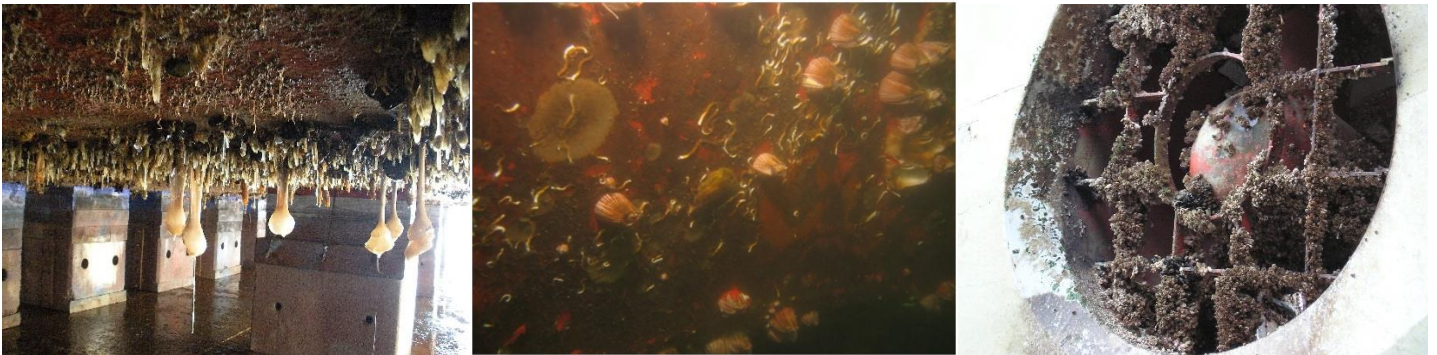


Guidance Document for:

*Biofouling Management Regulations to Minimize  
the Transfer of Nonindigenous Species from  
Vessels Arriving at California Ports*

California Code of Regulations, title 2, section 2298.1 et seq.



September 19, 2017

California State Lands Commission

Marine Invasive Species Program

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## PURPOSE

The purpose of this guidance document is to provide clear information to improve understanding of, and compliance with, the Biofouling Management Regulations to Minimize the Transfer of Nonindigenous Species from Vessels Arriving at California Ports (California Code of Regulations, title 2, section 2298.1 et seq.), hereafter referred to as the Biofouling Management Regulations.

The Biofouling Management Regulations are intended to:

- Align with the International Maritime Organization's 2011 Guidelines for the Control and Management of Ships' Biofouling to Minimize the Transfer of Invasive Aquatic Species (Resolution MEPC.207(62)), hereafter referred to as the IMO Biofouling Guidelines
- Focus on efforts to prevent biofouling accumulation on a vessel's wetted surfaces
- Move the State expeditiously toward elimination of the discharge of nonindigenous species into the waters of the State, or into the waters that may impact the waters of the State, based on the best available technology economically achievable.

<http://www.slc.ca.gov/Programs/MISP.html>

## SUMMARY OF THE REQUIREMENTS (see regulatory text for complete requirements)

### APPLICABILITY (see 2 California Code of Regulations (CCR) section 2298.1)

- The regulations apply to all vessels 300 Gross Registered Tons or above that carry, or are capable of carrying, ballast water that arrive at a California port
- The regulations are effective as of October 1, 2017
  - Many provisions (see below) apply to vessels after the first regularly scheduled out-of-water maintenance (or delivery into service) on or after January 1, 2018
- For the purposes of these regulations:
  - All ports in the San Francisco Bay area east of the Golden Gate Bridge, including the Ports of Stockton and Sacramento, shall be interpreted as the same California port
  - The Ports of Los Angeles, Long Beach, and the El Segundo marine terminal shall be interpreted as the same California port

### RECORD KEEPING REQUIREMENTS (see 2 CCR sections 2298.3 and 2298.4)

When are these requirements applicable to individual vessels?

