



THE REPUBLIC OF LIBERIA
LIBERIA MARITIME AUTHORITY

Marine Notice

SAF-018
Rev. 3/25

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

SUBJECT: Management of Asbestos and Perfluorooctane Sulfonic Acid (PFOS)

- References:**
- (a) Maritime Regulation 2.35
 - (b) Regulations 3-5 of SOLAS Chapter II-1 and 10.11 of SOLAS Chapter II-2
 - (c) [MSC.1/Circ.1374/Rev.1](#)
 - (d) Regulation 2.10.3 of the 2009 MODU Code
 - (e) Regulation 2.8.2 of the 1989 MODU Code
 - (f) Regulation 2.7.2 of the 1979 MODU Code
 - (g) [Draft UI of SOLAS II-2/10.11 and 7.9.4 of the 1994 and 2000 HSC Codes](#)
 - (h) [Marine Advisory 16/2024](#)

PURPOSE:

This Notice provides guidance to vessel owners, operators and managers, and to recognized organizations (RO's), on how to deal with asbestos on board all ships, including Mobile Offshore Units (MOU's), that are in service, under repair/modification/conversion and alteration. Guidance is also provided on the prohibition of the use or storage of extinguishing media containing perfluorooctane sulfonic acid (PFOS) on new vessels and the requirement to remove PFOS on existing vessels.

APPLICABILITY:

This Notice applies to all ships, including MOU's and High Speed Craft (HSC).

1.0 DEFINITIONS:

- 1.1 *Asbestos Containing Materials (ACMs)* means that asbestos is present in the product/material above 0.1% by weight.
- 1.2 *Containing perfluorooctane sulfonic acid (PFOS)* means present in concentrations of PFOS above 10 mg/kg (0.001% by weight).
- 1.3 *Fire-extinguishing media* includes firefighting foams.

2.0 MANAGEMENT OF ASBESTOS CONTAINING MATERIALS (ACMs) ON BOARD SHIPS CERTIFIED UNDER SOLAS:

- 2.1 Ships built before 1 July 2002:

- .1 Ships built before 1 July 2002 are allowed to have ACMs on board. However, the ACMs are only allowed if they do not pose a risk to the crew's health. The inventory of hazardous material (IHM) Part I should identify the presence of ACMs and their location and quantity on board the ship. If ACMs are present, a maintenance and monitoring programme should be developed for that ship, based on the inspection and assessment data. The programme should be implemented and managed conscientiously and include the elements contained in Annex 1 of [MSC/Circ.1045](#).
- .2 In the case of flake coatings, lagging or false ceilings containing asbestos, their condition should be assessed by completing the evaluation checklist shown in Appendix 1 to Annex 1 of [MSC/Circ.1045](#), which takes into account, in particular, the accessibility of the materials and products, their degree of degradation, their exposure to shocks and vibration and the presence of air currents in the area. Air sampling of dust measurement may be used as one tool to help provide a more complete assessment of the ambient conditions on board. The evaluation form contained in Appendix 2 to Annex 1 of [MSC/Circ.1045](#) should be used to make the diagnosis on the state of conservation of these materials. Depending on the diagnosis, the company should establish appropriate thresholds and timescales for undertaking any necessary repairs or abatement, such as encapsulation, enclosure, encasement by qualified, trained and experienced contractors.
- .3 In the event of works requiring the removal of asbestos-containing materials, these materials should be unloaded from the ship. On completion of the work, and before any restoration of the spaces, the Company should carry out dust measurement after dismantling the enclosing mechanism. If the work does not result in the total removal of the materials and products listed in this order, the Company should carry out regular surveillance of the asbestos-containing materials at intervals identified by the Company as being appropriate but not exceeding 3 years, and the maintenance and monitoring programme updated as necessary.

2.2 Ships built on or after 1 July 2002 and before 1 January 2011:

- .1 New installations of ACMs has been prohibited except for:
 - Vanes used in rotary vane compressors and rotary vane pumps
 - Watertight joints and linings for circulation of high temperature fluids
 - Insulation assemblies used for temperatures above 1000⁰C.
- .2 For asbestos-containing gaskets in good condition and installed on or after 1 July 2002 and before 1 January 2011 in contravention of SOLAS regulation II 1/3-5, the Administration may, as an equivalent in accordance with SOLAS regulation I/5, instead of removal, allow for an onboard implemented risk-based maintenance and monitoring programme of onboard materials containing asbestos, in accordance with the Guidelines in [MSC.1/Circ.1045](#). Such asbestos-containing gaskets should subsequently be removed when planned repairs or removal of the relevant system (containing these gaskets) is carried out.
- .3 When ACMs other than that in 2.2.2 is detected on board, in contravention of SOLAS regulation II-1/3-5, action should be taken to have it removed. The removal – assigned to professional asbestos removal companies – should take place within a time frame of three years from the date when the contravention is found and should be conducted

in close consultation with the Administration. An Exemption Certificate shall be issued by the Administration for a period not exceeding 3 years. During the period of the exemption, the Company should implement a risk-based maintenance and monitoring programme of onboard materials containing asbestos. The programme is to be submitted to the Administration for review and should be implemented and managed conscientiously and include the elements contained in Annex 1 of [MSC/Circ.1045](#).

