

existing chemicals are introduced into interstate commerce for significant new uses as substitutes for a class I substance. The producer must also provide the Agency with the producer's health and safety studies on such substitutes.

- **Outreach:** Section 612(b)(1) states that the Administrator shall seek to maximize the use of federal research facilities and resources to assist users of class I and II substances in identifying and developing alternatives to the use of such substances in key commercial applications.

- **Clearinghouse:** Section 612(b)(4) requires the Agency to set up a public clearinghouse of alternative chemicals, product substitutes, and alternative manufacturing processes that are available for products and manufacturing processes which use class I and II substances.

#### B. Regulatory History

On March 18, 1994, EPA issued a rule (69 FR 13044) which described the process for administering the SNAP program and published EPA's first acceptability lists for substitutes in the major industrial use sectors. These sectors include: refrigeration and air-conditioning; foam blowing; solvents cleaning; fire suppression and explosion protection; sterilants; aerosols; adhesives, coatings and inks; and tobacco expansion. These sectors comprise the principal industrial sectors that historically consumed large volumes of ozone-depleting compounds.

The Agency defines a "substitute" as any chemical, product substitute, or alternative manufacturing process, whether existing or new, that could replace a class I or class II substance. Anyone who produces a substitute must provide the Agency with health and safety studies on the substitute at least 90 days before introducing it into interstate commerce for significant new use as an alternative. This requirement applies to chemical manufacturers, but may include importers, formulators, or end-users when they are responsible for introducing a substitute into commerce.

To develop the lists of unacceptable and acceptable substitutes, EPA conducts screens of health and environmental risk posed by various substitutes for ozone-depleting compounds in each use sector. The outcome of these risk screens can be found in the public docket, as described above in the **ADDRESSES** portion of this document.

Under section 612, the Agency has considerable discretion in the risk management decisions it can make in SNAP. The Agency has identified four

possible decision categories: acceptable; acceptable subject to use conditions; acceptable subject to narrowed use limits; and unacceptable. Fully acceptable substitutes, i.e., those with no restrictions, can be used for all applications within the relevant sector end-use. Conversely, it is illegal to replace an ODS with a substitute listed by SNAP as unacceptable.

After reviewing a substitute, the Agency may make a determination that a substitute is acceptable only if certain conditions of use are met to minimize risk to human health and the environment. Such substitutes are described as "acceptable subject to use conditions." Use of such substitutes without meeting associated use conditions renders these substitutes unacceptable and subjects the user to enforcement for violation of section 612 of the Clean Air Act.

Even though the Agency can restrict the use of a substitute based on the potential for adverse effects, it may be necessary to permit a narrowed range of use within a sector end-use because of lack of alternatives for specialized applications. Users intending to adopt a substitute acceptable with narrowed use limits must ascertain that other acceptable alternatives are not technically feasible. Companies must document the results of their evaluation, and retain the results on file for purposes of demonstrating compliance. This documentation shall include descriptions of substitutes examined and rejected, processes or products in which the substitute is needed, reason for rejection of other alternatives, e.g., performance, technical or safety standards, and the anticipated date other substitutes will be available and projected time for switching to other available substitutes. Use of such substitutes in applications and end-uses which are not specified as acceptable in the narrowed use limit renders these substitutes unacceptable.

EPA does not believe that notice and comment rulemaking procedures are required to list alternatives as acceptable with no restrictions. Such listings do not impose any sanction, nor do they remove any prior license to use a substitute. Consequently, EPA adds substitutes to the list of acceptable alternatives without first requesting comment on new listings. Updates to the acceptable lists are published as separate Notices of Acceptability in the **Federal Register**.

For more information on the Agency's process for administering the SNAP program or criteria for evaluation of substitutes, refer to the SNAP rule published in the **Federal Register** on

March 18, 1994 (59 FR 13044), and see also the Code of Federal Regulations at 40 CFR part 82, subpart G. A complete chronology of SNAP decisions and the appropriate **Federal Register** citations may be found at EPA's Ozone Depletion Web site at <http://www.epa.gov/ozone/snap/chron.html>. For a complete listing of the Agency's decisions on acceptable and unacceptable substitutes, go to <http://www.epa.gov/ozone/snap/lists/index.html>.

#### II. Listing of Substitutes

In this final rule, EPA is issuing its decision on the acceptability, subject to narrowed use limits or use conditions, of the following substitutes in the fire suppression and explosion protection sector: *HFC227-BC*, *C6-perfluoroketone*, and *H Galden hydrofluoropolyethers (HFPEs)*. As described in the March 8, 1994 rule for the SNAP program (59 FR 13044), EPA believes that notice-and-comment rulemaking is required to place any alternative on the list of prohibited substitutes, to list a substitute as acceptable only under certain use conditions or narrowed use limits, or to remove an alternative from either the list of prohibited or acceptable substitutes.

The section below presents a detailed discussion of the fire suppression and explosion protection substitute listing determinations that are finalized in today's Final Rule. Tables summarizing these listing decisions are at the end of this document. The comments contained in the tables provide additional information on substitutes determined to be unacceptable, acceptable subject to narrowed use limits, or acceptable subject to use conditions. The comments contained in the appendix are not a binding part of the regulatory decision and are, therefore, not mandatory for use of a substitute. Nor should such comments be considered comprehensive with respect to other legal obligations pertaining to the use of the substitute. However, EPA encourages users of substitutes to act consistent with all such comments in their use of these substitutes especially if any practices have not already been identified in existing industry standards such as fire and building codes, or occupational exposure guidelines.

##### A. Listing Decisions: Fire Suppression and Explosion Protection—Total Flooding Agents

###### 1. Acceptable Subject to Use Conditions a. HFC227-BC

*HFC227-BC is acceptable, subject to use conditions, as a halon 1301*