

**ANNEX 21**

**RESOLUTION MEPC.358(78)  
(adopted on 10 June 2022)**

**2022 GUIDELINES FOR SURVEY AND CERTIFICATION  
OF ANTI-FOULING SYSTEMS ON SHIPS**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by the international conventions for the prevention and control of marine pollution,

RECALLING ALSO that the International Conference on the Control of Harmful Anti-fouling Systems for Ships, 2001, held in October 2001, adopted the International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001 (the AFS Convention) together with four Conference resolutions,

NOTING that article 10 of the AFS Convention prescribes that ships shall be surveyed and certified in accordance with the regulations of annex 4 of the Convention,

NOTING ALSO that regulation 1(4)(a) of annex 4 of the AFS Convention refers to the guidelines to be developed by the Organization,

NOTING FURTHER resolution MEPC.195(61) by which the Committee adopted the *2010 Guidelines for survey and certification of anti-fouling systems on ships*,

RECALLING FURTHER that at its seventy-sixth session it adopted amendments to the AFS Convention to introduce controls on cybutryne through resolution MEPC.331(76),

RECOGNIZING the need for a consequential revision of the guidelines associated with the AFS Convention due to the aforementioned amendments,

NOTING FURTHER that through resolutions MEPC.356(78) and MEPC.357(78) the Organization adopted *2022 Guidelines for brief sampling of anti-fouling systems on ships* and *2022 Guidelines for inspection of anti-fouling systems on ships*, respectively, and

HAVING CONSIDERED a revised text of the *Guidelines for survey and certification of anti-fouling systems on ships* prepared by the Sub-Committee on Pollution Prevention and Response at its ninth session,

- 1 ADOPTS the *2022 Guidelines for survey and certification of anti-fouling systems on ships* (2022 Guidelines), the text of which is set out in the annex to this resolution;
- 2 INVITES Governments to apply the 2022 Guidelines as soon as possible, or when the Convention becomes applicable to them;
- 3 RECOMMENDS that the Guidelines be reviewed on a regular basis;
- 4 REVOKES resolution MEPC.195(61).

## ANNEX

### 2022 GUIDELINES FOR SURVEY AND CERTIFICATION OF ANTI-FOULING SYSTEMS ON SHIPS

#### 1 General

1.1 Article 10 of the International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001, hereinafter referred to as "the Convention", prescribes that ships shall be surveyed and certified in accordance with the regulations of annex 4 to the Convention. The purpose of this document is to provide the *Guidelines for surveys and certification of anti-fouling systems on ships* referred to in regulation 1(4)(a) of annex 4, hereinafter referred to as the "Guidelines", that will assist the Administrations and recognized organizations in the uniform application of the provisions of the Convention and assist companies, shipbuilders, manufacturers of anti-fouling systems, as well as other interested parties to understand the process of the surveys and issuance and endorsement of the certificates.

1.2 These Guidelines provide the procedures for survey to ensure that a ship's anti-fouling system complies with the Convention, and those necessary for issuance and endorsement of an International Anti-fouling System Certificate. A guidance for compliant anti-fouling systems is given in appendix I to this annex.

1.3 These Guidelines apply to surveys of ships of 400 gross tonnage and above engaged in international voyages, excluding fixed or floating platforms, floating storage units (FSUs), and floating production storage and off-loading units (FPSOs), as specified in regulation 1(1) of annex 4 to the Convention.

1.4 The sole purpose of the survey activities described in these Guidelines is to verify compliance with the provisions of the Convention. Consequently, such surveys do not relate to any aspect not regulated by the Convention even if such aspects relate to the performance of an anti-fouling system on the hull of a ship, including the quality of workmanship during the application process.

1.5 In the event that a new survey method is developed, or in the event that the use of a certain anti-fouling system is prohibited and/or restricted, or in the light of experience gained, these Guidelines may need to be revised in the future.

