

Standard on Halon 1301 Fire Extinguishing Systems

2018



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NFPA® 12A

Standard on

Halon 1301 Fire Extinguishing Systems

2018 Edition

This edition of NFPA 12A, *Halon 1301 Fire Extinguishing Systems*, was prepared by the Technical Committee on Gaseous Fire Extinguishing Systems. It was issued by the Standards Council on November 10, 2017, with an effective date of November 30, 2017, and supersedes all previous editions.

This edition of NFPA 12A was approved as an American National Standard on November 30, $9017\,$

Origin and Development of NFPA 12A

The Committee on Halogenated Fire Extinguishing Systems was formed in the fall of 1966 and held its first meeting during December of that year. The Committee was organized into four Subcommittees who separately prepared various portions of the standard for review by the full Committee at meetings held in September and December 1967.

The standard was submitted and adopted at the Annual Meeting in Atlanta, Georgia, May 20–24, 1968. The 1968 edition was the first edition of this standard and was adopted in tentative form in accordance with NFPA regulations. In 1969 the Committee determined that the standard had not yet been sufficiently tested and elected to carry it in tentative status for one more year. It was presented for official adoption in 1970. The first official version of the standard was adopted at the Annual Meeting of NFPA held in Toronto, Ontario in May 1970. Revisions were made in 1972, 1973, 1977, and 1980.

The 1985 edition was a complete revision of the standard. The standard was revised in 1987 and again in 1989.

The standard was completely rewritten for the 1992 revision to more clearly state the requirements and to separate the mandatory requirements from the advisory text in an effort to make the document more usable, enforceable, and adoptable. The main topic addressed in this revision was decommissioning and removal of systems.

The standard was updated to conform to the Manual of Style for NFPA Technical Committee Documents for the 2004 edition.

For the 2009 edition, the standard was revised to address testing and recharging of Halon 1301 cylinders.

The 2015 edition incorporated support for electronic storage of system maintenance records.

For the 2018 edition, the annex chapter on nozzle and piping calculations (Annex H) was revised to correct errors, comply with the *Manual of Style for NFPA Technical Committee Documents*, and clarify the details of the procedure.

Foreword

Halon 1301 (bromotrifluoromethane, or CBrF3) is a colorless, odorless, electrically nonconductive gas that is an effective medium for extinguishing fires. Halon 1301 is included in the Montreal Protocol on Substances That Deplete the Ozone Layer signed September 16, 1987. The protocol permits continued availability of halogenated fire extinguishing agents at 1986 production levels. That protocol, and subsequent amendments, restrict the production of this agent. In addition, local jurisdictions within some countries (e.g., the EPA in the United States) have enacted further rules regulating the production, use, handling, and disposal of this agent. The user of this standard is advised to consult local authorities for current regulations. Halon 1301 fire extinguishing systems are useful within the limits of this standard in extinguishing fires in specific hazards or equipment and in occupancies where an electrically nonconductive medium is essential or desirable, or where cleanup of other media presents a problem.

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NOTE: Membership on a committee shall not in and of itself constitute an endorsement of the Association or any document developed by the committee on which the member serves.

Committee Scope: This committee shall have primary responsibility for documents on the installation, maintenance, and use of carbon dioxide systems for fire protection.

This committee shall also have primary responsibility for documents on fixed fire extinguishing systems utilizing bromotrifluoromethane and other similar halogenated extinguishing agents, covering the installation, maintenance, and use of systems.

This committee shall also have primary responsibility for documents on alternative protection options to Halon 1301 and 1211 fire extinguishing systems. It shall not deal with design, installation, operation, testing, and maintenance of systems employing dry chemical, wet chemical, foam, aerosols, or water as the primary extinguishing media.

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