

FIRE SUPPRESSION AND EXPLOSION PROTECTION TOTAL FLOODING AGENTS

[Substitutes Acceptable Subject to Use Conditions]

End Use	Substitute	Decision	Conditions	Comments
Halon 1301, Total Flooding Agents.	IG-100	Acceptable	<p>Until OSHA establishes applicable workplace requirements:</p> <p>IG-100 systems may be designed to an oxygen level of 10% if employees can egress the area within one minute, but may be designed only to the 12% oxygen level if it takes longer than one minute to egress the area.</p> <p>If the possibility exists for the oxygen level to drop below 10%, employees must be evacuated prior to such oxygen depletion.</p> <p>A design concentration of less than 10% may only be used in normally occupied areas, as long as an employee who could possibly be exposed can egress within 30 seconds.</p>	<p>EPA does not contemplate personnel remaining in the space after system discharge during a fire without Self-Contained Breathing Apparatus (SCBA) as required by OSHA.</p> <p>EPA does not encourage any employee to intentionally remain in the area after system discharge, even in the event of accidental discharge. In addition, the system must include alarms and warning mechanisms as specified by OSHA.</p> <p>See additional comments 1, 2.</p>

Additional Comments

1. Must conform with OSHA 29 CFR 1910, Subpart L, Section 1910.160.

2. Per OSHA requirements, protective gear (SCBA) must be available in the event personnel must re-enter the area.

FIRE SUPPRESSION AND EXPLOSION PROTECTION STREAMING AGENTS

[Substitutes Acceptable Subject to Narrowed Use Limits]

End use	Substitute	Decision	Limitations	Comments
Halon 1211, Streaming Agents.	HCFC Blend E	Acceptable	Nonresidential uses only.	

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ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 82**

[FRL-6301-8]

RIN 2060-AG12

Protection of Stratospheric Ozone; Listing of Substitutes for Ozone-Depleting Substances

AGENCY: Environmental Protection Agency.

ACTION: Request for data and advance notice of proposed rulemaking.

SUMMARY: This action requests comments and information on n-propyl bromide (nPB) under the U.S. Environmental Protection Agency's (EPA) Significant New Alternatives Policy (SNAP) program. SNAP implements section 612 of the amended Clean Air Act of 1990 (CAAA), which requires EPA to evaluate substitutes for

ozone depleting substances (ODSs) to reduce overall risk to human health and the environment. Through these evaluations, SNAP generates lists of acceptable and unacceptable substitutes for each of the major industrial use sectors. The intended effect of the SNAP program is to expedite movement away from ozone depleting compounds while avoiding a shift into substitutes posing other environmental or health problems.

Through this Advance Notice of Proposed Rulemaking (ANPR), the Agency hopes to receive information as part of the development of effective regulatory options on the listing of nPB as acceptable or unacceptable for the various submitted end-uses under SNAP. This action notifies the public of the availability of information regarding nPB and the Agency hopes that this action will provide the public an opportunity to provide input at an early stage in the decision-making process.

This notice does not constitute a final, or even preliminary, decision by the Agency. Based on information collected as part of this ANPR, EPA intends to propose a future determination

regarding the acceptability or unacceptability of nPB as a substitute for class I and class II ozone depleting substances and, if acceptable, an occupational exposure limit (OEL) for nPB. This limit would be designed to protect worker safety until the Occupational Safety and Health Administration (OSHA) sets its own standards under Public Law 91-596. However, until a final determination is made, users of nPB should exercise caution in the manufacture, handling, and disposal of this chemical.

EPA has received petitions under CAAA Section 612(d) to add nPB to the list of acceptable alternatives for class I and class II ozone depleting substances in the solvent sector for general metals, precision, and electronics cleaning, as well as in aerosol and adhesive applications.

DATES: Written comments on data provided in response to this notice must be submitted by April 19, 1999.

ADDRESSES: Comments on and materials supporting this advanced notice are collected in Air Docket # A-92-13, U.S. Environmental Protection Agency, 401

M Street, S.W., Room M-1500, Washington, D.C., 20460. The docket is located at the address above in room M-1500, First Floor, Waterside Mall. The materials may be inspected from 8 am until 4 pm Monday through Friday. A reasonable fee may be charged by EPA for copying docket materials.

