



European Maritime Safety Agency

WORKING PAPER

**IMPLEMENTATION OF
REGULATION 782/2003/EC ON
THE PROHIBITION OF
ORGANOTIN COMPOUNDS ON
SHIPS**

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I. Introduction

The objective of the European Regulation (EC)782/2003 on the prohibition of organotin compounds on ships which entered into force on 10 May 2003 is, as stated in its Article 1, to reduce or eliminate adverse effects on the marine environment and human health caused by organotin compounds, which act as active biocides in anti-fouling systems used on ships flying the flag of, or operating under the authority of, a Member State, or ships, regardless of the flag they fly, sailing to or from ports of the Member States.

The provisions of the Regulation (EC)782/2003 take into account the two main dates of anticipated entry into force of the requirements of the AFS-Convention (1 January 2003 and 1 January 2008). Moreover, it has to be noted that the Directive 2002/62 prohibits the marketing and the use of organostannic compounds within the EU with the effect from 1 January 2003.

According to Article 3, Regulation (EC)782/2003 applies to:

- Ships flying the flag of a Member State.
- Ships not flying the flag of a Member State but operating under the authority of a Member State.
- Ships not falling under previous categories above that enter a port or offshore terminal of a Member State.

The Regulation imposes an interim regime applicable during the interim period from 1 July 2003 until the entry into force of AFS-Convention. This regime is laid down in Articles 4 (Prohibition of the application of organotin compounds which act as biocides) and 5.1 (Prohibition of the bearing of organotin compounds which act as biocides) and is specific for the EU.

The basic regime applicable from 1 January 2008 is laid down in Article 5.2 of the Regulation stating that as from 1 January 2008 all ships flying an EU flag and all ships flying another flag that enter an EU port shall either not bear organotin compounds which act as biocides in anti-fouling systems on their hulls or external parts and surfaces, **or** bear a coating that forms a barrier to such compounds leaching from underlying non-compliant antifouling system.

These ships will have to demonstrate that they are totally TBT free or that a sealer coat is present when coming to Community ports.

The community regime for survey and certification refers to the regime laid down in Annex 4 to the AFS Convention and in the Resolution MEPC.102(48) Guidelines for survey and certification of anti-fouling systems on ships". Annex 1 of the Regulation EC/782/2003 has references to both of the mentioned IMO documents, although with an error (MEPC.101(48)).

At present, although there is a clear reference to Article 11 of the AFS Convention, the following two IMO Guidelines are not explicitly mentioned in the European Regulation:

1. Resolution MEPC.105(49) "Guidelines for inspection of anti-fouling systems on ships" explains the process for conducting these PSC inspection.
2. In general, no sampling and no testing are carried out unless it is deemed necessary but if decided to be carried out, they should be in accordance with Resolution MEPC.104(49) "Guidelines for brief sampling of anti-fouling systems".

These IMO guidelines will be used as base documents for the workshop and are annexed to this document.

II. Objectives of the workshop

As the AFS-Convention adopted under the auspices of IMO did not enter into force on the 1st of January 2007, the Commission – assisted by the Committee of the Safe Seas and the Prevention of Pollution by Ships (COSS) – shall:

- adopt appropriate measures in order to allow ships flying the flag of a third State to demonstrate their compliance with Article 5 (Article 6.3);
- establish appropriate procedures for port State control (Article 7).

These elements are needed in order to enforce the Regulation 782/2003 requirements on ships not flying the flag of EU Member States.

Therefore, before the end of 2007 the Commission will propose to COSS a proposal of a Commission Regulation setting a legal basis for survey, certification and port State control rules for ships flying the flag of a third State.

This proposal will expand the current applicable regime for EU flagged ships to ships flying the flag of a third State which will have as from, 1 January 2008 to comply with the prohibition of the bearing of organotin compounds which act as biocides or bear a barrier system preventing leaching from the underlying non-compliant anti-fouling system.