#### 2 Definitions

For the purposes of these guidelines:

2.1 "Administration" means the Government of the State under whose authority the ship is operating. With respect to a ship entitled to fly a flag of a State, the Administration is the Government of that State. With respect to fixed or floating platforms engaged in exploration and exploitation of the seabed and subsoil thereof adjacent to the coast over which the coastal State exercises sovereign rights for the purposes of exploration and exploitation of their natural resources, the Administration is the Government of the coastal State concerned.

2.2 "Anti-fouling system" means a coating, paint, surface treatment, surface, or device that is used on a ship to control or prevent attachment of unwanted organisms.

2.3 "Company" means the owner of the ship or any other organization or person such as the manager or the bareboat charterer, who has assumed the responsibility for the operation of the ship from the owner of the ship and who, on assuming such responsibility, has agreed to take over all duties and responsibilities imposed by the International Safety Management (ISM) Code.

2.4 "Gross tonnage" means the gross tonnage calculated in accordance with the tonnage measurement regulations contained in annex 1 to the International Convention on Tonnage Measurement of Ships, 1969, or any successor Convention.

2.5 "International voyage" means a voyage by a ship entitled to fly the flag of one State to or from a port, shipyard, or offshore terminal under the jurisdiction of another State.

2.6 "Length" means the length as defined in the International Convention on Load Lines, 1966, as modified by the Protocol of 1988 relating thereto, or any successor Convention.

2.7 "Ship" means a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles, submersibles, floating craft, fixed or floating platforms, floating storage units (FSUs) and floating production storage and off-loading units (FPSOs).

### **3 General requirements for surveys**

3.1 An initial survey covering at least the scope as in paragraph 1 of appendix II to these Guidelines should be held before the ship is put into service and the International Anti-fouling System Certificate required under regulation 2 or 3 of annex 4 to the Convention is issued for the first time.

3.2 A survey should be carried out whenever an anti-fouling system is changed or replaced. Such surveys should cover the scope as in paragraph 2 of appendix II to these Guidelines.

3.3 A major conversion affecting the anti-fouling system of a ship may be considered as a newbuilding as determined by the Administration.

3.4 Repairs generally do not require a survey. However, repairs affecting approximately twenty-five (25) per cent or more of the anti-fouling system should be considered as a change or replacement of the anti-fouling system.

3.5 A non-compliant anti-fouling system controlled under annex 1 to the Convention that undergoes repair must be repaired or replaced with a compliant anti-fouling system.

### **4 Request for survey**

4.1 Prior to any survey, a request for survey should be submitted by the Company to the Administration, or to a recognized organization, along with the ship's data required in the International Anti-fouling System Certificate as listed:

- .1 Name of ship
- .2 Distinctive number or letters
- .3 Port of registry
- .4 Gross tonnage
- .5 IMO number.

4.2 A request for survey should be supplemented by a declaration and supporting information from the anti-fouling system manufacturer, confirming that the anti-fouling system

applied, or intended to be applied to the ship is in compliance with the requirements of the Convention (with an identification of the version of the Convention referred to). Such declaration should provide the following information contained in the Record of Anti-fouling System, as can be found in appendix I to annex 4 to the Convention:

- .1 Type of anti-fouling system\*.
- .2 Name of anti-fouling system manufacturer.
- .3 Name and colour of anti-fouling system.
- .4 Active ingredient(s) and their Chemical Abstract Service Registry Number(s) (CAS number(s)).

4.3 Information required by the surveyor regarding compliance of the product with the Convention should be found in a declaration from the anti-fouling system manufacturer which may be provided on the anti-fouling system container and/or on supportive documentation (such as Material Safety Data Sheets (MSDS), or similar). A link between the supportive documentation and the relevant container should exist.