FOR FURTHER INFORMATION CONTACT: The Stratospheric Ozone Hotline at (800)-296-1996 or Melissa Payne at (202) 564-9738 or fax (202) 565-2096, Analysis and Review Branch, Stratospheric Protection Division, Mail Code 6205J, Washington, D.C. 20460. Overnight or courier deliveries should be sent to our 501 3rd Street, N.W., Washington, DC, 20001 location.

SUPPLEMENTARY INFORMATION:

This action is divided into four sections:

- I. Section 612 Program
 - A. Statutory Requirements
 - B. Regulatory History
- II. Listing of Substitutes
- III. Information Needs
 - A. Objective
 - B. Ozone Depletion Potential
 - C. Toxicity
 - D. Potential Use
- IV. Regulatory Options
- V. References

I. Section 612 Program

A. Statutory Requirements

Section 612 of the Clean Air Act authorizes EPA to develop a program for evaluating alternatives to ozone-depleting substances. This program is referred to as the Significant New Alternatives Policy (SNAP) program. Section 612(c) requires EPA to publish a list of the substitutes unacceptable for specific uses and a corresponding list of acceptable alternatives for specific uses. Section 612(d) grants the right to any person to petition EPA to add a substitute to or delete a substitute from the lists published in accordance with section 612(c).

B. Regulatory History

On March 18, 1994, EPA published the Final Rulemaking (59 FR 13044) which described the process for administering the SNAP program and issued EPA's first acceptability and unacceptability lists for substitutes in the major industrial use sectors. These sectors include: refrigeration and air conditioning; foam blowing; solvent cleaning; fire suppression and explosion protection; sterilants; aerosols; adhesives, coatings and inks; and tobacco expansion. These sectors comprise the principal industrial sectors that historically consume 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.

II. Listing of Substitutes

To develop the lists of unacceptable and acceptable substitutes, EPA conducts screens of health and environmental risks 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 five possible decision categories: acceptable; acceptable subject to use conditions; acceptable subject to narrowed use limits; unacceptable; and pending. 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. A pending listing represents substitutes for which the Agency has not received complete data or has not completed its review of the data.

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 risks to human health and the environment. Such substitutes are placed on the "acceptable, subject to use, conditions" lists. Use of such substitutes in ways that are inconsistent with such 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 the 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 the purpose 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.

III. Information Needs

A. Objective

As noted above, the purpose of today's notice is to elicit the voluntary submission of information on nPB as a substitute for class I and class II substances. Listed below are the specific areas of information that will be most useful to the Agency in completing the risk characterizations needed to make regulatory decisions. However, any available data pertaining to nPB will be considered by the Agency. Data submitted in response to this request can be designated as confidential business information (CBI) under 40 CFR, part 2, subpart B.

EPA has been reviewing the data available on nPB with regard to its toxicity and its ozone depletion potential. In order to ascertain the extent of potential environmental implications associated with the use of this chemical, the Agency is also interested in estimates of nPB production and ultimate use in various applications. Based on the assessment to date, the Agency believes that additional information in all of these areas is needed before regulatory decisions can be formulated. This notice is to inform the public of the information gaps and to make publicly available the data to which the Agency already has access. In this light, EPA is establishing a docket with all available information on the environmental and health risks associated with nPB, and is asking for comments and data that can supplement this information. EPA is seeking public comment regarding nPB in the following areas where EPA believes that either significant uncertainties exist in the available data or the data are incomplete. These areas are critical to EPA's decision-making on the acceptability or unacceptability of nPB.

B. Ozone Depletion Potential

The ozone depletion potential (ODP) of a chemical compound provides a relative measure of the expected impact on stratospheric ozone per unit mass of the emission of the compound, as compared to that expected from the same mass emission of CFC-11 integrated over time. ODP is a benchmark that has been used by the Parties to the Montreal Protocol to characterize the relative risks associated with the various ozone-depleting compounds subject to the Protocol's requirements. Under the auspices of the United Nations Environment Programme, every four years the world's leading experts in the atmospheric sciences publish a scientific assessment, relied upon by the Parties to the Montreal Protocol for future decisions regarding protection of the stratospheric ozone layer. These assessments evaluate the impacts of ozone depleting substances on stratospheric ozone concentrations using ODP. Prior analyses of ODP conducted by these experts, as well as by others in the field of atmospheric chemistry, have traditionally focused on compounds with relatively long atmospheric lifetimes (e.g., three months or longer) (WMO, 1994).

