shall remain closed during cleaning operations, except when depositing and removing objects to be cleaned, and during non-operation, except when performing maintenance and repair to the cleaning equipment.

1) If a solvent flow method is used, the solvent shall not be atomized.

2) If a solvent flushing method is used, the solvent shall be flushed through the system by pumping.

6. In lieu of complying with the requirements of Subsection B.1, emissions of ROC, excluding emissions from clean up operations, may be controlled by an emission capture and control system, which reduces ROC emissions to the atmosphere, provided that:

   a. During any period of continuous operation not to exceed 24 hours, the capture and control system shall have a combined efficiency of at least 85 percent, by weight, for publication gravure and at least 80 percent, by weight, for other types of printing operations; and,

   b. The collection system shall vent all drying oven exhaust to the control device and shall have one or more inlets for collection of fugitive emissions; and,

   c. ROC emissions are no greater than emissions if compliant inks, coatings, and adhesives as per Subsection B.1 were used; and,

   d. During any period of operation of a thermal or catalytic incinerator, combustion temperature shall be continuously monitored; and,

   e. Written approval for such equipment, in the form of an Authority to Construct and Permit to Operate, is received from the Air Pollution Control Officer (APCO).

7. All ROC-containing materials including used cleaning towels shall be stored in closed containers that are nonabsorbent and do not leak.

8. Waste ROC materials shall be disposed of in a manner consistent with Federal, State, and local hazardous waste regulations.

9. The manufacturer of any ink, coating, adhesive, fountain solution, or solvent subject to this rule shall include the following information on the product container or a data sheet supplied with the product:

   a. Material name, manufacturer identification, specific mixing instructions (if applicable).

   b. VOC content

1) The VOC content of inks, coatings, and adhesives expressed as grams per liter (or pounds per gallon), less water and less exempt organic compounds. For low-solids inks, coatings or adhesives, the VOC content is expressed as grams per liter of material.

2) The VOC content of fountain solutions and solvents expressed as grams per liter (or pounds per gallon) or percent by weight of material, and if applicable, the recommended application dilution ratio.

c. Until January 1, 2012, the VOC composite partial pressure expressed as mm HG at 20^{o}C, if applicable.

d. The density of the material expressed as grams per liter (or pounds per gallon).

e. The solids content of all low-solids inks, coatings or adhesives, expressed as grams per liter (or pounds per gallon).

For the purposes of this Subsection, the term "VOC" is equivalent to the term "ROC".

10. Prohibition of Specification: No person shall specify or require the use of any ink, coating, adhesive, solvent cleaner, or fountain solution, in a graphic arts operation subject to the provisions of this rule that does not meet the limits and requirements of this rule.

C. Exemptions

1. The requirements of Subsections B.1, B.2, B.3, and B.4 shall not apply to:

a. Any stationary source that emits less than 200 pounds of ROC in every rolling period of 12 consecutive calendar months from graphic arts operations. Emissions from aerosol products, cold cleaners, and vapor degreasers shall not be included in this exemption determination. ROC emissions from graphic arts operations used exclusively for research, classroom instruction in schools, laboratory analysis, or determination of product quality and commercial acceptance shall not be included in this exemption determination.

b. Graphic arts operations used exclusively for research, classroom instruction in schools, laboratory analysis, or determination of product quality and commercial acceptance provided total emissions of ROC from such equipment are less than 200 pounds in any rolling period of 12 consecutive calendar months from printing, coating, adhesive, and solvent cleaning operations.

2. This rule shall not apply to:

   a. Screen Printing, which is subject to Rule 74.19.1.

   b. Operations which apply any ROC containing ink, coating, or adhesive on ceramic materials.

   c. Circuitry Printing.

   d. Operations using darkroom equipment associated with lithographic printing plate making.

   e. Operations which apply inks used to indicate that sterilization has occurred.

   f. Digital Printing Operations.

   g. Proof presses.

   h. Prepress operations such as the cleaning or processing of film processors, color scanners, plate processors, film cleaning, and plate developers.

   i. Blanket repair materials used in containers of four ounces or less.

   j. Aerosol coating products that are in compliance with regulations and requirements adopted by the California Air Resources Board (California Code of Regulations Title 17, Subchapter 8.5, Section 94522).

   k. Cleaning activities using Clean Air Solvents as defined in Section G.9.

3. The solvent cleaning requirements of Subsection B.3 shall not apply to cleaning solvents used to clean ultraviolet lamps and reflectors, or electron beam processors.

D. Recordkeeping Requirements.

Any person subject to this rule shall:

1. Maintain a current file for each ink, coating, and adhesive in use and in storage. The file shall include a data sheet or material list that provides material name, manufacturer identification, applicable product category from Subsection B.1, specific mixing instructions, and grams of ROC per liter (or pound of ROC per gallon) of coating (or ink or adhesive) less water and less exempt organic compounds, and grams of ROC per liter (or pounds of ROC per gallon) of material.

2. Maintain a current file for each fountain solution and cleaning solvent in use and in storage. The file shall include a data sheet or material list that provides material name, manufacturer identification, applicable solvent cleaning activity from Subsection B.3 for each cleaning solvent, specific mixing instructions if any, and grams of ROC per liter (or pounds of ROC per gallon) of material, and, if applicable until January 1, 2012, ROC composite partial pressure. The required data sheets for fountain solutions shall provide the ROC content, and minimum recommended dilution, which can be used to calculate the ROC content percent by weight, as applied or ROC content, grams per liter of material, applied.

3. Maintain records on a daily basis showing the amount of inks, coatings, adhesives, fountain solutions, and solvents used. If only compliant inks, coatings, adhesives, fountain solutions, and solvents are used, these records may be maintained on a monthly basis instead of a daily basis.

4. Any person claiming the exemption in subsections C.1.a. or C.1.b shall provide monthly records sufficient to substantiate this claim, as follows:

    a. Ink emission records shall be maintained using one of the following options and District-approved emission factors:

        1) Group the quantity of all inks used and use the highest ROC content, and the minimum density,

        2) Report process inks and pantone colors separately and:

            a) Use the specific ROC content and density values for each process ink and the highest ROC and the minimum density for pantone inks; or

            b) Use the highest ROC content and minimum density for both process and pantone inks.

        3) Itemize each ink and pantone color and use the specific ROC content and density value for each.

        For the purpose of subsection D.4.a, "minimum density" means the lowest weight per unit volume for inks in a reported group, or the default value of 1.01 kilograms per liter (8.44 pounds per gallon) where minimum density is unknown.

    b. Coating, adhesive, fountain solution, and solvent emission records shall be maintained by itemizing each coating, adhesive, fountain solution, and solvent and using the specific ROC content and density value for each.

5. If compliance is achieved through the use of emission control equipment maintain daily records of key system operating parameters for emission control equipment as specified in the Permit to Operate.

6. Inventory, usage, and emission control equipment operation records shall be retained for a minimum of two years and shall be made available to District Personnel upon request.

E. Test Methods

1. Measurement of the ROC and/or solids content of inks, coatings, adhesives, fountain solutions, and solvents, except publication gravure inks shall be conducted and reported in accordance with EPA Reference Method 24, Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings, and SCAQMD Method 303-91, Determination of Exempt Compounds, Revised February 1993 (EPA Approved August 1996), for determination of exempt compounds as necessary.

2. Measurement of the ROC content of publication gravure inks shall be conducted and reported in accordance with EPA Reference Method 24A, Publication Rotogravure Inks and Coatings, and SCAQMD Method 303-91, Determination of Exempt Compounds, Revised February 1993 (EPA Approved August 1996) for determination of exempt compounds as necessary.

3. If applicable, measurement of the ROC content of ultraviolet-cured inks shall be determined using ASTM Method D5403-93(2007) (EPA Approved 1993), Standard Test Methods for Density of Liquid Coatings, Inks, and Related Products. This method determines the ROC weight percent of inks designed to be cured by ultraviolet light. Calculation of the ROC content in grams per liter requires knowing the ink density. The density of inks shall be determined using ASTM D1475-98, Standard Test Method for Density of Paint, Varnish, Lacquer and Related Products (EPA Approved 1990).

4. Until January 1, 2012, ROC composite pressure shall be calculated using a widely accepted published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company, CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985). The true vapor pressure of a component in a solvent mix may be determined by ASTM Method D2879-97, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope. The ROC composite pressure of a solvent mix consisting entirely of ROC may be determined by ASTM Method D2879-97.

5. The capture and control efficiency of air pollution control equipment shall be determined as specified in U.S.EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995, and 40 CFR 51, Appendix M, Methods 204-204F as applicable. Destruction efficiency, measured and calculated as carbon, shall be determined by 40 CFR 60, Appendix A-6, Method 18, or Appendix A-7, Methods 25, or 25A or by ARB Method 422.

6. The ROC content of any cyanoacrylate adhesive shall be determined using SCAQMD Test Method 316B Revised August 1997: "Determination of Volatile Organic Compounds (VOC) in Adhesives Containing Cyanoacrylates (EPA Approved August 1997).

7. The alcohol content of any fountain solution shall be determined using SCAQMD Test Method 313-91, Revised February 1997, "Determination of Volatile Organic Compounds (VOC) by Gas Chromatography/Mass Spectrometry (GC/MS) (EPA Approved June 1993).

8. When more than one test method or set of test methods are specified for any testing, noncompliance with any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of this rule.

F. Violations

Failure to comply with any provision of this rule, including recordkeeping requirements, shall constitute a violation of this rule.

G. Definitions

1. "Adhesive": A material that is applied for the primary purpose of bonding two surfaces together by surface attachment. Adhesive used in a graphic arts operation such as in the binding or laminating of magazines, books, or other printed materials.

2. "Aerosol Coating Product": Any pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application.

3. "Alcohol": An organic chemical known as a monohydric alcohol, in which one hydroxyl (OH) group is attached to a carbon atom in place of a hydrogen atom. Common examples include, are not limited to, methanol, ethanol, isopropyl alcohol, and pentanol.

4. "Blanket": Any rubber or synthetic rubber mat used in offset-lithography to transfer or "offset" an image from a planographic printing plate to paper or other substrate.

5. “Blanket Repair Material”: The material used in offset printing to correct low spots in the press blanket.

6. "Blanket Wash": Solvent used to clean the rubber-surface fabric used to transfer the image from the plate to the substrate.

7. "Blower": A unit, mounted on a web printing press, that sets and dries nonheatset ink by using unheated ambient air to accelerate the oxidation of the solvent components.

8. “Circuitry Printing”: Printing on circuit boards, membrane switches, or other electronic circuitry.

9. “Clean Air Solvent”: A solvent certified by the South Coast Air Quality Management District as a Clean Air Solvent as defined by SCAQMD Rule 102.

10 "Coating": A layer of material applied to a substrate in a relatively unbroken film to perform a protective or decorative function.

11. “Combined Efficiency”: The efficiency of an approved emission control system, measured by the collection system’s capture efficiency multiplied by the destruction or control efficiency of the control device, expressed as a percentage.

12. “Digital Printing Operations”: Operations using a digital printer that uses digital data to control the deposition of ink, toner or dye to create images. Digital print operations include, but are not limited to, the following technologies: inkjet, thermography, electrophotography, and magnetography.

13. "Exempt Organic Compounds": Shall be as defined in Rule 2 of these rules.

14. "Flexographic Printing": A printing method that uses a raised image carrier on a flexible printing roll to apply words, designs, or pictures onto a substrate. The roll is typically made of rubber or other elastomeric materials. The portion of the roll that is not raised is often referred to as the non-image area. Ink may be metered to the substrate by means of an anilox roll, which is usually constructed of a steel or aluminum core which is coated by an industrial ceramic whose surface contains millions of very fine dimples, known as cells.

15. "Fountain Solution": The solution applied to the image plate to maintain the hydrophilic properties of the nonimage areas and to keep the nonimage area free from ink. Fountain solution is primarily water and contains at least one of the following materials: etchants such as mineral salts, hydrophilic gums; or ROC additives to reduce the surface tension of the water.

16. "Fugitive Emissions": Uncollected emissions of VOC from any portion of the printing, coating or laminating operation.

17. "Grams of ROC per Liter of Coating (Ink or Adhesive), Less Water and Exempt Compounds": The weight of ROC per combined volume of ROC and coating (ink or adhesive) solids as follows:

Grams of ROC per Liter of Coating (Ink or Adhesive), Less Water and Less Exempt Compounds = $\frac{W_S - W_W - W_{es}}{V_m - V_W - V_{es}}$

Where:
W_S = weight of volatile compounds in grams
W_W = weight of water in grams
W_{es} = weight of exempt compounds in grams
V_m = volume of material in liters
V_W = volume of water in liters
V_{es} = volume of exempt compounds in liters

18. "Grams of ROC per Liter of Material": The weight of ROC per volume of material as follows:

Grams of ROC per liter of material = $\frac{W_S - W_W - W_{es}}{V_m}$

Where:
W_S = Weight of volatile compounds in grams
W_W = Weight of water in grams
W_{es} = Weight of exempt compounds in grams
V_m = Volume of material in liters

19. "Graphic Arts": All screen, gravure, letterpress, flexographic, ink jet, and lithographic printing processes or related coating or laminating processes.

20. "Graphic Arts Operation": Any packaging gravure, publication gravure, flexographic printing, screen printing, letterpress, ink jet, digital printing, or lithographic printing operation, or any associated cleaning, coating or laminating or adhesive operation to produce a printed product. These operations include printing application equipment, coating equipment, laminating equipment, flash-off areas, ovens, conveyors or other equipment in an uninterrupted series with such operation.

21. "Gravure Printing": An intaglio printing method in which the ink is transferred from minute etched wells on a plate to the substrate, which is supported by an impression roller, with excess ink removed by a doctor blade.

22. "Heater or Dryer": A device used to vaporize heatset inks.

23. "Heatset Ink": A printing ink used on continuous web-feed printing presses that are equipped with dryers or ovens. The ink dries or sets by heat-induced evaporation of the ink oils and subsequent chilling of the ink by chill rolls.

24. “Ink”: A pigmented and/or dyed liquid or paste used especially for printing or other graphic arts operations.

25. "Ink Jet Printing": Printing methods where the liquid ink is transferred at high velocity through a small diameter opening(s) to a solid substrate. Ink jet systems include, but are not limited to: Air-brush; Thermal-jet; Drop-on-demand using piezoelectric crystals; and Continuous with ink recycling.

26. "Lamination": A process of bonding two or more layers of material to form a single, multiple-layer sheet by using adhesive.

27. "Letterpress Printing": A printing method in which the image area is raised relative to the nonimage area and the ink is transferred to the paper directly from the image surface.

28. "Lithographic Printing": Printing by a planographic method in which the image and non-image areas are on the same plane and are chemically differentiated. This printing process differs from other printing processes where the image is typically printed from a raised or recessed surface.

29. "Low-Solids Inks, Coatings or Adhesives": Any product that contains 120 grams or less of solids per liter (1 pound or less of solids per gallon) of material.

30. "Maintenance Cleaning": A solvent cleaning operation or activity carried out to keep general work areas, tools, machinery or equipment excluding application equipment, in clean and good operational condition.

31. "Metering Roller": A roller used to meter the fountain solution to the printing plate in a continuous contacting dampening system on a lithographic printing press.

32. "Nonheatset Ink": Printing ink that sets and dries by absorption into the substrate, and hardens by ambient air oxidation that may be accelerated by the use of infrared, ultraviolet, or electron-beam radiation but does not involve the use of heat from dryers or ovens.

33. "Nonporous Substrate": A substrate whose surface prevents penetration by water, including but not limited to foil, polyethylene, polypropylene, cellophane, metalized polyester, nylon, or mylar. Any paper-like substrate, including cardboard or paperboard, that is coated with a nonporous material shall be considered a nonporous substrate.

34. “Offset Lithographic Printing”: A planographic method in which the image and non-image areas are on the same plane. Typically, the ink is offset from a plate to a rubber blanket, and then from the blanket to the substrate.

35. “Other Press Parts”: Any press parts that do not come into contact with inks, adhesives, or coatings. Other press parts include, but are not limited to, pressure rollers, motors, and belts. Rollers, blankets, metering rollers, fountains, impression cylinders and plates shall not be considered as other press parts.

36. "Oven": A heating chamber which uses heat, ultraviolet (UV) radiation, or electron beam (EB) radiation to bake, cure, polymerize, or dry a surface coating.

37. "Packaging Gravure": Gravure printing on paper, paperboard, foil, film or other substrates which are to be used to produce containers or packages.

38. "Pantone Color": A printing ink created for color matching by combination of process inks.

39. "Porous Substrate": Any surface or substrate that is permeable to water including but not limited to paper, cardboard, paperboard and any paper product that is coated with a porous material.

40. “Prepress Operations”: Any operation associated with printing plate making including but not limited to, film photo processors and plate photo processors, color scanners, film cleaning, or plate developers.

41. "Printing Ink": Any fluid or viscous composition used in printing, impressing, or transferring an image onto a substrate.

42. “Printing Plates”: Printing processes such as offset lithography use printing plates to transfer an image to paper or other substrates. The plates may be made of metal, plastic, rubber, paper, and other materials. The image is put on the printing plates using photomechanical, photochemical, or laser engraving processes. The image may be positive or negative.

43. "Process Ink": The hues: yellow, magenta, and cyan, plus black used in the four-color print process.

44. “Proof Press”: A press that is used only for the sole purpose of printing a sample copy of a graphic art product to check the quality of the print, color reproduction and editorial content.

45. "Publication Gravure": Gravure printing on paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements or other types of printed material.

46. "Radiation Curing ": The use of electronic radiation to polymerize or cure specially-formulated inks, coatings, or adhesives on a substrate. Electron Beam and ultraviolet light are radiation curing methods used in graphic arts operations.

47. "Reactive Organic Compound (ROC)": As defined in Rule 2. ROC and VOC are identical and may be used interchangeably.

48. "Remote Reservoir Cold Cleaner": A device in which solvent is pumped through a sink-like work area for cleaning parts and drains immediately, without forming a pool, through a single drain hole less than 100 square centimeters (15.5 sq. in.) in area into an enclosed container which is not accessible for soaking parts.

49. "Removable Press Component": Any part, component, or accessory of a press that is physically attached to the press and does come into contact with ink, which is removed from the press prior to being cleaned. Rollers, blankets, metering rollers, fountains, impression cylinders and plates shall not be considered as removable press components.

50. "Repair Cleaning": A solvent cleaning operation or activity carried out during a repair process.

51. "Repair process": The process of returning a damaged object or an object not operating properly to good condition.

52. ROC Composite Partial Pressure": The sum of the partial pressures of the compounds defined as ROCs. ROC composite partial pressure is calculated as follows:

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

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

53. "ROC-Containing Materials": Inks, coatings, or adhesives; materials used for cleanup or of inks, coatings, or adhesives; materials used for removal of adhesives; solvent, paper and cloth, and waste containing, impregnated with, coated with, or mixed with Reactive Organic Compounds.

54. "Roller Wash": Solvent used to clean the metal ink rollers on a printing press.

55. "Screen Printing": A process where the printing ink passes through a web or a fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.

56. “Sheet-Fed Printers”: Any printer that processes single individual sheets of material one at a time instead of a continuous roll of input material.

57. “Solvent Cleaning”: The use of any solvent to remove uncured adhesives, uncured inks, uncured coatings, or contaminants from a substrate.

58. "Solvent Flushing": The use of a solvent to remove uncured adhesives, uncured inks, uncured coatings, or contaminants from the internal surfaces and passages of the equipment by flushing solvent through the equipment.

59. "Specialty Flexographic Printing": Flexographic printing on polyethylene or polypropylene food packaging, fertilizer bags, or liquid-tight food containers.

60. "Sterilization Indicating Inks": Inks that change color to indicate that sterilization has occurred. Such inks are used to monitor the sterilization of medical instruments, autoclave efficiency and the thermal processing of foods for prevention of spoilage.

61. “Substrate”: Any surface of any material that is the designated recipient of any ink, coating, or adhesive.

62. "Surface Preparation": The removal of contaminants such as dust, soil, oil, grease, etc., from a substrate prior to coating, adhesive, or ink applications.

63. "Volatile Organic Compounds (VOC)": Shall have the same meaning as Reactive Organic Compounds (ROC) as defined in Rule 2 of these Rules.

64. “Web-Fed”: An automatic system which supplies substrate from a continuous roll, or from an extrusion process.

65. "Wipe Cleaning": The method of cleaning a surface by physically rubbing it with a material or device such as a rag, paper, brush or cotton swab moistened with a solvent.

Rule 74.19.1. Screen Printing Operations (Adopted 6/11/96, Revised 11/11/03)

A. Applicability

The provisions of this rule apply to:

1. Any person who uses any ink, coating, adhesive, resist, or solvent containing ROC (Reactive Organic Compounds) in a screen printing operation. Any screen printing operation subject to the adhesive requirements in this rule shall be exempt from the requirements of Rule 74.20.

2. Any person in the District who manufactures, specifies the use of, sells, or offers for sale any ink, coating, adhesive, resist, or solvent containing ROC for use in a screen printing operation in the District.

3. The provisions of this rule shall become effective on December 1, 1996.

B. Requirements

1. ROC Content of Screen Printing Materials

No person shall apply to any substrate any screen printing material which contains, as applied, a total amount of ROC in excess of the applicable limit specified below:

a. For screen printing inks, coatings, adhesives, and resists except as specified in subsection B.1.b:

SCREEN PRINTING MATERIAL	ROC LIMIT Grams per Liter / Pounds per Gallon of Coating, Less Water and Less Exempt Organic Compounds	
	g/L	Lbs/gal
Printing Ink:	400	3.3
Coating:	400	3.3
Adhesive:	400	3.3
Metallic Inks:	600	5.0
Resists:	600	5.0
Extreme Performance Inks and Coatings:	800	6.7

b. For screen printing inks, coatings, and adhesives used in or on the following products or substrates:

PRODUCT/SUBSTRATE	ROC LIMIT Grams per Liter / Pounds per Gallon of Coating, Less Water and Less Exempt Organic Compounds	
	g/L	Lbs/gal
Water Slide Decals:	800	6.7
Ceramic Decals:	800	6.7

2. No person shall use a solvent to perform cleaning operations unless the solvent complies with both the ROC content and ROC Composite Partial Pressure limits of the following applicable requirements:

	LIMITS		
	ROC Grams per Liter / Pounds per Gallon of Material		ROC Composite Partial Pressure
SOLVENT CLEANING ACTIVITY	g/L	Lbs/gal	mmHG @ 20°C (68°F)
Surface Preparation	200	1.67	25
Clean-up	200	1.67	25
Spotting Fluid	400	3.30	25
Application Equipment Cleaning:			
Process Cleaning	1070	8.92	5
Ink Removal	950	7.92	5

3. No person shall perform cleaning operations unless one of the following cleaning devices or methods is used:

   a. Wipe cleaning;

   b. Spray bottles or containers with a maximum capacity of 32 fluid ounces from which solvents are applied without propellant-induced force;

   c. Cleaning equipment that complies with the equipment and operating requirements of Rule 74.6.

4. In lieu of the requirements of Subsection B.1, emissions of ROC, excluding emissions from clean up operations, may be controlled by an emission capture and control system, which reduces ROC emissions to the atmosphere, provided that:

   a. During any period of continuous operation not to exceed 24 hours, the capture and control system shall have a combined efficiency of at least 75 percent, by weight.

   b. The collection system shall vent all drying oven exhaust to the control device and shall have one or more inlets for collection of fugitive emissions; and,

   c. During any period of operation of a thermal incinerator, combustion temperature shall be continuously monitored; and,

   d. During any period of operation of a catalytic incinerator, catalyst temperature shall be continuously monitored; and,

   e. Written approval for such equipment, in the form of an Authority to Construct and Permit to Operate, is received from the Air Pollution Control Officer (APCO).

5. ROC materials shall be stored in nonabsorbent, nonleaking containers, which shall be kept closed except when adding or removing material or during cleaning operations.

6. Any person selling or offering for sale any ink, coating, adhesive, resist, or solvent subject to this rule shall include the following information on the product container or a data sheet supplied with the product:

   a. Material name, manufacturer identification, specific mixing instructions, density, and ROC content, as applied.

   b. The ROC content of inks, coatings, adhesives, and resists expressed as defined in Subsection G.10.

   c. The ROC content of solvents expressed as defined in Subsection G.11. The composite partial vapor pressure expressed as specified in Subsection E.3.

7. No person shall sell, distribute, or require any other person to use in the District any ROC-containing material subject to the provisions of this rule which, when thinned or reduced according to the manufacturer's recommendation for application and use, does not meet the applicable ROC limits required by this rule for the specific application.

C. Exemptions

1. The requirements of Subsections B.1 and B.2 shall not apply to a facility which emits less than 200 pounds of ROC per rolling period of 12 consecutive calendar months from the use of screen printing materials.

2. The requirements of Subsection B.1 shall not apply to screen printing operations performed by manufacturers of screen printing materials for purposes of conducting performance laboratory tests or doing research and development, provided that the ROC emissions from such laboratory tests and/or research and development are less than 200 pounds per rolling period of 12 consecutive calendar months.

3. The ROC content limit for aerosol platen adhesive does not apply if the total facility use of platen adhesive does not exceed 150 ounces in any month.

4. Production of electronic circuits.

5. The prohibition specified in subsection B.7 shall not apply to persons selling to, distributing to, or requiring other persons who are operating an approved emission control system under subsection B.4 or operating under a variance granted by VCAPCD Hearing Board, or operating pursuant to subsection C.1 or subsection C.2.

D. Recordkeeping Requirements.

Any person subject to this rule shall:

1. Maintain a current file for each ink, coating, adhesive, and resist in use and in storage. The file shall include a data sheet or material list giving material name, manufacturer identification, specific mixing instructions, density, and ROC content as applied.

2. Maintain a current file for each solvent in use and in storage. The file shall include a data sheet or material list giving material name, manufacturer identification, ROC content and ROC composite partial pressure.

3. Maintain records showing the amount of inks, coatings, adhesives, resists, and solvents used:

    a. If only compliant inks, coatings, adhesives, resists, and solvents are used, records shall be kept on a monthly basis. For reporting purposes, ink lines may be grouped or each ink may be reported separately.

    b. If noncompliant inks, coatings, adhesives, or resists are used and compliance is achieved through the use of emission control equipment:

        1) Ink, coating, adhesive, and resist usage records shall be kept on a daily basis.

        2) Solvent usage records shall be kept on a monthly basis.

        3) Key system operating parameters for emission control equipment shall be recorded on a daily basis as specified in the Permit to Operate.

4. If operating pursuant to subsections C.1, C.2, or C.3, records necessary to substantiate exemption status shall be kept on a monthly basis.

5. Retain inventory, usage, and emission control equipment operation records for a minimum of two years and make these records available to the Air Pollution Control Officer upon request.

E. Test Methods

1. Measurement of the ROC content of inks, coatings, adhesives, resists, and solvents shall be conducted and reported in accordance with EPA Reference Method 24 and ARB Method 432 for determination of exempt organic compounds as necessary.

2. The metal content of metallic inks shall be determined by SCAQMD Method 311 (Determination of Percent Metal in Metallic Coatings by Spectrographic Method) contained in the SCAQMD "Laboratory Method of Analysis for Enforcement Samples" manual.

3. ROC composite partial pressure of a solvent shall be calculated using a published source such as: T. Boublik, V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company, CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985). The true vapor pressure of a component in a solvent mix may be determined by ASTM Method D2879-86. The ROC composite pressure of a solvent mix consisting entirely of ROC may be determined by ASTM Method D2879-86.

4. The capture and control efficiency of air pollution control equipment, as specified in Subsection B.4, shall be determined using applicable methods in 40 CFR 52.741.

G. Definitions

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

1. "Adhesive:" Any substance that is used to bond one surface to another surface.

2. "Application Equipment Cleaning:" The removal of coating, adhesive or ink from application equipment.

3. "Ceramic Decals:" Water-slide decals which are used to transfer images onto ceramic materials by firing above $800^{O}F$.

4. "Ceramic Decal Ink:" Any ink which is screen printed onto treated paper stock and is used in the production of ceramic decals.

5. "Cleanup:" The removal of uncured coating, adhesive or ink from any surface, oversprayed surfaces, and hands, excluding application equipment.

6. "Coating:" A layer of material applied to a substrate in a substantially unbroken film.

7. "Electronic Circuit:" A product which consists of a substrate and a circuitry created by screen printing an ink, which transmits electricity, on the substrate.

8. "Exempt Organic Compounds:" As defined in Rule 2 of these rules.

9. "Extreme Performance Screen Printing Materials:" An ink or coating used in screen printing on a non-porous substrate that is designed to resist or withstand any of the following: more than

two years of outdoor exposure; exposure to industrial grade chemicals, solvents, acids, detergents, oil products, or cosmetics; temperatures exceeding 76 degrees Celsius (169^{o} F); vacuum forming, embossing, or molding.

10. "Grams of ROC Per Liter of Coating, Less Water and Less Exempt Organic Compounds:" The weight of ROC per combined volume of ROC and material solids, is calculated by the following equation:

$$\text{Grams of ROC per Liter of Coating, Less Water and Less Exempt Organic Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:
- W_s = weight of volatile compounds, in grams
- W_w = weight of water, in grams
- W_{es} = weight of exempt organic compounds, in grams
- V_m = volume of material, in liters
- V_w = volume of water, in liters
- V_{es} = volume of exempt organic compounds, in liters

11. "Grams of ROC Per Liter of Material:" The weight of ROC per volume of material is calculated by the following equation:

$$\text{Grams of ROC per Liter of Material} = \frac{W_s - W_w - W_{es}}{V_m}$$

Where:
- W_s = weight of volatile compounds, in grams
- W_w = weight of water, in grams
- W_{es} = weight of exempt organic compounds, in grams
- V_m = volume of material, in liters

12. "Ink Line:" A group of inks from the same manufacturer with similar properties, such as ROC content and density.

13. "Ink Removal:" Final cleaning of application equipment prior to color change or storage of the application equipment.

14. "Metallic Ink:" Ink containing at least 50 grams of metal per liter of ink (0.4 lb/gal) as applied and which is not used in the manufacture of an electronic circuit.

15. "Non-porous Substrate:" A substrate that has no tiny pores or openings in its physical structure in which to absorb fluids. Non-porous substrates include, but are not limited to, glass, metals and plastics.

16. "Plastics:" Man-made materials, excluding rubber, produced from high molecular weight synthetic or natural organic polymers which are capable of being shaped or flowing under heat and pressure into desired forms at some stage of their manufacture. Plastics

include, but are not limited to, acrylonitrile butadiene styrene (ABS), acrylic, butylate, epoxy, vinyl, polyvinyl chloride (PVC), polyethylene, polypropylene, polystyrene, polycarbonate, polyamide, polyester, polyurethane and man-made textile.

17. "Platen Adhesive:" An adhesive used to hold the porous substrate being printed in place during the application of the printing ink(s).

18. "Printing:" Any operation that imparts a color, design, alphabet, symbol, or numeral on a substrate.

19. "Printing Ink:" Any viscous fluid used in printing, impressing, or transferring an image onto a substrate.

20. "Process Cleaning:" The removal of uncured coating, adhesive or ink from application equipment during the screen printing operation. This would include the use of a screen opener.

21. "Resists:" Inks that; a) form the required alphabets, numerals, designs, or symbols on the surface of the substrate; b) protect the screen printed or covered surface from the subsequent application of etching or plating solution; and c) are later removed from the substrate by a resist stripper. Resists applications include, but are not limited to, etched electronic circuits, display screens, chemical milling of parts, nameplates and signage.

22. "ROC (Reactive Organic Compounds):" As defined in Rule 2 of these rules.

23. "ROC Composite Partial Pressure:" The sum of the partial pressures of the compounds defined as ROCs. ROC composite partial pressure is calculated as follows:

$$PP_C = \frac{\sum_{i=1}^{n} \left(W_i\right)\left(VP_i\right) \Big/ \left(MW_i\right)}{\left(W_w / MW_w\right) + \sum_{e=1}^{n} \left(W_e / MW_e\right) + \sum_{i=1}^{n} \left(W_i / MW_i\right)}$$

Where:
W_i = Weight of the "i"th ROC compound, in grams
W_w = Weight of water, in grams
W_e = Weight of the "e"th exempt organic compound, in grams
MW_i = Molecular weight of the "i"th ROC compound, in g/(g-mole)
MW_w = Molecular weight of water, in g/(g-mole)
MW_e = Molecular weight of the "e"th exempt organic compound, in g/(g-mole)
PP_C = ROC composite partial pressure at 20 C, in mm Hg
VP_i = Vapor pressure of the "i"th ROC compound at 20 C, in mm Hg.

