

potential loophole through a freeze and a mechanism for reduction of the use of Methyl Bromide for quarantine and pre-shipment purposes (still exempt under the Montreal Protocol).

Measures to minimise emissions of all ODS. Use and supply bans for substances whose production and importation has already been banned (notably CFCs which are still used in existing refrigeration and air-conditioning systems and halons in fire-fighting systems) will facilitate the control of illegal trade in these substances. More stringent requirements for handling of ODS including new staff training schemes, mandatory recovery and destruction and improved monitoring and licensing schemes of these substances should help in minimising emissions of all ODS prior to their final phaseout.

Source: http://europa.eu.int/comm/environment/ozone/latest_news.htm 26 June 2000

4- EPA Finalizes Acceptability Decision on Halon Substitutes

An April 26 final rule issued by the U.S. Environmental Protection Agency (EPA) lists IG-100 and hydrochlorofluorocarbon (HCFC) Blend E as acceptable halon substitutes, subject to certain use restrictions, in designated fire suppression and explosion protection applications (65 FR 24387).

According to the final rule, IG-100, which is 100 percent nitrogen, is acceptable as a Halon 1301 substitute in total flooding applications under certain conditions.

Total flooding agents are used to put out fires in enclosed spaces and to prevent explosions. IG-100 does this by decreasing the amount of oxygen in a protected area to a level that will not support combustion, according to EPA. To protect employees and workplace personnel who may be present in areas where IG-100 is discharged, the final rule imposes specific design requirements on IG-100 systems.

Under the rule, IG-100 systems should be designed to maintain an oxygen level of 10 percent. A system that can lower the level of oxygen below this threshold may be used only in normally unoccupied areas and in areas where anyone who could be exposed to the chemical can evacuate within 30 seconds, the final rule states. If it takes longer than one minute to clear an area, the IG-100 system must be designed to maintain an oxygen level of at least 12 percent. In addition, if the possibility exists for oxygen levels to drop below 10 percent, the final rule states that employees must be evacuated prior to oxygen depletion.

EPA's comments accompanying its listing decision state that IG-100 systems must include alarms and warning mechanisms. The agency also notes that workplace personnel and employees should not remain in or re-enter an area where an IG-100 system has been discharged without appropriate personal protective equipment. These comments are not part of EPA's regulatory decision, the preamble states. In many instances, however, the agency's comments refer to operating practices that already are identified in existing industry or building code standards, according to EPA.

The final rule also makes HCFC Blend E acceptable as a Halon 1211 substitute for streaming agents used in nonresidential applications. Streaming agents are used in fire extinguishers.

HCFC Blend E is made up of HCFC, hydrofluorocarbon (HFC) and an additive, the preamble states. EPA has determined that HCFC Blend E causes less harm to the environment than Halon 1211. The ozone-depletion potential (ODP) of the HCFC in this blend is 0.02, and all other constituents in the blend have a zero ODP, according to the preamble. However, due to potential health risks, the final rule limits the use of HCFC Blend E to nonresidential applications.

Upon combustion, halocarbon fire extinguishing agents, including HCFCs and HFCs, break down to form hazardous products that are potentially toxic to humans, according to EPA. Users should avoid breathing gases produced by thermal decomposition of HCFC Blend E and evacuate and ventilate the area immediately after using the agent, EPA warns.

Section 610(d) of the Clean Air Act (CAA) prohibits the sale and distribution of HCFCs in fire extinguishers for residential applications. EPA recommends that all extinguishers containing this blend bear a label indicating the risks associated with using the product and handling procedures to reduce those risks.

Under CAA Section 612 and EPA's Significant New Alternatives Policy program, the agency has the authority to "list a substitute as acceptable only under certain conditions or narrowed use limits." EPA's use restrictions are designed to protect worker safety in the absence of U.S. Occupational Safety and Health Administration (OSHA) and other workplace limits. The agency does not intend to bar OSHA from regulating workplace safety with respect to fire protection, the preamble states. For additional information, contact EPA's Meg Victor at (202) 564-9193.

Source: Ozone Depleter Compliance Guide: <http://www.thompson.com/tpg/enviro/ozon/ozonjune.html>

United Nations Environment Programme Division of Technology, Industry, and Economics (UNEP DTIE) OzonAction Programme is providing **OzoNews** as an internal information service to keep UNEP DTIE staff informed on current ozone depletion & related issues, to promote information exchange and stimulate discussion about ozone protection. The views expressed in articles written by external authors are the viewpoints of those authors and do not necessarily represent the policy or viewpoint of UNEP. Additionally, the citing of commercial products or services does not constitute endorsement of those products or services by UNEP.

Prepared by: Samira de Gobert, *Public Information Assistant*
Reviewer: Jim Curlin, *Information Officer*

If you have questions, comments, ideas for future articles, or you want to discontinue receiving this update, please contact: Mrs. Samira de Gobert, Tel. 0144371452 Email: sami.degobert@unep.fr