Recently, EPA has been called upon to review compounds of much shorter lifetimes, such as nPB, which has an estimated atmospheric lifetime of only 11 days. Estimates of ODP for nPB based on the current models lie within the range of 0.006–0.027 (Wuebbles et al., 1997 and 1998). The two-dimensional (2-D) and other models currently used to estimate the relative effects of long-lived compounds on stratospheric ozone, however, may not be as useful in measuring effects associated with compounds with very short atmospheric lifetimes.

Chemicals previously evaluated for ODP have atmospheric lifetimes sufficiently long to be well-mixed in the troposphere, and 2-D models have been adequate tools for ODP estimation. Short-lived substances (i.e., compounds with atmospheric lifetimes shorter than three months) such as nPB can either reach the stratosphere or, unlike long-lived compounds, break down in the troposphere. Thus, the amount of bromine that would be available to affect stratospheric ozone greatly depends on the complex effects of transport and chemical processes in the troposphere. Two-dimensional modeling is not designed to accurately account for variations in chemical concentration at different latitudes or for atmospheric transport of short-lived

compounds. As a result, there are questions about the adequacy of the ODPs determined with these models for short-lived chemicals like nPB. Since current models may not accurately evaluate impacts of these short-lived compounds, EPA is concerned that it may be difficult to meaningfully compare them to the longer-lived compounds already controlled.

EPA is presently developing a process to more accurately determine ODPs for short-lived compounds. Independent atmospheric scientists are also in the process of refining current atmospheric models for this same purpose. The models are expected to examine a variety of questions related to convective transport rates at different latitudes, and the relative importance of transient versus steady-state effects. EPA expects this work to increase the accuracy of the ODP estimate for nPB, as well as for other short-lived compounds, and the Agency anticipates that these models will produce preliminary results within the next year. In addition, the Agency is interested in receiving from the public any other information pertaining to the atmospheric effects and ozone depletion potential of short-lived atmospheric chemicals (shorter than three months), and any additional information on the ozone depletion potential of nPB, specifically. EPA will make any new information accessible to the public as it becomes available by placing it in the docket identified in the ADDRESSES section of this document, and if appropriate, issue a notice of data availability in the **Federal Register** to insure that the public is aware of any new information.

C. Toxicity

Information on the toxicity of nPB was submitted to the Agency as part of the requirements of the SNAP program. Data from the submitters included the results of newly performed 28-day and 90-day repeated dose studies, both of which included a functional observation battery. A consortium of companies interested in nPB was formed after the initial data were submitted under the SNAP program. Other studies, not previously available to the public, were also submitted by a company that is not part of the consortium. Additional studies were available from the published scientific journals. A list of the studies received, evaluated, and placed in the docket is appended in Section VI.

EPA reviewed the literature to evaluate the potential metabolites of nPB and their expected toxicity following inhalation exposure. A

structure-activity relationship analysis for potential carcinogenicity was part of this evaluation. The pharmacokinetics of nPB and its metabolites were also examined, as well as reports of other studies performed under non-guideline protocols. Data on structural analogues of nPB, such as 2-propyl bromide, were also reviewed. This information, and the reports of the acute (less than 14-day) studies, 28-day and 90-day inhalation studies can be used to estimate a tentative exposure limit for the use of nPB in industrial settings. The "no observed adverse effect level" (NOAEL) for liver effects in the 90-day study of 2000 milligrams per cubic meter (mg/m³), or 400 parts per million (ppm), is a possible basis for setting an industrial exposure guideline (ICF 1998k). Based on this NOAEL, EPA's preliminary estimate of an exposure guideline is in the range of 50–100 ppm as an 8-hour time weighted average. Using the NOAEL for effects on sperm counts and motility from the Ichihara et al. (1998) study would result in a preliminary, estimated guideline of 93 ppm, suggesting that a range from 50–100 ppm would be protective of both liver and testicular effects. (This limit would be designed to protect worker safety until the Occupational Safety and Health Administration (OSHA) sets its own standards under P.L. 91–596. The existence of an EPA standard in no way bars OSHA from standard-setting under OSHA authorities as defined in P.L. 91–596.)

