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MSC.1/Circ.1672
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**GUIDELINES FOR MAINTENANCE AND MONITORING OF
MATERIALS CONTAINING ASBESTOS ON BOARD MODUs**

1 The Maritime Safety Committee, at its 107th session (31 May to 9 June 2023), having considered the *Guidelines for maintenance and monitoring of onboard materials containing asbestos* (MSC/Circ.1045) as the basis for the development of similar recommendations for MODUs, approved the *Guidelines for maintenance and monitoring of materials containing asbestos on board MODUs*, prepared by the Sub-Committee on Ship Design and Construction (SDC) at its ninth session (23 to 27 January 2023), as set out in the annex.

2 The Guidelines are intended to provide guidance to Administrations, owners, companies, operating personnel and others closely involved with the operation of mobile offshore drilling units (MODUs) on how to deal with asbestos on board MODUs in service, under repair/modification/conversion and alteration, with the principal objective of minimizing exposure to asbestos fibres of operating personnel, maintenance and repair personnel and any other persons.

3 Member Governments are invited to use the annexed Guidelines when dealing with asbestos on board MODUs and to bring them to the attention of all parties concerned.

ANNEX

GUIDELINES FOR MAINTENANCE AND MONITORING OF MATERIALS CONTAINING ASBESTOS ON BOARD MODUs

1 Introduction

1.1 These Guidelines aim at providing guidance to Administrations, owners, companies as defined in SOLAS regulation IX/1, operating personnel and others closely involved with the operation of MODUs on how to deal with asbestos on board MODUs in service.

1.2 They do not intend to address other aspects of asbestos that are already covered by the work of other international organizations, as set out in annex 2.

2 Scope of application

2.1 These Guidelines apply to MODUs which have asbestos or materials containing asbestos on board.

2.2 The purpose of the Guidelines is to set up a maintenance and monitoring programme with the principal objective of minimizing exposure to asbestos fibres of anyone on board (owners, operating personnel, maintenance and repair personnel) while the MODU is in service and under repair/modification/conversion/alteration, etc.

2.3 Planned repairs or removal of such materials should be carried out by special personnel. In cases where the MODU crews and/or personnel are involved in urgent repair work, special measures should be observed as listed in annex 1. Procedures should be developed for the safe retention of any waste asbestos on board the MODU and eventual safe disposal ashore.

3 General provision

Provisions should be established, including the nomination of a responsible person to control the maintenance and monitoring of onboard materials containing asbestos in line with the provisions of the present Guidelines.

4 Inventory and condition assessment of asbestos-containing materials

4.1 An initial inspection of the MODU should be performed by a qualified professional to investigate the possible presence of asbestos-containing materials on board and, if any are identified, to locate them and assess their condition. The inspection should serve as the basis for establishing an effective maintenance and monitoring programme for dealing with the asbestos in the MODU.

4.2 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, 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 should be used to make the diagnosis on the state of conservation of these materials.

5 Maintenance and monitoring programme

5.1 If asbestos-containing material is located, a maintenance and monitoring programme should be developed for that MODU, based on the inspection and assessment data. The programme should be implemented and managed conscientiously and include the elements contained in annex 1.

5.2 In the case of flake coatings, lagging or false ceilings containing asbestos, depending on the diagnosis as described in paragraph 4.2, appropriate thresholds and timescales should be established for undertaking any necessary repairs or abatement, taking into account any national regulations.

6 Abatement actions, planned repair and removal of asbestos-containing materials

6.1 Abatement actions should be selected and implemented when necessary. In some instances, due to the condition of asbestos-containing materials or upcoming repairs or modifications, other abatement actions may be taken to deal with asbestos-containing materials in the MODU. These response actions could include encapsulation (covering the asbestos-containing materials with a sealant to prevent fibre release), enclosure (placing an airtight barrier around the asbestos-containing materials), encasement (covering the asbestos-containing materials with a hard-setting sealing material) or repair or removal of the asbestos-containing materials. Qualified, trained and experienced contractors should be used for any of these actions. Any national and local regulations that pertain to abatement actions to deal with asbestos-containing materials should be identified and taken into account.