- New vessels: upon delivery on or after January 1, 2018
- Existing vessels: after the first regularly scheduled out-of-water maintenance on or after January 1, 2018
- A vessel will be granted a 60-day grace period to develop a Biofouling Management Plan and Biofouling Record Book if they are not already maintained onboard the vessel upon the first arrival to a California port after the requirement becomes effective

#### Biofouling Management Plan

- A Biofouling Management Plan shall:
  - Be prepared specifically for each vessel
  - Provide a description of the vessel's biofouling management strategy
  - Be consistent with the Biofouling Management Plan described in the IMO Biofouling Guidelines
  - Be current as of the most recent out-of-water maintenance or delivery (if the vessel has never undergone out-of-water maintenance)
  - Describe the practices and antifouling systems specifically used for the hull and niche areas listed in 2 CCR section 2298.6(c)(1)

#### Biofouling Record Book

- A Biofouling Record Book shall:

- Contain details of all in-water inspections and biofouling management measures undertaken since the most recent out-of-water maintenance or delivery (if the vessel has never undergone out-of-water maintenance)
- Be consistent with the Biofouling Record Book described in the IMO Biofouling Guidelines
- Include descriptions of niche area management practices, as required by 2 CCR section 2298.6(c)(2)

## REPORTING REQUIREMENTS (see 2 CCR section 2298.5)

When is this requirement applicable to individual vessels?

- All vessels: Beginning on October 1, 2017

### Marine Invasive Species Program Annual Vessel Reporting Form (SLC 600.12, Revised 08/17)

- A vessel must submit this form for the 2017 calendar year only if the vessel arrives at a California port for the first time during 2017 on or after October 1, 2017
  - A vessel that arrived at a California port during 2017 prior to October 1, 2017, does not need to submit this form for the 2017 calendar year
- Submission is required at least 24 hours in advance of the first arrival of each calendar year at a California port
- The Annual Vessel Reporting Form can be submitted via:
  - Online: <https://misp.io>
  - Email: [BWForm@slc.ca.gov](mailto:BWForm@slc.ca.gov)
  - Fax: (562) 499-6444

## BIOFOULING MANAGEMENT REQUIREMENTS (see 2 CCR section 2298.6)

When are these requirements applicable to individual vessels?

- New vessels: upon delivery on or after January 1, 2018
- Existing vessels: after the first regularly scheduled out-of-water maintenance on or after January 1, 2018

### Biofouling Management

- If a vessel is using an antifouling coating, the antifouling coating shall not be aged beyond its effective coating lifespan, as documented in the vessel's Biofouling Management Plan
  - If the antifouling coating is aged beyond the effective coating lifespan, the Biofouling Management Plan shall describe how biofouling will be managed after the expected coating lifespan is exceeded. All management actions should be documented in the Biofouling Record Book.

- If a vessel is not using an antifouling coating, the Biofouling Management Plan shall describe how biofouling will be managed in the absence of an antifouling coating. All management actions should be documented in the Biofouling Record Book.

#### Niche Area Management

- Biofouling in the following niche areas (if these niche areas are present) must be managed using one or more practices that are appropriate for the vessel and its operational profile, as determined by the owner, operator, master, or person in charge of the vessel:
  - Sea chests, sea chest gratings, bow and stern thrusters, bow and stern thruster gratings, fin stabilizers and recesses, out-of-water support strips, propellers and propeller shafts, and rudders
- Niche area management practices must be described in the Biofouling Management Plan and completed actions must be documented in the Biofouling Record Book

#### REQUIREMENTS FOR VESSELS WITH EXTENDED RESIDENCY PERIODS (45 CONSECUTIVE DAYS OR LONGER IN THE SAME PORT) (see 2 CCR section 2298.7)

When are these requirements applicable to individual vessels?