EPA also examined the potential uses of nPB in the solvent, aerosol, and adhesives, coatings and inks sectors and received additional personal monitoring data for these sectors. Preliminary consideration of the available personal monitoring data (Smith, 1998) during solvent, adhesive and aerosol usage indicates that nPB exposures can generally be kept within the range of 50–100 ppm, although some of the exposure measurements exceeded this range.

At this time, EPA cannot recommend a firm exposure limit because of identified areas of uncertainty. The fact that reproductive system effects have been observed in both rats and humans for the similar compound, 2-propyl bromide, as well as the report of oligospermia in rats exposed to nPB, raises concern that insufficient testing has been completed to fully evaluate these significant endpoints. The industry consortium has responded to these concerns by initiating studies to test the developmental and reproductive system effects of nPB. Results from these studies will not be available for another year.

Finally, EPA is aware that an isomer of nPB, 2-bromo-propane (2BP; also known as iso-propyl bromide), can be present as a contaminant in nPB formulations. Occupational exposure to 2BP has been associated with anemia and reproductive toxicity (Kim et al., 1996). Reproductive and hematopoietic effects of 2BP have also been demonstrated in animal studies (Takeuchi et al., 1997; Ichihara et al., 1996, 1997; Kamijima et al., 1997a,b). Should nPB be listed as acceptable under SNAP, the Agency would consider establishing maximum concentration limits for 2BP in applications involving nPB.

EPA is presenting and making publicly available the information it has received so that interested parties may evaluate these data for themselves and use it as guidance if they choose to use nPB until a proposal and final rule are in place. EPA is also interested in receiving additional information on human health and toxicological risks associated with exposure to nPB. As EPA receives new data, they will be added to the docket, along with notice of data availability in the **Federal Register**, as appropriate.

D. Potential Use

EPA is requesting information on the anticipated uses for nPB, the extent of its use in the different sectors (aerosols, solvents, adhesives, coatings, and inks), as well as estimated market potential. The Agency is also requesting information on the relative effectiveness of nPB versus the chemicals it would potentially replace, and the relative quantities of nPB that would be needed in various sectors compared to other chemicals that it would potentially replace. This information will provide the Agency information needed to assess potential environmental effects associated with use of nPB.

IV. Regulatory Options

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.

EPA does not believe that rulemaking procedures are required to list alternatives as acceptable with no limitations. 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 and pending lists are published as separate Notices of Acceptability in the **Federal Register**.

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Dated: February 10, 1999.

Carol M. Browner,
Administrator.

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FEDERAL EMERGENCY MANAGEMENT AGENCY

44 CFR Parts 77, 80-83, 152, 207, 220-222, 301, 303, 306, 308, 320, 324, 325, 328, 333, and 336

RIN 3067-AC91

Removal of Certain Parts of Title 44 CFR

AGENCY: Federal Emergency
Management Agency (FEMA).

ACTION: Proposed rule.

SUMMARY: We propose to remove 20 parts from title 44 of the Code of Federal Regulations. The rules we are proposing to remove are no longer authorized, covered in other regulations, or are complete, discontinued, or otherwise obsolete. We invite your comments.

DATES: Please send your comments to us no later than April 19, 1999.

ADDRESSES: Please address your comments to the Rules Docket Clerk, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (telefax) (202) 646-4536, or (email) rules@fema.gov.

FOR FURTHER INFORMATION CONTACT: H. Crane Miller, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-3340, (telefax) (202) 646-4536, or (email) crane.miller@fema.gov.

SUPPLEMENTARY INFORMATION: The proposed removal of these rules is part of our continuing efforts to update and streamline FEMA regulations. Below are the parts that we propose to remove and reasons why we propose to remove them.