Nevertheless, in view of a possible legislative action at EU level in order to, if deemed appropriate and necessary, complement and improve the IMO rules for survey, certification and port State control (for instance with more detailed inspection procedures or guidelines), Member States experts are invited to express their views concerning the IMO Guidelines principles (Resolutions MEPC.102(48), MEPC.104(49), and MEPC.105(49)).

III. Points to be discussed

After analysis of the IMO Guidelines, the following points have been identified as points to be clarified or discussed. Please note that the numbering in brackets refers to the numbering system of the IMO Guidelines.

A. Survey and certification of anti-fouling systems on ships

The base document for discussion is MEPC.102(48) "Guidelines for survey and certification of anti-fouling systems on ships".

1. When are surveys required? (Point 3 of the Guidelines)

1.1. An initial survey should be carried out: (point 3.1)

Point to be discussed: The use of the word "should" in the context of setting an obligation is suitable for guidelines, but should be hereby and elsewhere in the text changed to "shall" wherever obligations are set.

1.2. A survey should be carried out whenever an anti-fouling system is changed or replaced (point 3.3)

Point to be discussed: the expression "changed or replaced" as used in the text of the AFS-Convention, the relevant Guidelines and also in Regulation EC/782/2003 is not clear. In addition, it does not allow consideration of the application of a sealer coating. The meaning of similar expression "change or replacement" is revealed only in relation to repairs in point 3.5 of the Guidelines.

The expression "removed or covered" used on the IAFS Certificate is more precise and should be perhaps chosen to be used in the possible amendments to the Regulation 782/2003.

1.3. A major conversion affecting the anti-fouling system... (point 3.4)

Point to be discussed: no definition of "a major conversion" is given in the Guidelines; in order to ensure a harmonised implementation, a definition should be added to the Regulation 782/2003.

2. Request for survey (point 4)

2.1. 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. Such declaration should provide the following information contained in the Record of Anti-fouling system, as can be found in Appendix 1 to Annex 4 of the Convention (point 4.2):

Information required by the surveyor regarding compliance of 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 (MSDSs), or similar. A link between the supportive documentation and the relevant container should exist. (point 4.2)

Point to be discussed: It is proposed that minimum content requirements for the manufacturer's declaration should be prescribed with presenting a model form, based on the information contained in Appendix 1 to Annex 4 of the AFS-Convention and in the Model Form of the Record of Anti-Fouling System.

3. Conduct of surveys (point 5)

3.1. Surveys of newbuildings (point 5.1)

Taking into account experience gained and the prevailing circumstances, the verification required by paragraph 5.1.1 should include one or more of the following tasks, as deemed necessary to verify compliance (point 5.1.2):

- (a) Checking that the product identification on anti-fouling system containers used during the application process is identical to the system specified in the request for survey.
- (b) Sampling of the anti-fouling system.
- (c) Testing of the anti-fouling system.
- (d) Other checks conducted on site.

Point to be discussed: no reference exists on the meaning of "testing of the anti-fouling system" and on the types and extent of the tests. There is either no information available on the other checks mentioned in (d). It is therefore advised to develop a reference revealing the essence, types and aim of the possible relevant testing (c) at least. Especially information on testing the coatings for leaching would have considerable practical value.

3.2. Surveys of existing ships intending to apply a new anti-fouling system (point 5.2)

If the exiting anti-fouling system has been removed, the removal should be verified in addition to the provisions described in paragraph 5.1. (point 5.2.3).

Point to be discussed: it has to be noted that this requirement means a set of two visits at least. One inspection is foreseen after the removal of the anti fouling system, and a second inspection is foreseen after the new coating has been applied.