## **5 Conduct of surveys**

### **5.1 Initial surveys** (Surveys in accordance with regulation 1(1)(a) of annex 4 to the Convention)

- .1 The initial survey should verify that all applicable requirements of the Convention are complied with.
- .2 As part of the survey, it should be verified that the anti-fouling system specified by the documentation submitted with the request for survey complies with the Convention. The survey should include verification that the anti-fouling system applied is identical to the system specified in the request for survey.
- .3 Taking into account experience gained and the prevailing circumstances, the initial survey should include the tasks as listed in paragraph 1 of appendix II to these Guidelines.
- .4 The verification tasks set out in paragraph 5.1.2 should be conducted at any time, either before, during, or after the anti-fouling system has been applied to the ship, as deemed necessary to verify compliance. No checks or tests must affect the integrity, structure or operation of the anti-fouling system.

### **5.2 Surveys when the anti-fouling systems are changed or replaced** (Surveys in accordance with regulation 1(1)(b) of Annex 4 to the Convention)

- .1 If the existing anti-fouling system is confirmed by an International Anti-fouling System Certificate not to be controlled under annex 1 to the Convention, the provisions described in paragraphs 5.1 and 5.2 apply.

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\* Examples of suitable wording could be: Organotin-free self-polishing type, Organotin-free ablative type, Organotin-free conventional, Biocide-free silicon type paint, others. In the case of an anti-fouling system containing no active ingredients, the words "biocide-free" should be used.

- .2 If the existing anti-fouling system is declared not to be controlled under annex 1 of the Convention, without being documented by an International Anti-fouling System Certificate, a verification should be carried out to confirm that the anti-fouling system complies with the requirements of the Convention. This verification may be based on sampling and/or testing and/or reliable documentation, as deemed necessary based on experience gained and the existing circumstances. Documentation for verification could, for example, be MSDS, or similar, a declaration of compliance from the anti-fouling system manufacturer, invoices from the shipyard and/or the anti-fouling system manufacturer. To verify the new anti-fouling system, the provisions described in paragraph 5.1 apply.
- .3 If the existing anti-fouling system has been removed, the removal should be verified in addition to the provisions described in paragraph 5.1.
- .4 If a sealer coat has been applied, a verification should be carried out to confirm that the name, type and colour of the sealer coat applied to the ship match those specified in the request for survey, and that the existing anti-fouling system has been covered with that sealer coat. Additionally the provisions described in paragraph 5.1 apply.
- .5 An existing anti-fouling system controlled under annex 1 of the Convention, containing organotin:
  - .1 applied on/after 1 January 2003 or a later date if specified by the Administration, should be removed in accordance with paragraph 5.2.3;
  - .2 applied before 1 January 2003 or a later date if specified by the Administration, must have been removed or covered by a sealer coat in accordance with paragraph 5.2.4, not later than 60 months after its application and latest on 1 January 2008.
- .6 An existing anti-fouling system controlled under annex 1 of the Convention, containing cybutryne in the external coating layer:
  - .1 applied before 1 January 2023, should be removed or covered by a sealer coat in accordance with paragraph 5.2.4.
- .7 The survey should include the tasks as listed in paragraph 2 of appendix II to these Guidelines.

### 5.3 **Surveys of existing ships requesting only an International Anti-fouling System Certificate**

- .1 If the existing anti-fouling system is declared not to be controlled under Annex 1 to the Convention, a verification should be carried out to confirm that the anti-fouling system complies with the requirements of the Convention. This verification may be based on sampling and/or testing and/or reliable documentation, as deemed necessary based on experience gained and the existing circumstances. Such documentation could be MSDS or similar, a declaration of compliance from the anti-fouling system manufacturer, invoices from the shipyard and/or the anti-fouling system manufacturer. If this information raises no reasonable doubt that the system applied is compliant with annex 1 of the Convention, the International Anti-fouling System Certificate may be issued on this basis.

## **6 Issuing or endorsing the International Anti-fouling System Certificate**

6.1 The International Anti-fouling System Certificate along with the Record of Anti-fouling Systems should be:

- .1 issued upon satisfactory completion of the initial survey;
- .2 issued upon acceptance of another Party's International Anti-fouling System Certificate; or
- .3 endorsed upon satisfactory completion of a survey for change or replacement of an anti-fouling system.