Part 77—Acquisition of Flood Damaged Structures

The National Flood Insurance Reform Act of 1994 removed the authority underlying Part 77, Acquisition of Flood Damaged Structures, when it repealed § 1362 of the National Flood Insurance Act (Pub. L. 103-325, title V, § 551(a), Sept. 23, 1994, 108 Stat. 2269). Regulations governing acquisition of flood damaged structures are now found in 44 CFR 78.

Parts 80—Description of Program and Offer to Agents, 81—Purchase of Insurance and Adjustment of Claims, 82—Protective Device Requirements, and 83—Coverages, Rates, and Prescribed Policy Forms

These parts contain the regulations for the Federal Crime Insurance Program (FCIP), the authorization for which expired on September 30, 1996. The Congress established the FCIP in 1970 under Title VI of the Housing and Urban Development Act of 1970 to make crime insurance available at affordable rates in any State where a critical market unavailability situation for crime insurance existed and had not been met through State action or to make affordable crime insurance available in states where no affordable crime insurance was available and the state had taken no action. No new crime insurance coverage is available under this program, and with the exception of a few remaining claims in process, the program is no longer active. See 12 U.S.C. 1749bbb(a).

Part 152—State Grants for Arson Research

The authorization under the Arson Prevention Act of 1994 expired on September 30, 1996 and was not renewed by Congress. The Act authorized FEMA to make grants to States or consortia of States for competitive arson research, prevention and control grant awards. Part 152 established the uniform administrative rules under which the States or consortia of States applied for, and administered, the grants. The Director of FEMA delegated his responsibilities under the Act to the U.S. Fire Administration, which, working through its grantees, completed the research authorized under this program. See the Arson Prevention Act of 1994, Pub.L. 103-254, approved May 19, 1994, 108 Stat. 679.

Part 207—Great Lakes Planning Assistance

The Great Lakes Planning Assistance Act of 1988, approved November 23, 1988, expired one year later and was not extended by Congress. The Act authorized FEMA's Director to assist 8 Great Lakes States (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin) to reduce and prevent damage from high water levels in the Great Lakes. The assistance included a one-time grant up to \$250,000 for preparation of mitigation and emergency plans, coordinating available State and Federal Assistance, developing and implementing measures

to reduce damages due to high water levels, and assisting local governments in developing and implementing plans to reduce damages. The Act required the Great Lake States to submit grant applications within one year after the enactment of the Act—by November 23, 1989. See the Great Lakes Planning Assistance Act of 1988, Pub.L. 100-707, approved November 23, 1988, 102 Stat. 4711

Parts 220—Temporary Relocation Assistance, 221—Permanent Relocation Assistance, and 222—Superfund Cost Share Eligibility Criteria for Permanent and Temporary Relocation

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URARPA) provides for moving costs, relocation benefits, and other expenses incurred by persons displaced as a result of Federal and federally assisted programs. Under § 2(c) of Executive Order 12580 of January 23, 1987 the President delegated to the Director of FEMA the functions vested in the President by the Act to the extent they require permanent relocation of residents, businesses, and community facilities or temporary evacuation and housing of threatened individuals not otherwise provided for. Using redelegation authority granted elsewhere in the executive order, FEMA Acting Director Jerry D. Jennings redelegated FEMA's authority under § 2(c) of E.O. 12580 to the Environmental Protection Agency (EPA) on August 8, 1990. William K. Reilly, Administrator of EPA, gave his consent to the redelegation on October 31, 1990.

Effective April 2, 1989, EPA adopted the U.S. Department of Transportation regulations and procedures for complying with the Uniform Relocation Assistance and Real Property Acquisition Act. See 40 CFR 4.1. When FEMA delegated its relocation assistance authority to EPA in 1990, that redelegated authority came under the regulations and procedures of the U.S. Department of Transportation. We propose to remove this part because separate FEMA regulations on the subject are unnecessary and experience shows that these separate regulations cause confusion to those that seek relocation assistance under the Superfund and under FEMA's Hazard Mitigation Grant Program.

Part 301—Contributions for Civil Defense Equipment

Part 301 prescribes the basic terms and conditions under which our Agency contributes Federal funds to States to procure civil defense equipment under the provisions of section 201(i) of the