

EFFECTIVE DATE: This rule is effective June 16, 1995.

ADDRESSES: This action is subject to the procedural requirements of section 307(d)(1)(B), (J), and (U) of the Act, and 42 U.S.C. 7607(d)(1)(B), (J), and (U). Therefore, EPA has established a public docket for this action, A-94-26, which is available for public inspection and copying between 8 a.m. and 4 p.m., Monday through Friday, at the U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (6102), 401 M Street SW., Washington, DC 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Mr. William Johnson, Office of Air Quality Planning and Standards, Air Quality Strategies and Standards Division (MD-15), Research Triangle Park, NC 27711, phone (919) 541-5245.

SUPPLEMENTARY INFORMATION:

I. Background

Three petitions were received by the EPA asking that acetone be added to the list of negligibly-reactive compounds in the definition of VOC at 40 CFR 51.100(s). These petitions were submitted by Eastman Chemical Company and Hoechst Celanese Corporation on April 26, 1993; Hickory Springs Manufacturing Company on May 6, 1993; and the Chemical Manufacturers Association on May 14, 1993. Along with their petitions and in supplemental submissions, these organizations submitted a variety of scientific materials which support the assertion that acetone is of negligible photochemical reactivity. These materials have been added to the docket for this rulemaking. The petitioners based their request for the exclusion of acetone on a demonstration that the photochemical reactivity of acetone is not appreciably different from that of ethane, which is the most reactive compound on the current list of compounds which are named in the definition of VOC as being of negligible reactivity.

The petitioners point out that if acetone is accepted as having negligible photochemical reactivity, exempting acetone from regulation as an ozone precursor could contribute to the achievement of several important environmental goals and would support EPA's pollution prevention efforts. For example, acetone can be used as a substitute for several compounds that are listed as hazardous air pollutants (HAP) under section 112 of the Act. Methylene chloride and methyl chloroform are HAP that are used for metal cleaning and for flexible

polyurethane foam blowing. Other HAP, such as toluene, are often used as solvents in paints and coatings. Acetone can substitute for these substances in some circumstances.

Acetone can also be used as a substitute for ozone depleting substances (ODS) which are active in depleting the stratospheric ozone layer. Allowing wider use of acetone will facilitate the transition away from ODS without adversely affecting efforts to control ground level ozone concentrations. For example, chlorofluorocarbon-11 (CFC-11) and methyl chloroform have been used as foam-blowing agents in the manufacture of polyurethane foam. These compounds are also used in metal cleaning in the aircraft manufacturing industry. Both CFC-11 and methyl chloroform are listed as Class I substances under title VI of the Act, i.e., as substances that have the highest stratospheric ozone-depleting potential. Acetone may be able to be used as a foam-blowing agent and cleaning agent in place of these chemicals.

The EPA has already listed acetone as an acceptable ozone-depleting substance substitute for certain uses under the program known as the Significant New Alternatives Policy (SNAP) program (59 FR 13044, March 18, 1994). Within the context of the SNAP rule, substitutes are "acceptable" if they are technically feasible to be used as an alternative to an ODS for particular uses and provide a reduced overall risk to human health and the environment compared to the ODS they replace. In the SNAP rule, EPA listed acetone as an acceptable substitute for flexible polyurethane foam blowing (59 FR 13132). The SNAP rule lists ketones (which include acetone) as an acceptable substitute for solvent cleaning in metal cleaning, electronics cleaning, and precision cleaning (59 FR 13134). Ketones are also listed in the SNAP rule as an acceptable substitute solvent for aerosols and for adhesives, coatings, and inks (59 FR 13145).

Based on a review of the scientific material submitted by the petitioners, EPA published a notice in the **Federal Register** on September 30, 1994 (59 FR 49877) which proposed to revise EPA's definition of VOC to add acetone to the list of compounds which are considered to be negligibly photochemically reactive. In the proposal, EPA summarized the technical basis for its preliminary decision to add acetone to this list. This notice asked for comments from the public on the proposal and provided a 60-day comment period which ended November 29, 1994.

II. Comments on Proposal and EPA Responses

In accordance with section 307(d) of the Act, today's action is accompanied by a response to the significant comments, criticisms, and new data submitted in written or oral presentations during the public comment period. During the comment period, written comments were received from 52 individuals or organizations (including several manufacturing companies, seven trade associations, two States and a local air pollution agency) in response to EPA's September 30, 1994 proposal. Copies of these comments are located in the docket (A-94-26) for this action. Significant comments and EPA's responses are summarized below. In the proposal for today's action, EPA indicated that interested persons could request that EPA hold a public hearing on the proposed action (see section 307(d)(5)(ii) of the Act). During the comment period, one company requested a public hearing, but later withdrew its request. Since no one else requested a hearing, none was held.

About 80 percent of the letters received during the comment period were in favor of the proposal. These comments listed a variety of benefits that would result if acetone is deregulated for industrial use. Other substantial comments and EPA's responses are listed below.

Comment: Several commenters pointed out that removal of restrictions on use of acetone would have a detrimental effect on companies which have invested in research efforts to develop low solvent processes. As an example, some companies have developed low solvent cleaners which reduce the amount of VOC emitted into the air when used. Another example is processes for manufacture of polyurethane foam which do not rely on organic solvent blowing agents. Manufacturers have developed these low polluting processes for making polyurethane foam in order to avoid emission limitations on methylene chloride, methyl chloroform and other regulated organic compounds. Such low emitting polyurethane foam manufacturing processing may not be able to compete effectively if acetone is allowed unrestricted use as a foam-blowing agent. The companies that have developed these low-polluting processes say that they relied on past EPA policy which restricted emissions of acetone as a VOC when deciding to make a financial commitment to develop the processes or products. They now face loss of their research investments and