



FINAL RULE SUMMARY: Halons/Halon Blends

The Environmental Protection Agency (EPA) issued a regulation on March 5, 1998 that concerns the handling and disposal of halon and halon-containing equipment (63 FR 11084). Specifically, this rule covers Halon 1211, Halon 1301, and Halon 2402. The rule bans the manufacture of blends of these halons (i.e., blends containing two or more halons); and establishes certain provisions for training of technicians who handle halons and halon-containing equipment, releases of halons from halon-containing equipment during testing, maintenance, and other activities, and disposal of halons and halon-containing equipment. The date on which this rule becomes effective is April 6, 1998. This summary provides a brief review of the major elements of the rule.

Ban on Halon Blends

A halon blend is any mixture or combination of substances that contains two or more halons (i.e., Halon 1211, Halon 1301, or Halon 2402). As of the effective date, it is unlawful to newly manufacture any halon blend. Existing stores of halon blends are not affected by the ban. An exemption is provided for halon blends manufactured solely for the purpose of aviation fire protection, provided that blends produced under this exemption are recycled to meet the relevant industry purity standards for each individual halon.

Intentional Releases

This rule also prohibits venting of halons during testing, maintaining, servicing, repairing, or disposing of halon-containing equipment, or during the use of such equipment for technician training. For health, safety, environmental, and other considerations,

several limited exemptions have been provided for the following types of releases:

- *De minimis* releases associated with good faith efforts to recycle or recover halon. For example, release of residual halon contained in fully discharged total flooding fire extinguishing systems is considered a *de minimis* release; see Preamble for discussion of other releases considered *de minimis*.
- Release of halons during testing of fire extinguishing systems or equipment is exempted only if the following four criteria are met: (a) systems or equipment employing suitable alternative agents are not available, (b) system or equipment testing requiring release of agent is essential to demonstrate system or equipment functionality, (c) failure of the

system would pose great risk to human safety or the environment, **and** (d) a simulant agent cannot be used for the testing purposes

- Research and development (R&D) for halon alternatives, and analytical determination of halon purity
- Releases associated with qualification and development testing during design and development of halon-containing systems and equipment **only** when (a) such tests are essential to demonstrate functionality, and (b) a suitable simulant agent can not be used for the testing purposes.

Halon releases that occur as a result of owner failure to maintain halon-containing equipment to relevant industry standards are also prohibited.

However, this prohibition does not apply to emergency releases of halons for legitimate fire extinguishing, explosion inertion, or other emergency applications for which the systems or equipment were designed.

Technician Training

This rule also requires that technician training relevant to halon emissions be provided. Technicians hired on or before April 6, 1998 must be trained by September 1, 1998; technicians hired after April 5, 1998 shall be trained within 30 days of hiring, or by September 1, 1998, whichever is later. In the Preamble to the rule, EPA pointed to several industry publications containing standard service practice guidelines and other information relevant to the development of training programs.

These include NFPA, ISO, and ASTM publications; facilities may find these documents, or the most recent and relevant versions of these documents, helpful during the development of training programs and materials. Facilities are not limited to the use of the above-mentioned documents as guidance, however.

Proper Disposal

This rule establishes that halon-containing equipment must be properly disposed of at the end of its useful life. Proper disposal means **only** sending such equipment for halon recovery or recycling by a facility (e.g., a manufacturer, a fire equipment dealer, a recycler, or an in-house recovery or recycling operation) operating in accordance with NFPA 10 and NFPA 12A standards. Ancillary system devices such as electrical components that are not necessary to the safe and secure containment of the halon are not subject to this provision. In addition, equipment containing only *de minimis* quantities of halon is not subject to this requirement.

Furthermore, the halon itself must be properly disposed of. Proper disposal means **only** halon recycling by a facility operating in accordance with NFPA 10 and NFPA 12A or destruction using one of several controlled processes identified in the regulation (see regulatory text for specific destruction options named).

For Further Information

For further clarification, additional documents, or other information, please call the Stratospheric Protection Hotline at (800) 296-1996 or write to:

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