

8-18-97

## FACT SHEET

### **RULE TO EXCLUDE SIXTEEN HALOGENATED COMPOUNDS FROM CONTROL AS VOLATILE ORGANIC COMPOUNDS (VOCs)**

#### **TODAY'S ACTION...**

- ◆ The Environmental Protection Agency (EPA) is today issuing a rule specifying that sixteen halogenated compounds should not be considered volatile organic compounds (VOCs) under the Clean Air Act. These compounds include a number of hydrofluorocarbons (HFC) and hydrochlorofluorocarbons (HCFC). The attached table provides a complete listing of the compounds covered by today's action.
- ◆ VOCs contribute significantly to the formation of ground-level ozone (smog). Exposure to ground-level ozone can cause serious respiratory illness.
- ◆ Today's action allows, but does not require, states to remove regulatory controls on these compounds. This would allow states to focus their state implementation plans on controlling emissions of demonstrated ozone precursors in order to meet the national air quality standards for ground-level ozone.

#### **WHY IS EPA EXEMPTING THESE COMPOUNDS AS VOC?**

- ◆ EPA is exempting these compounds as VOCs because scientific evidence shows they are "negligibly reactive," meaning they contribute little or nothing to the formation of smog. Since EPA does not believe that these halogenated compounds contribute to the smog problem, today's action to exempt the compounds as VOCs would help states to focus on controlling emissions of demonstrated ozone precursors in order to meet the national ambient air quality standard for ground-level ozone.
- ◆ A compound may be exempted as a VOC as a result of public petitions and new scientific data that demonstrate its negligible effect on the formation of smog. Since 1977, EPA has removed 24 compounds or classes of compounds from the list of VOCs that contribute to smog formation. EPA codified its policy on VOCs in a February 3, 1992 revised regulation, "Requirements for Preparation, Adoption, and Submittal of State Implementation Plans."
- ◆ EPA carefully considered all public comments before making a final decision to exempt these compounds from regulation as VOCs. All comments received during the public comment period supported exempting these compounds.

#### **HOW DOES TODAY'S ACTION RELATE TO EPA'S STRATOSPHERIC PROTECTION PROGRAM?**

- ◆ In the stratosphere, high altitude ozone forms a protective layer 10 to 35 miles above the earth

that protects the earth's surface from the sun's harmful ultraviolet rays, which can cause skin cancer, eye cataracts, and damage crops. Under the terms of the Montreal Protocol, the international agreement to protect the ozone layer, developed countries worldwide agreed to limit, and eventually eliminate, world-wide production of substances that destroy or deplete the stratospheric ozone layer by the turn of the century.

- ◆ Under the Clean Air Act Amendments of 1990, EPA is required to phase out the production and use of chlorofluorocarbons (CFCs), typically used as refrigerants, and other ozone-depleting substances. January 1, 1996, was the deadline to phase out of production several stratospheric ozone-depleting compounds, including CFCs. The sixteen compounds being exempted should help provide alternatives to the stratospheric ozone depleting substances which developed countries have agreed to stop producing. These compounds could be used as refrigerants, aerosol, propellants, fire extinguishers, solvents, and blowing agents for foamed plastic.
- ◆ Of the sixteen halogenated chemicals that EPA is today exempting as VOCs, only the HCFCs will contribute a negligible amount to the destruction of the stratospheric ozone layer. Several of these HCFCs are by-products resulting from the manufacture of other halogenated chemicals and not used commercially.

#### **HOW WOULD TODAY'S ACTION PROVIDE REGULATORY RELIEF FOR INDUSTRY?**

- ◆ By exempting these compounds, today's action makes it easier and less expensive for industry to use these compounds as substitutes for stratospheric ozone-depleting substances, for such uses as solvents, aerosol propellants, refrigerants, and blowing agents in making foamed plastic.

#### **FOR MORE INFORMATION...**

- ◆ Interested parties can download the rule from EPA's web site on the Internet under recently signed rules at the following address: (<http://www.epa.gov/ttn/oarpg/rules.html>). For further information about the rule, contact Bill Johnson at EPA's Office of Air Quality Planning and Standards at (919) 541-5245. For more information about EPA's Stratospheric Protection Program, call the Stratospheric Ozone Hotline at 1-800-296-1996.
- ◆ EPA's Office of Air and Radiation's homepage on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The Office of Air and Radiation's home page address is: (<http://www.epa.gov/oar/>).

Table I

Compounds Added to the List of Negligibly  
Reactive Compounds

<u>Compound</u>	<u>Chemical Name</u>
HFC-32	difluoromethane
HFC-161	ethylfluoride
HFC-236fa	1,1,1,3,3,3-hexafluoropropane
HFC-245ca	1,1,2,2,3-pentafluoropropane
HFC-245ea	1,1,2,3,3-pentafluoropropane
HFC-245eb	1,1,1,2,3-pentafluoropropane
HFC-245fa	1,1,1,3,3-pentafluoropropane
HFC-236ea	1,1,1,2,3,3-hexafluoropropane
HFC-365mfc	1,1,1,3,3-pentafluorobutane
HCFC-31	chlorofluoromethane
HCFC-123a	1,2-dichloro-1,1,2-trifluoroethane
HCFC-151a	1 chloro-1-fluoroethane
C <sub>4</sub> F <sub>9</sub> OCH <sub>3</sub>	1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane
(CF <sub>3</sub> ) <sub>2</sub> CF <sub>2</sub> OCH <sub>3</sub>	2-(difluoromethoxymethyl) - 1,1,1,2,3,3,3-heptafluoropropane
C <sub>4</sub> F <sub>9</sub> OC <sub>2</sub> H <sub>5</sub>	1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane
(CF <sub>3</sub> ) <sub>2</sub> CF <sub>2</sub> OC <sub>2</sub> H <sub>5</sub>	2-(ethoxydifluoromethyl) - 1.1.1.2.3.3.3-heptafluoropropane