24. "Screen Opener:" A solvent sprayed on stencil openings to dissolve printing ink that is clogging those openings.

25. "Screen Printing:" A printing process in which printing ink, coating, or adhesive material is passed through a taut web or fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.

26. "Screen Printing Equipment:" Equipment used for applying screen printing materials, including the flash-off area, ovens or dryers, conveyors, or other equipment operating as part of screen printing operations.

27. "Screen Printing Materials:" Any inks, coatings, or adhesives, including added thinners or additives, used in screen printing.

28. "Screen Printing Operations:" Operations which include screen printing and any subsequent drying, curing, or conveying of the screen-printed substrate.

29. "Spotting Fluid" A solvent used to remove cured plastisol ink from fabric.

30. "Surface Preparation:" The removal of contaminants from a substrate prior to coating, adhesive or ink application. Surface preparation does not include the removal of cured coatings.

31. "Water Slide Decals:" Decals which are screen printed onto treated paper stock, and are removable from the stock by the dissolution of an underlying, water-soluble adhesive or a similar carrier.

32. "Water Slide Decal Adhesive:" Any adhesive which is screen printed onto treated paper stock, in the production of water slide decals.

33. "Wipe Cleaning:" The method of cleaning a surface by physically rubbing it with a material or device such as a rag, paper, brush or cotton swab moistened with a solvent.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.20 - ADHESIVES AND SEALANTS
(Adopted 6/8/93, Revised 9/10/96, 1/14/97, 9/9/03, 1/11/05, 9/11/12, 10/09/18)

A. Applicability

The provisions of this rule apply to any person who supplies, sells, offers for sale, manufactures, solicits the application of, or uses adhesives, sealants, sealant primers or adhesive primers in Ventura County.

B. Requirements

1. Unless otherwise specified in Subsection B.2 or B.3, a person shall not apply any adhesives or any adhesive primers, which have an ROC content less water and exempt organic compounds in excess of 250 g/l (for low-solids adhesives or adhesive primers, the ROC content is based on a "grams per liter of material" basis).

2. Adhesives/Sealants/Adhesive Primers/Sealant Primers (Specific Applications): No person shall apply any adhesive, sealant or primer, which is defined under the following product categories, and has an ROC content, less water and exempt organic compounds in excess of the following limits, as applied (for low-solids adhesives, sealants or primers, the ROC content is based on a "grams per liter of material" basis).

	Limits "Grams of ROC per Liter of Adhesive, Sealant or Primer Less Water and Exempt Organic Compounds"		
Category	Current Limit	Effective 7/1/2019	Effective 1/1/2023
Architectural Adhesive Products:			
Multipurpose Construction Adhesive	70		
Ceramic, Porcelain & Stone Wall Tile Adhesive	65		
Cove Base Adhesive	50		
Drywall Adhesive	50		
Flooring Adhesives:			
Ceramic, Porcelain, & Stone Floor Tile	65		
Outdoor Carpet	150	50	
Indoor Carpet or Carpet Pad	50		
Rubber Flooring	60		
Subfloor Adhesive	50		
VCT and Asphalt Tile	50		
Wood Flooring	100		20
Other Flooring	150	50	
Panel Adhesive	50		

Limits
"Grams of ROC per Liter of Adhesive, Sealant or Primer
Less Water and Exempt Organic Compounds"

Category	Current Limit	Effective 7/1/2019	Effective 1/1/2023
Architectural Adhesive Products (cont.):			
Roofing Adhesives:			
Single Ply Roof Membrane	250		
Nonmembrane Roof	300		
Structural Glazing Adhesive	100		
Structural Wood Member Adhesive	140		
Miscellaneous Adhesives:			
Contact Adhesive	80		
Special Purpose Contact Adhesive	250		
Sheet-Applied Rubber Lining Operations	850		
Tire Retread	100		
Traffic Marking Tape Adhesive	150		
Top and Trim Adhesive	540		
Waterproof Resorcinol Glue	170		
Plastic Welding Products:			
ABS Welding	400	325	
ABS to PVC Transition Cement	510		
Cellulosic Plastic Welding (except ethyl cellulose)	100		
CPVC Welding	490		
PVC Welding	510		
Styrene-Acrylonitrile Welding	100		
Plastic Welding Primer	650	550	
Other plastic welding	500		
Adhesive Primers:			
Vehicle Glass Adhesive Primer	700		
Pressure Sensitive Adhesive Primer	785		
Other Adhesive Primer	250		
Sealants:			
Aerosol Insulating Foam Sealant	250		
Marine Deck	760		
Nonmembrane Roof	300		
Non-Staining Plumbing Putty	420	150	50
Potable Water Sealant	420	100	
Roadway Sealant	250		
Single-Ply Roof Membrane Sealant	450		
All Other Roof Sealants	420	300	
All Other Architectural Sealants (Non-Roof)	250	50	
All Other Sealants (Non-Architectural)	420		250

Limits
"Grams of ROC per Liter of Adhesive, Sealant or Primer
Less Water and Exempt Organic Compounds"

Category	Current Limit
Sealant Primers:	
Architectural Nonporous	250
Architectural Porous	775
Marine Deck	760
Other Sealant Primers	750

3. Adhesives (Substrates or Nonspecific Operations): No person shall apply any adhesive to a substrate with an ROC content, "less water and exempt organic compounds" in excess of the following limits, as applied (for low-solid adhesives, sealants or primers, the ROC content is based on a "grams per liter of material basis").

   If an adhesive is used to bond dissimilar substrates, the applicable substrate category with the highest ROC limit shall be the limit for that operation. If an operator uses an adhesive product listed in Subsection B.2, then the requirement in that section applies rather than this one.

Limits
"Grams of ROC per Liter of Adhesive
Less Water and Exempt Organic Compounds"

Substrate/Application	Current Limit
Fiberglass	80
Flexible Vinyl	250
Metal to Metal	30
Plastic Foam	50
Porous Material (Except Wood and Plastic Foam)	50
Wood	30

4. Substrate Surface Preparation:

   No person shall use a material for substrate surface preparation that exceeds the following applicable limit:

Category	Type of Limit	Limit
Inkjet Printer Head Assembly	ROC Content	200 g/l of material
All Others	ROC Content	25 g/l of material

5. Solvent Cleaning:

   No person shall use ROC-containing materials for solvent cleaning unless the ROC content is 25 grams per liter of material or lower.

6. Storage of ROC-Containing Materials: All ROC-containing materials, including but not limited to, adhesives, sealants, coatings, cleanup solvents or surface preparation materials, shall be stored in closed containers, which are nonabsorbent and do not leak. These storage containers shall be closed except when filling or emptying.

7. Adhesive Spray Application Equipment Cleaning:

   No person shall use ROC-containing materials for the cleaning of spray application equipment used in adhesive operations unless a solvent containing no more than 25 grams of ROC per liter of material shall be used for cleaning, flushing or soaking of filters, flushing lines, pipes, pumps, and other parts of the application equipment.

8. Add-on Control Equipment Option: In lieu of complying with the provisions of Subsections B.1, B.2 or B.3, emissions of ROC may be controlled by an emission capture and control system, which reduces ROC emissions to the atmosphere, provided that:
   a. The combined control and capture efficiency reduces emissions by at least 85 percent, by weight, during any period of continuous operation not to exceed 24 hours, and

   b. Written approval for such equipment, in the form of an Authority to Construct and a Permit to Operate is received from the Air Pollution Control Officer (APCO).

9. Adhesive Strippers: No person shall use an adhesive stripper unless its ROC composite partial pressure is 9.5 mm Hg or less at 20 ^{o}C.

10. Primers, Sealants or Adhesives Containing 1,1,1-Trichloroethane or Methylene Chloride: No person shall apply any primer, sealant or adhesive to any surface, if that product contains any 1,1,1-trichloroethane or methylene chloride. Adhesives containing methylene chloride used to plastic weld the following plastic substrates are exempt from this requirement:

    a. Polycarbonate
    b. Polysulfone
    c. Acrylics including Polymethylmethacrylate (PMMA)
    d. Phenylene-Oxide based resins
    e. Polyetherimide

11. Prohibition of Specification: No person shall solicit, require for use, or specify the application of any adhesive, primer or sealant, if such use or application results in a violation of the provisions of this Rule. This prohibition shall apply to all written or oral contracts.

12. Compliance Statement Requirement: The manufacturer of any adhesive, sealant, sealant primer or adhesive primer subject to this rule shall include a designation of the maximum ROC or VOC content as supplied, including adhesive components, expressed in grams per liter or pounds per gallon excluding water and exempt organic compounds from the appropriate test method in Section E or based on product formulation data, on containers and data sheets. This designation shall include recommendations regarding thinning, reducing, or mixing with any other ROC or VOC-containing materials. This statement shall include the maximum ROC or VOC on an as-applied basis when used in accordance with the manufacturer's recommendations.

13. Liquid Cleaning Material Compliance Statement: The manufacturer of liquid cleaning materials subject to this rule shall designate on product containers and data sheets the ROC content of cleaning materials as supplied. This designation shall include recommendations regarding mixing with any other ROC containing materials, and express the cleaning material ROC content when used in accordance with the manufacturer's recommendations. All letters and numbers used to designate ROC or VOC content on product labels shall be visible and legible.

14. Prohibition of Sales:

    a. Except as provided in Subsections B.14.c, B.14.d, or B.14.e, no person shall supply, sell, or offer for sale any adhesive, sealant or primer which, at the time of sale, is defined under a product category in Subsection B.2, and exceeds the ROC limits listed in Subsection B.2 after the specified effective dates. This provision only applies to products that are supplied to or sold to persons within the District.

    b. Except as provided in Subsections B.14.c, B.14.d, or B.14.e, no person shall supply, sell, or offer for sale any adhesive, sealant, or primer which, at the time of sale, contains any 1,1,1-trichloroethane or methylene chloride, except for those adhesives designed to plastic weld polycarbonates, polysulfones, acrylics, phenylene oxide based resins or polyetherimides.

    c. The sales prohibition in Subsections B.14.a and B.14.b shall not apply to any supplier or seller of any adhesive, sealant or primer as follows:

        1) Any adhesive shipped outside of the District for use outside of the District.

        2) The sale of adhesives to a user who has installed an APCD permitted ROC add-on control device.

    d. The sales prohibitions in Subsections B.14.a and B.14.b shall not apply to the sale of any adhesive, sealant, or primer, except plastic welding products and except aerosol insulating foam sealants, if:

        1) The adhesive, sealant, or primer is sold in any container(s) having a capacity of 16 ounces or less (net volume) or 1 pound or less (net weight); and

2) The total weight or volume of two or more containers packaged together must be less than 1 pound or 16 ounces, respectively, to qualify for this exemption.

e. The sales prohibitions in Subsections B.14.a and B.14.b shall not apply to any manufacturer of any adhesive, sealant, or primer if the manufacturer has provided an accurate compliance statement and if:

1) The product was not sold directly to a user or a sales outlet located in the District, or

2) The product was sold to an independent distributor that is not a subsidiary of, or under the direct control of the manufacturer.

15. Sell-Through and Use-Through Provision: Any adhesive or sealant that is manufactured prior to the effective date of the applicable ROC content limit in Subsection B.2 and that has an ROC content limit above that limit (but not above the limit in effect at the date of manufacture) may be sold, supplied, or offered for sale for up to three years after the specified effective date and may be used up to four years after the specified effective date as long as the date of manufacture is clearly visible on the container (or code for manufacture date has been provided to the District) . This provision shall not apply to those adhesives or sealants subject to current ROC limits in Subsection B.2.

C. Exemptions

1. This rule, except Section B.14, shall not apply to any stationary source that emits less than 200 pounds of ROC in every rolling period of 12 consecutive calendar months from adhesive and sealant operations. Emissions from cold cleaners, vapor degreasers, and aerosol products shall not be included in this determination. Any person claiming this exemption shall provide monthly records sufficient to substantiate this claim.

2. Exemption of Operations Subject to Other District Rules: The provisions of this rule shall not apply to the following operations that are subject to other District rules.

a. Assembling, manufacturing and repairing of aerospace components subject to Rule 74.13, excluding manufacturing of aircraft tires.

b. Any graphic arts operation subject to the requirements of Rule 74.19, Graphic Arts.

c. Any screen printing operation subject to the requirements of Rule 74.19.1, Screen Printing Operations.

3. Exemption of Specific Operations from ROC Standards for Adhesives/Sealants/Primers: The ROC limits of Subsections B.1, B.2, and B.3 of this rule shall not apply to the following operations.

a. Assembling and manufacturing of undersea-based weapon systems.

b. Testing and evaluation of adhesive or sealant products in any research and development or analytical laboratories.

c. Plastic welding operations used in the manufacturing of medical devices.

d. Tire repair operations, provided the label on the adhesive used states "For Tire Repair Only".

e. Field installation or repair of potable water linings and covers at potable water treatment, potable water storage, or potable water distribution facilities. Potable water treatment is any process that will improve the quality of water to make it exceed or meet applicable drinking water standards.

f. Manufacturing operations of the following products: diving suits, rubber fuel bladders, inflatable boats, life preservers or other stand-alone elastomeric type products designed for immersion in liquids. The adhesive products used by these operations must be labeled "For the bonding of immersible products only."

g. Inkjet printer head assembly operations where the ROC content of the adhesive used for laminating is less than 100 grams per liter of material.

h. Thin film laminating operations of magnetic or electronic components excluding inkjet printer head assembly operations.

i. Glass bonding and priming processes in automotive convertible top manufacturing operations.

4. Exemption of Specific Adhesives and Sealants:

a. Any adhesive, primer, or sealant that contains less than 20 grams of ROC per liter of material is exempt from all the provisions of this rule.

b. Any aerosol adhesive (except aerosol insulating foam sealant) is exempt from all provisions of this rule.

c. Any cyanoacrylate or methyacrylate-based adhesive is exempt from all provisions of this rule.

d. Any adhesive tape is exempt from all provisions of this rule.

e. Any low pressure (less than 250 psi) or high pressure (1,000 to 1,300 psi) two-component spray polyurethane foam system that uses exempt organic compounds as the blowing agent and that uses ancillary spray equipment and hoses to apply the foam.

f. Any one-component spray polyurethane foam system in a cylinder (containing not less than 10 pounds and not more than 23 pounds of prepolymerized mixtures) that uses exempt organic compounds as the blowing agent and that uses ancillary spray equipment or hoses to apply the foam.

5. The provisions of Subsection B.3 of this rule shall not apply to any person who uses less than 10 gallons per rolling period (consisting of 12 consecutive calendar months) per stationary source of an adhesive, a sealant, or primer in a separate formulation provided the total volume of noncomplying adhesives, sealants, or primers at a stationary source does not exceed 55 gallons per rolling period (consisting of 12 consecutive calendar months). If a specific adhesive, sealant, sealant primer or adhesive primer can be defined under one of the product categories in Subsection B.2, then this exemption does not apply. Any person seeking to claim this exemption shall notify the APCO in writing that a complying adhesive, sealant or primer is not available and maintain records sufficient to substantiate this claim.

D. Recordkeeping

1. Any person subject to this rule shall:

a. Maintain a current list of all adhesives, sealants, primers, strippers and solvents that provides all information necessary to evaluate compliance including the following, as applicable:

1) The name and manufacturer of each ROC-containing material including any catalysts, reducers, or other components used.

2) Mix ratio, if applicable.

3) ROC content (less water and exempt organic compounds except low-solids coatings, which are expressed as grams per liter of material basis), as applied,

4) ROC composite partial pressure of the adhesive stripper.

5) Applicable ROC content limit or ROC composite partial pressure limit from Section B.

b. Maintain records of the monthly volume of each complying adhesive, sealant, primer, solvent, or stripper used that is required to be tracked by a District permit condition.

c. Maintain records of the daily volume of each noncompliant adhesive, sealant, primer, solvent or stripper used. Adhesives, sealants or primers qualifying for the exemption in Subsection C.5 shall not be subject to this daily recordkeeping requirement.

d. Any person using an emission control system as a means of complying with this rule shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities.

2. All records shall be retained for at least two (2) years from the date of each entry and shall be available to District personnel upon request.

E. Test Methods

1. The ROC and solids content of all adhesives products, sealants, primers and cleaning solvents, except as specified in Section E.3, shall be determined using EPA Reference Method 24 (40 CFR Part 60, Appendix A), South Coast AQMD: Laboratory Method 304 (Determination of Volatile Organic Compounds in Various Materials), or SCAQMD Method 313 (Determination of Volatile Organic Compounds by Gas Chromatography-Mass Spectrometry).

2. Exempt organic compounds shall be determined using ASTM D4457-91 or SCAQMD Laboratory Method 303. For exempt compounds where no reference test method is available, a facility requesting the exemption shall provide appropriate test methods approved by the APCO and approvable by the U.S. EPA.

3. The ROC content of any plastic welding product shall be determined using Proposed SCAQMD Laboratory Method of Analysis for Enforcement Samples, Method 316a-92, “Determination of VOC in Material Used for Pipes and Fittings” (October 1996).

4. The capture efficiency shall be determined according to EPA's technical document, "Guidelines for Determining Capture Efficiency," January 9, 1995, and Methods in 40 CFR 51 Appendix M, Methods 204-204F, as applicable:
Methods 204, Criteria for and Verification of a Permanent or Temporary Total Enclosure
Method 204A, VOC content in Liquid Input Stream
Method 204B, VOC Emissions in Captured Stream
Method 204C, VOC Emissions in Captured Stream (Dilution Technique)
Method 204D, VOC Emissions in Uncaptured Stream from Temporary Total Enclosure
Method 204E, VOC Emissions in Uncaptured Stream from Building Enclosure, and
Method 204F, VOC Content in Liquid Input Streams (Distillation Approach)

Control system efficiency shall be determined by 40 CFR 60, Appendix A, Method 18, “Measurement of Gaseous Organic Compound Emissions by Gas Chromatography”, Method 25, “Determination of Total Gaseous Nonmethane Organic Emissions as Carbon” or Method 25A, “Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer.”

5. ROC composite partial pressure shall be calculated using a widely accepted published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co. New York (1973); Perry's Chemical Engineer's

Handbook, McGraw-Hill Book Company; CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985). The true vapor pressure of a component in a mix may be determined by ASTM Method D2879-96. The ROC composite pressure of a solvent mix consisting entirely of ROC may be determined by ASTM Method D2879-97, "Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope."

6. If applicable, the ROC content of reactive adhesives may be determined using EPA Method Appendix A to Subpart PPPP of Part 63 – Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives. This method is a sandwich method where the adhesive cures between two substrates to prevent moisture in the atmosphere from competing with the reaction taking place in the adhesive. This method may not be used for one-part moisture-cured urethanes, silicone adhesives, or reactive sealants.

F. Violations

Failure to comply with any provision of this rule, including the requirement to maintain records or supply VOC or ROC information, or supply ROC composite partial pressure information, shall constitute a violation of this rule. Noncompliance determined by any test method specified or referenced in this Rule is a violation of this Rule. Where more than one approved test method may be applicable, sources shall not be required to demonstrate compliance using more than one approved test method.

G. Definitions

1. "ABS Welding Adhesive": Any adhesive that is intended by the manufacturer to weld acrylonitrile styrene (ABS) plastic. ABS is made by reacting monomers of acrylonitrile, butadiene, and styrene and is normally identified with ABS marking.

2. "ABS to Polyvinyl Chloride (PVC) Transition Cement": Any plastic welding adhesive that is intended by the manufacturer to join ABS to PVC building drains or building sewers.

3. "Acrylic": Acrylic is any thermoplastic polymer or copolymer of acrylic acid, methacrylic acid, ester of these acids, or acrylonitrile. Acrylic contains at least one version of a methacrylate monomer, including but not limited to: methylmethacrylate or butylmethacrylate.

4. "Adhesive": Any substance that is used to bond one surface to another surface by attachment.

5. "Adhesive Primer": Any film-forming material applied to a substrate, prior to the application of an adhesive or adhesive tape, to increase adhesion or film bond strength, promote wetting, or form a chemical bond with a subsequently applied adhesive.

6. “Adhesive Tape”: Any backing material coated with an adhesive, and includes, but is not limited to, drywall tape, heat sensitive tape, pressure sensitive adhesive tape, and water-activated tape.

7. “Aerosol Insulating Foam Sealant”: Any 8 ounce to 30 ounce aerosolized can of polyurethane prepolymer foam used to fill and form a durable, airtight, water-resistant seal to common building substrates, such as wood, brick, concrete, foam board, and plastic. This sealant is intended by the manufacturer to be used for hand-held applications.

8. "Adhesive Stripper": A volatile liquid applied to remove a cured or dried adhesive.

9. "Aerosol Adhesive": Any adhesive packaged as an aerosol product in which the spray mechanism is permanently housed in a nonrefillable can designed for hand-held application without the need for ancillary hoses or spray equipment. Aerosol adhesives include special purpose adhesives, mist spray adhesives, and web spray adhesives, as defined by the California Air Resources Board consumer product regulation found in Title 17 of the California Code of Regulations, beginning at Section 94507.

10. “Architectural Appurtenance”: Any accessory to a stationary structure, including, but not limited to, hand railings, cabinets, bathroom and kitchen fixtures, fences, rain gutters and downspouts, window screens, lamp posts, heating and air conditioning equipment, other mechanical equipment, large fixed stationary tools, signs, motion picture and production sets, and concrete forms, excluding aquariums.

11. "Architectural Sealant Primer- Nonporous": Any sealant primer intended by the manufacturer to be applied to nonporous material surfaces on stationary structures, including mobile homes, and their appurtenances.

12. "Architectural Sealant Primer- Porous": Any sealant primer intended by the manufacturer to be applied to porous material surfaces on stationary structures, including mobile homes, and their appurtenances.

13. "Architectural Sealant": Any sealant intended by the manufacturer to be applied on stationary structures, including mobile homes, and their appurtenances.

14. “Capture Efficiency”: The percentage of ROC used, emitted, evolved, or generated by the operation, that is collected, and directed to an air pollution control device.

15. "Carbon Adsorption": A carbon unit that is typically either a fixed-bed or a fluidized-bed design. ROC-laden air is pretreated, if necessary, to remove any solids, liquids, and long-chain, high-boiling organic compounds that might coat the carbon. The exhaust stream then passes through the adsorbing bed where the ROCs collect on the surface of the carbon.

16. "Catalytic Incinerator": An incinerator that requires a catalyst to promote the oxidation of the ROCs at a lower temperature. The catalyst is often, but not always, a platinum serial metal deposited in a porous form onto a structure, such as a honeycomb, or pellets. The

ROCs are preheated up to 650 to 900 ^{O}F and then enter the catalyst area. There the oxidation of the ROCs continues to produce an increase in temperature across the catalyst bed.

17. "Cellulosic Plastics": Any plastic containing the naturally occurring polymer or polysaccharide, cellulose $(C_6H_{10}O_5)_n$. Examples include cellulose acetate, cellulose acetate butyrate, cellulose nitrate and cellulose propionate.

18. "Ceramic, Porcelain, and Stone Tile Installation Adhesive": Any adhesive that is intended by the manufacturer to be used for installation of tile products.

19. "Contact Adhesive": Any adhesive that is intended by the manufacturer to adhere to itself instantaneously upon contact and is indicated by the label or data sheet as a contact adhesive. This adhesive is applied to both adherents and allowed to become dry, which develops a bond when the adherents are brought together without sustained pressure. For the purpose of this rule, products that qualify as a contact adhesive using the above definition, and that are labeled exclusively for only one of the following applications shall not be required to meet the ROC limit for "Contact Adhesives" in Subsection B.2:

    a. Single-ply roofing
    b. Bonding of immersible products
    c. Bonding of flexible vinyl to flexible vinyl
    d. Nonmembrane roofing

20. "Cove Base Installation Adhesive": Any adhesive that is intended by the manufacturer to be used for cove base (or wall base) installation. The cove base is generally made of vinyl or rubber, and is installed on a wall or vertical surface at floor level.

21. "CPVC Welding": Any adhesive intended by the manufacturer for the welding of CPVC (chlorinated polyvinyl chloride) plastic. CPVC is a polymer of the monomer that contains 67 percent chlorine and is normally identified with a CPVC marking.

22. "Cyanoacrylate Adhesive": Any adhesive that is a single-component reactive diluent adhesive that contains at least 85 percent by weight, methyl, ethyl, methoxymethyl or other functional groupings of cyanoacrylate.

23. "Dry Wall Adhesive": An adhesive that is intended by the manufacturer to be used to install gypsum dry wall to studs or solid surfaces.

24. “Energy Curable Adhesives and Sealants”: Single-component reactive products that cure upon exposure to visible-light, ultra-violet light, or to an electron beam. The VOC content of thin film Energy Curable Adhesives and Sealants may be determined by manufacturers using ASTM Method 7767-11, Standard Test Method to Measure Volatiles from Radiation Curable Acrylate Monomers, Oligomers, and Blends and Thin Coatings Made from Them.

25. "Exempt Organic Compounds": As defined in Rule 2, Definitions, of these Rules, except for the purpose of this rule, exempt organic compounds shall also include the following foam blowing agents:
    a. trans-1,3,3,3-tetrafluoropropene (HFO-1234ze)
    b. trans-1-chloro-3,3,3-trifluoropropene (HFO-1233zd)
    c. cis-1,1,1,4,4,4-hexaflouro-2-butene (HFO-1336mzz-Z) Note: The inclusion of this compound as an exempt ROC shall not become effective until EPA adopts a final rule confirming its exempt VOC status.

26. "Fiberglass": Fiberglass is any fiber reinforced plastic (FRP) surface that has fiber material set in a binding substance of plastic resins.

27. "Flexible vinyl": Nonrigid polyvinyl chloride plastic with at least five percent, by weight, of plasticizer content. A plasticizer is a material, such as a high-boiling point organic solvent, that is incorporated into an adhesive to increase its flexibility, workability, or distensibility, and may be determined using ASTM Method E260-91 or from product formulation data.

28. "Grams of ROC per liter of Adhesive, Sealant, or Primer, less water and exempt organic compounds": The weight of ROC per combined volume of ROC and coating solids calculated using the following equation:

$$\text{Grams of ROC per Liter of Adhesive Less Water and Exempt Organic Compound} = \frac{Ws - Ww - Wes}{Vm - Vw - Ves}$$

Where: Ws = Weight of volatile compounds (grams)
Ww = Weight of water (grams)
Wes = Weight of exempt organic compounds (grams)
Vm = Volume of material (liters)
Vw = Volume of water (liters)
Ves = Volume of exempt organic compounds (liters)

29. "Grams of ROC per Liter of Material": The weight of ROC per volume of material shall be calculated using the following equation:

$$\text{Grams of ROC per Liter of Material} = \frac{Ws - Ww - Wes}{Vm}$$

Where: Ws = Weight of volatile compounds (grams)
Ww = Weight of water (grams)
Wes = Weight of exempt organic compounds (grams)
Vm = Volume of material (liters)

30. "Gun Washer": Electrically or pneumatically operated system that is designed to clean spray application equipment and minimize emissions. A gun washer may also be considered a gun

cleaning system that consists of spraying solvent into an enclosed container using a snug fitting.

31. "Inkjet Printer Head Assembly Operation": Any operation used to manufacture or assemble the printer head used on inkjet printers. Inkjet printing is a printing method where the liquid ink is transferred at high velocity through a small diameter opening(s) to a solid substrate.

32. "Low Emission Spray Gun Cleaner": Any properly used spray gun equipment cleanup device which has passive solvent losses of no more than 0.6 grams per hour and has active solvent losses of no more than 15 grams per operating cycle as defined by the test method in Subsection E.6.

33. "Low-Solids Adhesive, Sealant or Primer": Any product that has less than one pound of solids per gallon of material (120 grams or less of solids per liter of material). Such solids are the non-volatiles remaining after a sample is heated at 110ºC for one hour.

34. "Marine Deck Sealant": Any sealant intended by the manufacturer to be applied to wooden marine decks.

35. "Marine Deck Sealant Primer": Any sealant primer intended by the manufacturer to be applied to wooden marine decks.

36. "Multipurpose Construction Adhesives": Any adhesive that is intended by the manufacturer to be used for the installation or repair of various construction materials or to bond architectural appurtenances, including but not limited to drywall, subfloor, panel, tileboard, deck and lumber, seams, fiberglass reinforced plastic (FRP), ceiling tile and acoustical tile. Adhesives used to bond uninstalled cabinets, counters, and other architectural appurtenances are subject to this adhesive category.

37. "Nonmembrane Roof Sealant/Adhesive": Any sealant or adhesive that is intended by the manufacturer to install or repair nonmembrane roofs and that is not intended for the installation of prefabricated single-ply flexible roofing membranes. This category includes plastic or asphalt roof cement, asphalt roof coatings, and cold application cement.

38. "Outdoor Carpet Adhesive": Any adhesive intended by the manufacturer for the installation of carpet or artificial turf that is not in an enclosure and is exposed to ambient weather conditions.

39. “Non-Staining Plumbing Putty”: Any non-staining sealant intended by the manufacturer to be provide watertight seals around faucets and drains, and is formulated to be used on granite, marble, quartz, sandstone, or any other natural surfaces.

40. "Panel Adhesive": An adhesive that is intended by the manufacturer to be used for the installation of plywood. pre-decorated hardboard (or tileboard), fiberglass reinforced plastic, and similar pre-decorated or non-decorated panels to studs or solid surfaces.

41. "Percent ROC by Weight": The ratio of the weight of ROC to the weight of the material, expressed as a percentage by weight. The percent ROC by weight is calculated as follows:

$$\% \text{ ROC weight} = \frac{Wv}{W} \times 100$$

Where Wv = Weight of the ROCs (grams)
W = Weight of the Material (grams)

42. "Plastic Welding Primer": Any primer intended by the manufacturer to prepare plastic substrates prior to welding.

43. "Plastic Foam": Any rigid or spongy cellular plastic mass with gas bubbles dispersed throughout. Examples include but are not limited to: urethane foams, PVC foams, Styrofoam, Foamboard and polyethylene foams.

44. "Plastic Welding": The use of solvent-based adhesives to dissolve plastic surfaces to form a weld-like bond between mating surfaces.

45. "Plastic Welding Products": Any product intended by the manufacturer to weld plastic substrates, or to prepare plastic substrates prior to welding. These products include ABS welding products, cellulosic plastic welding products, CPVC welding products, PVC welding products, styrene-acrylonitrile welding products, plastic welding primers, and other plastic welding products.

46. "Plastics": Synthetic materials chemically formed by the polymerization of organic (carbon-based) materials.

47. "Polycarbonate": Polycarbonate is a type of thermoplastic "structural" foam and contains a plastic resin that can be found in Lexan manufactured by General Electric Company or in Tuffrak manufactured by Rohm and Haas Company.

48. "Porous Material": A material whose surface is permeable to liquids; such materials include but are not limited to paper, and corrugated paperboard.

49. “Potable Water Sealant”: Any sealant intended by the manufacturer to be used in water treatment or water distribution applications, which requires compliance with NSF/ANSI Standard 61: Drinking Water System Components – Health Effects.

50. “Pressure Sensitive Adhesive”: Any adhesive intended by the manufacturer to form a bond when pressure is applied (without the need for solvent, water, or heat) and is typically applied to backings or release liners.

51. “Pressure Sensitive Adhesive Primer”: Any adhesive primer intended by the manufacturer to be applied during the application of a pressure sensitive adhesive product. This primer will result in the increased adhesion or shorter cure times of the applied adhesive.

52. "PVC Welding Adhesive": Any adhesive intended by manufacturer to weld polyvinyl chloride (PVC) plastic. PVC plastic is a polymer of the chlorinated vinyl monomer that contains 57 percent chlorine and which is normally identified with a PVC marking.

53. "Reactive Organic Compounds (ROC)": As defined in Rule 2, Definitions, of these Rules. The term "volatile organic compound" (VOC) is equivalent to ROC.

54. “Reactive Adhesives”: Any adhesive that is composed of monomers that become integral parts of the cured product through chemical reactions. Reactive products include, but are not limited to, polyurethane and two-component regulated products.

55. "Roadway Sealant": Any sealant intended by the manufacturer to be applied to public streets, highways, and other surfaces, including but not limited to curbs, berms, driveways and parking lots.

56. ROC Composite Partial Pressure": The sum of the partial pressures of the compounds defined as ROCs. ROC composite partial pressure is calculated as follows:

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

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

57. "Rubber": Rubber includes any natural or manmade rubber substrate, including but not limited to: styrene-butadiene rubber (SBR), polychloroprene (Neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene (CSM), and ethylene propylene diene terpolymer (EPDM).

58. "Rubber Flooring Adhesive": Any adhesive intended by the manufacturer for the installation of flooring material in which both the back and the top surface are made of synthetic rubber, and which may be in sheet or tile form.