- New vessels: upon delivery after January 1, 2018
- Existing vessels: after the first regularly scheduled out-of-water maintenance on or after January 1, 2018

- Vessels that have remained in one port for 45 or more consecutive days must comply with the following biofouling management requirements upon arrival at a California port:
  - Biofouling in the niche areas described below must be managed in a manner that is consistent with the niche area management practices described in the Biofouling Management Plan:
    - Sea chests, sea chest gratings, bow and stern thrusters, bow and stern thruster gratings, fin stabilizers and recesses, out-of-water support strips, propellers and propeller shafts, and rudders
  - Any activities conducted to manage biofouling on niche areas or any wetted surface shall be documented in the Biofouling Record Book

#### PROPELLER CLEANING (see 2 CCR section 2298.8)

- Propeller cleaning or polishing is not prohibited under these regulations

## ALTERNATIVES (see 2 CCR section 2298.9)

- Petitions for alternative management actions must be submitted in writing and must be approved by the Commission's Marine Environmental Protection Division Chief prior to the vessel's arrival at a California port
- Responses will be delivered within thirty days of receipt of the petition
- Proposed alternatives may be approved if they fulfill the purpose of the regulations (i.e., to move the State expeditiously toward elimination of the discharge of nonindigenous species into the waters of the State)
- The Division Chief may withdraw approved alternatives if the petitioner does not comply with the approved alternative requirements

## EMERGENCY EXEMPTIONS (see 2 CCR section 2298.9.1)

- A vessel can be exempted from these regulations if it arrives at a California port because of an emergency and all the following conditions are met:
  - The arrival is unscheduled and due to an emergency where the safety of the vessel or crew is compromised
  - The vessel notifies the Marine Environmental Protection Division Chief no later than 24-hours after the arrival and cessation of the emergency
  - The arrival is the vessel's first at a California port since the most recent of:
    - The previous out-of-water maintenance
    - Vessel delivery
    - Ownership commencement
  - The vessel will remain in California waters for 21 days or less

## FREQUENTLY ASKED QUESTIONS

### Section 2298.1. Purpose, Applicability, and Date of Implementation

**Q:** To what types of vessels do these regulations apply?

**A:** All vessels 300 Gross Registered Tons and greater, carrying or are capable of carrying ballast water, that arrive at a California port, except those vessels listed in Public Resources Code section 71202 (i.e., vessels of the armed forces and vessels in innocent passage)

**Q:** Why are these regulations applicable only to vessels that carry or are capable of carrying ballast water?

**A:** The California Legislature defined the vessels that are subject to the Marine Invasive Species Act (Public Resources Code section 71200 et seq.) and associated regulations. Per Public Resources Code section 71201, the Act applies only to vessels that carry or are capable of carrying ballast water. To remain consistent with the Marine Invasive Species Act, the Commission limited application to vessels that carry or are capable of carrying ballast water.

### Section 2298.3. Biofouling Management Plan

**Q:** Why does the Biofouling Management Plan requirement apply only after the first regularly scheduled out-of-water maintenance on or after January 1, 2018?

**A:** A Biofouling Management Plan is most effective and cost-efficient when it is used as a planning tool to prepare for installation or application of antifouling systems while in a dry dock. Therefore, the most appropriate time for this requirement to become effective is immediately after the first regularly scheduled out-of-water maintenance event.

**Q:** Should the Biofouling Management Plan be a standalone document or can it be a part of the Ballast Water Management Plan?

**A:** There is no required format for the Biofouling Management Plan. It can be a part of a vessel's Ballast Water Management Plan if the required information is present and can be made available to California State Lands Commission staff for inspection and review.



**Q:** Can the Biofouling Management Plan be in an electronic format?

**A:** There is no required format for a Biofouling Management Plan. It can be kept electronically if the required information is present and can be made available to California State Lands Commission staff for inspection and review.

**Q:** Does the Biofouling Management Plan need to be kept onboard the vessel?

**A:** Yes, the information required to be maintained in the Biofouling Management Plan must be retained onboard and made available to California State Lands Commission staff for review during an onboard inspection.

**Q:** What is an example of an acceptable Biofouling Management Plan?

**A:** There is no required format for a Biofouling Management Plan. It can be in any format if the required information is present and can be made available to California State Lands Commission staff for review during an onboard inspection. An example of a Biofouling Management Plan template developed by the Institute for Marine Engineering, Science, and Technology and the International Paint and Printing Ink Council can be found in Appendix A and at <https://www.imarest.org/special-interest-groups/biofouling-management/item/3505-template-for-biofouling-management-plan>.