6.2 In the event of works requiring the removal of asbestos-containing materials, they should be unloaded from the MODU. On completion of the work, and before any restoration of the spaces, dust measurement should be carried out after dismantling the enclosing mechanism. If the work does not result in the total removal of the materials and products listed in this order, regular surveillance of the asbestos-containing materials should be carried out at appropriate intervals, but not exceeding three years.

ANNEX 1

MAINTENANCE AND MONITORING PROGRAMME

A successful maintenance and monitoring programme should include the following elements.

1 Notification

A programme through which all those affected will be informed where asbestos-containing material is located, and how and why to avoid disturbing the asbestos-containing material.

2 Surveillance

Regular surveillance of asbestos-containing material to note, assess and document any changes in the condition of the asbestos-containing material.

3 Controls

The maintenance and monitoring programme should include a system to control all work that could disturb asbestos-containing material.

4 Work practices

A maintenance and monitoring programme should focus on a special set of work practices. The nature and extent of any special work practices should be tailored to the likelihood that the asbestos-containing material will be disturbed and that fibres will be released. In general, four broad categories of work practices are recognized:

- .1 protection programmes to ensure MODU crews and personnel are adequately protected from asbestos exposure during normal maintenance;
- .2 basic operations and maintenance procedures to minimize and/or contain asbestos fibres;
- .3 special operations and maintenance cleaning techniques to clean up asbestos fibres on a routine basis; and
- .4 procedures for use during incidents of asbestos fibre release episodes to minimize the spread throughout the MODU.

In the latter case, the procedures to be followed will vary according to the site of the major release episode, the amount of asbestos-containing material affected, the extent of fibre release from the asbestos-containing material, the relationship of the asbestos-containing material to the air handling systems, and whether the release site is accessible to MODU crews and personnel.

5 Record-keeping

All MODU asbestos management documents should be stored in permanent files. In addition, for MODU crews and personnel engaged in asbestos-related work there may be national regulations that require employers to retain medical records, health records and personal air sampling records for each member of the crew or personnel, and provision should be made to comply with such regulations.

6 Training

Training of maintenance personnel is one of the keys to a successful maintenance and monitoring programme. Inadequate training of personnel may result in asbestos operations and maintenance tasks not being performed properly, possibly leading to higher than necessary levels of asbestos fibres in the air and an increased risk being faced by MODU crews and personnel. The level of training may vary from:

- .1 awareness training for personnel involved in activities where asbestos-containing materials may be accidentally disturbed;
- .2 special operations and maintenance training for personnel involved in general maintenance and incidental repair tasks involving asbestos-containing material; and
- .3 abatement worker training for workers who may conduct asbestos abatement. This level of work should not normally be expected of MODU crews or personnel.

APPENDIX 1

EVALUATION CHECKLIST

Where asbestos is present in flake coating, lagging or false ceilings
(to be completed for each compartment)

Name of MODU	
Date of check	
Compartment	
Stated destination of compartment	

Depending on diagnosis (see appendix 2)	
1	Periodic check of state of conversation of materials
2	Monitoring of dust levels
3	Works

Characteristics of protection		
Watertight	<input type="checkbox"/>	1
Non-watertight	<input type="checkbox"/>	As indicated in appendix 2

TABLE OF CRITERIA USED IN THE DIAGNOSTIC CHECKLIST

FLAKE COATING	LAGGING	FALSE CEILINGS
Condition of surface and degradation Material in poor condition or material unstuck Material coated or uncoated with local degradation Material uncoated non-impregnated in good condition Core impregnation in good condition or surface coating in good condition	State of degradation Lagging in poor condition Lagging with local degradation Lagging in good condition	Condition of surface and degradation Product in poor condition Product with local degradation Product in good condition
Reported protection of the material Physical protection non-watertight No physical protection		
Exposure of product to air current (including, depending on the situation plenum, false ceiling, etc.) Low Average High		
Exposure of product to shocks and vibrations Low Average High		