59. "Sales Outlet": Any establishment at which adhesives, sealants, or primers can be sold in person to users of such products.

60. "Sealant Primer": Any product intended by the manufacturer to be applied to a substrate, prior to the application of a sealant, to enhance the bonding surface.

61. "Sealants": Any material with adhesive properties that is formulated primarily to fill, seal, waterproof or weatherproof gaps or joints between two surfaces. Sealants include caulks.

62. "Sheet-Applied Rubber Lining Operations": The process of applying sheet rubber liners by hand to metal or plastic substrates in order to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric by hand.

63. "Single-Ply Roof Membrane Adhesive Primer": Any primer intended by the manufacturer to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding.

64. "Single-Ply Roofing Membrane Installation/Repair Adhesive": An adhesive intended by the manufacturer to be used for the installation or repair of a prefabricated single-ply flexible roofing membrane. Single-ply roofing membranes are field-applied using just one layer of membrane material. The containers must be labeled exclusively for such use. Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashing to the vents, pipes and ducts that protrude through the membrane. Repair includes gluing the edges of tears together, attaching a patch over a hole, and reapplying flashings to vents, pipes or ducts installed through the membrane.

65. "Single-Ply Roofing Membrane Sealant": A sealant intended by the manufacturer to be used for the installation or repair of a prefabricated single-ply flexible roofing membrane. The containers must be labeled exclusively for such use.

66. "Solvent": Organic, petrochemical compounds, which are used as diluents, thinners, dissolvers, reducers, cleaning agents, or for similar uses.

67. “Solvent Cleaning”: The use of solvent to remove loosely held uncured adhesives, uncured inks, uncured coatings, and contaminants, which include, but are not limited to, dirt, soil, and grease from parts, products, tools, machinery, equipment, and general work areas.

68. "Special Purpose Contact Adhesive": Any contact adhesive that is used to bond melamine covered board, metal, unsupported vinyl, Teflon, ultra-high molecular weight polyethylene, rubber, or wood veneer 1/16 inch or less thick to any porous or nonporous surface.

69. "Structural Glazing Adhesive": Any adhesive that is intended by the manufacturer to be used to adhere glass, ceramic, metal, stone, or composite panels to exterior building frames.

70. "Structural Wood Member Adhesive": Any adhesive intended by the manufacturer to be used for the construction of a load-bearing joint in wooden joists, trusses, or beams.

71. "Styrene-Acrylonitrile Welding ": Any adhesive intended by manufacturer to weld styrene-acrylonitrile co-polymer plastics. Bonding of styrene-acrylonitrile to any other substrate (such as metal) is not included under this plastic welding adhesive subcategory.

72. "Subfloor Adhesive": Any adhesive intended by the manufacturer to be used for the installation of subflooring material over floor joists.

73. Substrate Surface Preparation": Cleaning of a substrate to remove dirt, oils, and other contaminants. This surface cleaning is typically done prior to the application of primers, adhesives, or sealants.

74. "Thermal Incineration": A direct-flame incinerator that depends on flame contact and high temperatures in the range of 1200 to 1500 ^{o}F to complete oxidation of ROCs. Thermal incinerators usually consist of refractory-lined chambers, burners, controllers, safety equipment and heat recovery equipment.

75. "Thin Metal Laminating of Magnetic or Electronic Components": Any operation, excluding inkjet printer head assembly, that includes the bonding of multiple layers of metal to metal or metal to plastic in the production of electronic components or magnetic components, in which the bond line(s) is less than 0.25 mil.

76. "Tire Repair": The repair of a hole, tear, fissure, or blemish in a tire casing by grinding or gouging, applying adhesive or sealant product and filling the hole or crevice with rubber.

77. "Tire Retread": The process of tire retreading is where adhesives are applied to the back of precured tread rubber and to the casing and cushion rubber. It may also be used to seal buffed tire casings to prevent oxidation while the tire is being prepared for a new tread.

78. "Top and Trim Adhesive": Any adhesive used to install automotive and marine trim, including, but not limited to headliners, vinyl tops, vinyl trim, sunroofs, dash covering, door covering, floor covering, panel covering, and upholstery.

79. "Traffic Marking Tape": A preformed reflective film intended by the manufacturer to be applied to public streets, highways, and other surfaces, including but not limited to curbs, berms, driveways and parking lots.

80. "Traffic Marking Tape Adhesive": Any adhesive intended by the manufacturer to be applied to surfaces prior to installation of traffic marking tape.

81. "Undersea Based Weapons Systems Components": The fabricated part, assembly of parts or completed units of any portion of the missile launching system used on undersea ships.

82. "VCT and Asphalt Tile Adhesive": Any adhesive intended by the manufacturer for the installation of Vinyl Composite Tile (VCT) or asphalt tile flooring. Vinyl composite tile is a material made from thermoplastic resins, fillers, and pigments.

83. “Vehicle Glass Adhesive Primer”: Any primer intended by the manufacturer to be applied to vehicle glass or to the frame of a vehicle prior to the installation or repair of the vehicle glass using an adhesive or sealant to improve adhesion to the pinch weld.

84. "Volatile Organic Compound (VOC)": Shall have the same meaning as Reactive Organic Compounds (ROC) as defined in Rule 2 of these Rules.

85. “Waterproof Resorcinol Glue”: Any two-part, resorcinol resin-based adhesive intended by the manufacturer to be used in applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

86. "Wood Flooring Adhesive": Any adhesive intended by the manufacturer for the installation of wood flooring, which may include but is not limited to parquet tiles, wood planks, or strip-wood.

Ventura
11/18/93

Rule 74.21 Semiconductor Manufacturing (Adopted 04/06/93)

A. Applicability

The provisions of this rule apply to:

1. Any person who utilizes any maskant, developer, or cleaning solvent containing Reactive Organic Compounds (ROC) as part of a semiconductor manufacturing operation.

2. Any person who manufactures or supplies any maskant, developer, or solvent containing ROC sold for use in a semiconductor manufacturing operation in the District.

3. The provisions of this rule shall become effective on September 30, 1993.

B. Operating Requirements

1. No person shall utilize a solvent cleaning station as part of a semiconductor manufacturing process unless:

a. All heated or unheated reservoirs, sinks, tanks and containers which transfer, store, or hold ROC containing material are provided with a full cover. Covers must remain closed except while production, sampling, maintenance, or loading or unloading procedures require operator access.

b. The freeboard ratio of all heated or unheated reservoirs and sinks holding ROC containing fluids is:

1) Equal to or greater than 0.75 if total facility ROC emissions from semiconductor manufacturing operations are less than 40.82 kilograms (90 pounds) in any month; or

2) Equal to or greater than 1.0 if total facility ROC emissions from semiconductor manufacturing operations are equal to or greater than 40.82 kilograms (90 pounds) in any month.

c. In lieu of the requirements of Subsections B.1.a and B.1.b, ROC emissions may be controlled by an emission capture and control system.

d. ROC containing materials in a solvent flow are applied only as a continuous unbroken stream and not as a dispersed, fine, atomized, or shower type spray, and the method of application shall prevent liquid losses through splashing.

e. Liquid solvent leaks of 3 drops per minute or more are repaired within 24 hours of detection or the equipment is shut down until replaced or repaired.

2. No person shall use ROC containing materials for a solvent cleaning operation outside a solvent cleaning station unless:

a. The solvent composite vapor pressure is 33 mm Hg (0.64 psia) or lower at 20°C (68°F) and the solvent ROC content is equal to or less than the following limits:

	LIMITS Grams per Liter (g/l) of Solvent
Surface Preparation	450
Repair and Maintenance Cleaning	750
Photoresist Application Equipment Cleaning	950
Other, not listed	200

b. One of the following cleaning devices or methods is used:

1) Wipe cleaning; or

2) Remote reservoir cold cleaner; or

3) Spray bottles or containers with a maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force; or

4) Cleaning equipment utilizing a closable solvent container. The solvent container shall remain closed at all times except while objects to be cleaned are being deposited or removed or when maintenance or repair is being performed on the cleaning equipment.

a) If a solvent flow method is used, the solvent shall not be atomized.

b) If a solvent flushing method is used, the solvent shall be flushed through the system by pumping.

3. No person, with total combined ROC emissions from photoresist maskant and photoresist developer equal to or greater than 27.22 kilograms (60 pounds) in any month on a facility-wide basis, shall perform photoresist operations at a semiconductor manufacturing facility unless all ROC containing vapors from photoresist operations and solvent cleaning stations are vented to an emission capture and control system.

4. An emission capture and control system, which reduces ROC emissions to the atmosphere, shall:

a. Operate at all times the associated equipment is operating.

b. Have a combined efficiency of at least 90 percent, by weight.

c. Have a collection system which vents all exhaust from photoresist operations and/or cleaning station exhaust to the control device and have one or more inlets for the collection of fugitive emissions.

d. Have a continuous monitor which shall:

1) Measure and record applicable key operating parameters such as:

a) Destruction device combustion temperature.

b) Temperature rise across a catalytic incinerator.

c) ROC concentration of a carbon absorption unit to determine breakthrough.

2) Be calibrated according to the manufacturer's specifications.

3) Operate at all times the associated control equipment is operating.

e. Receive written approval for such equipment from the Air Pollution Control Officer (APCO) pursuant to Rule 10 of these rules.

5. ROC materials shall be stored in nonabsorbent, nonleaking containers, which shall be kept closed except when adding or removing material.

6. ROC material wastes shall be disposed of in a manner consistent with Federal, State, and local hazardous waste regulations.

7. The manufacturer or supplier of any maskant, developer, which contains ROC, or solvent subject to this rule shall ensure the following information is included on the product container or a data sheet supplied with the product:

a. Material name, manufacturer identification, specific mixing instructions, and ROC content as applied.

b. The ROC content of maskants and developer expressed as grams of ROC per liter of maskant or developer, excluding water and exempt compounds.

c. The ROC content of solvents expressed as grams of ROC per liter of solvent and the composite partial vapor pressure.

C. Recordkeeping Requirements.

Recordkeeping is required only for those maskants, developers, and

solvents containing ROC. Any person subject to this rule shall:

1. Maintain a current file for each maskant and developer in use and in storage. The file shall include a data sheet or material list giving the material name, manufacturer identification, specific mixing instructions, and ROC content, as applied.

2. Maintain a current file for each solvent in use and in storage. The file shall include a data sheet or material list giving the material name, manufacturer identification, ROC content and composite partial vapor pressure.

3. If total facility-wide ROC emissions from photoresist maskant and photoresist developer are less than 27.22 kilograms (60 pounds) per month and the requirements of Subsection B.1 are met, maintain records on a monthly basis showing the type and amount of maskant, developer, and solvent used. Like materials may be grouped and the highest ROC content and the minimum density for each like material used or each maskant, developer, and solvent may be itemized and the specific ROC content and density value for each used. Records shall be maintained using one of the following options.

   a. Develop a detailed record of the amount of maskant, developer, and cleaning station solvent used for each process and report based on throughput for each process. Solvents used outside a solvent cleaning station may be grouped or each may be reported separately.

   b. Develop a detailed record of the amount of each maskant, developer, and solvent used.

4. If compliance is achieved through use of air pollution control equipment:

   a. Maintain daily records of key system operating parameters for emission capture and control equipment as specified in the permit to operate.

   b. Maintain records on a monthly basis showing the type and amount of each maskant, developer, and solvent used.

5. Retain inventory, usage records, and emission capture and control equipment operating records for a minimum of two years from the date of each entry and make these records available to the APCO upon request.

D. Test Methods

1. The ROC content of maskants and solvents shall be determined using EPA Reference Method 24 and ARB Method 432 for determination of exempt compounds as necessary.

2. The composite vapor pressure of organic compounds in liquid cleaning materials shall be determined by quantifying the amount of each organic compound in the blend using gas chromatographic analysis (ASTM E260-91) or by using product formulation data and by summing the partial pressures of each compound at 20°C. For the purpose of this calculation, Raoult's Law applies to the blend. The vapor pressure of each single component compound may be determined from ASTM Method D2879-86 or may be obtained from a published source approved by the APCO such as the sources referenced in 40 CFR 52.741.

3. ROC emissions, as specified in Subsection B.4, shall be measured as prescribed by EPA Reference Method 25, for determining total organic emissions, and EPA Reference Method 18, for quantifying emissions of exempt compounds.

4. The capture and control efficiency of air pollution control equipment, as specified in Subsection B.4, shall be determined using applicable methods in 40 CFR 52.741.

E. Violations

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

2. Any person subject to the provisions of Subsection B.1.b.1) shall comply with the requirements of Subsection B.1.b.2) if total facility ROC emissions are equal to or greater than 40.82 kilograms (90 pounds) in any month.

3. Any person exempt from the provisions of Subsection B.3 shall comply with the requirements of Subsection B.3 if total combined ROC emissions from photoresist maskant and photoresist developer are equal to or greater than 27.22 kilograms (60 pounds) in any month on a facility-wide basis.

F. Definitions

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

1. "Breakthrough": The point at which the retentive capacity of the adsorption material is reached and the vapor content of the exit air exceeds a predetermined level.

2. "Coating": A thin layer of material applied to a substrate in a relatively unbroken film.

3. "Composite Partial Vapor Pressure": The sum of the partial pressures of the compounds defined as ROC.

4. "Exempt Organic Compounds": As defined in Rule 2 of these rules.

5. "Freeboard Height": The distance from the top of the solvent or solvent overflow drain to the top of the sink or reservoir.

6. "Freeboard Ratio": The freeboard height divided by the smaller of the length or width of the sink or reservoir.

7. "Fugitive Emissions": Uncollected ROC emissions from any portion of the semiconductor manufacturing operation.

8. "Grams of ROC per Liter of Maskant, Excluding Water and Exempt Compounds": The weight of ROC that are emitted during use per combined volume of ROC and maskant solids and can be calculated by the following equation:

$$\text{Grams of ROC per Liter of Maskant, Less Water and Less Exempt Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:

W_s	=	weight of reactive compounds that are emitted in grams
W_w	=	weight of water in grams
W_{es}	=	weight of exempt compounds in grams
V_m	=	volume of material in liters
V_w	=	volume of water in liters
V_{es}	=	volume of exempt compounds in liters

9. "Grams of ROC per Liter of Solvent": The weight of ROC per volume of solvent can be calculated by the following equation:

$$\text{Grams of ROC per liter of solvent} = \frac{W_s - W_w - W_{es}}{V_m}$$

Where:

W_s	=	Weight of reactive compounds in grams
W_w	=	Weight of water in grams
W_{es}	=	Weight of exempt compounds in grams
V_m	=	Volume of material in liters

10. "Photoresist Maskant, Maskant, or Photoresist": A coating applied directly to a component to protect surface areas when chemical milling, etching, or other chemical surface operations are performed on the component.

11. "Photoresist Operation": A process for the application and development of photoresist masking solution on a substrate, including preparation (except primary cleaning), soft bake, develop, hard bake, and stripping of the unhardened or softened photoresist.

12. "Reactive Organic Compounds (ROC)": As defined in Rule 2 of these rules.

13. "Remote Reservoir Cold Cleaner": A device in which solvent is pumped through a sink-like work area for cleaning parts and drains immediately, without forming a pool, through a single drain hole less than 100 square centimeters (15.5 square inches) in area into an enclosed container which is not accessible for soaking parts.

14. "Repair and Maintenance Cleaning": Cleaning of equipment, equipment parts tools, or general work areas as part of a repair operation or as part of a scheduled maintenance procedure during which power to the equipment has been secured.

15. "ROC Materials": Maskants, materials used for cleanup or maskant removal, solvent, paper and cloth, and waste containing, impregnated with, coated with, or mixed with Reactive Organic Compounds.

16. "Semiconductor Manufacture": Any process or operation producing semiconductor material, slicing or polishing semiconductor material, utilizing photoresist to manufacture intermediate products, or producing either semiconductor devices or related solid state devices.

17. "Solvent Cleaning Operation": A cleaning operation utilizing a ROC material and conducted outside a solvent cleaning station for the removal of loosely held uncured maskants and contaminants which include, but are not limited to, dirt, soil, and grease from parts, tools, machinery, equipment, and general work areas. Each distinct method of cleaning in a cleaning process which consists of a series of cleaning methods shall constitute a separate solvent cleaning operation.

18. "Solvent Cleaning Station": A workplace, which is enclosed on three sides and equipped with a vent hood, used to remove surface contaminants, oxide stencil, or photoresist from the semiconductor substrate using a liquid or vapor solvent containing reactive organic compounds.

19. "Solvent Flushing": The use of a solvent to remove uncured maskants or contaminants from the internal surfaces and passages of the equipment by flushing solvent through the equipment.

20. "Stripping": The removal of spent photoresist maskant from the product after etching, or the removal of oxide stencil from the product after diffusion.

21. "Surface Preparation": The removal of contaminants such as cured maskants, dust, soil, oil, grease, etc., prior to coating applications.

22. "Wipe Cleaning": The method of cleaning which utilizes a material such as a rag dampened, not saturated, with a solvent, coupled with a physical rubbing process to remove contaminants from surfaces.

2/11/94

2/11/94

Rule 74.22 Natural Gas-Fired, Fan-Type Central Furnaces (Adopted 11/9/93)

A. Applicability

1. The provisions of this rule apply to any person who sells, offers for sale, or installs any natural gas-fired, fan-type central furnace in this District.

2. The provisions of this rule shall become effective on May 31, 1994.

B. Requirements

1. No person shall sell, offer for sale, or install in this District any natural gas-fired, fan-type central furnace with NOx (oxides of nitrogen) emissions in excess of 40 nanograms per joule of heat output.

2. No person shall sell, offer for sale, or install in this District any natural gas-fired, fan-type central furnace unless it is certified and identified in accordance with Section C.

C. Certification and Identification

1. The manufacturer shall have tested or shall test each appliance model in accordance with Section E.

2. The manufacturer or authorized manufacturers' representative shall submit a list of complying furnaces to the APCO with the following information:

   a. Name and address of manufacturer.

   b. Brand name.

   c. Model number and heat input rating, as it appears on the furnace rating plate.

   d. A description of the furnace and specifications for each model being certified.

   e. A signed statement that each furnace on the list is in compliance with Section B. The statement shall include the test method used and the test results.

3. The manufacturer shall display the model number of the furnace complying with Section B on the shipping carton and rating plate.

D. Exemptions

Units installed in manufactured housing (mobile home) shall be exempt from the requirements of this rule.

E. Test Methods

1. Operation of the furnace shall be in accordance with the procedures specified in Section 3.1 of Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix N.

2. Compliance with the emission requirements in Section B shall be determined using ARB Method 100, or other EPA approved method, for NOx. NOx samples shall be taken simultaneously with the CO_2 sample specified in Section 3.1 of Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix N.

3. The following calculation shall be used to determine the nanograms of NOx per joule of heat output:

$$N = \frac{4.566 \times 10^4 \times P \times U}{H \times C \times E}$$

Where:

4.566×10^4 = unit conversion factor [ppm (parts per million) to nanograms and Btu to joules]

N = nanograms of emitted oxides of nitrogen per joule of heat output

P = concentration of NOx in flue gas in parts per million by volume

U = dry volume percent of CO_2 in flue gas necessary for stoichiometric combustion.

H = gross heating value of fuel, Btu/cu.ft. at 60°F and 30 in. Hg

C = dry volume percent of CO_2 in the flue gas, assuming complete combustion and no CO present

E = efficiency, as defined in Section 4.2.35 of Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix N

F. Violations

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

G. Definitions

1. "Fan-Type Central Furnace": A self-contained space heater providing for circulation of heated air at pressures other than atmospheric through ducts more than 10 inches in length that has a rated heat input capacity of less than 175,000 Btu per hour and, for combination heating and cooling units, a rated cooling capacity of less than 65,000 Btu per hour.

2. "Rated Heat Input Capacity": The heat input capacity specified on the nameplate of the combustion unit. Heat input is the amount of energy consumed in one hour (Btu/hr).

3. "Heat Output": The product obtained by multiplying the efficiency as defined by Section 4.2.35 of the Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix N, by the input rating of a natural gas-fired central furnace.

4. "Manufactured Housing": As defined in 42 US Code Section 5402 and California Health and Safety Code Section 18007.

5. "Natural Gas": A mixture of gaseous hydrocarbons containing at least 80% methane by volume as determined by ASTM Method D1945-64.

6. "Rated Cooling Capacity": The cooling capacity specified on the nameplate of the cooling unit. Cooling capacity is the amount of heat energy the cooling system can displace in one hour (Btu/hr).

7. "Unit": Any fan-type central furnace as defined in Subsection G.1 of this rule.

Rule 74.23 Stationary Gas Turbines (Adopted 3/14/95, Revised 10/10/95, 6/12/01, 1/8/02)

A. Applicability

This rule shall apply to all stationary gas turbines rated 0.3 megawatt (MW) or greater and operated on gaseous and/or liquid fuel.

B. Requirements

1. No person shall discharge into the atmosphere from any stationary gas turbine emissions in excess of the following:

Unit Rating (MW)	NOx Emissions (ppmv) Gaseous Fuel	Liquid Fuel
0.3 to <2.9	42	65
2.9 to <10.0	25 x E/25	65
10.0 and up, With SCR	9 x E/25	25 x E/25
10.0 and up, Without SCR	15 x E/25	42 x E/25
4.0 and up, less than 877 hours per calendar year	42	65

Unit efficiency (E) shall be determined as follows:

$$E = \frac{(\text{MRE [Continuous] at LHV})(\text{LHV})}{(\text{HHV})}$$

where LHV = the lower heating value of the fuel
HHV = the higher heating value of the fuel
MRE = manufacturer's rated thermal efficiency

Turbine efficiency (E) shall not be less than 25 percent; a turbine with an efficiency lower than 25 percent shall be assigned an efficiency of 25 percent for the purposes of this rule.

All Turbines shall verify compliance annually.

2. The owner or operator of any stationary gas turbine shall install, operate, and maintain in calibration, equipment, as approved by the Air Pollution Control Officer (APCO), that continuously measures and records the following:

a. Control System Operating Parameters,

b. Elapsed time of operation, and

c. For units 10 MW and over that operated an average of more than 4000 hours per calendar year prior to May 31, 1995, continuous exhaust gas NOx concentrations corrected to 15 percent oxygen on a dry basis and averaged over any three consecutive hours. The continuous NOx emission monitor shall meet the requirements specified in Rule 103, Stack Monitoring.

The owner or operator shall provide documentation, including a certified source test, correlating the Control System Operating Parameters to the associated measured NOx emissions. This information may be used by the District to determine compliance when no continuous NOx emission monitoring system exists or when the continuous emission monitoring system is not operating properly.

3. The owner or operator of any stationary gas turbine shall submit for approval to the APCO a plan for compliance with the provisions of Subsections B.1. The plan shall include:

   a. A list of all units subject to the rule, including the manufacturer, model number, rated shaft power output (MW), electrical generator efficiency, fuel type, fuel HHV, fuel consumption rate (MCF/Hr or gal/Hr), and heat rate (BTU/kw-Hr, corrected to HHV) of the turbine.

   b. A description of the NOx control system proposed for each unit, including type and manufacturer, as well as a description of any ancillary equipment related to the control of emissions, including the measurement and recording equipment required in Subsection B.2. Data on the expected performance of the NOx control system shall also be included.

   c. A compliance schedule for each unit, including, but not limited to, specific dates for the following events: final engineering, contract award, begin construction, complete construction, and final compliance.

4. No person shall discharge into the atmosphere from any emission control device installed and operated pursuant to the requirements of Subsection B.1 above, ammonia (NH_3) emissions in excess of 20 ppmv.

5. Notwithstanding the NOx limit in Subsection B.1, the owner or operator of a unit rated at over 20 MW and equipped with water injection only, and where exhaust gases are used to dry paper, shall meet a 24 ppmv NOx limit on gaseous fuel or a 57 ppmv NOx limit on liquid fuel.

6. Notwithstanding the NOx limit in Subsection B.1, the owner or operator of a unit rated at over 39 MW and equipped with steam injection and SCR, and where exhaust gases are used to dry paper, shall meet a 6.8 ppmv NOx limit on gaseous fuel.

C. Exemptions

1. The provisions of Section B of this rule shall not apply to turbines operated under the following conditions:

   a. Laboratory units used in research and testing for the advancement of gas turbine technology.

   b. Units operated exclusively for fire fighting and/or flood control.

   c. Units operated less than 200 hours per calendar year.

   d. Emergency standby units operated during either an emergency or maintenance operation. Maintenance operation is limited to 104 hours per calendar year.

   e. During the thermal stabilization period associated with a start-up, planned shutdown or unplanned load change as follows:

      (1) A start-up exemption shall not exceed two (2) hours for units utilizing steam injection and one (1) hour for all other units.

      (2) A planned shutdown exemption shall not exceed one (1) hour.

      (3) An unplanned load change exemption shall not exceed two (2) hours for units utilizing steam injection and one (1) hour for all other units.

      For failed start-ups, each restart shall begin a new exemption period.

2. In lieu of Subsection C.1.e above, the provisions of Section B of this rule shall not apply during the thermal stabilization period associated with a start-up, planned shutdown or unplanned load change on turbines rated at over 20 MW equipped with selective catalytic reduction and a waste heat steam generator, and where steam is used to dry paper, as follows:

   a. A cold start-up exemption shall not exceed twelve (12) hours.

   b. A normal start-up exemption shall not exceed three (3) hours.

   c. A planned shutdown exemption shall not exceed one (1) hour.

   d. An unplanned load change exemption shall not exceed two (2) hours.

   For failed start-ups, each restart shall begin a new exemption period.

D. Recordkeeping Requirements

1. The owner or operator of a unit subject to the provisions of Section B of this rule shall maintain the continuous records specified in Subsection B.2 for a period of 2 years. The records shall be available for inspection by the District upon request.

2. The owner or operator of a unit exempt from the provisions of Section B of this rule, as specified in either Subsection C.1.c or C.1.d, shall install a non-resettable totalizing hour meter and shall maintain monthly records of total operating hours for a period of 2 years after the date of each entry. The records shall be available for inspection by the District upon request.

E. Reporting Requirements

Prior to each permit renewal, each operator subject to the provisions of this rule shall provide the District with data specifying the actual annual usage (e.g., fuel consumption, operating hours, etc.) of each applicable turbine. Also required is the annual compliance verification as specified in Subsection B.1.

F. Test Methods

1. Oxides of nitrogen emissions for compliance source tests shall be determined by using EPA Method 20. The average of three runs shall be used to determine compliance.

2. Oxygen content for compliance source tests shall be determined by using ARB Method 100.

3. NOx emission limitations specified in Subsection B.1 are expressed as nitrogen dioxide. All emission limitations are referenced at fifteen (15) percent volume stack gas oxygen measured on a dry basis.

4. The heating value of fuel oil shall be measured using ASTM Method D 240-87. The heating value of gaseous fuel shall be measured using ASTM Method D 1826-88.

5. Ammonia emissions shall be determined using Bay Area Air Quality Management District Method ST-1B, dated 1/20/82. The average of three runs shall be used to determine compliance.

G. Violations

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

2. It is the responsibility of the turbine operator to demonstrate to the satisfaction of the Air Pollution Control Officer that a unit subject to the provisions of this rule is being operated in continuous compliance with all applicable provisions of this rule.

3. The owner or operator of a unit subject to the provisions of Subsection B.1 or exempt according to Subsection C.1.c shall notify the APCO within seven days if the limit on annual operating hours is exceeded. Once the limit is exceeded, the exemption shall be permanently withdrawn. Within 30 days of the exceedance, the owner or operator shall submit a plan as specified in Subsection B.3 to show compliance with the rule within 24 months. Operating hours that occur during a force majeure emergency shall be excluded from the annual total.

H. Definitions

1. "Cold start-up": A start-up that occurs after the unit has experienced zero fuel flow for a period of twenty-four (24) hours or more.

2. "Control System Operating Parameters": the operating parameters necessary for analysis when determining compliance. Parameters may include, but are not limited to, ammonia and exhaust gas flow rates, exhaust gas temperature, humidity, water or steam injection rate, and fuel use.

3. "Emergency Standby Unit": a unit used only when normal power line or natural gas service fails. Electricity generated by such a unit cannot be sold.

4. "Force Majeure Emergency": an unforeseeable event not resulting from an intentional or negligent act or omission on the part of the owner or operator, or a natural disaster. Such events include, but are not limited to, loss of major generating resources or transmission capability, flood, earthquake, storm, fire, lightning, or other natural catastrophes.

5. "Maintenance Operation": The use of an emergency standby turbine and fuel system during testing, repair and routine maintenance to verify its readiness for emergency standby use.

6. "Normal start-up": A start-up that occurs when the unit is not considered cold.

7. "Planned Shutdown": a premeditated shutdown not caused by automatic sensors or other instrumentation.

8. "Power Augmentation": an increase in the gas turbine shaft output and/or the decrease in gas turbine fuel consumption by the addition of energy recovered from exhaust heat. Energy recovered from exhaust heat includes, but is not limited to, the use of regenerators, intercoolers, and steam injection. Also included is water injection.

9. "Rating": the continuous megawatt (MW) output or the mechanical equivalent as established by the manufacturer without power augmentation.

10. "Start-up": The process of bringing an applicable unit and its associated emission control device up to operating temperature.

11. "Turbine" or "Unit": any gas turbine system with or without power augmentation, either attached to a foundation or operated at a site for more than one year. Two or more gas turbines powering one shaft shall be treated as one unit.

12. "Unplanned Load Change": the automatic release of power from the turbine and the subsequent restart. Loss of power during the release must exceed forty (40) percent of the turbine rating.

RULE 74.24 - MARINE COATING OPERATIONS

(Adopted 3/8/94, Revised 9/10/96, 11/11/03, 9/11/12)

A. Applicability

The provisions of this rule apply to any person who applies, specifies the use of, or supplies coatings for marine and fresh water vessels, drilling vessels, and navigational aids, and their parts or components, including any parts subjected to unprotected shipboard conditions. The provisions of this rule shall not apply to any stationary source whose sole Standard Industrial Classification (SIC) is 3732, Boat Building and Repair or 4493, Marinas.

B. Requirements

1. Except as otherwise provided in this rule, no person shall apply a marine coating with an ROC content in excess of the following general limits, expressed as grams of ROC per liter of coating applied (g/l) or pounds per gallon (lb/gal), less water and exempt organic compounds (for low-solids coatings, the ROC content is based on a gram per liter of material basis):

General Limits

Coating Category	ROC Limit (g/l)	ROC Limit (lb/gal)
Air Dried	340	2.8
Baked	275	2.3

2. Specialty Coating Limits: No person shall apply a marine coating with an ROC content in excess of the following limits, expressed as grams of ROC per liter of coating applied, less water and exempt organic compounds(for low-solids coatings, the ROC content is based on a gram per liter of material basis):

Specialty Coating Limits

Coating Category	ROC Limit (g/l)	ROC Limit (lb/gal)
Air Flask Coatings	340	2.8
Antenna Coatings	340	2.8
Antifoulants Coatings		
Aluminum Substrates	560	4.7
Other Substrates	400	3.3
Heat Resistant Coatings (Air Dried)	420	3.5
Heat Resistant Coatings (Baked)	360	3.0
High Gloss Coatings (Air Dried)	420	3.5
High Gloss Coatings (Baked)	360	3.0
High Temperature	500	4.2
Low Activation Interior	420	3.5
Military Exterior	340	2.8
Navigational Aids	340	2.8
Pretreatment Wash Primer	780	6.5

Specialty Coating Limits

Coating Category	ROC Limit (g/l)	ROC Limit (lb/gal)
Repair and Maintenance Thermoplastic	340	2.8
Rubber Camouflage Coatings	340	2.8
Sealant for Wire-Sprayed Aluminum	610	5.1
Special Marking	420	3.5
Specialty Interior	340	2.8
Tack Coat	610	5.1
Undersea Weapons Systems Coatings	340	2.8
Wood Sealer	340	2.8
Zinc-Rich	340	2.8

3. Add-on Control Equipment Option: In lieu of complying with the provisions of Subsections B.1 or B.2, air pollution control equipment may be used provided that:

   a. The combined control and capture efficiency reduces emissions by at least 85 percent, by weight, and

   b. Written approval for such equipment, in the form of an Authority to Construct and a Permit to Operate, is received from the Air Pollution Control Officer (APCO).

4. Surface Preparation and Cleanup Solvent:

   a. Until December 1, 2012, no person shall use ROC-containing materials for cleanup unless:

      1) An enclosed gun washer or "low emission spray gun cleaner," which has been approved in writing by the APCO, is properly used for spray equipment cleaning, and

      2) The ROC composite partial pressure of the solvent used for cleanup, including spray equipment cleanup, is less than 45 mm Hg at 20^{o}C.