**Q:** How does the 60-day grace period work?

**A:** A 60-day grace period will initiate if a vessel arrives at a California port for the first time since it was required to have a Biofouling Management Plan and does not have it. The vessel will remain in compliance if it makes additional arrivals at California ports during the 60-day grace period. The vessel, however, must have a Biofouling Management Plan upon arriving at a California port after the 60-day grace period expires.

#### Section 2298.4. Biofouling Record Book

**Q:** Why does this requirement apply only after the first regularly scheduled out-of-water maintenance on or after January 1, 2018?

**A:** The Biofouling Record Book is intended to accompany the Biofouling Management Plan and document the implementation of the vessel-specific plan. Therefore, the most appropriate time for this requirement to become effective is at the same time a vessel is required to maintain a Biofouling Management Plan.

**Q:** Should the Biofouling Record Book be a standalone document?

**A:** There is no required format for a Biofouling Record Book. It can be in any format if the required information is present and can be made available to California State Lands Commission staff for inspection and review.

**Q:** Can the Biofouling Record Book be in an electronic format?

**A:** There is no required format for a Biofouling Record Book. It can be kept electronically if the required information is present and can be made available to California State Lands Commission staff for inspection and review.

**Q:** Does the Biofouling Record Book need to be kept onboard the vessel?

**A:** Yes, the information required to be maintained in the Biofouling Record Book must be retained onboard and made available to California State Lands Commission staff for review during an onboard inspection.

**Q:** How does the 60-day grace period work?

**A:** A 60-day grace period will initiate if a vessel arrives at a California port for the first time since it was required to have a Biofouling Record Book and does not have it. The vessel will remain in compliance if it makes additional arrivals at California ports during the 60-day grace period. The vessel, however, must have a Biofouling Record Book upon arrival at a California port after the 60-day grace period expires.

#### Section 2298.5. Marine Invasive Species Program Annual Vessel Reporting Form

**Q:** Who is responsible for submitting the Annual Vessel Reporting Form?

**A:** The Annual Vessel Reporting Form can be submitted by anyone, but the master, owner, operator, agent, and person in charge of a vessel are all potentially responsible parties for this submission requirement.

**Q:** How often and when do I submit the Annual Vessel Reporting Form?

**A:** The Annual Vessel Reporting Form is required to be submitted once per calendar year. Specifically, the form is due 24 hours in advance of the first arrival at a California port during each calendar year.

**Q:** How do I submit the Annual Vessel Reporting Form?

**A:** The Annual Vessel Reporting Form can be submitted online via <https://misp.io>, via email to [bwform@slc.ca.gov](mailto:bwform@slc.ca.gov), or via fax at 562-499-6444.

**Q:** Do I need to submit the Annual Vessel Reporting Form in 2017?

**A:** Submission of the Annual Vessel Reporting Form is required in 2017 if a vessel makes its first California port arrival of the 2017 calendar year on or after October 1, 2017. If a vessel has previously arrived at a California port during 2017 (i.e., prior to October 1), the Annual Vessel Reporting Form is not required from that vessel during 2017. Vessels that arrived at a California port in 2017 prior to October 1, 2017, are still required to submit the Hull Husbandry Reporting Form and the Ballast Water Treatment Technology Annual Reporting Form (as applicable) for 2017.

#### Section 2298.6. Biofouling Management for Wetted Surfaces

**Q:** Why does this requirement apply only after the first regularly scheduled out-of-water maintenance on or after January 1, 2018?

**A:** Preventive biofouling management actions typically occur during out-of-water maintenance. These actions should be linked to a vessel's Biofouling Management Plan and should be documented in the Biofouling Record Book. All three of these items are connected. For example, the Biofouling Management Plan is developed, the management actions taken will implement the Biofouling Management Plan, and the Biofouling Record Book documents the implementation of the Plan. Therefore, all three requirements must be initiated simultaneously.