3.3. Surveys of ships prior to entry into force of the Convention (point 5.4)

.1 Prior to the Convention having entered into force, an Administration may conduct surveys of ships in accordance with these Guidelines, and may then issue a Statement of Compliance to this effect. (point 5.4.1)

.2 Ships capable of documenting full compliance with the Convention through such a statement of compliance may be issued, upon entry into force of the Convention, an International Anti-fouling System Certificate on that basis, subject to any additional requirements from the Administration. (point 5.4.2)

Point to be discussed: Regulation 782/2003 prescribes that:

- 1) AFS-Statement of Compliance shall be recognised only until a year after the date (1 July 2003) referred to in Article 6.1(a);
- 2) Ships flying a flag of a Member State should hold an "AFS Certificate". According to the definition presented in Article 2.7, *"AFS Certificate" means the certificate issued to ships in conformity with the provisions of Annex 4 to the AFS-Convention or, during the interim period, a certificate issued in accordance with the format laid down in Annex II to this Regulation, when it is issued by the administration of any Member State or by a recognised organisation acting on its behalf*.

These requirements have to be taken into account while assessing the compliance with the Regulation 782/2003 of all ships, irrespective of their flag.

3.4 Article 6.1(b) of Regulation 782/2003

The Regulation states: Ships of 24 metres or more in length, but less than 400 gross tonnage, excluding fixed or floating platforms, FSUs and FPSOs, shall carry an AFS-Declaration to demonstrate compliance with Articles 4 and 5. If necessary, the Commission, in accordance with the procedure referred to in Article 9(2), may establish a harmonised survey and certification regime for these ships.

Point to be discussed: Would Community measures be justified for these types of ships?

3.5. Sealer coating

Point to be discussed: What can be considered to be "a sealer coating"? Are there any recognised types? Any application methodology? Would it be useful to develop special provisions at Community level?

B. Sampling of anti-fouling systems on ships

Base document of discussion: *MEPC.104 (49) "Guidelines for brief sampling of anti-fouling systems on ships"*.

These Guidelines only concern taking samples from the most recently applied layer of paint / anti-fouling system. No methodology has been presented for checking / testing the previous layers (underlying primers, paints, sealers,

coatings for leaching and content of any anti-fouling agent controlled with the AFS-convention).

1. Personal safety when sampling (point 3)

1.1. Access to ships to carry out sampling safely may be difficult. If a ship is moored alongside persons carrying out sampling must ensure they have safe access to reach the hull from e.g. platforms, crane baskets, cherry-pickers, gangways. They must ensure that they are protected by railings or a climbing harness or take other precautions so that they cannot fall into the water between the quay and the ship. If in doubt a lifejacket and possible a safety line, should be worn when sampling. (point 3.3)

Point to be discussed: The shipowner should have the obligation to provide means of safe access for sampling all the time. In practice, in addition to dry-docking periods, sampling can be accomplished only while in (semi) ballast condition at berth, with adequate weather conditions. It has to be noted that taking samples from both Starboard and Portside might be difficult.

1.2 Access to ships in dry-dock should be made by secure means. Scaffolding should be securely constructed and cherry-pickers or dock-arms should be properly constructed and maintained if they are to be used to gain access. There should be a system to record the presence of the inspector in the dock area, and he should preferably be accompanied. Safety harnesses should be worn in cherry-picker baskets, if used (point 3.4)

Point to be discussed: How to record the presence of the inspector (ship's logbook, shipyard entrance records or diary, else)?

2. Sampling and Analysis (point 4)

2.1. The sampling procedure should ideally be easily and reliably undertaken. Persons conducting sampling should receive appropriate training in sampling methods (point 4.4)

Point to be discussed: The company who undertakes the analysis and/or samples should comply with national regulations. Any sampling leading to a decision needs to be most likely done by trained personnel / certified company. Also other national requirements, like the presence of a police officer at sampling, have to be satisfied.

The record sheet presented in Appendix to method I mention "photographs taken of the sample point". At the same time taking photographs is not mentioned in the main text of these Guidelines. It would be logical to add this reference.

2.2 The sampling method should take into account the type of anti-fouling system used on the ship (point 4.5)

Point to be discussed: Method 1 presented in the Guidelines is not suitable for use all AFS paint types. The scope of application of Method 2 is not described. Could Method 2 be considered systematically as the appropriate method for all types of anti-fouling systems falling out of the scope of Method 1?