      Effective December 1, 2012, no person shall use ROC-containing materials for cleanup or for spray equipment cleaning unless the ROC content is 25 grams per liter of material or less.

   b. Until December 1, 2012, no person shall use ROC-containing materials which have more than 200 grams of ROC per liter of material for substrate surface preparation prior to coating.

Effective December 1, 2012, no person shall use ROC-containing materials which have more than 25 grams of ROC per liter of material for substrate surface cleaning prior to coating.

5. Storage of ROC-Containing Materials: All ROC-containing materials, including but not limited to, surface coatings, cleanup solvents, or surface preparation materials shall be stored in closed containers, which are nonabsorbent and do not leak.

6. Prohibition of Specification: No person shall solicit, require for use, or specify the application of any coating, if such use or application results in a violation of the provisions of this Rule. This prohibition shall apply to all written or oral contracts.

7. Compliance Statement Requirement: The manufacturer of any marine coating subject to this rule shall designate on the coating container or on separate data sheets the maximum volatile organic compound (VOC) content of the coating, as supplied. The VOC content shall be expressed as grams per liter of coating (less water and less exempt organic compounds). For zinc-rich coatings, in addition to the VOC content, the weight of total zinc per gallon of coating shall also be provided. For low-solids coatings, the VOC content shall be expressed as gram per liter of material basis.

8. Liquid Cleaning Material Compliance Statement: The manufacturer of liquid cleaning materials subject to this rule shall designate on product labels or data sheets the ROC or VOC content and ROC or VOC Composite Partial Pressure of cleaning materials as supplied. This designation shall include recommendations regarding mixing with any other ROC containing materials, and express the cleaning material ROC content when used in accordance with the manufacturer's recommendations. All letters and numbers used to designate ROC or VOC content on product labels shall be visible and legible.

C. Exemptions

1. The provisions of this rule shall not apply to:

   a. Solid-film lubricants

   b. The coating of stationary structures that are subject to Rule 74.2, Architectural Coatings, including, but not limited to bridges, piers, pontoons and installed offshore platforms.

   c. The coating of metal parts that are subject to Rule 74.12, Surface Coating of Metal Parts and Products. Any marine coating applied to a vessel or to a component exposed to shipboard conditions shall be subject to Rule 74.24.

d. Aerosol coating products.

2. Section B of this rule, shall not apply to any stationary source that emits less than 200 pounds of ROC in every rolling period of 12 consecutive calendar months from marine coating operations. Emissions from aerosol products, cold cleaners and vapor degreasers shall not be included in this determination. Any person claiming this exemption shall maintain monthly operational records to substantiate this claim.

3. Subsections B.1 and B.2 of this rule do not apply to any one coating provided:

   a. No complying coating is available, and

   b. Total usage of all non-complying coatings has not exceeded 55 gallons in any calendar year.

   Any person claiming this exemption shall demonstrate the lack of available coatings to the APCO on an annual basis.

4. The provisions of this rule shall not apply to any stationary source whose sole Standard Industrial Classification (SIC Code), as identified by the APCO, is 3732, Boat Building and Repairing, or 4493, Marinas.

D. Recordkeeping

1. Any person subject to this rule shall:

   a. Maintain a current list of all coatings that provides all information necessary to evaluate compliance, including the following, as applicable:
      1) The name and manufacturer of each coating and any catalysts and reducers used with each coating
      2) Mix ratio of components used in coatings
      3) ROC Content (less water and exempt organic compounds except for low-solids coatings, which are expressed as grams per liter of material basis), as applied
      4) Category from Section B of each coating used

   b. Maintain records which show the following foreach ROC-containing material used for cleanup, including equipment cleaning, and each ROC-containing material used for substrate surface cleaning:

      1) Type
      2) ROC content in grams per liter of material
      3) Composite ROC partial pressure of organic solvent (where applicable)

c. Maintain records of the monthly volume of each complying coating and ROC-containing liquid used for equipment cleanup and surface preparation, and daily volume of each noncompliant coating used. Any person claiming the coating small-use exemption in Subsection C.3 shall maintain records of each exempt coating used on a monthly basis.

d. Any person using an emission control system as a means of complying with this rule shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities.

2. All records shall be retained for at least two (2) years from the date of each entry and shall be available to District personnel upon request.

E. Test Methods

1. The ROC and solids content of all coatings and cleaning solvents shall be determined using EPA Reference Method 24 (40 CFR Part 60, Appendix A), "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings."

2. Exempt organic compounds shall be determined using ASTM D4457-91, "Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph."

3. Capture efficiency shall be determined according to EPA "Guidelines for Determining Capture Efficiency," dated January 9, 1995, and 40 CFR 51, Appendix M, Methods 204-204F, as applicable.
Methods 204, Criteria for and Verification of a Permanent or Temporary Total Enclosure
Method 204A, VOC content in Liquid Input Stream
Method 204B, VOC Emissions in Captured Stream
Method 204C, VOC Emissions in Captured Stream (Dilution Technique)
Method 204D, VOC Emissions in Un-captured Stream from Temporary Total Enclosure
Method 204E, VOC Emissions in Un-captured Stream from Building Enclosure, and
Method 204F, VOC Content in Liquid Input Streams (Distillation Approach)

Control system efficiency shall be determined by 40 CFR 60, Appendix A, Method 18, "Measurement of Gaseous Organic Compound Emissions by Gas Chromatography", Method 25, "Determination of Total Gaseous Nonmethane Organic Emissions as Carbon" or Method 25A, "Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer."

4. ROC composite pressure of a solvent shall be calculated using a widely accepted published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure

of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company, CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985). The true vapor pressure of a component in a solvent mix may be determined by ASTM Method D2879-97, "Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope." The ROC composite pressure of a solvent mix consisting entirely of ROC may be determined by ASTM Method D2879-97.

5. The active and passive solvent losses from spray gun cleaning systems shall be determined using SCAQMD's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" dated October 3, 1989. The test solvent for this determination shall be any lacquer thinner with a minimum ROC composite partial pressure of 105 mm of Hg at 20 ^{o}C, and the minimum test temperature shall be 15 ^{o}C.

6. The measurement of acid content and solid content of pretreatment wash primers shall be done in accordance with ASTM Method D 1613-96, "ASTM Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Lacquer, and Related Products," and ASTM Method D 2369-95, "Standard Test Method for Volatile Content of Coatings," respectively.

7. The measurement of the zinc content of a coating shall be determined in accordance with South Coast Air Quality Management District Method 311, "Determination of Percent Metal in Metallic Coatings by Spectrographic Method."

F. Violations

Failure to comply with any provision of this rule, including the requirement to maintain records or supply VOC or ROC information, shall constitute a violation of this rule.

G. Definitions:

1. "Active Solvent Losses": The active solvent losses are the emissions during all steps of a spray gun equipment cleaning operation and are expressed in units of grams of solvent loss per cleaning cycle.

2. "Aerosol Coating Product"; A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand held application, or for use in specialized equipment for ground traffic/marking applications.

3. "Air Dried Coating": Any coating that is cured at a temperature below 90°C (194°F).

4. "Air Flask Coating": A coating applied to the interior surfaces of high pressure breathing air flasks to provide corrosion resistance and which is certified safe for use with breathing air supplies.

5. "Antenna Coating": Any coating applied to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.

6. "Antifoulant Coating": Any coating applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms and registered with the Environmental Protection Agency (EPA) as a pesticide.

7. "Baked Coating": Any coating that is cured at a temperature at or above 90°C (194°F).

8. "Capture Efficiency": The percentage of ROC used, emitted, evolved, or generated by the operation, that are collected and directed to an air pollution control device.

9. "Cleanup": The removal of uncured coating from any surface.

10. "Coating": A material that is applied to a surface and forms a film in order to beautify and/or protect such surface.

11. "Exempt Organic Compounds": As defined in Rule 2, Definitions, of these Rules.

12. "Grams of ROC per liter of Coating, less water and exempt organic compounds": The weight of ROC per combined volume of ROC and coating solids calculated using the following equation:

Grams of ROC per Liter of Coating
Less Water and Exempt Organic Compound $= \frac{Ws - Ww - Wes}{Vm - Vw - Ves}$

where Ws = Weight of volatile compounds (grams)
Ww = Weight of water (grams)
Wes = Weight of exempt organic compounds (grams)
Vm = Volume of material (liters)
Vw = Volume of water (liters)
Ves = Volume of exempt organic compounds (liters)

13. "Grams of ROC per Liter of Material": The weight of ROC per volume of material shall be calculated using the following equation:

Grams of ROC per Liter of Material

$$= \frac{Ws - Ww - Wes}{Vm}$$

Where Ws = Weight of volatile compounds (grams)
Ww = Weight of water (grams)
Wes = Weight of exempt organic compounds (grams)
Vm = Volume of material (liters)

14. "Gun Washer": Electrically or pneumatically operated system that is designed to clean spray application equipment while enclosed. A gun washer may also be considered a gun cleaning system that consists of spraying solvent into an enclosed container using a snug fitting.

15. "Heat Resistant Coating": Any coating which during normal use must withstand temperatures of at least 204°C (400°F).

16. "High Gloss Coating": Any coating which achieves at least 85 percent reflectance on a 60^{o} meter when tested in accordance with ASTM D-523.

17. "High Temperature Coating": Any coating which must withstand temperatures of at least 426°C (800°F).

18. "Low-Activation Interior Coating": A coating used on interior surfaces aboard ships to minimize the activation of pigments on painted surfaces within a radiation environment.

19. "Low emission spray gun cleaner": Any properly used spray equipment cleanup device which has passive solvent losses of no more than 0.6 grams per hour and has active solvent losses of no more than 15 grams per operating cycle as defined by the test method in Subsection E.5.

20. "Low-Solids Coatings": Any product that has less than one pound of solids per gallon of material (120 grams or less of solids per liter of material). Such solids are the non-volatiles remaining after a sample is heated at 110^{o}C for one hour.

21. "Marine Coating": Any coating, except unsaturated polyester resin (fiberglass) coatings, intended by the manufacturer to be applied to marine or fresh water vessels, and their appurtenances, and to navigational aids.

22. "Military Exterior": Any exterior topcoat intended by the manufacturer to be applied to military vessels (including US Coast Guard) that are subject to specified chemical, biological, and radiological washdown requirements.

23. "Navigational Aids Coating": Any coating that is used to recoat in-use buoys or other Coast Guard waterway markers.

24. "Operating Cycle": An operating cycle consists of all steps carried out during a cleaning operation.

25. "Passive Solvent Losses": The passive solvent losses are the emissions from spray gun cleaning equipment when the equipment sits idle between cleaning cycles and are a result of natural evaporation from the equipment.

26. "Pretreatment Wash Primer": Any coating which contains at least 1/2-percent acids, by weight, to provide surface etching and contains no more than 12 percent solids, by weight.

27. "Reactive Organic Compounds (ROC)": As defined in Rule 2, Definitions, of these Rules. The term "volatile organic compound"(VOC) is equivalent to ROC.

28. "Repair and Maintenance Thermoplastic Coating": Any vinyl, chlorinated rubber, or bituminous resin coating used for partial recoating over the same coating system.

29. ROC Composite Partial Pressure": The sum of the partial pressures of the compounds defined as ROCs. ROC composite partial pressure is calculated as follows:

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

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

30. "Rubber Camouflage Topcoat": A specially formulated epoxy coating, used as a camouflage topcoat for exterior submarine hulls and sonar domes lined with elastomeric material, which provides resistance to chipping and cracking of the rubber substrate.

31. "Sealant for Wire-Sprayed Aluminum": A coating of up to one mil (0.001 inch) in thickness of an epoxy material which is reduced for application with an equal part of an appropriate solvent (naphtha or ethylene glycol monoethyl ether), for use on wire-sprayed aluminum surfaces.

32. "Solid Film Lubricant": A very thin coating consisting of a binder system containing as its chief pigment material one or more of the following:

molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE) or other solids that act as a dry lubricant between faying surfaces.

33. "Specialty Interior Coating": An extreme performance coating used on interior surfaces aboard ships. This coating has fire retardant properties in addition to military physical performance requirements.

34. "Special Marking Coating": Any coating used for items such as flight decks, ships' numbers, and other safety or identification applications.

35. "Substrate Surface Cleaning": Cleaning of a substrate to remove dirt, oils, and other contaminants. Substrate surface cleaning is typically done prior to the application of surface coatings, adhesive bonding materials, or sealants. Stripping of cured paints or adhesives is not considered to be substrate surface cleaning.

36. "Tack Coat": An epoxy coating of up to two mils thick applied to an existing epoxy coating that has aged beyond the time limit specified by the manufacturer for application of the next coat.

37. "Undersea Weapons Coating": A coating applied to any component of a weapons system intended for exposure to a marine environment and intended to be launched or fired undersea.

38. "Volatile Organic Compound" (VOC): Shall have the same meaning as Reactive Organic Compounds (ROC) as defined in Rule 2 of these Rules.

39. "Wired-Sprayed Aluminum": A molten aluminum coating applied to a steel substrate using oxygen fueled combustion spray methods.

40. "Wood Sealer": A coating formulated for and intended by the manufacturer to be applied to wood in order to prevent subsequent coatings from being absorbed into the wood.

41. "Zinc-Rich Coating": A coating that contains more than 8 pounds of zinc per gallon of coating (as applied), used for the express purpose of providing corrosion protection.

Rule 74.24.1 Pleasure Craft Coating and Commercial Boatyard Operations
(Adopted 11/10/98, Revised 01/08/2002)

A. Applicability

The provisions of this rule apply to any person who applies, specifies the use of, or supplies coatings for pleasure craft, and their parts or components. The provisions of this rule also apply to any person who applies, specifies the use of, or supplies marine coatings that are used at a commercial boatyard.

B. Requirements

1. ROC Content of Coatings: Except as otherwise provided in this rule, no person shall apply or require any other person to use in the District any pleasure craft coating or any marine coating at a commercial boatyard with an ROC content in excess of the following limits, expressed as grams of ROC per liter of coating applied, less water and exempt organic compounds (for low-solid coatings, the ROC content is based on a gram/liter of material basis):

ROC LIMITS
(Grams of ROC per Liter of Coatings
Less Water and Exempt Organic Compounds)

Coating Category	Effective Dates	
	11/10/99	11/1/2000
Antifoulant Coatings		
Aluminum Substrates	580	
Other Substrates	400	
Clear Wood Finishes		
Marine Sealers	550	
Marine Varnishes	490	
Finish Primer(One-Component)	420	
Finish Primer(Two-Component)	600	420
High Build Primer Surfacer	340	
Marine Deck Sealant Primer	760	
Pretreatment Wash Primer	780	
Topcoats (One-Component)	490	
Topcoats (Two-Component)	650	
Other Coatings	420	

2. Prohibition of Sale: Except as provided in Subsections C.3 or C.4, no person shall supply, sell, or offer for sale any pleasure craft coating which, at the time of sale, exceeds the ROC limits in Subsection B.1. In the case of any pleasure craft coating sold, offered for sale, or solicited for use, this sales prohibition shall only apply where it is designated anywhere on the container by any sticker or label affixed thereto, or where it is indicated in any sales or advertising literature, that the coating may be used as, or is suitable for use as, a pleasure craft coating.

3. Transfer Efficiency: No person shall apply any coating to an entire vessel or their exterior parts and components unless one of the following methods is properly used:

a. Hand application methods

b. High-Volume, Low-Pressure (HVLP) application

c. Any other coating application method which has been demonstrated to be capable of achieving a transfer efficiency of at least 65 percent.

4. Surface Preparation: No person shall use ROC-containing materials which have more than 200 grams of ROC per liter of material for surface preparation.

5. Storage of ROC-Containing Materials: All ROC-containing materials shall be stored in nonabsorbent, nonleaking containers, which shall be closed except when adding or removing materials.

6. Coating Compliance Statement Requirement: The manufacturer of any pleasure craft coating subject to this rule shall designate on the coating container or on separate data sheets the maximum volatile organic compound (VOC) content of the coating, as supplied. The VOC content shall be expressed as grams per liter of coating (less water and less exempt organic compounds).

7. Liquid Cleaning Material Compliance Statement: The manufacturer of liquid cleaning materials subject to this rule shall designate on product labels or data sheets the VOC content of cleaning materials as supplied. This designation on data sheets shall include recommendations regarding mixing with any other materials, and express the cleaning material VOC content when used in accordance with the manufacturer's recommendations. All letters and numbers used to designate ROC or VOC content on product labels shall be visible and legible.

8. Cleanup and Spray Gun Cleaning Solvents (Effective July 8, 2002): No person shall use methylene chloride as a cleanup solvent or spray gun cleaning solvent. No person shall use an ROC-containing material for cleanup unless:

a. An enclosed gun washer or "low emission spray gun cleaner," which has been approved in writing by the APCO, is properly used for spray equipment cleaning, and

b. The ROC composite partial pressure of the solvent used for cleanup, including spray equipment, is less than 45 mm Hg at temperature of 20^{o}C.

C. Exemptions

1. The provisions of this rule shall not apply to aerosol coating products subject to California Code of Regulations, Title 17, Article 3, Aerosol Coating Products.

2. The provisions of Subsection B.3, Transfer Efficiency, shall not apply to the application of any topcoat above the vessel water line.

3. The sales prohibition in Subsection B.2 shall not apply to any supplier or seller of any pleasure craft coating that is shipped outside of the District for use outside the District.

4. The sales prohibition in Subsection B.2 shall not apply to any manufacturer of any pleasure craft coating if the manufacturer has provided an accurate compliance statement and if:

1) The pleasure craft coating was not sold directly to a user or a sales outlet located in the District, or

2) The pleasure craft coating was sold to an independent distributor that is not a subsidiary of, or under the direct control of the manufacturer.

5. The provisions of Subsection B.4, Surface Preparation, shall not apply to the surface preparation of fiberglass substrates.

D. Recordkeeping

Any person subject to both this rule and Rule 10, Permits Required, shall:

1. Maintain a current file of each coating, catalyst, reducer in use and in storage. This file shall include a data sheet or material list giving material name, manufacturer identification, specific mixing instructions, and VOC content as applied.

2. Maintain a current file of each solvent in use and in storage. This file shall include a data sheet or material list giving material name, manufacturer identification, VOC content, and if required, ROC composite partial pressure.

3. Maintain daily records of the volume of each coating, reducer, and cleanup solvent used. Any person that uses only complying materials may maintain these records on a monthly basis instead of a daily basis.

4. All records shall be retained for at least two (2) years from the date of each entry and shall be available to District personnel upon request.

E. Test Methods

1. The ROC and solids content of all coatings and cleaning solvents shall be determined using EPA Reference Method 24 (40 CFR Part 60, Appendix A).

2. Exempt organic compounds shall be determined using ASTM D4457-85.

3. Transfer Efficiency shall be determined in accordance with the South Coast Air Quality Management District method entitled "Spray Equipment Transfer Efficiency Test Procedure for Equipment Users" or a method which satisfies all of the following requirements:

a. Is modeled after the test method described in the EPA document (EPA/600/2-88/-26b) "Development of Proposed Standard Test Method for Spray Painting Transfer Efficiency."

b. Simulate the transfer efficiency achieved during the actual operations.

c. Has received written approval by the APCO.

4. The measurement of acid content and solid content of pretreatment wash primers shall be done in accordance with ASTM Method D 1613-85 and D 2369-93, respectively.

5. ROC composite pressure of a solvent shall be calculated using a widely accepted published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company, CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985). The true vapor pressure of a component in a solvent mix may be determined by ASTM Method D2879-86. The ROC composite pressure of a solvent mix consisting entirely of ROC may be determined by ASTM Method D2879-86.

6. The active and passive solvent losses from spray gun cleaning systems shall be determined using South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" dated October 3, 1989. The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105 mm Hg at 20 ^{O}C. The minimum test temperature shall be 15 ^{O}C.

F. Violations

Failure to comply with any provision of this rule, including the requirement to maintain records or supply VOC or ROC information, shall constitute a violation of this rule.

G. Definitions:

1. "Active Solvent Losses": The emissions during all steps of a spray gun equipment cleaning operation, expressed in units of grams of solvent loss per cleaning cycle.

2. "Aerosol Coating Product": A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand held application, or for use in specialized equipment for ground traffic/marking applications.

3. "Antifoulant Coating": Any coating applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms and registered with the Environmental Protection Agency (EPA) as a pesticide.

4. "Cleanup": The removal of uncured coating from any surface.

5. Clear Wood Finish: Any clear or semi-transparent topcoat applied to wood substrates to provide a transparent or translucent film.

6. "Coating": A material that is applied to a surface and forms a film in order to beautify and/or protect such surface.

7. "Commercial Boatyard": Any commercial boat building or maintenance facility where vessels are built or refinished. These facilities are identified by the Standard Industrial

Classification (SIC) Code 3732, Boat Building and Repair, or 4493, Marinas.

8. "Exempt Organic Compounds": As defined in Rule 2, Definitions, of these Rules.

9. "Finish Primer(One-Component)": Any coating applied prior to the application of a topcoat for the purpose of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections. A finish primer shall have a wet film thickness of less than 10 mils as determined by ASTM Method D 1212-85. A one-component finish primer is any finish primer where the coating resin cures without the need for an added catalyst or converter. Addition of reducers or other additives to a finish primer shall not change the coating's status as a one-component finish primer category.

10. "Finish Primer(Two-Component)": Any coating applied prior to the application of a topcoat for the purpose of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections. A finish primer shall have a wet film thickness of less than 10 mils as determined by ASTM Method D 1212-85. A two-component finish primer is any finish primer where the coating resin cures only when a catalyst or converter is added.

11. "Grams of ROC per liter of Coating, less water and exempt organic compounds": The weight of ROC per combined volume of ROC and coating solids calculated using the following equation:

$$ROC = \frac{Ws - Ww - Wes}{Vm - Vw - Ves}$$

where Ws = Weight of volatile compounds (grams)
Ww = Weight of water (grams)
Wes = Weight of exempt organic compounds (grams)
Vm = Volume of material (liters)
Vw = Volume of water (liters)
Ves = Volume of exempt organic compounds (liters)
ROC = Grams of ROC per Liter of Coating Less Water and Exempt Organic Compounds (g/l)

12. "Grams of ROC per Liter of Material": The weight of ROC per volume of material shall be calculated using the following equation:

$$ROC = \frac{Ws - Ww - Wes}{Vm}$$

where Ws = Weight of volatile compounds (grams)
Ww = Weight of water (grams)
Wes = Weight of exempt organic compounds (grams)
Vm = Volume of material (liters)
ROC = Grams of ROC per liter of material (g/l)

13. "Gun Washer": Electrically or pneumatically operated system that is designed to clean spray application equipment while enclosed. A gun washer may also be considered a gun cleaning system that

consists of spraying solvent into an enclosed container using a snug fitting.

14. "Hand Application Methods": The application of coatings by nonmechanical hand-held equipment including but not limited to paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags, and sponges.

15. "High-Build Primer/Surfacer": A coating applied prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, or a moisture barrier, or promoting a uniform surface necessary for filling in surface imperfections. A high-build primer/surfacer shall have a wet-film thickness of 10 mils or more as determined by ASTM Method D1212-85.

16. "High-Volume, Low-Pressure Application (HVLP)": Spray equipment which uses a high volume of air delivered at pressures between 0.1 and 10 psig measured at the spray gun air cap and which operates at a maximum fluid delivery pressure of 50 psig.

17. "Low emission spray gun cleaner": Any properly used spray equipment cleanup device which has passive solvent losses of no more than 0.6 grams per hour and has active solvent losses of no more than 15 grams per operating cycle as defined by the test method in Subsection E.6.

18. "Low Solid Coating": Any coating that contains 120 grams or less of solids per liter of material.

19. "Marine Coating": Any coating intended by the manufacturer to be applied to marine or fresh water vessels.

20. "Marine Deck Sealant Primer": Any sealant primer intended by the manufacturer to be applied to wooden marine decks. A sealant primer is any product intended by the manufacturer to be applied to a substrate, prior to the application of a sealant, to enhance the bonding surface.

21. "Marine Varnish": A clear wood topcoat with various resins that dry by chemical reaction on exposure to air and is formulated for and intended by the manufacturer to be applied to pleasure craft or components, thereof.

22. "Marine Sealer": A coating formulated for and intended by the manufacturer to seal wood that is part of a pleasure craft. The purpose of the sealer is to prevent subsequent coatings from being absorbed into the wood.

23. "Operating Cycle": An operating cycle consists of all steps carried out during a cleaning operation.

24. "Passive Solvent Losses": The passive solvent losses are the emissions from spray gun cleaning equipment when the equipment sits idle between cleaning cycles and are a result of natural evaporation from the equipment.

25. "Pleasure Craft": Any vessel that is manufactured or operated primarily for recreational purposes. A pleasure craft may be chartered, rented or leased.

26. "Pleasure Craft Coating": Any marine coating that is applied to or intended by the manufacturer to be applied to pleasure craft.

27. "Pretreatment Wash Primer": Any coating which contains at least 1/2-percent acids, by weight, to provide surface etching and contains no more than 12 percent solids, by weight.

28. "Reactive Organic Compounds (ROC)": As defined in Rule 2, Definitions, of these Rules. The term "volatile organic compound"(VOC) is equivalent to ROC.

29. ROC Composite Partial Pressure": The sum of the partial pressures of the compounds defined as ROCs. ROC composite partial pressure is calculated as follows:

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

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

30. "Substrate Surface Cleaning": Cleaning of a substrate to remove dirt, oils, and other contaminants. Substrate surface cleaning is typically done prior to the application of surface coatings, adhesive bonding materials, or sealants. Stripping of cured paints or adhesives is not considered to be substrate surface cleaning.

31. "Topcoat (One Component)": Any coating applied over a primer for purposes such as appearance, identification, or protection. A one-component topcoat is any topcoat where the coating resin cures without the need for an added catalyst or converter. Addition of reducers or other additives to a topcoat shall not change the coating’s status as a one-component topcoat category.

32. "Topcoat (Two Component)": Any coating applied over a primer for purposes such as appearance, identification, or protection. A two-component topcoat is any topcoat where the coating resin cures only after adding a catalyst or converter.

33. "Uncured Coating": An uncured coating is any coating that is not dry to the touch.

34. "Volatile Organic Compound" (VOC): Shall have the same meaning as Reactive Organic Compounds (ROC) as defined in Rule 2 of these Rules.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.25 - RESTAURANT COOKING OPERATIONS
(Adopted 10/12/04)

A. Applicability

This rule applies to the owner or operator of the following restaurant cooking equipment:

1. Conveyorized charbroilers.

B. Requirements

1. The owner or operator of a conveyorized charbroiler shall reduce both reactive organic compound emissions and particulate matter emissions by at least eighty three (83) percent using an emission control device certified pursuant to Section E of this rule.

2. Any emission control device shall be operated, cleaned, and maintained in accordance with the written specifications of the manufacturer.

C. Exemptions

A conveyorized charbroiler placed into service before October 12, 2005, shall be exempt from Subsections B.1 of this rule if the amount of meat cooked on the charbroiler is less than 875 pounds per week.

D. Recordkeeping

1. The owner or operator of a conveyorized charbroiler equipped with an emission control device shall maintain the following:

a) Records of the date of installation and/or replacement of the emission control device, and

b) Records of any maintenance performed on the emission control device, including date, time, and a brief description. Maintenance shall include, but is not limited to, preventative maintenance, breakdown repair, and cleaning.

2. The owner or operator of a conveyorized charbroiler exempt from provisions of this rule pursuant to Section C above shall maintain weekly records of the pounds of meat charbroiled and monthly records of the pounds of meat purchased.

3. All records shall be retained on the restaurant premises for a period of not less than two (2) years and shall be made available to the APCO upon request.

E. Certification and Testing Requirements

1. Catalytic oxidizers for conveyorized charbroilers installed pursuant to Subsections B.1 of this rule shall be certified prior to installation. Certification requirements are specified in the following South Coast Air Quality Management District document: "Protocol - Determination of Particulate and Volatile Organic Compound Emissions from Restaurant Operations," dated 11/14/97.

2. Other emission control devices for conveyorized charbroilers shall be tested using the protocol specified in Subsection E.1.

F. Definitions

1. "Catalytic oxidizer:" A device composed of a noble metal alloy substrate through which process gasses pass at an elevated temperature. The substrate promotes the oxidation of particulate matter and reactive organic compounds into carbon dioxide and water without itself undergoing a net chemical change.

2. "Charbroiler:" A cooking device composed of a grated grill and a heat source. Heat is transferred to meat resting on the grated grill either directly or indirectly by way of a radiant surface. Types of charbroilers include, but are not limited to grill charbroilers, flamebroilers, and direct-fired barbecues.

3. "Conveyorized charbroiler:" A charbroiler designed to move meat on a grated grill mechanically through the device.

4. "Meat:" Beef, lamb, pork, poultry, fish, or seafood, uncooked.

5. "Restaurant:" A stationary, commercial eating establishment that prepares food for human consumption.

G. Increments Of Progress

1. All non-exempt conveyorized charbroilers shall meet the requirements of Subsection B.1 by October 12, 2005.

2. If the addition of emission control equipment is required to comply with Subsection B.1, a Permit To Operate application shall be filed prior to purchase of the emission control equipment.

1/24/95

Rule 74.26 Crude Oil Storage Tank Degassing Operations (Adopted 11/8/94)

A. Applicability

Effective 3/31/95, this rule shall apply to:

1. Any aboveground crude oil or produced water storage tank that is equipped with a vapor recovery system, and:

   a. Has a storage capacity of 2,000 barrels and stores a liquid having a modified Reid vapor pressure (mRVP) of 3.4 pounds per square inch (psi) absolute or greater, or

   b. Has a storage capacity greater than 2,000 barrels.

2. Any external or internal floating roof crude oil tank that has a vapor space of 2,000 barrels or more when the tank's roof is resting on the tank's inner roof supports.

B. Requirements

1. No person shall conduct or allow the degassing of any storage tank subject to this rule, unless the emissions are controlled by:

   a. Liquid displacement into a vapor recovery system, flare, or fuel gas system, or

   b. An air pollution control device that has a vapor destruction and removal efficiency of at least 95 percent until the vapor concentration in:

      (1) Aboveground crude oil or produced water tanks equipped with a vapor recovery system, is less than 10 percent of the tank's initial vapor concentration determined immediately prior to the tank degassing, or less than 10,000 ppmv, measured as methane, or

      (2) Floating roof tanks, is less than 10,000 ppmv, measured as methane.

   Fugitive emissions that do not qualify as a leak shall be allowed around tank openings such as a manhole during a tank degassing operation performed in compliance with this rule.

2. Any receiving vessel used during a tank cleaning operation shall either be bottom loaded or shall be loaded by submerged fill pipe. Any vapors emitted from such vessels during a tank degassing operation shall be controlled pursuant to Subsection B.1.b.

3. Except during an emergency, the Air Pollution Control Officer (APCO) shall be notified verbally or in writing at least 48 hours prior to starting any tank degassing operation. Such notification shall include an identification of the tank(s) to be degassed and the air pollution control method to be employed. If a tank

degassing operation was required due to an emergency, the APCO shall be notified as soon as reasonably possible but no later than four hours after completion of the operation.

C. Exemptions

1. The provisions of this rule shall not apply to any tank exempt from vapor recovery requirements pursuant to Subsections D.1, D.3, and D.4 in Rule 71.1 and Subsections G.1.a, G.1.b, and G.2 in Rule 71.2.

2. The provisions of Section B of this rule shall not apply to in-service tanks undergoing maintenance, including but not limited to repair of regulators, fittings, deck components, hatches, valves, flame arrestors, or compressors, or any leaks found pursuant to the operator inspection requirements in Rule 74.10, provided that (1) the operation will take no longer than 24 hours to complete and (2) the maintenance operation does not require the complete draining of product from the tank.

3. This rule shall not apply to vessels rated and operated to contain normal working pressures of at least 15 psi guage without vapor loss to the atmosphere.

D. Recordkeeping:

1. Any person using an air pollution control device to comply with this rule shall record:

   a. The vapor concentration in parts per million (ppm) and gas flow rate in cubic feet per minute entering and exiting the device (except for a flare) upon beginning use of the device and every thirty minutes thereafter. The instrument used to measure vapor concentration shall meet the specifications of EPA Method 21, and

   b. The tank's vapor concentrations determined in accordance with Subsection E.3, and

   c. If a refrigerated condenser is used, the condenser temperature in degrees fahrenheit upon beginning use of the condenser and every thirty minutes thereafter.

2. All records shall be maintained for at least two years from the date of each entry and shall be submitted to the APCO upon request.

3. Any person claiming an exemption for a storage tank based on mRVP shall provide records that demonstrate that the liquid stored in the tank has a mRVP less than 3.4 psi absolute.