APPENDIX 2

EVALUATION OF THE STATE OF CONSERVATION OF FLAKE COATING, LAGGING OR FALSE CEILINGS

Condition of surface and degradation	Physical protection ¹	Air circulation	Shocks and vibration	Result
Material in poor condition or Material unstuck <input type="checkbox"/>				3
Material coated or uncoated with local degradation <input type="checkbox"/>	P <input type="checkbox"/>	L <input type="checkbox"/>	L <input type="checkbox"/>	1
		A <input type="checkbox"/>	A <input type="checkbox"/>	1
		H <input type="checkbox"/>	H <input type="checkbox"/>	2
		L <input type="checkbox"/>	L <input type="checkbox"/>	1
		A <input type="checkbox"/>	A <input type="checkbox"/>	1
		H <input type="checkbox"/>	H <input type="checkbox"/>	2
	NP <input type="checkbox"/>	L <input type="checkbox"/>	L <input type="checkbox"/>	2
		A <input type="checkbox"/>	A <input type="checkbox"/>	2
		H <input type="checkbox"/>	H <input type="checkbox"/>	2
		L <input type="checkbox"/>	L <input type="checkbox"/>	2
		A <input type="checkbox"/>	A <input type="checkbox"/>	2
		H <input type="checkbox"/>	H <input type="checkbox"/>	3
Material uncoated or non-impregnated in good condition <input type="checkbox"/>	P <input type="checkbox"/>	L <input type="checkbox"/>	L <input type="checkbox"/>	1
		A <input type="checkbox"/>	A <input type="checkbox"/>	1
		H <input type="checkbox"/>	H <input type="checkbox"/>	2
		L <input type="checkbox"/>	L <input type="checkbox"/>	1
		A <input type="checkbox"/>	A <input type="checkbox"/>	1
		H <input type="checkbox"/>	H <input type="checkbox"/>	2
	NP <input type="checkbox"/>	L <input type="checkbox"/>	L <input type="checkbox"/>	2
		A <input type="checkbox"/>	A <input type="checkbox"/>	2
		H <input type="checkbox"/>	H <input type="checkbox"/>	2
		L <input type="checkbox"/>	L <input type="checkbox"/>	1
		A <input type="checkbox"/>	A <input type="checkbox"/>	2
		H <input type="checkbox"/>	H <input type="checkbox"/>	2
Core impregnation in good condition or Surface coating in good condition <input type="checkbox"/>		L <input type="checkbox"/>	L <input type="checkbox"/>	1
		A <input type="checkbox"/>	A <input type="checkbox"/>	3
		H <input type="checkbox"/>	H <input type="checkbox"/>	3
		L <input type="checkbox"/>	L <input type="checkbox"/>	2
		A <input type="checkbox"/>	A <input type="checkbox"/>	2
		H <input type="checkbox"/>	H <input type="checkbox"/>	3

P: Physical protection non-watertight
NP: No physical protection
L: Low
A: Average
H: High

¹ Column not applicable for false ceilings

ANNEX 2

**CONTACT DETAILS OF INTERNATIONAL ORGANIZATIONS WHICH HAVE
ADDRESSED ASBESTOS-RELATED ISSUES**

International Labour Office (ILO)

Address: 4, route des Morillons
CH-1211 Geneva 22
Switzerland
Tel: + 41 22 799 6111
Fax: + 41 22 798 8685
Website: www.ilo.org

World Health Organization (WHO)

Address: Avenue Appia 20
CH-1211 Geneva 27
Switzerland
Tel: + 41 22 791 2111
Fax: + 41 22 791 3111
Website: www.who.org
