



**REPUBLIC OF
THE MARSHALL ISLANDS**
MARITIME ADMINISTRATOR

Marine Notice

No. 2-011-11

Rev. Dec/2020

**TO: ALL SHIPOWNERS, OPERATORS, MASTERS AND OFFICERS OF
MERCHANT SHIPS, AND RECOGNIZED ORGANIZATIONS**

**SUBJECT: Onboard Systems using Halogenated Hydrocarbons (Halon) and Other
Ozone Depleting Substances (ODS)**

- References:**
- (a) **SOLAS**, *International Convention for the Safety of Life at Sea*, Consolidated Edition 2020, as amended
 - (b) **MARPOL**, *International Convention for the Prevention of Pollution from Ships*, Consolidated Edition 2017, as amended
 - (c) **IMO Assembly Resolution [A.719\(17\)](#)**, *Prevention of Air Pollution from Ships*, adopted 06 November 1991
 - (d) **IMO Circular [MSC.1/Circ.600](#)**, *Annual leakage check of halon fire-extinguishing systems*
 - (e) **RMI Maritime Regulations [MI-108](#)**, §2.11 and §2.13
 - (f) **RMI Marine Notice [2-011-14](#)**, *Maintenance and Inspection of Fire-Protection Systems and Appliances*
 - (g) **IACS [Recommendation No.53](#)**, *Periodic Survey and Testing of Foam Concentrates and CO2 Halon Containers*

PURPOSE

This Marine Notice addresses restrictions and phase-out on using ozone depleting substances (ODS) in onboard systems (e.g., fire extinguishing/ air conditioning). It supersedes Rev. Jan/2018 and provides the latest list of facilities that recharge or decommission Halon banking systems.

APPLICABILITY

This Marine Notice applies to Republic of the Marshall Islands (RMI)-flagged vessels that are still equipped with serviceable onboard systems containing ODS.

BACKGROUND

The United Nations Environment Program¹ (UNEP) is dedicated to the protection of the earth's ozone layer. As part of a world-wide movement, ODS are gradually being reduced and phased-out. This decrease is expected to continue throughout the 21st century.

REQUIREMENTS

1.0 Phase out

The RMI Maritime Administrator (the “Administrator”) has not established a phase out date for existing Halon installations and systems using (H)CFCs on RMI-flagged ships. It is the Administrator’s interpretation that only new installations containing ODS are prohibited. Existing systems may continue to be used where they are considered fit for their intended purpose and as long as they remain serviceable. More specifically:

- 1.1 **SOLAS Regulation II-2:** permits the use of Halogenated Hydrocarbons (Halons) as a fire extinguishing media on vessels built before 01 October 1994;
- 1.2 **IMO Assembly Resolution A.719(17):** permits the use of chlorofluorocarbons (CFCs) in fixed refrigeration and air conditioning plants on vessels built before 06 November 1992;
- 1.3 **MARPOL ANNEX VI Regulation 12-3.2:** permits systems containing hydro-chlorofluorocarbons (HCFCs) installed before 1 January 2020 to continue service; and
- 1.4 **European Regulation (EU) No 517/2014:** permits service and maintenance of Hydrofluorocarbons (HFC) systems onboard Non-EU flagged ships after 1 January 2020.

2.0 Halon Recharge and Recycle Facilities

- 2.1 Due to the Halon phase-out, there is increasing difficulty in locating servicing facilities and suppliers for the testing and maintenance of existing fixed Halon fire suppression systems and components. Moreover, because there are no longer newly manufactured halons, the fire protection industry must rely on used halons for recharging extinguishers and extinguishing systems. The Halon systems remaining in service are expected to reach zero between the years 2023 and 2033.
- 2.2 Facilities that recharge or decommission halon banking systems are listed in the Public Area of the IMO Global Integrated Shipping Information System (GISIS). Click on module icon, “[Test Laboratories and Halon Facilities](#)”. Registration is required for new users but is free.

¹ <https://ozone.unep.org/>

3.0 Halon Maintenance, Inspection and Testing

3.1 Halon systems must be maintained and inspected following:

- 3.1.1 **RMI Marine Notice** [2-011-14](#), *Maintenance and Inspection of Fire-Protection Systems and Appliances*;
- 3.1.2 **IMO Circular** [MSC.1/Circ.600](#), *Annual leakage check of halon fire-extinguishing systems*;
- 3.1.3 **IMO Circular** [MSC.1/Circ.1432](#), *Revised Guidelines for the maintenance and inspection of fire protection systems and appliances*; and
- 3.1.4 **IACS Recommendation No.53**, *Periodic Survey and Testing of Foam Concentrates and CO2 Halon Containers*.

3.2 Alternatively Halon systems may be maintained as following:

Under the alternative maintenance schedule, the hydrostatic testing interval of 20 years for Halon storage cylinders may be extended by five years provided the following conditions are met:

- 3.2.1 A cylinder has not been discharged during its service history.
 - 3.2.2 Cylinder contents are verified by weighing or isotropic measurement.
 - 3.2.3 Cylinder pressures and levels are verified to be acceptable.
 - 3.2.4 A thorough visual inspection of cylinders reveals no defects.
 - 3.2.5 Cylinders are gauged to the extent considered necessary and the wall thickness readings kept on board for future comparative reference.
- 3.2 Additionally, a thorough examination must be made of all accessible component parts of the Halon system, including control valves and connections, to verify satisfactory condition and freedom from leakage. Selected control valves must be opened out for internal examination to the extent necessary.
- 3.3 Any cylinders that do not meet the provisions stated above must be tested or taken out of service.
- 3.4 The cylinder inspection and thickness gauging must be repeated annually as part of the annual servicing of the system, until the end of the five-year extension period.
- 3.5 Consideration for the application of the alternative hydrostatic testing requirements for the fixed Halon system storage cylinders will be given on a case-by-case basis and must be approved in writing by the Administrator.

4.0 Management of existing ODS

- 4.1 The Supplement to the International Air Pollution Prevention Certificate may identify the presence of ODS² onboard. The ODS Record Book must be kept up to date and may form part of an existing log book or electronic record book.³
- 4.2 Where an Inventory of Hazardous Materials (IHM) must be maintained, documentation for verifying the presence of ODS could be the Material Safety Data Sheets, or declarations of compliance from the manufacturer. Additionally, suppliers to the shipbuilding industry must identify and declare in their Material Declarations whether ODS materials are present. Supplier's Declarations of Conformity must cover compliance and information on the chemical substance content⁴.

5.0 End-of-life ODS equipment

- 5.1 Regulation 12.2 of MARPOL, Annex VI, prohibits any deliberate emissions of ozone depleting substances.
- 5.2 When a decision is made to recycle ODS equipment, it is important to check coastal State requirements governing the transboundary⁵ movement of waste for disposal in an environmentally sound manner.
- 5.3 During removal of ODS from a vessel, the recycling facility is likely to rely on an IHM⁶ for the safety of their workers and the environment.

² Per [MEPC.269\(68\)](#) unintentional trace contaminants of ODS should not be sampled. Within the Montreal Protocol there is "No threshold value" for reporting ODS.

³ See MARPOL, Annex VI, Regulation 12.

⁴ MEPC.269(68).

⁵ Wastes having ODS as constituents are also covered under the UNEP Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.

⁶ See [MEPC.210\(63\)](#).