E. Test Methods

1. The Reid vapor pressure shall be determined by ASTM Method D 323-82.

2. The methods used for determining the vapor destruction or removal efficiency of an air pollution control device shall be:

   a. EPA Method 2A for measuring the vapor flow through pipes.

   b. EPA Method 25A for measuring the vapor concentration entering and exiting the device.

3. Compliance with Subsection B.1.b, shall require that the tank vapor concentration remain at or below the specified level for at least one hour as demonstrated by measuring the vapor concentration at least four times at 15-minute intervals. The monitoring instrument used to measure the vapor concentration shall meet the specifications of EPA Method 21. The probe inlet of the monitoring instrument shall be located one foot above the bottom of the tank or one foot above the surface of any sludge material on the bottom of the tank. For upright, cylindrical aboveground tanks, the probe inlet shall be (1) located at least 2 feet away from the inner surface of the tank wall and (2) if samples are withdrawn from a manhole, inserted in an opening of no more than one inch diameter on a flexible or inflexible material that is impermeable to reactive organic compound (ROC) vapors, secured over the manhole.

F. Definitions:

1. "Aboveground tank": Any tank, including pipes and ancillary connections used for the storage of organic liquids, that is more than 50 percent above the surface of the ground.

2. "Air pollution control device": A device such as a thermal or catalytic incinerator, a carbon adsorber, a condenser, or any such combination that functions by destroying or recovering a stream of ROC vapors such that only a small fraction of the ROCs that enter the device are emitted to the atmosphere. A flare shall be considered to meet a vapor destruction and removal efficiency of 95 percent. Air pollution control device does not include a vapor recovery system.

3. "Bottom loaded": A receiving vessel is bottom loaded when the liquid transfer and vapor return lines have separate, independent, and dedicated attachments on the truck or tank, when the inlet is flush with the tank bottom, and when the truck and trailer hatches remain closed during liquid transfer.

4. "Crude oil": Any naturally-occurring, unrefined petroleum liquid.

5. "Degassing": The removal of organic vapors from a stationary storage tank for the purpose of cleaning, removing the tank,

cleaning the tank's interior, or making repairs to the tank that would require the complete removal of product from the tank.

6. "Emergency": An unplanned and unexpected event that, if not immediately attended to, presents a safety or public health hazard or an unreasonable financial burden.

7. "External Floating Roof": A floating roof, consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and is properly installed, properly maintained and in good operating order. External floating roof seals comply with the criteria specified in Section D and Section E in Rule 71.2.

8. "Internal Floating Roof": A fixed roof tank with an internal-floating-type cover consisting of a pan, pontoon, or double-deck that rests on the liquid surface, which is properly installed, properly maintained in good operating order and with internal floating roof seals that comply with the criteria specified in Section D and Section F in Rule 71.2.

9. "Leak":

   a. A leak exists when a reading in excess of 10,000 ppm, as methane, above background, is obtained using an appropriate portable hydrocarbon analyzer and when sampling is performed according to the procedures specified in EPA Method 21 - Appendix A 40 CFR Part 60, or

   b. A leak exists when the dripping of liquid containing reactive organic compounds at a rate of more than three (3) drops per minute is observed.

   A "leak" is not a gaseous emission from pressure relief devices on tanks when the process pressure exceeds the limit specified for the device.

10. "Liquid Displacement": The removal of ROC vapors from within a storage tank drained of liquid product by introducing into the tank a liquid having an ROC modified Reid vapor pressure (mRVP) of less than 0.5 psi absolute until at least 90 percent of the tank's vapor volume has been displaced, with the mRVP determined using American Standard for Testing Materials (ASTM) D 323-82 conducted at 68°F.

11. "Modified Reid Vapor Pressure" (mRVP): the Reid vapor pressure measured at 68°F using ASTM D 323-82.

12. "Petroleum liquid": Crude oil or any crude oil distillate such as, but not limited to, fuels used in motorized vehicles or engines.

13. "Produced Water": Water associated with the production, gathering, separation, and processing of crude oil.

14. "Receiving vessel": A vessel used to receive liquids or sludge material removed from an ROC liquid storage tank during a tank degassing operation.

15. "Sludge material": Solid or semisolid material such as basic sediment that deposits on the bottom of crude oil or produced water storage tanks. Sludge material is not considered the liquid product in tanks that is regularly transferred, used, or sold as a part of normal business operations.

16. "Submerged fill pipe": Any fill pipe or discharge nozzle which meets any one of the following conditions:

    a. The discharge opening is entirely submerged when the liquid level is six inches above the bottom of the container.

    b. When applied to a container that is loaded from the side, the discharge opening is entirely submerged when the liquid level is 18 inches above the bottom of the container.

    c. When applied to a container that is bottom loaded, the discharge opening is entirely submerged when the liquid level is six inches above the bottom of the container.

17. "Tank": A container, constructed primarily of nonearthen materials, used for the purpose of storing or holding crude oil or produced water.

18. "Tank cleaning": The removal of sludge material from a tank either to restore the tank to its original intended volume or to abandon or remove the tank from service.

19. "Vapor": All hydrocarbon compounds that are not in either a liquid or solid state.

20. "Vapor destruction and removal efficiency": The percentage by weight of ROC that enters an air pollution control device during a tank degassing operation that is not emitted to the atmosphere.

21. "Vapor recovery system": Any reactive organic compound vapor control system which is designed to prevent the release or venting of reactive organic compound gases to the atmosphere under normal operating conditions. For the purpose of this definition, a vapor recovery system meets the specification of Subsection C.3 in Rule 71.2 or is installed pursuant to Rule 71.1.

1/24/95

Rule 74.27 Gasoline and ROC Liquid Storage Tank Degassing Operations (Adopted 11/8/94)

A. Applicability

Effective 3/31/95, this rule shall apply to:

1. Any gasoline storage tank that has a storage capacity greater than 5,000 gallons, and

2. Any storage tank that has a storage capacity greater than 5,000 gallons that stores a reactive organic compound (ROC) liquid, excluding petroleum liquids, having a true vapor pressure equal to or greater than that determined by:

$TVP_{68^\circ F}$ (psia) = 2.3 + 23,000/V, where V is the volume of the tank in gallons.

B. Requirements

1. No person shall conduct or allow the degassing of any storage tank subject to this rule, unless the emissions are controlled by:

a. Liquid displacement into a vapor recovery system, flare, or fuel gas system, or

b. An air pollution control device that has a destruction and removal efficiency of at least 95 percent until the vapor concentration in the tank is less than 10,000 ppmv, measured as methane.

Fugitive emissions that do not qualify as a leak shall be allowed around tank openings such as a manhole during a tank degassing operation performed in compliance with this rule.

2. Any receiving vessel used during a tank cleaning operation shall either be bottom loaded or shall be loaded by submerged fill pipe. Any vapors emitted from such vessels during a tank degassing operation shall be controlled pursuant to Subsection B.1.b.

3. Except during an emergency, the Air Pollution Control Officer (APCO) shall be notified verbally or in writing at least 48 hours prior to starting any tank degassing operation. Such notification shall include an identification of the tank(s) to be degassed and the air pollution control method to be employed. If a tank degassing operation was required due to an emergency, the APCO shall be notified as soon as reasonably possible but no later than four hours after completion of the operation.

C. Exemptions

1. The provisions of Section B of this rule shall not apply to in-service tanks undergoing maintenance, including but not limited to repair of regulators, fittings, deck components, hatches, valves,

flame arrestors, or compressors, provided that (1) the operation will take no longer than 24 hours to complete and (2) the maintenance operation does not require the complete draining of product from the tank.

D. Recordkeeping:

1. Any person using an air pollution control device to comply with this rule shall record:

   a. The vapor concentration in parts per million (ppm) and gas flow rate in cubic feet per minute entering and exiting the device (except for a flare) upon beginning use of the device and every thirty minutes thereafter. The instrument used to measure vapor concentration shall meet the specifications of EPA Method 21, and

   b. The tank's vapor concentrations determined in accordance with Subsection E.3, and

   c. If a refrigerated condenser is used, the condenser temperature in degrees fahrenheit upon beginning use of the condenser and every thirty minutes thereafter.

2. All records shall be maintained for at least two years from the date of each entry and shall be submitted to the APCO upon request.

E. Test Methods

1. The true vapor pressure shall be determined by quantifying the amount of each organic compound using gas chromatographic analysis (ASTM E260-91) or by using product formulation data, and by summing the partial pressures of each compound at 20°C. For the purpose of this calculation, Raoult's Law applies to a blend. The vapor pressure of each single component compound may be determined from ASTM Method D2879-86 or may be obtained from a published source approved by the APCO, such as the sources referenced in 40 CFR 52.741.

2. The methods used for determining the vapor destruction or removal efficiency of an air pollution control device shall be:

   a. EPA Method 2A for measuring the vapor flow through pipes.

   b. EPA Method 25A for measuring the vapor concentration entering and exiting the device.

3. Compliance with Subsection B.1.b, shall require that the tank vapor concentration remain at or below 10,000 ppmv for at least one hour as demonstrated by measuring the vapor concentration at least four times at 15-minute intervals. The monitoring instrument used to measure the vapor concentration shall meet the specifications of EPA Method 21. The probe inlet of the

monitoring instrument shall be located one foot above the bottom of the tank or one foot above the surface of any sludge material on the bottom of the tank. For upright, cylindrical aboveground tanks, the probe inlet shall be (1) located at least 2 feet away from the inner surface of the tank wall and (2) if samples are withdrawn from a manhole, inserted in an opening of no more than one inch diameter on a flexible or inflexible material that is impermeable to ROC vapors and secured over the manhole.

F. Definitions:

1. "Aboveground tank": Any tank, including pipes and ancillary connections used for the storage of organic liquids, that is more than 50 percent above the surface of the ground.

2. "Air pollution control device": A device such as a thermal or catalytic incinerator, a carbon adsorber, a condenser, or any such combination that functions by destroying or recovering a stream of ROC vapors such that only a small fraction of the ROC mass that enters the device is emitted to the atmosphere. A flare shall be considered to meet a destruction and removal efficiency of 95 percent. Air pollution control device does not include a vapor recovery system.

3. "Bottom loaded": A receiving vessel is bottom loaded when the liquid transfer and vapor return lines have separate, independent, and dedicated attachments on the truck or tank, when the inlet is flush with the tank bottom, and when the truck and trailer hatches remain closed during liquid transfer.

4. "Degassing": The removal of organic vapors from a stationary storage tank for the purpose of removing the tank, cleaning the tank's interior, or making repairs to the tank that would require the complete removal of product from the tank.

5. "Emergency": An unplanned and unexpected event that, if not immediately attended to, presents a safety or public health hazard or an unreasonable financial burden.

6. "Gasoline": Any petroleum distillate having a Reid vapor pressure of 4.0 pounds per square inch or greater, which is sold or intended for sale for use in motor vehicles or engines and is commonly or commercially known or sold as gasoline.

7. "Leak":

   a. A leak exists when a reading in excess of 10,000 ppm, as methane, above background, is obtained using an appropriate portable hydrocarbon analyzer and when sampling is performed according to the procedures specified in EPA Method 21 - Appendix A 40 CFR Part 60, or

b. A leak exists when the dripping of liquid containing reactive organic compounds at a rate of more than three (3) drops per minute is observed.

A "leak" is not a gaseous emission from pressure relief devices on tanks when the process pressure exceeds the limit specified for the device.

8. "Liquid Displacement": The removal of ROC vapors from within a storage tank drained of liquid product by introducing into the tank a liquid having an ROC modified Reid vapor pressure (mRVP) of less than 0.5 psia until at least 90 percent of the tank's vapor volume has been displaced, with the mRVP determined using American Standard for Testing Materials (ASTM) D 323-82 conducted at 68°F.

9. "Modified Reid Vapor Pressure" (mRVP): the Reid vapor pressure measured at 70°F using ASTM D 323-82.

10. "Reactive organic compound (ROC) liquid": Any reactive organic compound as defined in Rule 2, Definitions, of these rules.

11. "Receiving vessel": A vessel used to receive liquids or sludge material removed from an ROC liquid storage tank during a tank degassing operation.

12. "Sludge material": Solid or semisolid material such as basic sediment that deposits on the bottom of storage tanks subject to this rule. Sludge material is not considered the liquid product in tanks that is regularly transferred, used, or sold as a part of normal business operations.

13. "Submerged fill pipe": Any fill pipe or discharge nozzle which meets any one of the following conditions:

a. The discharge opening is entirely submerged when the liquid level is six inches above the bottom of the container.

b. When applied to a container that is loaded from the side, the discharge opening is entirely submerged when the liquid level is 18 inches above the bottom of the container.

c. When applied to a container that is bottom loaded, the discharge opening is entirely submerged when the liquid level is six inches above the bottom of the container.

14. "Tank": A container, constructed primarily of nonearthen materials, used for the purpose of storing or holding gasoline or ROC liquids.

15. "Tank cleaning": The removal of sludge material from a tank either to restore the tank to its original intended volume or to abandon or remove the tank from service.

16. "Vapor": All hydrocarbon compounds that are not in either a liquid or solid state.

17. "Vapor destruction and removal efficiency": The percentage by weight of ROC that enters an air pollution control device during a tank degassing operation that is not emitted to the atmosphere.

18. "Vapor recovery system": Any reactive organic compound vapor control system which is designed to prevent the release or venting of reactive organic compound gases to the atmosphere under normal operating conditions. For the purpose of this definition, a vapor recovery system meets the specification of Subsection C.3 in Rule 71.2 or is installed pursuant to Rule 71.1.

7/13/94

Rule 74.28 Asphalt Roofing Operations (Adopted 5/10/94)

A. Applicability

Effective 1/1/95, this rule shall apply to any person who operates equipment used for melting, heating, or holding asphalt or coal tar pitch.

B. Requirements

1. No person shall operate or use equipment subject to this rule for the on-site construction, installation, or repair of roofs unless the vapors from such equipment are contained by one or more close fitting lids. The lid(s) shall not be opened except for loading the kettle with solid roofing material or unless the material in the roofing kettle is less than 150°F.

2. The temperature of the material inside a roofing kettle shall be no greater than:

Asphalt:	500°F
Coal tar pitch:	400°F

3. During a roofing kettle draining operation, the ROC vapors from the kettle shall be contained by a close fitting lid. Within 2 minutes after the draining operation has been completed, the vessel that received the hot roofing material shall be covered with a close fitting lid or capped to prevent the release of visible smoke from the vessel.

4. Any kettle vent shall remain closed except during a pressure release caused by flashing of the roofing material.

C. Test Methods

The temperature limits specified in this rule shall be measured with a thermometer and shall apply to any location within the kettle where asphalt or coal tar pitch exists.

D. Definitions

1. "Asphalt": A brownish-black solid or semisolid mixture of bitumens obtained from native deposits or as a petroleum byproduct and used in roofing.

2. "Close fitting lid": An ROC impermeable cover that fits securely over a roofing kettle or other container so that no gap greater than 3/8 inch between the kettle body and lid exists.

3. "Coal tar": A viscous black liquid obtained by the destructive distillation of coal and used as a raw material for dyes, drugs, and organic chemicals and for waterproofing, paints, roofing, and insulation materials.

4. "Coal tar pitch": A thick, dark, and sticky substance obtained from the distillation residue of coal tar.

5. "Gap": An opening between a kettle body and the edges of the kettle lid where ROC vapors can be emitted to the atmosphere.

6. "Roofing kettle": A device used to heat and melt asphalt or coal tar pitch so that the asphalt or coal tar pitch can be applied onto a rooftop to provide a protective coating.

7. "Roof transfer pipe": A pipe or hose that connects to a roofing kettle's pump outlet and serves to convey hot roofing material from a kettle to a roof.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.29 - SOIL DECONTAMINATION OPERATIONS
(Adopted 10/10/95, Revised 1/8/02, Revised 4/08/08 Effective July 1, 2008)

A. Applicability

This rule is applicable to soils that contain gasoline, diesel fuel, or jet fuel.

B. Requirements

1. No person shall cause or allow the aeration of soil that contains gasoline, diesel fuel, or jet fuel, if such aeration:

   a. Emits reactive organic compounds (ROC), as measured by a certified organic vapor analyzer, in excess of 50 parts per million by volume (ppmv) above background, as hexane, except nonrepeatable momentary readings. In determining compliance, a portion of soil measuring three inches in depth and no less than six inches in diameter shall be removed from the soil surface and the probe inlet shall be placed near the center of the resulting hole, level with the soil surface surrounding the hole; or

   b. Causes a nuisance, as defined in the California Health and Safety Code Section 41700 and Rule 51, Nuisance.

   Offsite aeration is prohibited.

2. No person shall excavate an underground storage tank and/or transfer piping currently or previously used to store an applicable compound, or excavate or grade soil containing an applicable compound, unless ROC emissions are monitored with a certified organic vapor analyzer at least once every 15 minutes during the excavation period commencing at the beginning of excavation or grading. Soil with emission measurements in excess of 50 parts per million by volume (ppmv), as hexane, a shall be considered contaminated.

   During excavation, all inactive exposed contaminated soil surfaces shall be treated with a vapor suppressant or covered with continuous heavy duty plastic sheeting (4 mil or greater) or other covering to minimize emissions of ROC to the atmosphere. Covering shall be in good condition, overlapped at the seams, and securely anchored to minimize headspace where vapors may accumulate.

3. No person shall operate a vapor extraction, bioremediation, or bioventing system unless: ROC emissions, as measured by a certified organic vapor analyzer, are less than or equal to 100 ppmv, as methane. If the total system flow rate is greater

than 300 standard cubic feet per minute (scfm) and the system would emit ROC at a rate greater than 0.08 lb/hour, a Health Risk Assessment shall be required.

4. No person shall operate an in situ soil bioventing or bioremediation system unless ROC emissions, as measured by a certified organic vapor analyzer, are less than or equal to 50 ppmv, as hexane, except nonrepeatable momentary readings, when measured at a distance of three inches from the soil surface.

5. The owner or operator of any applicable underground storage tank shall notify the District Compliance Division at least 24 hours prior to beginning the excavation of said storage tank and/or transfer piping.

6. Contaminated soil in active storage piles shall be kept visibly moist by water spray, treated with a vapor suppressant, or covered with continuous heavy duty plastic sheeting (4 mil or greater) or other covering to minimize emissions of ROC to the atmosphere. Covering shall be in good condition, overlapped at the seams, and securely anchored to minimize headspace where vapors may accumulate. For any active storage pile, the surface area not covered by plastic sheeting or other covering shall not exceed 6,000 square feet.

7. Contaminated soil in inactive storage piles shall be with covered with continuous heavy duty plastic sheeting (4 mil or greater) or other covering to minimize emissions to the atmosphere. The covering shall be in good condition, overlapped at the seams, and securely anchored to minimize headspace where vapors may accumulate.

8. If not removed within 30 days of excavation, on-site treatment to remove contamination from contaminated soil at an excavation or grading site shall be initiated. The treatment of contaminated soil shall be subject to all applicable District Rules and Regulations.

9. Trucks used to transport contaminated soil must meet the following requirements:

    a. The truck and trailer shall be tarped prior to leaving the site. Contaminated material shall not be visible beyond the tarp and shall not extend above the sides or rear of the truck or trailer; and

    b. The exterior of the truck, trailer and tires shall be cleaned prior to leaving the site.

C. Exemptions

1. The provisions of this rule shall not apply to soil that was contaminated by a leaking storage tank used in an agricultural operation engaged in the growing of crops or the raising of fowl or animals.

2. The requirements of Subsection B.1.a shall not apply to:

   a. Soil excavation activities necessary for the removal of in situ soil such as in the removal of an underground storage tank, pipe or piping system, provided the exposed soil is covered as specified in Subsection B.7 while inactive; or

   b. Soil moving, loading, or transport activities performed for the sole purpose of complying with local, state, or federal laws, provided the soil is handled in accordance with such laws; or

   c. Soil excavation or handling occurring as a result of an emergency as declared by an authorized health officer, agricultural commissioner, fire protection officer, or other authorized agency officer. Whenever possible, the APCO shall be notified prior to commencing such excavation; or

   d. Any soil aeration project involving less than 1 cubic yard; or

   e. Situations where the soil contamination resulted from a spill or release of less than five (5) gallons of diesel fuel, jet fuel, or gasoline; or

   f. Contaminated soil used as daily cover at permitted Class III Solid Waste Disposal Sites if such soils do not have a gasoline concentration exceeding 100 parts per million by weight (ppmw) or a diesel fuel concentration exceeding 1,000 ppmw as determined by the method specified in Subsection F.1.

D. Recordkeeping Requirements

For any soil aeration project subject to this rule, the records specified in Subsection D.1 shall be made available to the Air Pollution Control Officer upon request for at least two years after initial entry.

For any other soil decontamination project subject to this rule, the following information shall be made available to the Air Pollution Control Officer upon request for at least two years after initial entry.

1. All dates that soil was disturbed and the quantity of soil disturbed on each date.

2. Reasons for excavation or grading.

3. Cause of VOC soil contamination and history of the site.

4. Description of tanks or piping associated with the soil contamination.

5. Description of mitigation measures employed for dust, odors and ROC emissions.

6. Details of treatment and/or disposal of ROC contaminated soil, including the ultimate receptor.

7. Description of monitoring equipment and techniques.

8. All ROC emission measurements shall be recorded on a continuous permanent strip-chart or in a format approved by the Air Pollution Control Officer (APCO).

9. A map showing the facility layout, property line, and surrounding area up to 2500 feet away, and including any schools, residential areas or other sensitive receptors such as hospitals or locations where children or elderly people live or work.

E. Violations

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

F. Test Methods

1. The percent by weight of contaminant in soil samples shall be determined by EPA Method 8015B. Samples shall be introduced using Method 5035 (Purge and Trap) and shall be taken in accordance with the Los Angeles Regional Water Quality Control Board's guidelines for contaminated soil sampling. Standards shall be the same as the contaminant believed to be in the soil. If the soil is contaminated with methanol 85 (M85) the standard used shall be M85.

2. To determine if the 0.08 lb/hr threshold in Subsection B.3, will be exceeded, the emission rate (ER) shall be determined as:

$$ER = \frac{(MR)(ppmv)(16\ lb/lbmole)(60\ min/hour)}{(387\ scf/lbmole)(10^6)}$$

Where:

MR = Maximum rating of the system's fan or blower in scfm.

ppmv = Contaminant concentration in parts per million by volume, as methane, in the system's exhaust or vent as determined in a manner consistent Subsection F.3 and according to a monitoring schedule approved by the District.

3. The ROC concentration measurements required in Subsections B.1, B.2, B.3, and B.4 shall be made using an organic vapor analyzer certified according to the requirements of EPA Method 21. For stack measurements, the probe inlet of the analyzer shall be placed on the centerline of the exhaust or vent, upstream of the point where the exhaust gases meet the atmosphere.

G. Definitions

1. "Active": A worksite to which soil is currently being added or from which soil is currently being removed. Activity must occur within one hour to be current.

2. "Aeration": The exposure of excavated contaminated soil to the atmosphere without the use of air pollution control equipment or vapor extraction equipment.

3. "Bioremediation system": A system that uses endogenous or exogenous biological agents to degrade soil contaminants to less hazardous compounds. In bioremediation, microbial processes are controlled by factors such as soil pH, salinity, oxygen level, water content, and nutrient level.

4. "Bioventing system": A type of bioremediation system in which air or oxygen is supplied to the unsaturated zone of contaminated soil to stimulate aerobic biodegradation of soil contaminants. Bioventing systems are designed to provide only the necessary amount of oxygen for biodegradation while minimizing contaminant volatilization. Bioventing may be implemented by injecting air or oxygen through a screened well in the contaminated zone or withdrawing air through a screened well, thereby drawing air into the contaminated soil from the surrounding clean soil. Bioventing systems may or may not have a vent to the atmosphere.

5. "Certified organic vapor analyzer": An applicable instrument meeting the specifications and performance criteria in Section 6.0 of EPA Method 21.

6. "Contaminant": Diesel fuel, gasoline, or jet fuel.

7. "Contaminated": Emitting ROC in excess of 50 parts per million by volume (ppmv), as hexane.

8. "Daily Cover": Soil that is applied on a daily basis or less frequently as a covering over landfill waste.

9. "Diesel Fuel": A blend of petroleum called middle distillates (heavier than gasoline but lighter than lubrication oil) that may contain additional additives.

10. “Excavation”: The process of digging out and removing soil. Included is the digging out and removal of any material necessary to expose soil, such as asphalt or concrete.

11. "Gasoline": Any petroleum distillate having a Reid vapor pressure of 4.0 pounds per square inch or greater, which is sold or intended for sale for use in motor vehicles or engines and is commonly or commercially known or sold as gasoline. Under this definition, methanol 85 (M85) shall be considered gasoline.

12. “Grading”: The process of leveling off material to produce a smooth surface. Included is the removal of any material necessary to expose the contaminated soil, such as asphalt or concrete.

13. "Health Risk Assessment": For the purpose of this rule, a study conducted by the District to determine the potential for health risks caused by emissions from a proposed soil decontamination operation. The applicant is subject to fees pursuant to Rule 42 to recover the District's costs of conducting the assessment.

14. "Jet Fuel": A kerosene-based product having a maximum distillation temperature of 400 degrees Fahrenheit at the 10 percent recovery point and a final maximum boiling point of 572 degrees Fahrenheit and meeting the American Society of Testing and Materials Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8), used for commercial and military turbojet and turboprop aircraft engines.

15. "Methanol 85 (M85)": A blend consisting of 85 percent methanol and 15 percent gasoline.

16. "Nonrepeatable Momentary Readings": "Indications of the presence of organic gasses using a detector meeting the apparatus requirements of EPA Method 21 which persist for less than five seconds and do not recur when the sampling probe is placed in the same location for at least twice the response time of the instrument.

17. "Owner or operator": Any person or authorized representative who has legal title to, leases, operates, controls, or supervises the operation of:

    a. An underground storage tank, including pipes connected thereto, or the real property on which such tank or pipes are located, or

    b. Real property on which surface or subsurface soil will undergo aeration to remove contaminants.

18. "School": Any public or private establishment used for the purpose of educating more than 12 children in kindergarten or any of the grades 1 to 12, inclusive, but does not include any private establishment in which education is primarily conducted in private homes.

19. "Soil Aeration Project": One or more operations conducted at a stationary source in which excavated and contaminated soil is exposed to the atmosphere without the use of air pollution control equipment or a vapor extraction, bioremediation, or bioventing system.

20. "Underground Storage Tank:" Any one or combination of tanks, having at least 10 percent of the underground tank system volume, including the volume of any connected piping, below the ground surface or enclosed below earthen materials.

21. "Vapor Extraction System": An underground or aboveground system that extracts contaminants from soil or ground water using air injection and/or suction and routes the vapors to the surface of the contaminated soil. This definition does not include equipment designed or used to expose soil openly to the atmosphere to facilitate evaporation of ROCs.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.30 - WOOD PRODUCTS COATINGS
(Adopted 5/17/94, Revised 9/10/96, 11/11/03, 6/27/06)

A. Applicability

The provisions of this rule apply to any person who manufactures, supplies, uses, or specifies the use of wood products coatings for commercial use.

B. Requirements

1. For either a new wood product or new product made of simulated wood materials, no person shall use any coating that has an ROC (reactive organic compound) content, as applied, exceeding the applicable limit specified below:

ROC LIMITS
Grams Per Liter and
Pounds per Gallon of Coating,
Less Water and Exempt Compounds

COATING	On and After 7/1/1996 (g/L)	(lb/gal)
Clear topcoats	275	(2.3)
Filler	275	(2.3)
High-solid Stains	240	(2.0)
Inks	500	(4.2)
Mold-seal Coating	750	(6.3)
Multi-colored Coating	275	(2.3)
Pigmented Coating	275	(2.3)
Sealer	240	(2.0)

ROC LIMITS
Grams Per Liter of Material

COATING	On and After 7/1/1996 (g/L)	(lb/gal)
Low-solids Stains, Toners, or Washcoats	120	(1.0)

2. For a refinishing operation necessary to repair, preserve, or restore a wood product, no person shall use any coating that has an ROC content, as applied, exceeding the applicable limit specified below:

ROC LIMITS
Grams Per Liter and
Pounds per Gallon of Coating,
Less Water and Exempt Compounds

COATING	On and After 7/1/1995 (g/L)	(lb/gal)
Clear topcoat	680	(5.7)
Filler	500	(4.2)
High-solid Stains	700	(5.8)
Inks	500	(4.2)
Mold-seal Coating	750	(6.3)
Multi-colored Coating	680	(5.7)
Pigmented Coating	600	(5.0)
Sealer	680	(5.7)

ROC LIMITS
Grams Per Liter of Material

COATING	On and After 7/1/1995 (g/L)	(lb/gal)
Low-solids Stains, Toners, or Washcoats	480	(4.0)

3. No person shall use any stripper on wood products unless:

   a. The ROC content is 350 grams per liter (2.9 lb/gal) of material or less; or

   b. The ROC composite partial pressure of the stripper is 2 mm Hg (0.04 psia) or less at 20^{o}C (68^{o}F).

4. No person shall apply coatings to wood products unless the coating is applied with properly operating equipment, according to proper operating procedures, and by the use of one of the following methods:

   a. electrostatic application, operated at a minimum of 60 KV;

   b. flow coat;

c. dip coat;

d. high-volume, low-pressure (HVLP) spray;

e. paint brush;

f. hand roller;

g. roll coater; or

h. such other coating application methods as are demonstrated to the APCO to be capable of achieving at least 65 percent transfer efficiency, and for which written approval of the APCO has been obtained.

5. Surface Preparation and Cleanup Solvent

a. After September 25, 2006, no person shall use a material for surface preparation that has an ROC content exceeding 25 grams per liter of material.

On or before September 25, 2006, no person shall use ROC-containing materials which have more than 200 grams of ROC per liter of material for surface preparation.

b. After September 25, 2006, no person shall use a material for either spray equipment cleaning or cleanup that has an ROC content exceeding 25 grams per liter of material.

On or before September 25, 2006, no person shall use ROC-containing materials for spray equipment cleaning unless:

1) The system used:

a) Is an enclosed gun washer or "low emission spray gun cleaner" that has been approved in writing by the APCO and is properly used for cleaning; or

b) Has been demonstrated to the APCO to be as effective as the equipment described in the subparagraph above in minimizing the loss of the ROC-containing material to the atmosphere according the test method in Subsection E.4.

2) The ROC composite partial pressure of organic solvent used is less than 45 mm Hg at a temperature of 20^{o}C.

c. On or before September 25, 2006, no person shall use ROC-containing materials for cleanup unless the ROC composite partial pressure of organic solvent used is less than 45 mm Hg at 20^{o}C.

6. In lieu of the requirements of Subsections B.1, B.2, B.3 and B.4, emissions of ROC, excluding emissions from clean up operations, may be controlled by an emission capture and control system, which reduces ROC emissions to the atmosphere, provided that:

   a. During any period of continuous operation not to exceed 24 hours, the capture and control system shall have a combined efficiency of at least 90 percent, by weight.

   b. The collection system shall vent all drying oven exhaust to the control device and shall have one or more inlets for collection of fugitive emissions.

   c. During any period of operation of a thermal incinerator, combustion temperature shall be continuously monitored.

   d. During any period of operation of a catalytic incinerator, exhaust gas temperature shall be continuously monitored.

   e. Written approval for such equipment, in the form of an Authority to Construct and Permit to Operate, is received from the APCO.

7. Storage of ROC-containing materials: All ROC containing materials, including, but not limited to surface coatings, cleanup solvents, or surface preparation materials shall be stored in closed containers which are nonabsorbent and do not leak.

8. No person shall specify the use in the District of any coating to be applied to any wood products subject to the provisions of this rule that does not meet the limits and requirements of this rule.

9. The manufacturer of any coating or stripper subject to this rule shall designate on the coating container or on separate data sheet(s) the maximum VOC content of the coating, as supplied. The VOC content, except for low-solids stains, toners, and washcoats, shall be expressed as grams per liter of coating (less water and less exempt organic compounds).

10. Cleaning and Stripping Material Compliance Statement: The manufacturer of liquid cleaning materials or strippers subject to this rule shall designate on product labels or data sheets the ROC content and ROC Composite Partial Pressure of cleaning materials as supplied. This designation shall include recommendations

regarding mixing with any other ROC containing materials, and express the cleaning material ROC content when used in accordance with the manufacturer's recommendations. All letters and numbers used to designate ROC or VOC content on product labels shall be visible and legible. (Effective September 10, 1997)

C. Exemptions

1. The provisions of this rule shall not apply to aerosol coating products.

2. Sections B.1, B.2, B.3, B.4, and B.5 of this rule, shall not apply to any stationary source that emits less than 200 pounds of ROC in every rolling period of 12 consecutive calendar months from wood products coating operations. Any person claiming this exemption shall maintain monthly records to substantiate this claim. Emissions from aerosol products, cold cleaners, and vapor degreasers shall not be included in this determination.

