

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.

<b>Negligibly-Reactive Compounds</b>	
<b>Compound</b>	<b>CAS Number</b>
carbon monoxide	<a href="#">630-08-0</a>
carbon dioxide	<a href="#">124-38-9</a>
metallic carbides (M-C) or Carbonates (M-CO <sub>3</sub> )	
ammonium carbonate ((NH <sub>4</sub> )HCO <sub>3</sub> (NH <sub>4</sub> )CO <sub>2</sub> NH <sub>2</sub> )	<a href="#">8000-73-5-123</a>
carbonic acid (CO(OH) <sub>2</sub> )	<a href="#">463-79-6</a>
methane (CH <sub>4</sub> )	<a href="#">74-82-8</a>
methylene chloride (dichloromethane)	<a href="#">75-09-2</a>
1,1,1-trichloroethane (methyl chloroform)	<a href="#">71-55-6</a>
trichlorofluoromethane (CFC-11)	<a href="#">75-69-4</a>
dichlorodifluoromethane (CFC-12)	<a href="#">75-71-8</a>
chlorodifluoromethane (HCFC-22)	<a href="#">75-45-6</a>
trifluoromethane (HFC-23)	<a href="#">75-46-7</a>
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)	<a href="#">76-13-1</a>
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)	<a href="#">76-14-2</a>
chloropentafluoroethane (CFC-115)	<a href="#">76-15-3</a>
1,1,1-trifluoro-2,2-dichloroethane (HCFC-123)	<a href="#">306-83-2</a>
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)	<a href="#">2837-89-0</a>

pentafluoroethane (HFC-125)	<a href="#">354-33-6</a>
1,1,2,2-tetrafluoroethane (HFC-134)	<a href="#">359-35-3</a>
1,1,1,2-tetrafluoroethane (HFC-134a)	<a href="#">811-97-2</a>
1,1-dichloro-1-fluoroethane (HCFC-141b)	<a href="#">1717-00-6</a>
1-chloro-1,1-difluoroethane (HCFC-142b)	<a href="#">75-68-3</a>
1,1,1-trifluoroethane (HFC-143a)	<a href="#">420-46-2</a>
1,1-difluoroethane (HFC-152a)	<a href="#">75-37-6</a>
difluoromethane (HFC-32)	<a href="#">75-10-5</a>
1,1,1,2,3,4,4,5,5-decafluoropentane (HFC-43-10mee)	<a href="#">138495-42-8</a>
3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)	<a href="#">422-56-0</a>
1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)	<a href="#">507-55-1</a>
<a href="#">1,1,1,2,2,3,3-heptafluoro-3-methoxypropane (HFE-7000)</a>	<a href="#">375-03-1</a>
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane (C4F9OCH3 or HFE-7100)	<a href="#">163702-07-6</a>
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C4F9OC2H5 or HFE-7200)	<a href="#">163702-05-4</a>
<a href="#">1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300)</a>	<a href="#">132182-92-4</a>
<a href="#">3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl)hexane (HFE-7500)</a>	<a href="#">297730-93-9</a>
2-(difluoromethoxymethyl)-1,1,1,2,3,3,3 heptafluoropropane [(CF3)2CFCF2OCH3]	<a href="#">163702-08-7</a>
<a href="#">trans-1-chloro-3,3,3-trifluoromethyl-pentane (HFO-1233zd)</a>	<a href="#">102687-65-0</a>
<a href="#">trans-1,3,3,3-tetrafluoropropene (HFO-1234ze)</a>	<a href="#">29118-24-9</a>
<a href="#">2,3,3,3-tetrafluoropropene (HFO-1234yf)</a>	<a href="#">754-12-1</a>
<a href="#">cis-1,1,1,4,4,4-hexafluorobut-2-ene (HFO-1336mzz-Z)</a>	<a href="#">692-49-9</a>
<a href="#">1,1,2,2-Tetrafluoro-1-(2,2,2-trifluoroethoxy) ethane (HFE-347pcf2)</a>	<a href="#">406-78-0</a>
<a href="#">2-Amino-2-methyl-1-propanol (AMP)</a>	<a href="#">124-68-5</a>
2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane [(CF3)2CFCF2OC2H5]	<a href="#">163702-06-5</a>
ethylfluoride (HFC-161)	<a href="#">353-36-6</a>
1,1,1,2,3,3-hexafluoropropane (HFC-236ea)	<a href="#">431-63-0</a>
1,1,1,3,3,3-hexafluoropropane (HFC-236fa)	<a href="#">690-39-1</a>
1,1,2,2,3-pentafluoropropane (HFC-245ca)	<a href="#">679-86-7</a>
1,1,2,3,3-pentafluoropropane (HFC-245ea)	<a href="#">24270-66-4</a>
1,1,1,2,3-pentafluoropropane (HFC-245eb)	<a href="#">431-31-2</a>
1,1,1,3,3-pentafluoropropane (HFC-245fa)	<a href="#">460-73-1</a>
1,1,1,3,3-pentafluorobutane (HFC-365mfc)	<a href="#">406-58-6</a>
chlorofluoromethane (HCFC-31)	<a href="#">593-70-4</a>
1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a)	<a href="#">354-23-4</a>
1-chloro-1-fluoroethane (HCFC-151a)	<a href="#">1615-75-4</a>

