



## SUMMARY OF DETERMINATION: Halon Recovery/Recycling Equipment

The Environmental Protection Agency (EPA) issued a direct final determination (DFD) published in the **Federal Register (FR)** on August 11, 1998 (63 **FR** 42728) regarding the need for a certification program for equipment used to recover and recycle halons (i.e., Halon 1211, Halon 1301, and Halon 2402, and all isomers of these chemicals). Briefly, the direct final determination states that it is neither necessary nor appropriate at this time, under section 608 of the Clean Air Act as amended (CAA), to issue a rule establishing a certification program for equipment used in the recovery and recycling of halons, a group of Class I ozone-depleting substances, or to require that halons be recovered only through the use of certified equipment.

EPA stresses that nothing in this determination affects any existing legal requirements regarding halons and strongly emphasizes the ongoing environmental need to reduce their use and emissions and maximize their recapture and recycling. It should be noted that all provisions, including those relating to halon disposal and recovery and recycling practices, of a recent rule concerning halons (63 **FR** 11084, published on March 5, 1998) continue to fully apply. EPA urges members of the regulated community to ensure that their practices thoroughly comply with those federal rules and all other appropriate standards and regulations. This summary provides a brief background on halons and the August 11, 1998 regulatory action. The full text of the determination can be retrieved at the Federal Register web site (select both *Final Rules and Regulations* and *Proposed Rules* and use an appropriate term in the Search Terms box, e.g., halon):

[http://www.access.gpo.gov/su\\_docs/aces/aces140.html](http://www.access.gpo.gov/su_docs/aces/aces140.html)

### Background

Halons are gaseous or easily vaporized halocarbons used primarily for fire and explosion protection and are listed as Group II, Class I ozone-depleting substances (ODSs) under 40 CFR Part 82, Subpart A. Section 608 of the CAA directs EPA to issue regulations that reduce the use and emissions of ozone-depleting substances to the lowest achievable level and that maximize the recapture and recycling of such substances.

Despite their effectiveness as a fire fighting agent, halons are among the most ozone-depleting chemicals in use today. With 0.2 ozone-depleting potential (ODP) representing the threshold for classification as a Class I substance, Halon 1301 has an estimated ODP of 10, Halon 2402 an

estimated ODP of 6, and Halon 1211 an estimated ODP of 3.

Several existing federal regulations address halons. The new production of halons has been banned in the U.S. since January 1, 1994. More recently, EPA issued a rule on March 5, 1998 (63 **FR** 11084), under the authority of Section 608 of the CAA, establishing certain practices and requirements relative to halons, including training requirements for technicians who handle halon-containing equipment; and prohibitions on releases of halons during technician training and during the testing, maintenance, repair, servicing, and disposal of halons and halon-containing equipment. The March 5, 1998 rule also provided for the proper disposal of halons and halon-containing equipment.

## **Current Practices and EPA Determination**

The further environmental objective of an equipment certification program, and associated provisions allowing the removal of halons only through the use of certified equipment, would be to verify that all recycling and recovery equipment sold is capable of minimizing emissions, and that such certified equipment was in fact used, thereby ensuring minimum emissions and maximum recovery during recycling and recovery activities.

Research completed by EPA in association with this determination suggested that the great majority of halon recovery and recycling equipment currently in use, and all such equipment currently on the market, consists of highly efficient closed halon recovery systems achieving a minimum recovery efficiency of 98%. Entities that perform the vast majority of halon transfers employ these efficient units. Research further indicated that the halon sector has been instituting conservative halon practices since the ban on halon production that occurred on January 1, 1994. Operations utilizing less efficient halon recycling and recovery equipment and methods are estimated to account for less than 1% of total annual halon emissions in the United States. With regard to such halon emissions arising from the use of inefficient, non-closed halon recovery and recycling devices and methods, in sections 82.270(d) and (e) of an EPA rule issued March 5, 1998, were intended to eliminate the use of such devices and restrict halon recovery and recycling equipment to the highly efficient type of closed recovery systems now widely used in industry. Based upon these findings, EPA determined that no further environmental advances could be made, in regard to the CAA section 608 goals of reducing halon use and emissions, or maximizing halon recapture and recycling, through a halon recovery and recycling equipment certification program.

It should be noted that EPA stated in this determination that it will propose to amend the March 5, 1998 rule to, among other adjustments,

clarify sections of that regulation pertaining to the requirement for halon and halon-containing equipment disposal to be performed in accordance with cited industry standards. Please see FR text of determination for further discussion of these anticipated clarifications.

The direct final determination will become effective on October 13, 1998 without further notice, unless the EPA receives adverse comment on the determination by September 10, 1998. If adverse comment is received, the EPA will publish a timely withdrawal of the direct final determination in the Federal Register and inform the public that the determination will not take effect. All comments would then be addressed in a subsequent final determination based on the proposed determination that was published simultaneously with the direct final determination on August 11, 1998. Comments on the determination should be made to EPA as indicated in the August 11, 1998 **FR** text of the determination (63 **FR** at 42729, under "Addresses").

## **For Further Information**

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Information is also available from EPA's Stratospheric Protection Home Page at the following URL address:

<http://www.epa.gov/ozone/index.html>