3. This rule shall not apply to the coating of building appurtenances such as cabinets, shutters, fences and handrails coated at the site of permanent installation.

4. The limits in subsection B.1 and B.2 for Pigmented Coatings, Fillers, Washcoats, Sealers and Clear Topcoats shall not apply to the coating of wooden musical instruments.

D. Recordkeeping Requirements.

Any person subject to this rule shall:

1. Maintain a current file for each coating in use and in storage. The file shall include a data sheet or material list giving material name, manufacturer identification, specific mixing instructions, and ROC content as applied.

2. Maintain a current file for each solvent and stripper in use and in storage. The file shall include a data sheet or material list giving material name, manufacturer identification, ROC content and, if required, ROC composite partial pressure.

3. Maintain records on a daily basis showing the amount of coatings, strippers, and solvents used. Itemize each coating, stripper, and solvent and use the specific ROC content and density value for each. If only compliant coatings, strippers and solvents are used, these records may be kept on a monthly basis.

4. If compliance is achieved through the use of emission control equipment maintain daily records of key system operating parameters and maintenance procedures that demonstrate continuous operation and compliance of the emission control system during periods of emission producing activities. Key system operating parameters

for emission control equipment are those necessary to ensure compliance with ROC content of coating requirements such as temperatures, pressures, and flow rates.

5. Inventory, usage, and emission control equipment operation records shall be retained for a minimum of two years and shall be made available to District personnel upon request.

E. Test Methods

1. Measurement of the ROC content of coatings, strippers, and solvents shall be conducted and reported in accordance with EPA Reference Method 24, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings," and ARB Method 432, "Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings," for determination of exempt compounds as necessary.

2. ROC composite pressure shall be calculated using a widely accepted published source such as: Boublik, T., V. Fried and E. Hala, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company, CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-87), and Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985). The true vapor pressure of a component in a mix may be determined by ASTM Method D2879-86. The ROC composite pressure of a solvent mix consisting entirely of ROC may be determined by ASTM Method D2879-86.

3. Transfer efficiency shall be determined in accordance with South Coast Air Quality Management District method Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989.

4. The active and passive solvent losses from spray gun cleaning systems shall be determined using South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" dated October 3, 1989 or later. The test solvent for this determination shall be any lacquer thinner with a minimum ROC composite partial pressure of 105 mm Hg at 20^{o}C. The minimum test temperature shall be 15^{o}C.

5. Capture efficiency shall be determined according to EPA Guidelines for Determining Capture Efficiency, dated January 9, 1995, and 40 CFR 51, Appendix M, Methods 204-204F as applicable. Control system efficiency shall be determined by 40 CFR 60, Appendix A, Methods 18, 25 or 25A.

6. High Volume-Low Pressure (HVLP) equipment shall be identified by either test air cap measurements or an inlet pressure measurement that, when used with specifications published by the manufacturer, establishes that gun is being operated as specified in Subsection G.16.

F. Violations

Failure to comply with any provision of this rule, including recordkeeping requirements, shall constitute a violation of this rule.

G. Definitions

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

1. "Active Solvent Losses": The active solvent losses are the emissions during all steps of a spray gun equipment cleaning operation and are expressed in units of grams of solvent loss per cleaning cycle.

2. "Aerosol Coating Product"; A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand held application, or for use in specialized equipment for ground traffic/marking applications.

3. "Binders": Nonvolatile polymeric organic materials (resins) which form the surface film in coating applications.

4. "Clear Topcoat": A final coating which contains binders, but not opaque pigments, and is specifically formulated to form a transparent or translucent solid protective film.

5. "Cleanup": The removal of uncured coating from any surface.

6. "Coating": A material which is applied to a surface and which forms a film in order to beautify and/or protect such surface.

7. "Dip Coat": Dip an object into a vat of coating material and drain off any excess coating.

8. "Electrostatic Application": Charging of atomized paint droplets for deposition by electrostatic attraction.

9. "Exempt Organic Compounds": As defined in Rule 2, Definitions, of these Rules.

10. "Filler": A composition that hardens on drying used to fill pores, cracks, or holes in a wood product prior to finishing.

11. "Flow Coat": Coat an object by flowing a stream of coating over an object and draining off any excess coating.

12. "Grams of ROC per Liter of Coating, Less Water and Exempt Organic Compounds": The weight of ROC per combined volume of ROC and coating solids calculated using the following equation:

$$\text{Grams of ROC per Liter of Coating, Less Water and Exempt Organic Compounds} = \frac{Ws - Ww - Wes}{Vm - Vw - Ves}$$

Where:
- Ws = weight of volatile compounds in grams
- Ww = weight of water in grams
- Wes = weight of exempt organic compounds in grams
- Vm = volume of material in liters
- Vw = volume of water in liters
- Ves = volume of exempt organic compounds in liters

13. "Grams of ROC per Liter of Material": The weight of ROC per volume of material shall be calculated by the following equation:

$$\text{Grams of ROC per Liter of Material} = \frac{Ws - Ww - Wes}{Vm}$$

Where:
- Ws = weight of volatile compounds in grams
- Ww = weight of water in grams
- Wes = weight of exempt organic compounds in grams
- Vm = volume of material in liters

14. "Gun Washer": Electrically or pneumatically operated system that is designed to clean spray application equipment while enclosed. A gun washer may also be considered a gun cleaning system that consists of spraying solvent into an enclosed container using a snug fitting.

15. "High-solids Stains": Stains containing more than 1 pound of solids per gallon, by weight, and can include wiping stains, glazes, and opaque stains.

16. "High Volume-Low Pressure (HVLP)": Equipment used to apply coatings by means of a spray gun designed to be operated and operated between 0.1 and 10 pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns.

17. "Ink": A fluid, containing dyes and/or colorants, used to make markings but not used to protect surfaces.

18. "Low Emission Spray Gun Cleaner": Any properly used spray equipment cleanup device which has passive solvent losses of no more than 0.6 grams per hour and has active solvent losses of no more than 15 grams per operating cycle as defined by the test method in Subsection E.4.

19. "Low-solids Stains": Stains containing 1 pound of solids per gallon, or less, by weight.

20. "Mold-seal Coating": The initial coating applied to a new mold or repaired mold to provide a smooth surface that, when coated with a mold release coating, prevents products from sticking to the mold.

21. "Multi-colored Coating": A coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat.

22. "New Wood Product": A wood product or simulated wood product which has not been previously coated and from which cured coatings have not been removed. A wood product or simulated wood product from which uncured coatings have been removed to repair flaws in initial coatings application is a new wood product.

23. "Passive Solvent Losses": The passive solvent losses are the emissions from spray gun cleaning equipment when the equipment sits idle between cleaning cycles and are a result of natural evaporation from the equipment.

24. "Pigmented Coatings": Opaque coatings which contain binders and colored pigments which are formulated to hide the wood surface, either as an undercoat or topcoat.

25. "Reactive Organic Compound (ROC)": As defined in Rule 2, Definitions, of these rules. The term "volatile organic compound (VOC)" is equivalent to ROC.

26. ROC Composite Partial Pressure": The sum of the partial pressures of the compounds defined as ROCs. ROC composite partial pressure is calculated as follows:

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

Where:
W_i = Weight of the "i"th ROC compound, in grams
W_w = Weight of water, in grams
W_e = Weight of the "e"th exempt organic compound, in grams
MW_i = Molecular weight of the "i"th ROC compound, in g/(g-mole)

MW_w = Molecular weight of water, in g/(g-mole)
MW_e = Molecular weight of the "e"th exempt organic compound, in g/(g-mole)
PP_c = ROC composite partial pressure at 20 C, in mm Hg
VP_i = Vapor pressure of the "i"th ROC compound at 20 C, in mm Hg.

27. "Refinishing Operation": The steps necessary to remove cured coatings and to repair, preserve, or restore a wood product.

28. "Repair Coating": A coating used to recoat portions of a product which has sustained mechanical damage to the coating following normal painting operations.

29. "Roll Coater": A series of mechanical rollers that forms a thin coating film on the surface of roller, which is applied to a substrate by moving the substrate underneath the roller.

30. "Sealer": A coating, containing binders, which seals the wood prior to application of the subsequent coatings.

31. "Simulated Wood Materials": Materials, such as formica, glass, metal, plastic, etc., that are made to give a wood-like appearance or are processed like a wood product.

32. "Stencil Coating": An ink or a pigmented coating which is rolled or brushed onto a template or stamp in order to add identifying letters and/or numbers to wood products.

33. "Stripper": A liquid used to remove cured coatings, cured inks, and/or cured adhesives.

34. "Surface Preparation": Cleaning of a substrate to remove dirt, oils, and other contaminants. Surface preparation does not include stripping. Surface preparation is typically done prior to the application of surface coatings, adhesive bonding materials, or sealants.

35. "Toner": A wash coat which contains binders and dyes or pigments to add tint to a coated surface.

36. "Touch up Coating": A coating used to cover minor coating imperfections appearing after the main coating operation.

37. "Transfer Efficiency": The ratio of the weight of coating solids deposited on an object to the total weight of coating solids used in a coating application step, expressed as a percentage.

38. "Wash Coat": A coating that contains no more than 1.0 pound of solids per gallon, by weight, which is used to seal wood surfaces, prevent undesired staining, and control penetration.

39. "Wood Products": Those surface-coated room furnishings including cabinets (kitchen, bath, and vanity), tables, chairs, beds, sofas, shutters, and art objects; and any other coated objects made of solid wood, and/or wood composition, and/or made of simulated wood material used in combination with solid wood or wood composition.

40. "Wood Product Coating Application Operations": A combination of coating application steps which may include use of spray guns, flash-off areas, spray booths, ovens, conveyors, and/or other equipment operated for the purpose of applying coating materials.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.31 – METALWORKING FLUIDS AND DIRECT-CONTACT LUBRICANTS

(Adopted 11/12/2013)

A. Applicability and Purpose

The provisions of this rule apply to any person who uses metalworking fluids or direct-contact lubricants on products or parts; and to any manufacturer or supplier who supplies, sells, or offers for sale either metalworking fluids or direct-contact lubricants for use at industrial or commercial facilities.

This rule shall apply to all Reactive Organic Compound (ROC) containing fluids used for metalworking including, but not limited to, metal removal, metal forming, metal treating, or lubricating operations where the metalworking fluid or direct-contact lubricant come into contact with products or parts including, but not limited to, blanking, broaching, coining, cutting, drilling, drawing, forming, forging, grinding, heading, honing, lapping, marquenching, milling, piercing, quenching, roll forming, rolling, stamping, tapping, threading, turning, and wire drawing.

This rule also applies to ROC containing fluids used for metal protection, including rust and corrosion prevention and inhibition, but shall not apply to coatings, sealants, adhesives, or lubricants regulated by other District rules including, but not limited to, Rule 74.12, Surface Coating of Metal Parts and Products, or 74.13, Aerospace Assembly and Component Manufacturing Operations.

B. Requirements

1. **ROC Content.** No person shall use or solicit the use of any metalworking fluid, vanishing oil, or direct-contact lubricant with a Reactive Organic Compound (ROC) content in excess of the following limits, as applied:

Grams of ROC per Liter of Material (pounds per gallon)

Fluid Category	Effective January 1, 2014
Vanishing Oil	50 (0.42)
Metalworking Fluid:	
Metal Forming	75 (0.63)
Metal Removal – General	75 (0.63)
Metal Removal – Precision Metal	130 (1.08)
Metal Treating	75 (0.63)
Metal Protecting – General	50 (0.42)
Metal Protecting – Military Specified Preservative	340 (2.83)
Direct-Contact Lubricant	50 (0.42)

2. **Depletion of Metalworking Fluid User Inventory**: Until January 1, 2015, a person may use a metalworking fluid or direct-contact lubricant in excess of the applicable ROC content limit if the product was purchased prior to January 1, 2014. Purchase records, sales invoices, or bill of sales may be used to verify eligibility for this provision.

3. **Prohibition of Sale**. No person shall manufacture, supply, offer for sale, sell or distribute to any person a metalworking fluid or direct-contact lubricant for use in the District which, at the time of sale, contains more ROC per liter of material than the corresponding limit in effect in Subsection B.1. The ROC content of metalworking fluids or direct contact lubricants that are normally diluted prior to use shall be calculated using the minimum recommended dilution ratio per product label or product data sheet.

   This prohibition of sale shall not apply to a manufacturer or supplier of a non-complying metalworking fluid or direct-contact lubricant provided this fluid or lubricant was sold to an independent distributor that was informed in writing by the manufacturer or supplier that this fluid or lubricant does not comply with District regulations.

   This prohibition of sale shall not apply to any metalworking fluid or direct-contact lubricant that is collected and directed to an emission control system that complies with the provision of Subsection B.4.

4. **Control Equipment**

   A person may comply with the provisions of Subsection B.1 by using an emission control system provided that:

   a. The control device shall reduce reactive organic compound (ROC) emissions from an emission collection system by at least 95 percent, by weight, or the output of the air pollution control device is no more than 5 ppm ROC by volume calculated as carbon with no dilution, and

   b. The emission collection system has been demonstrated to collect at least 90 percent by weight of the ROC emissions generated by the sources of ROC emissions.

   c. Written approval in the form of an Authority to Construct and a Permit to Operate for such equipment is received from the Air Pollution Control Officer (APCO).

   d. Any approved emission control system shall be maintained and used at all times in proper working condition.

5. **Administrative Requirements**

a. **Inventory Compliance List:** Any owner or operator subject to this rule shall develop and maintain a VOC or ROC listing of metalworking fluids and direct-contact lubricants purchased for use at the facility. This list shall contain at least the following information and shall be updated within seven (7) calendar days from the date of receipt of a new metalworking fluid or direct contact lubricant at the facility:

1) Name of Company, Facility Address, and APCD Permit Number, if applicable.
2) For each metalworking fluid and direct-contact lubricant: the manufacturer name, product name, product number or ID code, fluid category according to this rule, VOC or ROC content in grams per liter of material, and corresponding ROC limit, if applicable.

b. **Monthly Purchase Records**: Monthly purchase records shall be kept of all ROC-containing metalworking fluids and direct-contact lubricants and shall include product supplier, manufacturer name, product name, product number or ID code, and quantities purchased. Monthly purchase records may be used to verify the validity of the inventory compliance list.

c. All records shall be retained for a minimum of two years from the date of each entry, and shall be made available to District personnel upon request.

6. **Storage and Disposal of ROC-Containing Materials**: All ROC-containing materials shall be stored in closed vapor-tight, non-leaking, nonabsorbent containers, except while adding or removing them from containers.

7. **Container VOC Labeling Requirement.** No person shall sell or distribute any container whose contents include any metalworking fluid or direct-contact lubricant subject to this rule without displaying the VOC content on the container.

C. Exemptions

1. The Sales Prohibition in Subsection B.3 and the Administrative Requirements in Subsection B.5 shall not apply to metalworking fluids and direct-contact lubricants subject to the consumer products regulations of the Air Resources Board (ARB) pursuant to Title 17. California Code of Regulations, beginning at Section 94507.

2. The ROC content limits of Subsection B.1 shall not apply to:

a. The use of any metalworking fluid or direct-contact lubricant subject to ARB Consumer Product Regulations and applied via a hand-held pre-pressurized non-refillable aerosol product, provided 100 cans or less per calendar year are used based on purchase and/or usage records.

b. The use of any metalworking fluid or direct contact lubricant for the purpose of maintaining or repairing operator-owned machine tools.

c. Research Operations.

3. The Sales Prohibition in Subsection B.2 shall not apply to metalworking fluids and direct-contact lubricants sold in this District for shipment and use outside of this district or for shipment to other manufacturers for repackaging.

4. The ROC content limits of Subsection B.1 and the Sales Prohibition in Subsection B.2 shall not apply to metalworking fluids or direct-contact lubricants designed by the manufacturer to be used solely for the following operations:
   a. Lapping;
   b. Sinker EDM
   c. Avionics, assembled aircraft or any assembled aircraft component
   d. Space vehicle components
   e. Fluids utilizing the control equipment option in Subsection B.4

5. The Administrative Requirements in Subsection B.5 shall not apply to metalworking fluids that are "Super Compliant," (ROC content is 50 grams per liter of material or less). If a shop uses both super compliant and non-super compliant materials, the administrative requirements in Subsection B.5 still apply to the non-super compliant materials. Any person claiming this exemption shall provide documentation or other evidence to substantiate this claim, upon request of APCD personnel. This exemption does not apply to metalworking fluids used at metal forging operations.

D. Test Methods and Procedures

The following test methods and procedures shall be used to determine compliance.

1. Determination of ROC Content: ASTM E 1868-10, Standard Test Method for Loss-On-Drying by Thermogravimetry. Quality assurance and quality control procedures shall be conducted using SCAQMD Additional Requirements to ASTM Standard Test Method E 1868-10 Loss on Drying by Thermogravimetry for Rule 1144 Metalworking Fluids and Direct-Contact Lubricants, December 2010. Water content shall be determined by ASTM D 4017-02(2008)e1 (Standard Test Method for Water in Paints and Paint Materials by Karl Fischer Method) if applicable to the specific sample. The exempt solvent content shall be determined

by SCAQMD Method 303-91, Revised August 1996 (Determination of Exempt Compounds).
Exempt Perfluorocarbon Compounds
The following classes of 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, will be analyzed as exempt compounds for compliance, only when manufacturers specify which individual compounds are used in the coating formulation. In addition, the manufacturers must identify the USEPA, CARB, or the SCAQMD approved test methods used to quantify the amount of each of these exempt compounds.

2. Determination of Flash Point: ASTM D93-07, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester.

3. The capture efficiency shall be determined according to EPA's technical document, "Guidelines for Determining Capture Efficiency," January 9, 1995, and Methods in 40 CFR 51 Appendix M, Methods 204-204F, as applicable:
Methods 204, Criteria for and Verification of a Permanent or Temporary Total Enclosure
Method 204A, VOC Content in Liquid Input Stream
Method 204B, VOC Emissions in Captured Stream
Method 204C, VOC Emissions in Captured Stream (Dilution Technique)
Method 204D, VOC Emissions in Un-captured Stream from Temporary Total Enclosure
Method 204E, VOC Emissions in Un-captured Stream from Building Enclosure, and
Method 204F, VOC Content in Liquid Input Streams (Distillation Approach)

   Control system efficiency shall be determined by 40 CFR 60, Appendix A, Method 18, “Measurement of Gaseous Organic Compound Emissions by Gas Chromatography,” Method 25, “Determination of Total Gaseous Non-methane Organic Emissions as Carbon” or Method 25A, “Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer.” Alternatively, South Coast AQMD Method 25.1, “Determination of Total Gaseous Non-methane Organic Emissions as Carbon,” or SCAQMD Method 25.3(March 2000), “Determination of Low Concentration Non-methane Non-ethane Organic Compound Emissions from Clean Fueled Combustion Sources,” may be substituted as applicable.

4. Alternative Test Methods: The use of other test methods may be used in place of test methods specified in this rule if they are determined to be equivalent or better and approved, in writing, by the Air Pollution Control Officer.

E. Violations

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

F. Definitions

1. "Direct-Contact Lubricant": Any fluid that comes into direct contact with the product or part during manufacturing or assembly and is used to reduce friction and to prolong the life of machine tools or machinery. Fluids defined as Metal-Forming Fluids (Subsection F.5) or Metal Removal fluids (Subsection F.8) are not subject to the ROC content limit for direct contact lubricants.

2. "Exempt Organic Compounds": As defined in Rule 2 of these Rules.

3. "Grams of ROC per Liter of Material"(VOC Actual): The weight of ROC per volume of material and calculated by the following equation:

$$\text{Grams of ROC per Liter of Material} = \frac{W_s - W_w - W_{es}}{V_m}$$

Where: W_s = Weight of volatile compounds (grams)
W_w = Weight of water (grams)
W_{es} = Weight of exempt organic compounds (grams)
V_m = Volume of material (liters)

4. "Lapping": A manufacturing method that employs particles of an abrasive material, suspended in a liquid carrier, between rotating plates.

5. "Metal Forming Fluid": Any fluid used at the tool and workpiece interface to facilitate the flow of metal over the tool and to extend the life of the tool. Common metal forming operations include, but are not limited to, blanking, coining, drawing, forming, forging, heading, piercing, roll forming, stamping, and wire drawing.

6. "Metal Protecting Fluid": Any fluid that inhibits or prevents the corrosion of metal surfaces, and applied independently of any other metalworking, lubricating, or cleaning application.

7. "Metal Protecting – Military Specified Preservative: Any metal protecting preservative that was formulated by the manufacturer to comply with Mil Spec MIL PRF 16173E Class II Corrosion Inhibitor, and is designed to protect ferrous and non-ferrous parts for indoor or covered storage and during shipping.

8. "Metal Removal Fluid": Any fluid used at the workpiece interface to facilitate the removal of metal from the part, cool the part and tool, extend the life of the tool, and to flush away chips and debris. Common metal removal operations, include, but are not limited to, broaching, cutting, drilling, grinding, honing, lapping, milling, tapping, threading, and turning.

9. "Metal Treating Fluid": Any fluid used to remove heat from metal parts, affect their hardness, and/or change the grain structure of the metal. Common metal treating operations, include, but are not limited to, marquenching and quenching.

10. "Metalworking Fluid": Any fluid that facilitates operations involving the working, protecting, or modifying of metals, including metal forming, treating and removal, and may consist of straight oils, emulsifiable oils, synthetic, or semi-synthetic fluids.

11. "Precision Metal Removal Fluid": Any fluid used for:
    a. Carbide grinding machine tools where the machine tool manufacturer specifies the viscosity of the fluid, or
    b. Machining of aluminum or magnesium in single or multiple spindle automatic machines.

12. "Reactive Organic Compound (ROC)": As defined in Rule 2 of these rules. The term "volatile organic compound" (VOC) is equivalent to ROC.

13. "Research Operation": Any prototype operation whose product is not designed to be sold and whose sole purpose is to develop something new or test an update of an existing version.

14. "Sinker Electrical Discharge Machining (EDM)": A method of removing material by a series of rapid recurring electric arcing discharges between an electrode and the workpiece, in the presence of an energetic electric field and in an insulating oil. EDM using a water-based dielectric fluid such as Wire EDM are not included in this definition.

15. "Space Vehicle": A vehicle designed to travel beyond the earth's atmosphere.

16. "Solicit": Solicit is to require for use or to specify by written or oral contract.

17. "Vanishing Oil": Any direct-contact lubricant or metalworking fluid containing petroleum distillates having a flash point less than 200^{o}F (93^{o}C) and is designed to evaporate from the workpiece after first providing necessary lubrication.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.33 –LIQUEFIED PETROLEUM GAS TRANSFER OR DISPENSING
(Adopted 1/13/2015)

A. Applicability and Purpose

The purpose of this rule is to reduce Reactive Organic Compound (ROC) emissions associated with the transfer or dispensing of liquefied petroleum gas (LPG). This rule applies to the transfer of LPG to or from any cargo tank, any stationary or portable storage tank, or any cylinder.

B. Equipment and Operation Requirements

1. **LPG Bulk Loading Facilities**: Effective July 1, 2015, no person at an LPG Bulk Loading Facility (defined in Subsection H.14 as having one or more stationary storage tank with a water capacity of 10,000 gallons or more) shall transfer, allow the transfer, or provide equipment used to transfer LPG from any cargo tank to a stationary tank located at the facility or from any stationary storage tank to a cargo tank unless all of the following conditions are met:

   a. All LPG Bulk Loading Facilities shall have an LPG vapor recovery or equalization system capable of recovering all LPG vapors during the transfer process. This system shall be maintained and operated in accordance with the manufacturer specifications and applicable safety regulations.

   b. All vapor return lines and liquid transfer lines are properly connected and maintained so that associated connectors are vapor tight and liquid tight during LPG transfer.

   c. The transfer hose assembly, which includes the hose, fittings, and gaskets, is properly maintained in order to maintain vapor tight conditions.

2. **LPG Transfer and Dispensing Facilities**: Effective July 1, 2015, no person shall transfer LPG at an LPG Transfer and Dispensing Facility from any stationary storage tank, cargo tank, or cylinder into any stationary storage tank, cargo tank, portable storage tank, cylinder, or vehicle fuel tank unless all the following applicable conditions are met:

   a. The **facility stationary storage tank(s)** shall meet one or both of the following two conditions:

1). All stationary storage tank Fixed Liquid Level Gauges (FLLGs) are closed during LPG transfer, using a filling technology that monitors the maximum fill level without use of an FLLG; or

2) Stationary source tanks are equipped only with low emission FLLGs according to the following schedule:

i. Whenever a tank is put into or taken out of service, the low emission FLLG shall be installed prior to returning the tank to service; and

ii. The deadline for installing all low emission FLLGs is January 1, 2017.

b. The **cargo tank(s)**, if equipped with an FLLG, shall meet one or both of the following two conditions:

1) All cargo tank FLLGs are closed while being filled using a filling technology that monitors the maximum fill level without the use of an FLLG; or

2) Cargo tanks are equipped only with low emission FLLGs as follows:

i. If a cargo tank is purchased as new or was manufactured after January 13, 2015, it shall be equipped with low emission FLLGs.

ii. Whenever a cargo tank is evacuated, the operator shall install low emission FLLGs prior to returning to service.

iii. The deadline for installing all low emission FLLGs is no later than 5 years after its last tank hydro testing that occurred prior to January 13, 2015.

c. If the container(s) receiving LPG are **cylinders or portable storage tanks,** they shall meet one or both of the following two conditions:

1) All the cylinder or portable storage tank FLLGs are closed during LPG transfer using a fill by weight technique or alternative technology that monitors the maximum fill level without the use of an FLLG; or

2) All cylinders or portable storage tanks equipped only with low emission FLLGs no later than January 1, 2017.

d. **LPG Low Emission Connectors:** Effective July 13, 2016, no person shall transfer LPG from any container to another without using LPG low emission connectors that are leak tight and vapor tight, except when actively connecting or disconnecting the connector. Qualifying LPG low emission connectors are defined in Subsection H.15, and an official list of qualified low emission connectors will be published on VCAPCD's website and in the rule staff report. Parts not listed may still qualify as low emission connectors provided that product manufacturer documentation showing a maximum 4 cubic centimeters (cc) emission release is provided to APCD personnel upon request. At a minimum, this documentation shall indicate the vendor name, part number, and maximum emissions release in cubic centimeters for each part. Vendors or manufacturers may request in writing that a new or existing products to be added to the official qualified list by providing sufficient written documentation, subject to approval in writing by APCD personnel.

3. **Mobile Fueler Operations**: Effective July 1, 2015, no person shall transfer LPG from any mobile fueler into any stationary storage tank, cargo tank, portable storage tank, cylinder, or vehicle fuel tank unless all the following applicable conditions are met:

a. The receiving **stationary storage tank(s)** shall meet one or both of the following two conditions:

1) All stationary storage tank Fixed Liquid Level Gauges (FLLGs) are closed during LPG transfer, using a filling technology that monitors the maximum fill level without use of an FLLG; or

2) All stationary source tanks are equipped only with low emission FLLGs according to the following schedule:

i. Whenever a tank is put into or taken out of service, low emission FLLGs shall be installed prior to returning the tank to service; and

ii. The deadline for installing all low emission FLLGs is January 1, 2017.

b. The receiving **cargo tank(s)**, if equipped with FLLGs, shall meet one or both of the following two conditions:

1) All cargo tank FLLGs are closed while being filled using a filling technology that monitors the maximum fill level without the use of an FLLG; or

2) Cargo tanks are equipped only with low emission FLLG as follows:

i. If the cargo tank was purchased as new or manufactured after January 13, 2015, it shall be equipped only with low emission FLLGs.

ii. Whenever a cargo tank is evacuated, the operator shall install low emission FLLGs prior to returning to service.

iii. The deadline for installing low emission FLLGs is no later than 5 years after the last tank hydro testing provided that testing occurred prior to January 13, 2015.

c. If the receiving container is a **cylinder or portable storage tank,** it shall meet one or both of the following two conditions:

1) Cylinder or portable storage tank FLLG is closed during LPG transfer using a fill by weight technique or alternative technology that monitors the maximum fill level without the use of the FLLG; or

2) The cylinder or portable storage tank is equipped with a low emission FLLG no later than January 1, 2017.

d. **LPG Low Emission Connectors:** Effective July 13, 2016, no person shall transfer LPG from one container to another without using LPG low emission connectors that are leak tight and vapor tight, except when actively connecting or disconnecting the connector. Qualifying LPG low emission connectors are defined in Subsection H.15 and an official list of qualified low emission connectors will be published on VCAPCD's website and in the rule staff report. Parts not listed may still qualify as low emission connectors provided that product manufacturer documentation showing a maximum 4 cubic centimeters (cc) emission release is provided to APCD personnel upon request. At a minimum, this documentation must indicate the vendor name, part number, and maximum emissions release in cubic centimeters for each part.

e. **Railroad Tank Car or Mobile Fueler Operating Requirements:** Any railroad tank car or mobile fueler equipped with an LPG vapor recovery or equalization system shall be maintained and operated in accordance with the specifications of the vapor recovery or equalization system manufacturer.

C. Leak Detection and Repair Program Requirements

Effective July 1, 2015, the operator of any LPG Bulk Loading Facility or any LPG Transfer and Dispensing Facility shall adopt a Leak Detection and Repair Program including but not limited to the following requirements:

1. **Daily Physical Leak Check**: On a daily basis, operators shall physically check all connectors involved with the transfer of LPG for evidence of leakage, such as the presence of odorant, hissing, or staining.

2. **Bubble Test or EPA Method 21 Inspections:** Operators shall inspect all LPG connectors during LPG transfers using the bubble test method or EPA Method 21 at least once every 90 days, or if the time between fillings is greater than 90 days, during or upon completion of the transfer of LPG. Records of these inspections shall be maintained in an inspection log, which shall be maintained for a minimum of two years and be made available to APCD personnel upon request.

3. **Employee Training:** All employees involved in the maintenance or operation of LPG transfer shall be trained in these Leak Detection and Repair (LDAR) Program Requirements (Section C), and the Training Program shall include the following:

   a. Written training procedures;
   b. Training frequency and scheduled training dates; and
   c. Written record of the dates of training provided for each employee.

   All employee LDAR training records and written procedures shall be made available to APCD personnel upon request.

4. **Leak Repairs and Recordkeeping**: Any connector found leaking liquid or vapor during inspections pursuant to Subsection C.1 or C.2 shall be removed from service and tagged. This tagged connector shall not be put back into service until it has been repaired or replaced, and re-inspected for leaks. Operators shall keep a written record of all leaks found. This maintenance log shall record the type of leak, date and time leak discovered, date and time leak repaired, name of person who performed the repair and their employer name and phone number, leaking component name (part ID name, part number, and part manufacturer), and location, and description of repair. This log shall be made available to APCD personnel upon request, and all records shall be maintained for at least two years.

5. **Leaks identified by operators and repaired pursuant to Subsection C.4** shall not be considered violations of the liquid tight or vapor tight requirements of this rule.

D. Recordkeeping Requirements

1. **Low Emission FLLG and Low Emission Connector Installations**: Each operator of an LPG Bulk Loading or LPG Transfer and Dispensing Facility shall maintain the following records for a minimum of five years, and these records shall be made available to APCD personnel upon request:

   a. Purchase records of all low emission FLLGs and low emission connectors installed to comply with this rule including component name, part ID number, quantity purchased, and component manufacturer.

   b. Records of all low emission FLLGs and connectors installed.

2. **Mobile Fuelers or Railroad Tank Cars**: Each operator of a Mobile Fueler or Railroad Tank Car equipped with an LPG vapor recovery or equalization system shall maintain records to demonstrate that the system is maintained and operated according to manufacturer's specifications.

3. **Compliance Documentation**: The operator of any LPG Bulk Loading or LPG Transfer and Dispensing Facility shall maintain documentation originating from the part manufacturer that shows any Low Emission Connector or FLLG installed to comply with the requirements in Section B of this rule meets the applicable specifications as defined in Section H, Definitions. This documentation shall be made available to APCD personnel upon request.

4. **Posting of Rule**: The operator of any LPG Bulk Loading or LPG Transfer and Dispensing Facility shall post a legible copy of this rule on site reasonably close to the subject equipment, or be easily accessible to operating personnel.