## APPENDIX I

### *Guidance for compliant anti-fouling systems*

#### **1 For the purpose of compliance with annex 1 to the Convention in respect to organotin compounds**

Small quantities of organotin compounds acting as a chemical catalyst (such as mono- and di-substituted organotin compounds) are allowed, provided that they are present at a level which does not provide a biocidal effect to the coating. On a practical level, when used as a catalyst, an organotin compound should not be present above 2,500 mg total tin per kilogram of dry paint.

#### **2 For the purpose of compliance with annex 1 to the Convention in respect to cybutryne**

##### **2.1 When samples are directly taken from the hull**

It could be expected that the distribution of the remaining anti-fouling paint on the hull surface is not uniform. Due to hull design and consequent action of the sea water during the service life of the paint, the paint may not have uniformly eroded, some parts in the hull may still have some paint, other parts may not have any paint left. Therefore, the brief samples taken from the hull surface should be representative of the anti-fouling system applied. Average values of cybutryne should not be present above 1,000 mg of cybutryne per kilogram of dry paint. Below this level any remaining cybutryne is expected not to create a negative impact to the marine environment.

##### **2.2 When samples are taken from wet paint containers**

Cybutryne should not be present at a level which does provide a biocidal effect (i.e. average values of cybutryne should not be present above 200 mg of cybutryne per kilogram of dry paint).

## APPENDIX II

### Guidance for surveys under the International Convention on the Control of Harmful Anti-fouling Systems on Ships (AFS 2001)

- (FI) 1 Initial survey (AFS 2001, annex 4, regulation 1(1)(a))
- (FI) 1.1 confirming that a Declaration and supporting information from the anti-fouling system manufacturer, specifying that the anti-fouling system and, where applicable, the sealer coat intended to be applied to the ship are in compliance with the requirements of the Convention, is provided (AFS 2001);
  - (FI) 1.2 verifying that the relevant containers of the anti-fouling system show same data as the supporting information (AFS 2001);
  - (FI) 1.3 confirming that the existing anti-fouling system, if controlled under annex 1 of the Convention, has been removed or that a sealer coat has been applied (AFS 2001);
  - (FI) 1.4 verifying, where applicable, that the relevant containers of the sealer coat applied show same data as the supporting information (AFS 2001);
  - (FI) 1.5 where supporting information from the anti-fouling system manufacturer is not available or does not provide sufficient information, sampling or testing or other checks conducted on site, of the anti-fouling system;
  - (FI) 1.6 for ships of 24 m or more in length but less than 400 GT and engaged in international voyages, confirming that the owner or owner's authorized agent has completed a Declaration on Anti-fouling System (AFS 2001);
- (FR) 2 Surveys when anti-fouling systems are changed or replaced (AFS 2001, annex 4, regulation 1(1)(b));
- (FR) 2.1 confirming that a Declaration and supporting information from the anti-fouling system manufacturer, specifying that the anti-fouling system and, where applicable, the sealer coat intended to be applied to the ship are in compliance with the requirements of the Convention, is provided (AFS 2001);
  - (FR) 2.2 verifying that the relevant containers of the anti-fouling system show same data as the supporting information (AFS 2001);
  - (FR) 2.3 confirming that the existing anti-fouling system, if controlled under annex 1 of the Convention, has been removed or that a sealer coat has been applied (AFS 2001);
  - (FR) 2.4 verifying, where applicable, that the relevant containers of the sealer coat applied show same data as the supporting information (AFS 2001);
  - (FR) 2.5 for ships of 24 m or more in length but less than 400 GT, confirming that the owner or owner's authorized agent has completed a Declaration on Anti-fouling System (AFS 2001);
  - (FR) 2.6 endorsement of the Record of Anti-fouling Systems.

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