cyclic, branched, or linear, completely methylated siloxanes (VMS)	
Four classes of perfluorocarbon (PFC) compounds:	
cyclic, branched, or linear, completely fluorinated alkanes	
cyclic, branched, or linear, completely fluorinated ethers with no unsaturations	
cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations	
sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine	

<b>Low-Reactive Compounds</b>	
<b>Compound</b>	<b>CAS Number</b>
acetone	<a href="#"><u>67-64-1</u></a>
ethane	<a href="#"><u>74-84-0</u></a>
methyl acetate	<a href="#"><u>79-20-9</u></a>
tetrachloroethylene (perchloroethylene)	<a href="#"><u>127-18-4</u></a>
1-chloro-4-trifluoromethyl benzene (parachlorobenzotrifluoride or PCBTF)	<a href="#"><u>98-56-6</u></a>
t-butyl acetate	<a href="#"><u>123-86-4</u></a>
dimethyl carbonate	<a href="#"><u>646-38-6</u></a>
propylene carbonate	<a href="#"><u>108-32-7</u></a>
methyl formate	<a href="#"><u>107-31-3</u></a>

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.

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

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 10/22/91).

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 <sub>2</sub>	- carbon dioxide
CO <sub>2</sub> e	- carbon dioxide equivalent
g.	- gram(s)
GHGs	- greenhouse
gases gr.	- grain(s)
Hg.	- mercury
H <sub>2</sub> S	- 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 <sub>2</sub>	- nitrogen dioxide
NO <sub>x</sub>	- 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 <sub>2</sub>	- 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)

NAME	GWP	NAME	GWP
CO2	1	HFE-43-10pccc (H-Galden 1040x)	1,870
CH4	21	HFE-125	14,900
N2O	310	HFE-134	6,320
HFC-23	11,700	HFE-143a	756
HFC-32	650	HFE-227ea	1,540
HFC-41	150	HFE-236ca12 (HG-10)	2,800
HFC-125	2,800	HFE-236ea2 (Desflurane)	989
HFC-134	1,000	HFE-236fa	487
HFC-134a	1,300	HFE-245cb2	708
HFC-143	300	HFE-245fa1	286
HFC-143a	3,800	HFE-245fa2	659
HFC-152	53	HFE-254cb2	359
HFC-152a	140	HFE-263fb2	11
HFC-161	12	HFE-329mcc2	919
HFC-227ea	2,900	HFE-338mcf2	552
HFC-236cb	1,340	HFE-338pcc13 (HG-01)	1,500
HFC-236ea	1,370	HFE-338mmz1	380
HFC-236fa	6,300	HFE-347mcc3	575
HFC-245ca	560	HFE-347mcf2	374
HFC-245fa	1,030	HFE-347pcf2	580
HFC-365mfc	794	HFE-347mmy1	343
HFC-4310mee	1,300	HFE-356mec3	101
Nitrogen trifluoride	17,200	HFE-356pcc3	110
Sulfur hexafluoride	23,900	HFE-356pcf2	265
Trifluoromethyl sulphur pentafluoride	17,700	HFE-356pcf3	502
PFC-14 (Perfluoromethane)	6,500	HFE-356mm1	27
PFC-116 (Perfluoroethane)	9,200	HFE-365mcf3	11
PFC-218 (Perfluoropropane)	7,000	HFE-374pc2	557
PFC-3-1-10 (Perfluorobutane)	7,000	HFE-449sl (HFE-7100) Chemical Blend	297
PFC-4-1-12 (Perfluoropentane)	7,500	HFE-569sf2 (HFE-7200) Chemical Blend	59
PFC-5-1-14 (Perfluorohexane)	7,400	Sevoflurane	345
Perfluorocyclopropane	17,340	(Octafluorotetramethylene) hydroxymethyl group	73
Perfluorocyclobutane	8,700	Bis(trifluoromethyl)-methanol	195
PFC-9-1-18	7,500	2,2,3,3,3-pentafluoropropanol	42
HCFE-235da2 (Isoflurane)	350	PFPME	10,300

Source: Table A-1 to Subpart A of part 98, Global Warming Potentials (Federal Register, Volume 74, No. 209, October 30, 2009) (Added 4/12/11)