5. **Initial Inventory Low Emission Connectors Reporting (LPG Bulk Facilities):** By July 1, 2017, the operator of any LPG Bulk Facility shall submit to the APCO an end of year inventory of all facility located LPG low emission connectors, including all LPG low emission connectors installed on facility-owned or leased mobile fuelers associated with the transfer or storage of LPG for the year 2016. This inventory shall include the specific storage or transfer equipment or operation involved and the manufacturer and identification or part number of all low emission connectors.

6. **FLLG Inventory Reporting Years 2016-2020 (LPG Bulk Facilities)**: By July 1 of each year from 2017 through 2021, the operator of an LPG bulk loading facility shall submit to the APCO an end of year inventory of all facility located containers, including all facility-owned or leased mobile fuelers associated with the transfer and storage of LPG that are equipped with one or more low emission FLLGs for the prior calendar year. This inventory shall include a summary, by

size and classification, and include the associated number of installed low emission FLLGs.

E. Exemptions

1. The provisions of this rule shall not apply to the transfer of LPG into any container with a water capacity of less than four (4) gallons.

2. The provisions of this rule shall not apply to facilities that are subject to Rule 74.7, Fugitive Emissions of Reactive Organic Compounds at Petroleum Refineries and Chemical Plants.

3. The equipment/operation requirements of Subsection B shall not apply to LPG cylinders that are specifically dedicated for and installed for use on recreational vehicles.

4. This rule shall not apply to any LPG tank truck loading facility subject to both VCAPCD Rule 71.3, Transfer of ROC Liquids and VCAPCD Rule 74.10, Components at Crude Oil and Natural Gas Production and Processing Facilities.

F. Test Methods and Procedures

1. Measurements of vapor tight leak concentrations shall be determined in accordance with EPA Reference Method 21 using appropriate analyzer calibrated with methane. The calibration, maintenance, and operation of the appropriate analyzer shall follow manufacturer's recommendations. The analyzer shall be calibrated before inspection on the day of inspection.

G. Violations

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

H. Definitions

1. "Bobtail Truck": Any vehicle that is equipped with a cargo tank without a trailer and is used to deliver propane.

2. "Bubble Test": The test application of a soap solution, detergent, or aerosol spray or similar material that produces visible bubbles at the site of any potential LPG vapor leak source.

3. "Cargo Tank": Any container used to transport LPG and is either mounted on a conventional truck chassis or is an integral part of a cargo transporting vehicle, including but not limited to a bobtail, mobile fueler, or rail tank car.

4. “Connector”: Any component including an adapter, hose, fitting, valve or coupling used in association with the transfer of LPG from one container to another, and is disconnected following completion of an LPG transfer activity.

5. “Container”: Any vessel, including cylinders, stationary or portable tanks, and cargo tanks, used for the transporting or storage of LPG.

6. “Cylinder”: Any container designed, constructed, tested and marked in accordance with U.S. DOT specifications.

7. “Fill by Weight”: The filling of an LPG container without the use of a Fixed Liquid Level Gauge and monitoring the fill level by the filled container weight to prevent overfilling to no more than the maximum rated capacity.

8. “Fitting “: Any machine component, piping, tubing, or fixture that attaches to larger parts or is used to connect two or more larger parts.

9. “Fixed Liquid Level Gauge (FLLG)”: A liquid level indicator, also called a bleeder valve used in propane containers, to accurately indicate a tank’s fill level to ensure safe tank refilling and transfer operations or to verify the accuracy of an existing overfill prevention device.

10. “Inspection”: The use of a bubble test by the operator to physically survey LPG connectors for evidence of leakage. Use of an alternate test method in Section F may be substituted for an inspection.

11. “Liquid Tight”: Equipment is not liquid tight if a liquid leak occurs where the visible liquid leak rate exceeds 3 or more drops per minute or exhibits a visible liquid mist.

12. “Low Emission Fixed Liquid Level Gauge”: A Fixed Liquid Level Gauge with a number 72 orifice size (0.025 inches) or physical configuration that results in a equivalent or lower emission rate test and demonstrated using a method approved in writing by the APCO.

13. “Liquefied Petroleum Gas (LPG)”: An organic compound having a vapor pressure not exceeding that allowed for commercial propane, which is composed predominantly of the following hydrocarbons: propane, propylene, butane, and to a lesser extent butylenes, and is stored and transported under pressure in a liquid state.

14. “LPG Bulk Loading Facility”: An LPG transfer and dispensing facility where the primary function is to store LPG for further distribution and has one or more stationary storage tanks with a water capacity of 10,000 gallons or more.

15. “LPG Low Emission Connector”: Any component, including an adapter, hose, fitting, valve, or coupling used to transfer LPG from one container to another and is designed to result in the maximum emission release of four (4) cubic centimeters of LPG when disconnected.

16. “LPG Transfer and Dispensing Facility”: A stationary facility consisting of one or more stationary storage tanks and associated equipment that receives, stores, and either transfers or dispenses LPG to stationary storage tanks, cargo tanks, or portable storage tanks.

17. “LPG Vapor Recovery or Equalization System”: A system installed on an LPG mobile fueler or a rail tank car that while transferring LPG liquid allows for the collection and recovery of LPG vapors displaced or emitted from the stationary storage tank or cargo tank when LPG is transferred to or from the mobile refueler or the rail tank car.

18. “LPG Vapors”: The organic compounds in vapor form as well as entrained liquid LPG displaced during transfer and/or dispensing operations.

19. “Mobile Fueler”: Any cargo tank, tanker truck or trailer, including a bobtail truck, which is used to transport LPG stored in an onboard cargo tank.

20. “Operator”: Any person who owns, leases, or operates any stationary facility or mobile fueler subject to the requirements of this rule.

21. “Portable Cylinder”: A container designed, constructed, tested, and marked in accordance with DOT specifications, including but not limited to, those LPG containers used for small hand torches, forklifts, barbecue grills, and weed burners.

22. “Portable Storage Tank”: A container or portable cylinder designed to be easily moved by hand or hand truck (dolly) without mechanized assistance, as opposed to a container or stationary tank designed for stationary installations.

23. “Railroad Tank Car”: A mounted cargo tank transported over rail.

24. “Reactive Organic Compound (ROC)”: As defined in Rule 2 of these rules. The term "volatile organic compound" (VOC) is equivalent to ROC.

25. “Recreational Vehicle”: Any vehicle or trailer used for strictly noncommercial leisure activities, and is equipped with living space and amenities found in a home.

26. “Stationary Storage Tank”: A container used for the storage of LPG, including, but not limited for, residential, commercial or industrial usage, and includes

containers constructed in accordance with American Society of Mechanical Engineers (ASME) specifications.

27. "Valve": A device that regulates or isolates the fluid flow in a pipe, tube, tank, or conduit by means of an external actuator.

28. "Vapor-Tight": Any component, valve, adapter, hose, coupling, or fitting is considered to be "vapor-tight" if the leak measurement using EPA Method 21 is 10,000 ppm or lower when tested in accordance with Subsection F.1.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 74.34 –NOX REDUCTIONS FROM MISCELLANEOUS SOURCES
(Adopted 12/13/2016)

A. Purpose and Applicability

The purpose of this rule is to reduce emissions of oxides of nitrogen (NOx) and carbon monoxide (CO), and it applies to dryers, furnaces, heaters, incinerators, kilns, ovens, and duct burners. This rule applies to any unit where the total rated heat input for the unit is 5 million BTU per hour or greater.

B. Requirements

1. **Emission Limits**: Effective July 1, 2018, no person shall own or operate a unit subject to this rule in a manner that exceeds the applicable nitrogen oxide limit specified in Table 1, and owners or operators modifying, replacing, or installing equipment in order to comply with these emission limits shall meet the Increments of Progress pursuant to Subsection B.2:

Table 1: NOx Emission Limits

Equipment Category		
Asphalt Manufacturing (Dryer)	40 ppm (0.048 lb/MMBTU heat input)	
Sand and Gravel Processing (Dryers)	40 ppm (0.048 lb/MMBTU heat input)	
Paper Products Manufacturing (Hot Air Furnace, Duct Burner, Paper Dryer)	40 ppm (0.048 lb/MMBTU heat input)	
Metal Heat Treating/ Metal Melting Furnace	60 ppm (0.072 lb/MMBTU heat input)	
Kiln	80 ppm (0.096lb/MMBTU heat input)	
Equipment Category	**Process Temp < 1200^{o}F**	**Process Temp >or= 1200^{o}F**
Oven, Dryer (besides asphalt, sand or paper dryer), Heater, Incinerator, Other Furnaces, or Other Duct Burner (Not Listed Above in Table 1)	30 ppm (0.036 lb/MMBTU heat input)	60 ppm (0.072 lb/MMBTU heat input)

Carbon monoxide emissions from units subject to this rule shall not exceed 400 ppm (0.30 lb/MMBTU heat input). The NOx ppm emission limitations are expressed as nitrogen dioxide, and the ppm emission limits for both NOx and CO are referenced at 3 percent by volume oxygen stack content on a dry basis. Units may comply with the applicable lb/MMBTU emission limit in lieu of the associated ppm limit.

2. **Increments of Progress for Units Coming into Compliance with NOx Limits (Subsection B.1)**:

a. Apply for an Authority to Construct before July 1, 2017.
b. Initiate construction or equipment installation or modification before January 1, 2018.
c. Demonstrate compliance via emission source test before July 1, 2018.

3. **Alternate Final Compliance Schedule**: Notwithstanding the effective date of July 1, 2018, Subsection B.1, a permitted facility with two or more units requiring NOx emissions reducing equipment modifications needed to comply with the NOx emission limits in Subsection B.1, may submit an alternate final compliance schedule as follows:

a. Qualifying facilities shall notify the District in writing or via electronic submittal prior to March 1, 2017, to be eligible for the new compliance schedule.

b. All units shall comply with the applicable NOx emission limits prior to July 1, 2020, while meeting all increments of progress deadlines pursuant to Subsection B.2 with each increment delayed by two years.

4. **Alternate Compliance Plan for Existing Direct-Fired Clay Kilns**: Any existing permitted direct-fired kiln operating prior to this rule adoption date and processing clay materials shall be considered to be in compliance with the emission limits in Subsection B.1 provided all the following conditions are met:

a. Each Unit shall be equipped with:

1) Low-NOx Burner(s) and an Automatic Combustion Air-Fuel Ratio Control System that is operated and maintained using good engineering practices to minimize NOx emissions, or

2) An alternate NOx reduction control system determined by the APCD to have equal to or greater NOx reduction control characteristics than the system specified in Subsection B.4.a.1., and is operated and maintained using good engineering practices to minimize NOx emissions.

b. An Authority to Construct Application shall be submitted and the unit shall be independently source tested prior to the applicable compliance deadline.

c. The NOx emissions from each retrofitted kiln operating at minimum NOx emission rate using good engineering practices or burner manufacturer's recommendations shall be determined using independent NOx emission source test data measured in accordance with Section E, Test Methods and Procedures under steady-state operating conditions, and calculated at the

rated maximum operating rate, which will establish a new permit condition limiting NOx emissions in terms of pounds per hour, and require source testing every four years with intervening annual screenings in accordance with Subsection B.6. Notwithstanding these source test results, this new NOx permit condition emission limit shall be established at not less than 3.9 pounds NOx per hour per kiln.

5. **Compliance Testing and Emission Screening:** All units subject to NOx emission limits shall test for NOx and CO emission (CO emission testing only required if subject to CO emissions limit) compliance prior to July 1, 2018 (except as allowed by an approved Alternative Final Compliance Schedule in Subsection B.3), upon initial installation (if new, modified or replaced equipment), and not less than once every 48 months thereafter, and shall perform an annual screening analysis of NOx and CO emissions no later than 30 days after the anniversary date of the previous source test. If a unit is modified to comply with the NOx emissions limits of this rule, then the unit shall be source tested and test report submitted to verify compliance within 6 months of the modification. The requirement for annual screenings is waived if performing a source compliance test. The APCD shall be notified at least 15 days prior to the source compliance test, and at least 3 days prior to an annual screening. Both source test reports and emission screening results shall be submitted to APCD no later than 45 days after the applicable test date.

6. **Combustion System Maintenance:** Any owner or operator of a combustion unit subject to this rule shall perform combustion system maintenance in accordance with the manufacturer's schedule and specifications as identified in the manual and other written materials supplied by the manufacturer or distributor, or according to good engineering practices focused on reliability and emission controls and documented in a site specific combustion and emission control systems maintenance plan prior to final unit compliance deadline and available onsite and upon request by APCD personnel.

7. **Compliance Statement**: Prior to July 1, 2017, any person owning or operating a unit or units subject to this rule shall submit a signed and dated Compliance Statement to the APCO that provides an inventory of all applicable units and their compliance status relative to the NOx and CO emission limits in Subsection B.1. Persons claiming unit compliance shall provide unit emissions data that demonstrate compliance with Subsection B.1.

C. Exemptions

1. This rule shall not apply to:

a. Combustion equipment whose primary function is to operate as an air pollution control device including, but not limited to, afterburners, catalytic oxidizers, flares, thermal oxidizers, or vapor incinerators.

b. Duct burners operating upstream of and controlled by a properly working Selective Catalytic Reduction (SCR) add-on NOx control unit that complies with all pertinent APCD permit conditions.

c. Gas flares.

d. External combustion equipment subject to Rule 74.15, Boilers, Steam Generators, and Process Heaters.

2. The NOx and CO emission limits pursuant to Subsection B.1 shall not apply to:

a. Yankee Hood furnaces or Hot Air furnaces operated at a sanitary paper products manufacturing facility (SIC Code 2676).

b. Units having an annual heat input rate of less than 9×10^9 BTUs per calendar year provided all the following conditions are met:

1) A totalizing fuel meter for each applicable unit shall be installed and shall be used to demonstrate that the annual heat input is below the applicable heat input level. Totalizing fuel meter readings shall be recorded monthly, shall be maintained for a period of four years, and shall be made available to APCD staff upon request.

2) NOx emissions for each unit shall not exceed 0.096 pounds of NOx per MMBTU heat input (80 ppm at 3 percent oxygen).

D. Recordkeeping Requirements

1. Sources subject to the emission compliance testing and emission screening requirements pursuant to Subsection B.5 shall maintain records of both compliance test reports and emission screening results. These records shall be maintained for a minimum of 4 years, and shall be made available to APCD personnel upon request.

2. Sources subject to the requirements of Subsection B.6 shall maintain records of combustion system maintenance including, but not limited to: written maintenance schedule, log and description of maintenance activities. These records shall be maintained for a minimum of 4 years, and shall be made available to APCD personnel upon request.

E. Test Methods and Procedures

1. Compliance with the emission requirements in Subsections B.1, B.4, and C.2.b.2 shall be determined using ARB Method 100 for oxides of nitrogen, carbon monoxide, and stack gas oxygen. An alternative procedure for determining emission compliance in units of lb/MMBTU heat input shall be based on the South Coast AQMD "Compliance Protocol for the Measurement of Nitrogen Dioxide, Carbon Monoxide, and Oxygen From Sources Subject to SCAQMD Rules 1146 and 1146.1" dated March 10, 2009.

2. Emissions compliance tests shall be conducted on units after unit startup in "as-found" operating conditions, averaged over a period of at least 30 minutes and no more than 60 minutes. All emission measurements shall be made representative of normal operations and if applicable, conditions specified in the APCD Permit to Operate.

3. Screening analyses required pursuant to Subsection B.5 shall be performed using a portable analyzer calibrated, maintained, and operated in accordance with the manufacturer's specifications or as approved in writing by the APCO. Portable analyzer operators shall undergo training on the operation of the analyzer for proper use.

F. Violations

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

2. An applicable unit shall be in violation if, according to a screening analysis, it is operated out-of-compliance with the requirements of Subsection B1 as follows. All out-of-compliance screening analyses shall be reported to the APCD within 7 calendar days. The owner or operator shall complete corrective actions, and a second screening analysis shall be performed within 14 calendar days of the initial screening analysis. The results of the second analysis shall be reported to the APCD within 7 days. If the unit remains out-of-compliance, it shall be considered to be in violation of this rule. Resolution of this violation may be determined using a screening analysis or an emissions source test.

G. Definitions

1. "Dryer": A device in which material is dried or cured in direct contact with the products of combustion, including, but not limited to, asphalt dryers, sand dryers, process dryers, and drying hoods.

2. "Duct Burners": Any combustion equipment installed on existing ductwork and designed to further heat exhaust gases, to promote process drying or to preheat

exhaust prior to the entrance to a Selective Catalytic Reduction (SCR) control unit.

3. "Furnace": An enclosed chamber in which heat is produced by a combustion source for any of the following purposes (excluding gas flaring):
   a. Pyrolysis processing
   b. Smelting or refining ores
   c. Metal melting or metal heat treating
   d. Glass manufacturing
   e. Incinerator

4. "Gas Flare": Gas flares are primarily used for burning off flammable gas released by pressure relief valves during unplanned over-pressuring of plant equipment. During plant or partial plant startups and shutdowns, flare stacks are also often used for the planned combustion of gases over relatively short periods. Gas flares may also be used to control landfill gas emissions, sewage treatment digester gas emissions, and oilfield waste gas emissions.

5. "Heater": Any combustion equipment that transfers heat from combusted fuel to materials or air contained in the unit or in an adjoining cabinet, container, or structure. Heaters do not include boilers or process heaters subject to Rule 74.15. Heaters do not include any combustion equipment that can be defined elsewhere in this rule including, but not limited to, dryers, furnaces, hot air furnaces, incinerators, kilns, ovens, or duct burners.

6. "Hot Air Furnace": Hot gas generating combustion equipment suitable for direct drying of paper products or other direct drying processes.

7. "Incinerator": An Incinerator is any furnace used to combust waste, or oxidize contaminants to less harmful forms.

8. "Kiln": Any thermally insulated chamber, a type of oven, which produces temperatures sufficient to complete some process, such as hardening, drying, vitrification, or chemical changes. Various industries and trades use kilns to vitrify objects made from clay into aggregate, pottery, tiles and bricks. Various industries use rotary kilns for pyroprocessing — to calcinate ores, produce cement, lime, and other materials.

9. "Low-NOx Burner(s)": Any combustion natural gas-fueled burner advertised and designed by the manufacturer to achieve significantly lower NOx emissions than a conventional burner, and usually involves the premixing of the combustion air and gas fuel in the nozzle or prechamber.

10. "Metal Heat Treating": Any metalworking processes used to alter the physical, and sometimes chemical, properties of a material. Metal heat treating involves the

use of heating, normally to extreme temperatures, to achieve a desired result such as hardening or softening of a material. Metal heat treating techniques include but are not limited to, annealing, case hardening, precipitation strengthening, and tempering.

11. "MMBTU": One million British thermal units.

12. "Oven": Any thermally insulated chamber used for the heating, baking or drying of a substance.

13. "Process Temperature": For the purpose of this rule, the process temperature of a unit shall be considered to be the maximum operating temperature of the unit under maximum designed production rate.

14. "Rated Heat Input Capacity": The heat input capacity specified on the nameplate of the unit's burner. If the burner has been permanently altered or modified such that the maximum heat input is different than the input capacity specified on the nameplate, and this alteration or modification has been approved in writing by the Air Pollution Control Officer, then the new maximum heat input shall be considered as the rated heat input capacity.

    If a unit controls more than one burner, then the rated heat input capacity is the sum of the maximum heat input for each of the affected burners. If a burner(s) can be operated independently as a separate unit with its own exhaust stack, then the maximum heat capacity for that unit is based on the rated heat input of that burner(s).

    For the purpose of determining rule applicability or final compliance schedule, a coffee roaster (or other combustion unit) and its associated afterburner emission controls are to be considered as separate independent units, where the rated heat input capacity is determined separately for each unit, even though they may share the same exhaust stack or operating controls.

15. "Start-Up": The period of time during which a unit is brought from a shutdown status to its normal operating temperature and pressure.

16. "Unit": Any dryer, furnace, heater, incinerator, kiln, oven, or duct burner that is subject to this rule.

17. "Yankee Hood Furnaces": A high-speed hot air drying apparatus that works with high-speed sanitary paper machines or specialty paper machines. The drying capacity is four to 10 times higher than conventional dryers because it combines contact drying and convection drying together.

5/23/79

~~2. Nuisance Prohibition~~

~~Compliance with all rules and regulations in this Rule does not exempt any person from complying with District Rule 51, and Section 41700 of the Health and Safety Code, nor from complying with any State statutory or common law nuisance prohibition.~~

Rule 75. Circumvention

A person shall not build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in an actual reduction in the total release of air contaminants to the atmosphere, superficially reduces or conceals an emission which would otherwise constitute a violation of Division 26 of the Health and Safety Code of the State of of California or of these Rules and Regulations. This Rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California, or of Rule 51 of these Rules and Regulations. (Rev. 3/9/76, Renumbered 11/21/78)

~~4. For the purpose of this Rule "Reactive Organic Compound" means any compound of carbon excluding carbon monoxide, carbon dioxide, carbon acid, metallic carbides, carbonates, and methane.~~

Rule 80. Permits (Adopted 10/22/68, 5/23/72, 10/30/79) 7-5-83

After the date of adoption of this Regulation, no person shall construct, place, maintain, alter, use or operate in excess of five (5) orchard heaters in any place where they may be used or operated for frost protection, without first obtaining a Permit to do so from the Agricultural Commissioner. Application for such Permits shall be made to the Agricultural Commissioner on available forms and shall contain all information required by such forms. The Agricultural Commissioner may require the applicant to furnish such additional information as he may deem necessary before acting on any application.

Information on Permits may be brought up to date through the use of questionnaires mailed out by the Agricultural Commissioner. This questionnaire will be mailed to the mailing address on the original application and permit. If a grower fails to answer the questionnaire, ~~his~~ the Permit may be cancelled and a new Permit application and filing fee may be required by the Agricultural Commissioner. A Permit shall remain valid if questionnaires have been filed satisfactorily and provisions of this Regulation have been complied with.

~~Rule 84. Non-Complying Heaters; Continued Use of Certain Types (Adopted 10/22/68, Revised 5/23/72)~~ deleted 7-5-83

~~Any person who owns or had in his possession on October 22, 1968 any orchard heaters which failed to comply with Rule 83 of this Regulation, may continue to use said heaters for frost protection until March 9, 1973, as long as they constitute 20% or less of the total heaters used. After March 9, 1973 all heaters must be of the complying type, as specified in Rule 83.~~

Rule 103. Stack Monitoring (Adopted 11/22/77, Renumbered 11/21/78, Revised 1/5/83)

B. Reporting Requirements

1. Any person subject to Section A of this Rule shall report any violation of any emission standard to which the stationary source is required to conform, as indicated by the records of the monitoring device, to the District within 48 hours after such occurrence. The District shall, in turn, report the violation to the state within five working days after receiving the report of the violation from the owner or operator.

2. Any person subject to the provisions of Section A of this Rule shall report any breakdown or shutdown of the monitoring equipment to the District consistent with the requirements of Rule 32 (Breakdown Conditions; Emergency Variance).

2/25/80

REGULATION V. ORCHARD HEATERS

~~Rule 80. Permits~~

After the date of adoption of this Regulation, no person shall construct, place, maintain, alter, use or operate in excess of five (5) orchard heaters in any place where they may be used or operated for frost protection, without first obtaining a Permit to do so from the Agricultural Commissioner. Application for such Permits shall be made to the Agricultural Commissioner on available forms and shall contain all information required by such forms. The Agricultural Commissioner may require the applicant to furnish such additional information as he may deem necessary before acting on any application.

Information on Permits may be brought up to date through the use of questionnaires mailed out by the Agricultural Commissioner. This questionnaire will be mailed to the mailing address on the original application and permit. If a grower fails to answer the questionnaire, his Permit may be cancelled and a new Permit application and filing fee may be required by the Agricultural Commissioner. A Permit shall remain valid if questionnaires have been filed satisfactorily and provisions of this Regulation have been compiled with. (Revised ~~5/23/72~~)

Rule 81. Condition of Heaters

Upon application for any Permit to Operate heaters, the applicant shall execute a signed statement to the effect that:

A. All heaters enumerated in said application are clean, and relatively free of solids in stacks.

B. All heaters enumerated in said application are in good repair and working conditions and will comply with Rules 83 and 84.

C. All heaters not under fire with fuel contained within must be covered when standing in the field.

D. All such heaters will be maintained and operated so as to comply with the Rules governing the Permit.

The Agricultural Commissioner may make inspections to determine the condition of the heaters. Upon findings contrary to any requirement of this Rule, the application shall be denied until such time as the condition of the heaters is such to effect compliance. (Revised 5/23/72)

~~Rule 82. Burning Rubber and Other Substances~~

~~It shall be unlawful for any person, for the purpose of frost protection, to burn any rubber, rubber tires, or any other substance~~

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

Rule 82. Burning Rubber and Other Substances

(Adopted 10/22/68, Revised 5/23/72)

It shall be unlawful for any person, for the purpose of frost protection, to burn any rubber tires, or any other substance containing rubber, or to burn oil or other combustible substances in drums, buckets, tubes, pails or other containers except orchard heaters.

Fuels used in orchard heaters shall comply with applicable Ventura County Air Pollution Control District Rules and Regulations.

Rule 83. Orchard Heaters: Permitted Types

(Adopted 10/22/68, Revised 5/23/72)

Orchard heaters may be used for frost protection pursuant to Permit if they are so designed or equipped, or can be operated or regulated, so as not to discharge into the atmosphere unconsumed solid carbonaceous matter at a rate in excess of one (1) gram per minute or are approved by the State Air Resources Board.

Rule 85. Prohibition of Sale of Heaters

(Adopted 10/22/68, Revised 5/23/72)

It shall be unlawful to sell, for use for frost protection within the County of Ventura, any orchard heater which is not approved by the State Air Resources Board, or does not comply with Rule 83 of this Regulation.

Rule 101. Sampling and Testing Facilities

(Adopted 10/22/68, Revised 5/23/72)

Any person operating or using any article, machine, equipment or other contrivance for which these Rules require a Permit to Operate, shall provide and maintain conveniently located facilities, and reasonable and necessary test openings in the stack and system, including instruments and sensing devices, as required within these Rules and Regulations, in order to permit measurement of emissions of air contaminants or for indicating temperatures, pressures, or other operating conditions necessary to determine compliance with these Rules. Where facilities provided by the owner for this purpose are inadequate, the Air Pollution Control District may, in writing, require the permittee to provide such facilities as are reasonably necessary for the above stated purposes.

All such facilities may be either permanent or temporary, at the discretion of the person responsible for their provision, shall be suitable for determinations consistent with the emission limits established in these Rules, and shall comply with all applicable laws and regulations concerning safe construction or safe practices in connection with such facilities.

Rule 102. Source Tests (Adopted 5/23/72, Revised and Renumbered 11/21/78, Revised 4/13/04)

A. The Air Pollution Control Officer may require of an applicant or permittee whatever sampling and source tests necessary to verify compliance of these rules when processing an application for a Permit to Operate, when renewing a Permit to Operate or whenever the Air Pollution Control Officer finds that an analysis is necessary. Testing shall be completed within 30 days of the request and a report submitted to the District 45 days thereafter or on another schedule preapproved in writing by the District. All costs shall be paid by the applicant or permittee.

B. Any source test or analysis which is submitted to substantiate an application for a permit and/or operation within the Rules and Regulations of the Air Pollution Control District, shall be conducted in strict conformance with the test method specified in the applicable District rule. Alternative test methods may be used with prior written approval by the District, ARB and EPA. The Air Pollution Control District shall have the right to observe and approve all such source tests and analysis. The Air Pollution Control District retains the authority to conduct such source tests and analyses as are deemed necessary to evaluate status of compliance and/or permit application materials.

6/3/99

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 103 - CONTINUOUS MONITORING SYSTEMS
(Adopted 11/22/77, Renumbered 11/21/78, Revised 7/5/83, 3/28/89, 6/4/91, 2/9/99)

A. Applicability Requirements

1. The owner or operator of an emission source required by a federal regulation to install, maintain in good working order, and operate a continuous monitoring system shall do so in accordance with the provisions of that regulation.

2. For emission sources not subject to Subsection A.1, the owner or operator of any boiler, steam generator or process heater, with a heat input capacity of between 40 million British Thermal Units (BTU's) per hour and 250 million BTU's per hour, and with a capacity factor of at least 30 percent per year, shall provide, properly install, maintain in good working order, and operate continuous emission monitoring systems to measure the following pollutants:

   a. Oxides of nitrogen

   b. Carbon monoxide

   c. Oxygen

3. For emission sources not subject to Subsection A.1, the owner or operator of any boiler, steam generator or process heater, with a heat input capacity of greater than 250 million BTU's per hour, shall provide, properly install, maintain in good working order, and operate continuous emission monitoring systems to measure the following pollutants:

   a. Oxides of nitrogen

   b. Carbon dioxide or oxygen

   c. Opacity, unless the device is gas-fired

4. Notwithstanding the requirements of Subsections A.1, A.2 or A.3, the owner or operator of any equipment with emissions of any single air contaminant greater than or equal to either 5 pounds per hour or 40 pounds per day shall, upon written request of the Air Pollution Control Officer, provide, properly install, maintain in good working order, and operate continuous monitoring systems to measure a specified set of air contaminant emissions for a specified reason.

B. Reporting Requirements

1. The owner or operator of a unit subject to the provisions of Section A of this Rule shall report any violation of any applicable monitored emission standard in writing to the District within 96 hours of each occurrence. Upon receipt, the District shall transmit the violation report to the state within five working days.

2. The owner or operator of a unit subject to the provisions of Section A of the Rule shall maintain permanent continuous monitoring records, in a form suitable for inspection, for a period of at least five (5) years. Such records shall be made available to the Air Resources Board or the District upon request.

   The record shall include:

   a. The date, time and duration of any startup, shutdown or malfunction in the operation of any affected facility.

   b. The results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of any continuous emission monitors that have been installed pursuant to Section A of this Rule.

   c. Emission Measurements.

   d. Net megawatt-hours produced, if applicable.

   e. Any applicable emission limit, if based on calculations.

3. The owner or operator of a unit subject to the provisions of Subsection A.1, A.2 or A.3 of this Rule shall, upon written request of the Air Pollution Control Officer, submit a written report each calendar quarter to the Air Pollution Control Officer. The report shall be due on the 30th day following the end of the calendar quarter and shall include:

   a. The date, time, duration and magnitude of excess emissions, the nature and cause of the excess (if known), the corrective actions taken, and the preventive measures adopted.

   b. The averaging period used for data reporting. For the pollutant/source category in question, this period shall correspond to either the averaging period specified in the applicable rule, or another period, as specified in writing by the Air Pollution Control Officer.

   c. The date, time and duration of each period during which the continuous monitoring system was inoperative, except for zero and span checks, and a description of the system repairs and adjustments undertaken during each period.

d. A negative declaration when no excess emissions occurred.

4. The owner or operator of a unit subject to the provisions of Subsection A.4 of this Rule shall, upon written request of the Air Pollution Control Officer, provide a summary of the data obtained from the continuous monitoring systems. The format of the summary shall be approved in writing by the Air Pollution Control Officer.

5. In addition to the requirements of any source specific rule, continuous monitoring data shall be reduced according to the following procedures:

   a) For electric power generating units, Appendix F to 40 CFR part 75, Conversion procedures.

   b) For units subject to a federal New Source Performance Standard and required by that standard to install a continuous emission monitoring system, 40 CFR, Part 51, Appendix P, Data reduction.

   c) For units subject to the provisions of Subsection A.2, A.3, or A.4, 40 CFR, Part 51, Appendix P, Data reduction, paragraphs 5.0 through 5.3.3, or by other methods determined to be equivalent by the District, the Air Resources Board and the Environmental Protection Agency.

C. Standards of Performance

The owner or operator of a continuous monitoring system shall install, calibrate, operate and maintain the system in accordance with the following specifications:

1. For electric power generating units; 40 CFR Part 75, Continuous Emission Monitoring, Subpart C, Operation and Maintenance Requirements, which includes by reference Appendix A to part 75, Specifications and Test Procedures, and Appendix B to Part 75, Quality Assurance and Quality Control procedures.

2. For units subject to a federal New Source Performance Standard and required by that standard to install a continuous emission monitoring system; 40 CFR Part 60.13, Monitoring requirements. Section (a) includes by reference 40 CFR Part 60, Appendix B to part 60, Performance Specifications, and Appendix F to part 60, Quality Assurance Procedures.

3. For units subject to the provisions of Subsection A.2 or A.3; 40 CFR, Part 51, Appendix P, Sections 3.0 through 3.9.5. Section 3.1 of Appendix P shall include 40 CFR, Part 60, Appendix B, Performance Specification 4, for Carbon Monoxide. Equivalent specifications may be established by mutual agreement of the District, the Air Resources Board and the Environmental Protection Agency.

4. For units subject to the provisions of Subsection A.4; specifications established by the Air Pollution Control Officer.