2.3. The analysis should be conducted by a recognized laboratory meeting the ISO 17025 standard or another appropriate facility at the discretion of the Administration or the port State (point 4.10)

Point to be discussed: Member States should have a system of recognition for these laboratories in place. A requirement for the Member States to keep record of the recognised laboratories could be explored.

3. Appendix – Possible methods for brief sampling and analysis of anti-fouling systems on ships.

3.1 Purpose of this method concerning brief sampling and analysis of anti-fouling systems (point 1)

The method has been developed in order to describe a rapid methodology appropriate for the identification of anti-fouling systems on ships hulls containing organotin compounds acting as a biocide. This method has been designed such that sealer should not be affected, and any underlying anti-fouling agent (or primer) is not taken up in the sampling procedure. The method is not recommended for silicon-based anti-fouling systems. (point 1.1)

Point to be discussed: Which method can be applied for silicon-based, glass flakes or other non specified paints?

C. Inspection of anti-fouling systems on ships

Base document: MEPC.105(49) "Guidelines for inspection of anti-fouling systems on ships".

It must be noted that the issue of inspecting anti-fouling systems on ships has not been addressed in the process on on-going recast of the Directive 95/21/EC on port State control and also Paris MoU on port State control has not issued any framework.

The AFS-Convention prescribes actions like warning, detaining, dismissing, excluding from its ports for non-compliant vessels, but no guidance is given to PSCOs on the use of these options. It must be noted that sending a non-compliant vessel to (nearest) dry-dock might be problematic.

1. Ships required to carry an IAFS Certificate or Declarations on Anti-Fouling System (point 1)

- .3 As a preliminary check, the validity of the IAFS Certificate should be confirmed by verifying that the IAFS Certificate is properly completed and signed / endorsed by the administration, or by a recognized organization (RO) and stating that the required survey has been performed. In reviewing the IAFS Certificate, particular attention should be given to verifying that the initial survey matched the dry dock period listed in the ship's log(s) and that only one box should be marked. (point 1.3)*

Point to be discussed: Not only the date of the initial survey but each AFS painting certificate date has to match with a dry-docking period, but this has been omitted in the text above and elsewhere. Consequently, there is no legal base for the use of such data yet. At the same time, evidence of this kind could be valuable proof and is important for Port State Control Officers (PSCOs).

Point to be discussed: There is no clear guidance in the Guidelines to determine when to use brief sampling is appropriate and justified. As stated in the guidelines; if a brief sampling is conducted, the time to process the results shall not be used as a basis for preventing the movement and departure of the ship.

Therefore, it may be relevant to consider the possibility to use the samples of sealer coat & AFS (in numbered containers). They should be therefore kept on board, in the same way as fuel or oil samples. The content could be processed / analysed as reliable evidence in order to obtain quick results.

Point to be discussed: In case the vessel can't be detained – what to do with the information on non-compliance (confirmation from the laboratory) that was obtained later? Informing the flag State is prescribed by the AFS-Convention, but it would be useful to inform other Member States or at least the next port of call State of the findings.

A database of non-compliant vessels may be needed in the future. RO-PAX database could be perhaps suitable, if expanded, or PSC NIS database.

Point to be discussed: allowing third country flag vessels to demonstrate their compliance with the Regulation (EC) 782/2003 is an important issue. Which certificate of compliance do the third country flag vessels have to have for this purpose after 1 January 2008?

Inspection Guidelines (MEPC 105(49) in its paragraph 2.1 (ships of Non-parties to AFS-convention) state that PSCO should look for documentation that contains all information of IAFS Certificate, like information contained in paragraphs 5.2.2 and 5.3.2 of survey Guidelines (MEPC.102(48)).

An additional reference to the "Statement of Compliance" (as referred to in paragraph 5.4.1 of MEPC.102(48) in cases of non-availability of an IAFS Certificate may be justified.

According to paragraph 5.4.1 of Resolution MEPC.102(48) Statement of Compliance can be issued by any Administration - after a survey has been undertaken - prior to the AFS-Convention having entered into force.