2.3 Ships built on or after 1 January 2011:

- .1 From 1 January 2011, new installations of ACMs on board all ships is, without exception, prohibited. Despite the clear and unambiguous prohibition of ACMs, asbestos is still found on various locations on board ships. During inspections, asbestos has been found in such places as fire blankets, joints and insulation materials, types of sealants, friction material for brakes, wall and ceiling coverings, cords, remnants, electric fuses, etc. Moreover, ships that initially were free of asbestos appear to have asbestos on board as a result of repairs at shipyards and/or of purchasing spare parts at a later stage.
- .2 When ACMs is detected on board, in contravention of SOLAS regulation II-1/3-5, action should be taken to have it removed. The removal – assigned to professional asbestos removal companies – should take place within a time frame of three years from the date when the contravention is found and should be conducted in close consultation with the Administration. An Exemption Certificate shall be issued by the Administration for a period not exceeding 3 years. During the period of the exemption, the Company should implement a risk-based maintenance and monitoring programme of onboard materials containing asbestos. The programme is to be submitted to the Administration for review and should be implemented and managed conscientiously and include the elements contained in Annex 1 of [MSC/Circ.1045](#).

2.4 Ships under 500 GT should manage ACMs as far as practicable in accordance with the provisions above.

3.0 MANAGEMENT OF ASBESTOS CONTAINING MATERIALS (ACMs) ON BOARD VESSELS CERTIFIED UNDER THE 1979, 1989 AND 2009 MODU CODES

- 3.1 New installations of ACMs is prohibited from 1 January 2024. Notwithstanding, existing materials stowed on board before 1 January 2024 are not prohibited from being retained on board but should not be installed unless they can be documented to be asbestos-free before use/installation.
- 3.2 Any repairs, replacements, maintenance or additions to working parts of a MODU should be documented with an asbestos-free declaration for the non-exclusive list of materials in the Appendix of [MSC.1/Circ.1671](#).
- 3.3 The inventory of hazardous material (IHM) Part I should identify the presence of ACMs and their location and quantity on board the vessel. If ACMs are present, a maintenance and monitoring programme should be developed for that vessel, based on the inspection and assessment data. The programme should be implemented and managed conscientiously

and include the elements contained in Annex1 of [MSC.1/Circ.1672](#).

- 3.4 In the case of flake coatings, lagging or false ceilings containing asbestos, their condition should be assessed by completing the evaluation checklist shown in Appendix 1 to Annex 1 of [MSC.1/Circ.1672](#), which takes into account, in particular, the accessibility of the materials and products, their degree of degradation, their exposure to shocks and vibration and the presence of air currents in the area. Air sampling of dust measurement may be used as one tool to help provide a more complete assessment of the ambient conditions on board. The evaluation form contained in Appendix 2 to Annex 1 of [MSC.1/Circ.1672](#) should be used to make the diagnosis on the state of conservation of these materials. Depending on the diagnosis, the company should establish appropriate thresholds and timescales for undertaking any necessary repairs or abatement, such as encapsulation, enclosure, encasement by qualified, trained and experienced contractors.
- 3.5 In the event of works requiring the removal of asbestos-containing materials, these materials should be unloaded from the vessel. On completion of the work, and before any restoration of the spaces, the Company should carry out dust measurements after dismantling the enclosing mechanism. If the work does not result in the total removal of the materials and products listed in this order, the Company should carry out regular surveillance of the asbestos-containing materials at intervals identified by the Company as being appropriate but not exceeding 3 years, and the maintenance and monitoring programme updated as necessary.

4.0 MANAGEMENT OF PFOS ON BOARD SHIPS AND OTHER VESSELS

- 4.0 For ships and other vessels, including mobile offshore units constructed on or after 1 January 2026, the use or storage of fire-extinguishing media containing (PFOS) is prohibited.
- 4.1 Ships and other vessels, including offshore mobile units constructed before 1 January 2026 shall comply with regulations prohibiting the use or storage of fire-extinguishing media containing PFOS not later than the date of the first survey on or after 1 January 2026.
- 4.2 The term “first survey” as referenced by a regulation in the 1974 SOLAS Convention, as amended, means the first annual survey, the first periodical survey or the first renewal survey whichever is due first after the date specified in the relevant regulation.
- 4.3 The maker’s declaration or laboratory test reports should be used for verification of the presence of PFOS in fire-extinguishing media.
- 4.4 The declaration issued by the foam maker should contain information about the foam such as, but not limited to: foam type, production period, batch No., ref. to type approval / MED Certificate for the foam.
- 4.5 For extinguishing media installed before 1 January 2026, where the maker's declaration or laboratory test reports are not available, sampling and testing of the fire-extinguishing media on board should be required to be conducted in accordance with a recognized standard.
- 4.6 The Administration recommends testing for PFOS when carrying out the periodical control of foam concentrates on board; or alternately, when developing the Inventory of Hazardous

Materials (IHM) Part I, due no later than 26 June 2025.

- 4.7 When removed from a ship or other vessel, including offshore mobile units, PFOS shall be delivered to appropriate shore-based reception facilities. The removal and subsequent delivery to an appropriate shore-based reception facility shall be duly recorded in the ship's official logbook.
- 4.8 Replacement extinguishing media should be approved and certificated in accordance with the applicable IMO guidelines. The extinguishing media approval certificate should clearly indicate the absence of PFOS in the media. High-expansion foam concentrate should be approved in accordance with [MSC/Circ.670](#) and low expansion foam in accordance with [MSC.1/Circ.1312 Corr.1](#).

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