D. Appeals and Discontinuance of Monitoring

1. The owner or operator of a unit required to install, maintain and operate continuous monitoring systems pursuant to Subsection A.4 of this Rule may petition the Hearing Board to appeal the Air Pollution Control Officer's decision.

2. The owner or operator of a unit subject to the provisions of Subsection A.4 of this Rule may be allowed to discontinue use of the continuous monitoring systems if, as determined by the Air Pollution Control Officer, the reason for monitoring no longer exists.

E. Definitions

Definitions appear in the applicable sections of federal code, which includes, but is not limited to;

- 40 CFR part 72 (Acid Rain), Subpart A, Section 72.2,
- 40 CFR part 60 (NSPS), Subpart A, Section 60.2, and
- any definitions that appear in cited federal specifications and procedures.

Alternative definitions may be established by mutual agreement of the District, the Air Resources Board and the Environmental Protection Agency. Other definitions appear in applicable rules.

1. "Capacity factor": The ratio of fuel used by an applicable unit compared to the fuel that would have been used by the unit if it had operated at its rated heat input capacity for the entire year. The capacity factor is calculated from a unit's reported fuel consumption.

VCAPCD
1/28/92

Rule 150. General (Adopted 11/7/72, Revised 3/26/74, 9/24/74, 7/1/75, 11/20/79, 9/17/91)

Regulation VIII, Emergency Action, specifies the actions that shall be taken by industry, business, commerce, educational institutions, government and the public to reduce public exposure to unhealthful ozone concentrations, to prevent ambient ozone concentrations from reaching hazardous levels, and to abate such concentrations should they occur.

A. Air Quality Surveillance

The Air Pollution Control Officer (APCO) shall maintain air monitoring stations that measure air quality on a continuing basis. Using these measurements, the APCO shall declare or predict air pollution episodes. The APCO shall make daily summaries of air monitoring data, and shall place the summaries on a public access recorded telephone message. Written summaries shall be public records and immediately after preparation shall be filed at the Air Pollution Control District to be available to the public, press, radio, television, and other communications medium.

B. Communications

The APCO shall establish an effective communications system to notify the public of the prediction or occurrence of episodes. Notifications shall be made through the press, radio, television, telephone, and other means of communications.

C. Air Pollution Abatement

If the APCO predicts or declares a Stage 1, Stage 2, or Stage 3 Episode, the APCO shall direct the owners or operators of the facilities designated in Rules 158 and 159 to implement the pre-planned air pollution abatement measures specified in those rules. Owners or operators of sources subject to Rule 158 must develop and submit written source abatement plans meeting Rule 158 specifications. Employers subject to Rule 159 must designate a person to implement the traffic abatement procedures specified in Rule 159.

D. Interdistrict Coordination

When an APCO of an adjacent air pollution control agency requests action to abate an episode occurring within that district, the Ventura County APCO shall evaluate the situation to determine whether emission sources in the Ventura County Air Pollution Control District are a significant contributing factor to the episode in the alerted district. When such sources are determined to be significant, the Ventura County APCO shall take the same actions required in the event of a similar episode occurring within the district's boundaries with a view toward reducing those emissions having a significant contribution to the air pollution level in the alerted district. Within three hours of the receipt of the request, or as soon thereafter as reasonably possible, the Ventura County APCO shall report to the requesting air pollution control agency the actions being taken to reduce emissions.

E. Enforcement

The APCO shall enforce the appropriate provisions of this regulation against any person who, having knowledge of the declaration of an episode, refuses to comply with the rules set forth in this regulation or any order of the Air Pollution Control Board or the Air Pollution Control Officer pursuant to this regulation.

F. Source Inspection Plans

The APCO shall prepare source inspection plans for enforcing the mandatory source abatement requirements of this regulation. These plans shall be implemented when a predicted Stage 1 Episode occurs and implementation shall continue during Stage 2 and Stage 3 Episodes.

G. Source Area

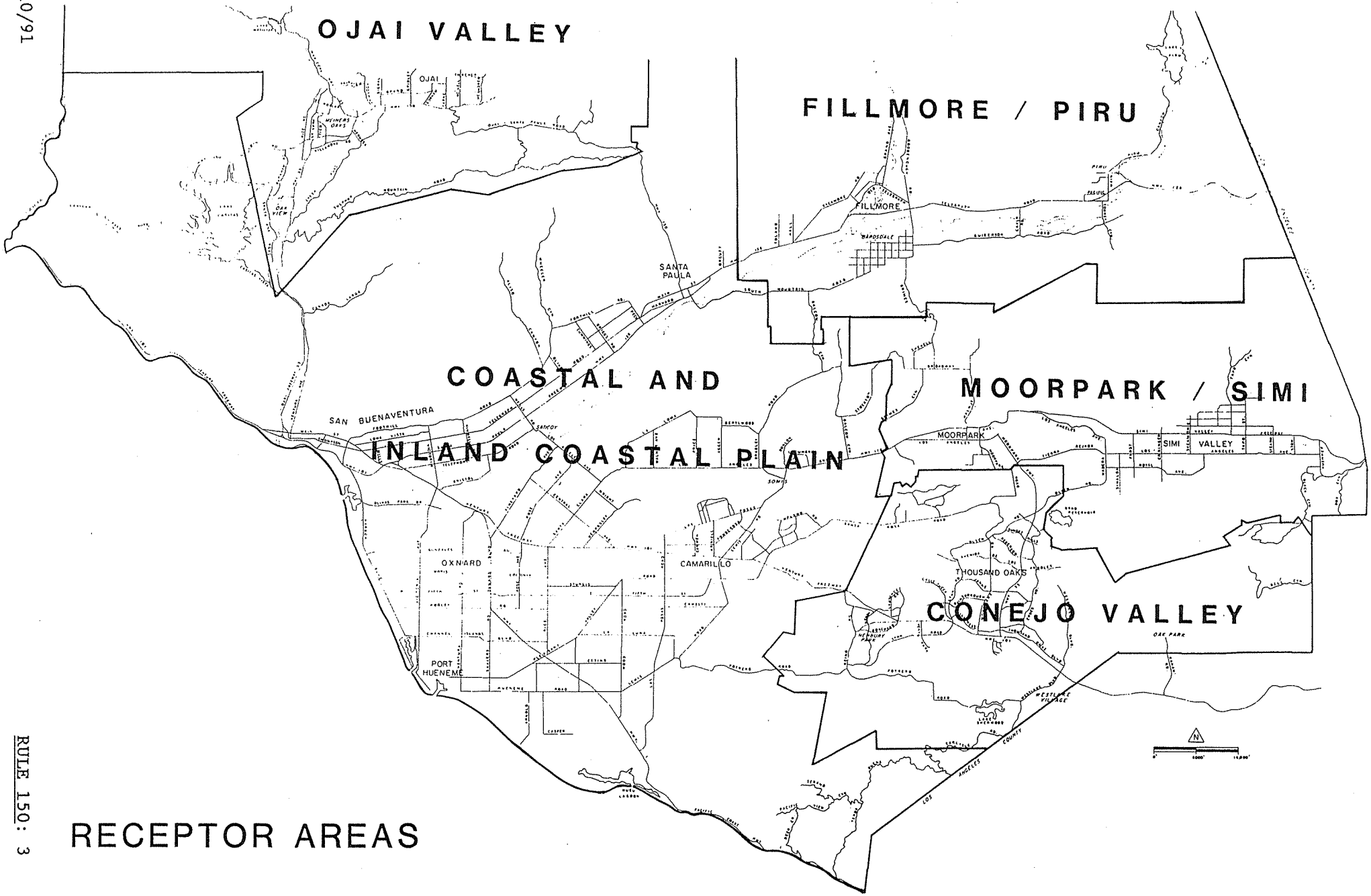
A source area is the region in which air contaminants are emitted. For the purpose of this Regulation, the source area is the area of Ventura County south of the Los Padres National Forest boundary plus all offshore areas for which the Ventura County Air Pollution Control District is designated the corresponding onshore area.

H. Receptor Areas

A receptor area is the region in which air contaminants are measured. For the purpose of this Regulation, Ventura County is divided into five receptor areas:

1. Ojai Valley
2. Coastal and Inland Coastal Plain
3. Conejo Valley
4. Moorpark / Simi Valley
5. Fillmore / Piru

10/91



RECEPTOR AREAS

RULE 150: 3

1/28/92

Rule 151. Episode Criteria (Adopted 9/17/91)

For the purpose of this Regulation, the following episode criteria shall apply:

Air Contaminant	Averaging Time	Health Advisory	Stage 1	Stage 2	Stage 3
Ozone	1 hr.	0.15 ppm*	0.20 ppm	0.35 ppm	0.50 ppm

* Parts per million parts of air by volume

1/25/92

Rule 152. Episode Notification Procedures (Adopted 9/17/91)

A. The Air Pollution Control Officer shall establish an effective system of communications for the purpose of announcing episode declarations, information and instructions appropriate to carry out the provisions of this regulation.

B. Following the prediction or declaration of an episode, the Air Pollution Control Officer shall notify the following persons:

1. School Officials.

2. Appropriate elected officials.

3. The news media.

4. APCD personnel.

5. Sources of air contaminants specified in Rules 158 and 159 which require alert status in preparation for implementation of pre-arranged emissions abatement plans.

6. Local public health officials and hospitals.

7. The California Air Resources Board.

8. Local and State law enforcement agencies.

9. Public safety personnel who have responsibilities for, or interests in, air pollution control.

10. Other parties as deemed necessary by the Air Pollution Control Officer.

C. When the Air Pollution Control Officer predicts that an episode will occur on the next day, he shall declare such a prediction not later than 4:00 p.m.

1/25/92

Rule 153. Health Advisory Episode Actions (Adopted 9/17/91)

The Air Pollution Control Officer shall declare a Health Advisory Episode whenever the Health Advisory Episode criteria specified in Rule 151 are attained or predicted. Upon declaration of a Health Advisory Episode the Air Pollution Control Officer shall:

A. Notify school officials that the California Air Pollution Emergency Plan requires the District to advise them that sustained rigorous outdoor exercise lasting longer than one hour by students must be discontinued.

B. Announce the occurrence or prediction of a Health Advisory Episode using the procedures established pursuant to Rule 152. The announcement shall include:

1. Health warnings appropriate for a Health Advisory Episode in accordance with the California Air Pollution Emergency Plan.

2. The specific ozone level predicted or reached.

3. The predicted duration of the episode including the predicted time of episode termination. If the ozone concentration persists or is predicted to persist at episode levels past the originally predicted termination time, the Air Pollution Control Officer shall re-declare the episode using the procedures in Rule 152.

4. The receptor areas currently affected or predicted to be affected.

1/28/92

Rule 154. Stage 1 Episode Actions (Adopted 9/17/91)

The Air Pollution Control Officer shall declare a Stage 1 Episode whenever the Stage 1 Episode criteria specified in Rule 151 are attained or predicted. Upon declaration of a Stage 1 Episode, the Air Pollution Control Officer shall:

A. Announce the occurrence or prediction of a Stage 1 Episode using the procedures established pursuant to Rule 152. The announcement shall include:

1. Health warnings appropriate for a Stage 1 Episode in accordance with the California Air Pollution Emergency Plan.

2. The specific ozone level predicted or reached.

3. The predicted duration of the episode including the predicted time of episode termination. If the ozone concentration persists or is predicted to persist at episode levels past the originally predicted termination time, the Air Pollution Control Officer shall re-declare the episode using the procedures in Rule 152.

4. The receptor areas currently affected or predicted to be affected.

5. A request for all persons engaged in activities which contribute to air pollution to voluntarily postpone such activities until after the episode is terminated. Such postponed activities shall include but are not limited to:

1) Unnecessary use and fueling of motor vehicles.

2) The application of pesticides and herbicides.

3) Painting, surface coating and surface cleaning with solvents, which are not equipped with air pollution controls.

4) The use of utility engines such as leaf blowers and lawn mowers.

B. In the case of a predicted Stage 1 Episode, The Air Pollution Control Officer shall:

a. Direct owners or operators of emission sources subject to Rule 158, who have source abatement plans on file with the District, to implement the Stage 1 Episode emissions abatement measures contained in those plans.

b. Direct employers subject to Rule 159 to implement the Stage 1 Episode traffic abatement procedures specified in Rule 159.

1/25/92

Rule 155. Stage 2 Episode Actions (Adopted 9/17/91)

The Air Pollution Control Officer shall declare a Stage 2 Episode whenever the Stage 2 Episode criteria specified in Rule 151 are attained or predicted. Upon declaration of a Stage 2 Episode the Air Pollution Control Officer shall notify the Office of Emergency Services, continue implementing the actions initiated pursuant to Rule 154, and:

A. The Air Pollution Control Officer shall announce the occurrence or prediction of a Stage 2 Episode using the procedures established pursuant to Rule 152. The announcement shall include:

1. Health warnings appropriate for a Stage 2 Ozone Episode in accordance with the California Air Pollution Emergency Plan.

2. The specific ozone level predicted or reached.

3. The predicted duration of the episode including the predicted time of episode termination. If the ozone concentration persists or is predicted to persist at episode levels past the originally predicted termination time, the Air Pollution Control Officer shall re-declare the episode using the procedures in Rule 152.

4. The receptor areas currently affected or predicted to be affected.

B. The Air Pollution Control Officer shall direct all employers subject to Rule 159 to implement the Stage 2 Episode traffic abatement procedures contained in Rule 159.

C. The Air Pollution Control Officer shall direct owners or operators subject to Rule 158 to implement their approved Stage 2 Episode source abatement plans and to prepare for possible shutdown in anticipation that the APCD may require the facility to close if Stage 3 Episode criteria are reached.

D. The APCO shall prohibit the loading and off loading of marine tankers containing petroleum products with a Reid vapor pressure greater than 1.5 pounds per square inch.

E. The Air Pollution Control Officer shall study all pertinent information relating to the concentration of air contaminants involved in the episode to determine actions to be taken. Those actions may include, but are not limited to:

1. The program of previously developed actions, as developed under Rules 158 and 159.

2. Postponing construction and demolition.

3. Banning the use of fleet vehicles, including government vehicles except those vehicles necessary to the health and welfare of the public.

4. Banning the delivery of all non-perishable goods.

5. Banning all service vehicles and all service calls, except those necessary to the health and welfare of the public.

6. Closing all government offices except those necessary to the health and welfare of the public.

7. Closing establishments with 100 or more employees, except those necessary to the health and welfare of the public.

8. Closing admission to public recreation facilities.

9. Closing admission to private recreational facilities such as theaters, shows and athletic events with more than 1,000 parking spaces.

10. Closing admission to shopping centers with more than 1,000 parking spaces.

11. Closing all schools and colleges.

12. Reduction of electrical generation in accordance with minimum NOx dispatch procedures consistent with the public health, welfare, and safety, and the extent customers reduce electrical demand upon request of the District.

13. Other measures as required to protect the health and safety of the public.

F. Whenever the Air Pollution Control Officer determines it necessary, the Air Pollution Control Board may take any action required by this rule with less than a quorum present. A majority vote of the members present is required for any such action.

The Air Pollution Control Officer shall implement any actions recommended by the Air Pollution Control Board.

G. Whenever a Stage 2 Episode is forecast or declared, radio and television stations shall be requested to broadcast, at least once each hour, the pertinent facts and be requested to inform the public of the actions taken in accordance with the provisions of this rule.

H. Following the declaration of a Stage 2 Episode, the Air Pollution Control Officer may request law enforcement agencies to announce the declaration of the episode to the general public by means of public announcements from those agencies' vehicles and aircraft.

I. The Air Pollution Control Officer shall inform the California Air Resources Board when the ozone concentration is observed to reach 0.40 ppm and again at 0.45 ppm.

1/28/92

Rule 156. Stage 3 Episode Actions (Adopted 9/17/91)

The Air Pollution Control Officer shall declare a Stage 3 Episode whenever the Stage 3 Episode criteria specified in Rule 151 are attained or predicted. Upon declaration of a Stage 3 Episode, the Air Pollution Control Officer shall continue implementing the actions initiated pursuant to Rules 154 and 155 and:

A. The Air Pollution Control Officer shall announce the occurrence or prediction of a Stage 3 Episode using the procedures established pursuant to Rule 152. The announcement shall include:

1. Health warnings appropriate for a Stage 3 Ozone Episode in accordance with the California Air Pollution Emergency Plan.

2. The specific ozone level predicted or reached.

3. The predicted duration of the episode including the predicted time of episode termination. If the ozone concentration persists or is predicted to persist at episode levels past the originally predicted termination time, the Air Pollution Control Officer shall re-declare the episode using the procedures in Rule 152.

4. The receptor areas currently affected or predicted to be affected.

B. The Air Pollution Control Officer shall:

1. Ban large scale commercial and industrial spray painting.

2. Suspend activities, such as roofing, asphalt paving and surface coating where the use of large quantities of volatile organic material is involved.

C. The Air Pollution Control Officer shall require the implementation of pre-planned Stage 3 Episode source abatement plans and traffic abatement procedures, as specified in Rules 158 and 159.

D. The Air Pollution Control Officer shall study all pertinent information relating to the concentration of air contaminants involved in the episode to determine any further actions to be taken, including the consideration of the following additional control measures:

1. Reduction of electrical generation in accordance with minimum NOx dispatch procedures consistent with the public health, welfare, and safety, and the extent customers reduce electrical demand upon request of the District.

2. Other measures required to protect public health and safety.

E. The Air Pollution Control Officer will implement any control measures recommended by the Air Pollution Control Board.

F. The Air Pollution Control Officer shall request Radio and television stations to broadcast, at least once each half-hour, the pertinent facts

and inform the public of actions taken in accordance with the provisions of this Rule.

G. If the steps taken by the Air Pollution Control Officer are inadequate to cope with the emergency, the Air Pollution Control Board shall request the Governor to declare a state of emergency as set forth in the California Emergency Services Act.

H. Specific provisions will be made by the Air Pollution Control Board for those operations necessary for the health and welfare of the public, such as road maintenance and construction operations which involve keeping roads open for public services such as fire and police protection and activities of concern to the medical community.

4/25/92

Rule 157. Air Pollution Disaster (Adopted 9/17/91)

When it is determined by medical authorities or local officials that a substantial number of persons are suffering or are likely to suffer incapacitating effects from air pollution, regardless of measured air pollutant concentrations, and analysis of meteorological and air quality data by the ARB or an APCD indicates that the condition is likely to continue, or recur, the Chairperson of the ARB shall confer with the director of the Office of Emergency Services (OES) and they shall jointly recommend to the Governor that an air pollution disaster (State of Emergency) be declared.

1/28/92

Rule 158. Source Abatement Plans (Adopted 9/17/91)

A. Applicability

This rule shall apply to all owners or operators of governmental, industrial, business or commercial establishments and activities listed below:

1. Any facility or plant emitting more than 100 tons of Nitrogen Oxides (NOx), or Reactive Organic Compounds (ROC) per year.

2. Other governmental, industrial, business establishment or activity specified by the Air Pollution Control Officer.

B. Requirements

Following written notice by the Air Pollution Control Officer, each person subject to this rule shall develop a source abatement plan to reduce emissions when air pollution episodes are predicted or attained. An emission abatement plan shall include the following parts, unless the APCO approves an alternate plan which is equivalent in effect:

1. Each plan shall include the following general information:

   a. The name and location of the facility.

   b. The names and telephone numbers of the persons responsible for implementation of the plan.

   c. A list of all equipment that emits ROC or NOx. The list shall include the actual emissions of each pollutant, in pounds per day, from each unit including any weekday, holiday or weekend variations.

2. For Stage 1 Episodes, each plan shall include as many emission abatement measures as possible without excessive disruption of normal activities. Such measures may include but are not limited to:

   a. Measures to voluntarily curtail equipment operations that emit ROC or NOx.

   b. Measures to postpone operations that emit ROC or NOx which can be postponed until after the episode.

3. For Stage 2 Episodes, each plan shall include the following emission abatement measures:

   a. Measures that will be implemented to curtail equipment operations that emit ROC or NOx to reduce emissions by at least 20 percent without jeopardizing the public health and safety, and without damaging equipment or increasing the emissions of other air contaminants. The plan shall identify the equipment for which emissions will be

curtailed, and the time required to accomplish the emission curtailment.

b. Measures that will be implemented to eliminate emissions of ROC and NOx by starting no new batches and by ceasing feed of new materials.

4. For Stage 3 Episodes, each plan shall include the following emission abatement measures and information:

a. Procedures that will be implemented to phase down all operations, as rapidly as possible without damage to equipment, to operate as though the day were a Major National Holiday.

b. Measures that will be implemented to curtail the equipment operations still in operation after phase-down to reduce emissions by an additional 13 percent (33 percent total) without jeopardizing the public health and safety, and without damaging equipment or increasing the emissions of other air contaminants. The plan shall identify the equipment for which emissions will be curtailed, and the time required to accomplish the emission curtailment.

c. A list of equipment which can be shut down without jeopardizing the public health or safety, and without causing damage to equipment, and an estimate of the resultant reductions in ROC and NOx emissions.

d. A list of all equipment which must be operated to protect the public health or safety, or to protect equipment from damage, and an estimate of the ROC and NOx emissions from such equipment.

C. The written notice specified in Section B may be served in the manner prescribed by law for the service of summons or by registered or certified mail. Each owner or operator of an industrial, business or commercial establishment or activity so served shall, within sixty days after the receipt of such notice, submit to the Air Pollution Control Officer the source abatement plans specified in the notice.

D. Any person, following the notice specified in Section B, who fails to submit the plans in the form and manner specified in this rule is in violation of this rule.

E. All plans submitted pursuant to this rule are subject to approval by the Air Pollution Control Officer.

F. The plans submitted pursuant to the requirements of this rule shall be reviewed by the Air Pollution Control Officer for approval or disapproval according to the following schedule:

1. For sources with emissions of ROC or NOx greater than 500 tons per year, within 45 days after receipt.

2. For sources with emissions of ROC or NOx greater than 100 tons per year, within 90 days after receipt.

4. Within 30 days after plan evaluation, the Air Pollution Control Officer shall notify the plan submitter if the plan is approved or disapproved. Any plan disapproved shall be modified to overcome the disapproval and resubmitted to the Air Pollution Control Officer within 30 days of receipt of the notice of disapproval.

G. A copy of the approved stationary source curtailment and/or traffic abatement plans shall be on file and readily available on the source premises to any person authorized to enforce the provisions of this Rule.

H. The APCO may require applicable owner/operators to periodically update plans in the same manner as described in Sections C, D, E, and F of this rule.

1/28/92

Rule 159. Traffic Abatement Procedures (Adopted 9/17/91)

A. Applicability

This rule shall apply to the following employers:

1. Employers with 50 or more employees reporting to work weekdays between 6:00 a.m. and 10:00 a.m. at any worksite during any 30 day period in the last 12 months.

2. Employers with 50 or more fleet vehicles.

B. Requirements

1. Upon notification by the APCD, each employer shall implement traffic abatement procedures as specified in Section C of this rule to reduce motor vehicle traffic and emissions during air pollution episodes.

2. Within 30 days of receipt of written notice by the APCD, each employer shall designate a contact person whom the APCD shall notify to implement the traffic abatement procedures specified in Section C. The employer shall, in writing, supply the APCD with the name, address, and telephone number of the designated contact person, and shall keep this information current and on file with the APCD at all times.

C. Traffic Abatement Procedures

1. Upon notification by the APCD that a Stage 1 Episode is predicted, the designated contact person shall:

a. Notify employees that a Stage 1 Episode is predicted and request all employees to reduce their vehicle trips and make extra efforts to rideshare on their next commute to work. The designated contact person may notify employees by posting notices, public address announcements, personal contact, or any other method which ensures that all employees are notified. The designated contact person shall keep a written record of the notification method used for each occasion that notifications are required. Such records shall be saved for one year and shall be made available to the APCO upon request.

b. Implement a policy during Stage 1 Episodes that encourages employees to reduce all non-essential business related trips taken in personal or company owned vehicles which can be cancelled or postponed until after the episode.

2. Upon notification by the APCD that a Stage 2 Episode is predicted or is occurring, the designated contact person shall implement the following measures in addition to Stage 1 Episode measures:

a. For the duration of the Stage 2 Episode, suspend all business related trips that can be eliminated or postponed without endangering public health and safety, without causing damage to property due to lack of attention or required maintenance, and without curtailing delivery schedules which are required by law or contract.

b. Other measures as directed by the APCO such as, telecommuting where possible, discontinuing the delivery of all non-perishable goods, and eliminating all activities that encourage public travel to the facility.

c. The designated contact person shall make preparations for possible shutdown in anticipation that the APCD may require the facility to close if Stage 3 Episode criteria are reached.

3. Upon notification by the APCD that a Stage 3 Episode is predicted or is occurring, the designated contact person shall, in addition to Stage 1 and Stage 2 measures:

a. Require carpooling or the use of mass transit by all employees for travel to work.

b. If directed by the APCD, eliminate all commute related trips taken by employees reporting to the worksite which can be eliminated without endangering public health and safety and without causing damage to property due to lack of attention or required maintenance.

7/19/74

Ventura

REGULATION IX. PUBLIC RECORDS

Rule 200. Public Records

A. All information, analyses, plans or specifications that disclose the nature, extent, quantity or degree of air contaminants or other pollution which any article, machine, equipment, or other contrivance will produce, which the District requires any applicant to provide before such applicant builds, erects, alters, replaces, operates, sells, rents, or uses such article, machine, equipment, or other contrivance, are public records.

B. All air or other pollution monitoring data, including data compiled from stationary sources, are public records.

C. Except as otherwise provided in Paragraph D. of this rule, trade secrets are not public records under this Regulation. Trade secrets, as used in this Regulation may include, but are not limited to, any formula, plan, pattern, process, tool, mechanism, compounds, procedure, production data, or compilation of information which is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article of trade or a service having commercial value, and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it.

D. Notwithstanding any other provision of law, all air pollution emission data, including those emission data which constitute trade secrets as defined in Paragraph C., are public records. Data used to calculate emission data are not emission data for the purpose of this subdivision and data which constitute trade secrets and which are used to calculate emission data are not public records.

(Adopted 1/29/74)

Ventura
4/76 4/21/76

Rule 201. District's Request for Information

A. When requesting information for determining the amount of air contaminants from non-vehicular sources pursuant to Section 41511 or other sections of the Health and Safety Code or Rule 11, the District shall identify the information requested with sufficient specificity to enable the source operator or owner to identify the precise information sought. The District shall give notice in writing that the information provided may be released (1) to the public upon request, except trade secrets which are not emission data, (2) to the California Air Resources Board, and (3) to the Federal Environmental Protection Agency, which protects trade secrets as provided in Section 114(c) of the Clean Air Act, as amended in 1970 and in Code 40 of the Federal Regulations, Chapter 1, Part 2.

B. Any person from whom the District obtains any records, whether requested by the District or furnished by a person for some other reason, may label as "trade secret" any part of those records which are entitled to confidentiality under Section 6254.7 of the Government Code and Rule 200(A). Written justification for the "trade secret" designation shall be furnished with the records so designated and the designation shall be a public record. The justification shall be as detailed as possible without disclosing the trade secret; the person may submit additional information to support the justification, which information, upon request, will be kept confidential in the same manner as the record sought to be protected.

C. After a preliminary review, the District may reject a justification as having inadequate merit, in which case the person making the justification shall be promptly notified in writing; the records in question shall, upon expiration of twenty-one (21) days from the data of the notice, be subject to public inspection unless a justification is received and accepted.

~~Rule 202. Inspection of Public Records - Disclosure Policy~~

~~It is the policy of the Ventura County Air Pollution Control District that all District records, not exempted from disclosure by state law, shall be open for public inspection with the least possible delay and expense to the requesting party.~~

Rev. 3/9/76

MAR 29 1976

Ventura 4/76

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Rule 203. Inspection of Public Records - Disclosure Procedure

A. A request to inspect public records in the custody of the District need not be in any particular form, but it must describe the records with sufficient specificity to enable the District to identify the information sought. The District shall require that a request to inspect be in writing, and such a request shall include but shall not be limited to the following:

1. Name of applicant;

2. Address and legal residence of applicant, if required for mailing purposes;

3. Emission source of interest;

4. Date of period of emissions of interest.

B. The District shall make available the records requested, with the exception of those records specifically exempted from disclosure by state law and those records labeled pursuant to Rule 201 as "trade secret" which are not emission data, within ten (10) working days of the date of receipt of the request therefore. If, for good cause, the information cannot be made available within ten (10) working days, the District will notify the requesting person the reasons for the delay and when the information will be available. Those records labeled as "trade secrets" shall be governed by the procedure set forth in Rule 204.

C. Within five (5) working days of receipt of a request to inspect public records, the District shall advise the requesting person of the following facts when appropriate:

1. The location at which the public records in question may be inspected and the date and office hours during which they may be inspected;

2. If copies of the public records are requested, the cost of providing such copies;

3. Which of the records requested, if any, have been labeled pursuant to Rule 201 as "trade secret" and are not public records. In such a case, the District shall give the notice required by Rule 204(B);

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4. The specific reason why the records cannot be made available, if such is the case. Reasons for unavailability may be, but are not limited to the following: the records are exempt from disclosure by state law; the records cannot be identified from the information contained in the request; the records do not exist; the District has determined pursuant to Section 6255 of the Government Code that on the facts of the particular case the public interest served by not making the record public clearly outweighs the public interest served by disclosure of the records; or the records in question are not in custody of the District. In the latter situation the District shall, if possible, notify the requesting party of the entity most likely to have custody of the records requested.

~~Rule 204. Trade Secrets~~

A. Only those portions of records in the custody of the District which are not emission data and (1) were labeled "trade secret" prior to the adoption of this Regulation, or (2) are hereafter specifically labeled as "trade secret" pursuant to Rule 201 B, shall be subject to the procedure set forth in this Regulation. All other portions of such records shall be made available pursuant to Rule 203.

B. When the District receives a request to inspect any record so labeled which is not emission data, it shall promptly notify the requesting party that (1) such record is designated a trade secret under Rule 201 B. and, if such is the case, under law it cannot be made available; (2) the District has not determined if it is a trade secret, but the justification of the request for confidentiality is enclosed; and (3) if the requesting party considers the justification inadequate, he may so advise the District in writing, setting forth his reasons.

C. Upon receipt of such advice, the District shall (1) promptly review in detail the justification, the challenge to the justification, and the record; (2) determine if the record is in its entirety a trade secret(s); and (3) promptly notify those persons affected of its decision in writing. If the District withholds the record from inspection, the person requesting it may seek judicial ~~relief under Section 6258 of the Government Code. If~~

(Adopt. 1/29/74)

7/19/74

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B. When the District receives a request to inspect any record so labeled which is not emission data, it shall promptly notify the requesting party that (1) such record is designated a trade secret under Rule 201 B. and, if such is the case, under law it cannot be made available; (2) the District has not determined if it is a trade secret, but the justification of the request for confidentiality is enclosed; and (3) if the requesting party considers the justification inadequate, he may so advise the District in writing, setting forth his reasons.

C. Upon receipt of such advice, the District shall (1) promptly review in detail the justification, the challenge to the justification, and the record; (2) determine if the record is in its entirety a trade secret(s); and (3) promptly notify those persons affected of its decision in writing. If the District withholds the record from inspection, the person requesting it may seek judicial relief under Section 6258 of the Government Code. If

(Adopt. 1/29/74)

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the District determines that the record is in any significant part not a trade secret, the District shall send the notice required by this Regulation by certified mail, return receipt requested to the person designating the information as a trade secret, with an additional notice that the record in question shall be released for inspection to the requesting party twenty-one (21) days after receipt of the notice, unless the District is restrained from so doing by a court of competent jurisdiction.

D. Should the person designating the record as a trade secret seek protection in a court of law, the requesting party may be made a party to the litigation to justify his challenge to the designation.

(Adopt. 1/29/74)

Ventura 8/10/95

Rule 220. General Conformity (Adopted 5/9/95)

As incorporated in this rule, the provisions of Title 40 Code of Federal Regulations (CFR) Part 51, Subpart W are hereby adopted by reference and shall apply to any federal actions other than those that are funded or approved under Title 23 U.S.C. or the Federal Transit Act.

For the purpose of this rule, the "State agency primarily responsible for the applicable implementation plan" as used in Title 40 CFR Part 51, Subpart W, shall mean the Ventura County Air Pollution Control District. Other deviations from the federal regulation as presented in the CFR and that were ordered by the Ventura County Air Pollution Control District are noted in the affected subpart.

This rule incorporates the following provisions of 40 CFR Part 51, Subpart W:

CFR Citation	Title	
Subpart W	Determining Conformity of General Federal Actions to State or Federal Implementation Plans	
	Initial Promulgation	(58FR63247, Nov. 30, 1993)