**Q:** What types of information should I consider when selecting an antifouling coating?

**A:** According to the IMO Biofouling Guidelines:

*“Different anti-fouling systems are designed for different ship operating profiles so it is essential that ship operators, designers and builders obtain appropriate technical advice to ensure an appropriate system is applied or installed...Some factors to consider when choosing an anti-fouling system include the following:*

- *planned periods between dry-docking – including any mandatory requirements for ships survey*
- *ship speed – different anti-fouling systems are designed to optimize anti-fouling performance for specific ship speeds*
- *operating profile – patterns of use, trade routes and activity levels, including periods of inactivity, influence the rate of biofouling accumulation*

- ship type and construction
- any legal requirements for the sale and use of the anti-fouling systems

*Consideration should also be given to the need for tailored, differential installation of anti-fouling coating systems for different areas of the ship to match the required performance and longevity of the coating with the expected wear, abrasion and water flow rates in specific areas, such as the bow, rudder, or internal seawater cooling systems and sea chest interiors."*

**Q:** What are some options for managing biofouling in niche areas?

**A:** The IMO Biofouling Guidelines offer guidance for managing biofouling in many different niche areas, including those that California requires to be managed. See the IMO Biofouling Guidelines sections 6.6 - 6.8.9 for more information:  
[http://www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Marine-Environment-Protection-Committee-\(MEPC\)/Documents/MEPC.207\(62\).pdf](http://www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Marine-Environment-Protection-Committee-(MEPC)/Documents/MEPC.207(62).pdf).

## Section 2298.7. Requirements for Vessels with Extended Residency Periods

**Q:** Why does this requirement apply only after the first regularly scheduled out-of-water maintenance on or after January 1, 2018?

**A:** The biofouling management actions undertaken before or after a long residency period must be described in the Biofouling Management Plan and must be documented in the Biofouling Record Book. The applicability of this requirement therefore matches the implementation date for the Biofouling Management Plan and Biofouling Record Book requirements.

**Q:** What is an extended residency period?

**A:** An extended residency period occurs when a vessel remains in the same port for 45 days or longer. Remaining stationary or moving slowly and infrequently for prolonged periods increases the likelihood that biofouling will accumulate on a vessel. Increased biofouling accumulation increases the vessel's risk of introducing nonindigenous species into other ports that the vessel may visit after the extended residency period.

**Q:** Would my vessel trigger an extended residency period if it remains in the San Francisco Bay area for greater than 45 days, but moves infrequently from port to port (e.g., Richmond, Oakland, San Francisco)?

**A:** Yes, these regulations interpret all ports in the San Francisco Bay area east of the Golden Gate Bridge as the same California port. Likewise, the Ports of Los Angeles and Long

Beach and the El Segundo marine terminal are interpreted through these regulations as the same California port. (See 2 CCR section 2298.1, subd. (c).)

### Section 2298.8. Propeller Cleaning in California Waters

**Q:** These regulations do not prohibit propeller cleaning, but does that mean I can clean my propeller in California waters?

**A:** The California State Lands Commission does not prohibit propeller cleaning in California waters, but other local, state, or federal laws may still apply.

**Q:** Can I clean the rest of my vessel's wetted surfaces?

**A:** The California State Lands Commission does not prohibit in-water cleaning in California waters. Discharges from in-water cleaning are subject to the Clean Water Act, either through the U.S. Environmental Protection Agency's Vessel General Permit for Discharges Incidental to the Normal Operation of a Vessel or through another National Pollutant Discharge Elimination System (NPDES) permit. Ensuring compliance with these requirements is the responsibility of the master, owner, operator, or person in charge of a vessel.

APPENDIX – Example of a Biofouling Management Plan template (Original can be found at <https://www.imarest.org/special-interest-groups/biofouling-management/item/3505-template-for-biofouling-management-plan>)



# Template for a Biofouling Management Plan

Published by the Institute of Marine Engineering, Science & Technology  
and the International Paint and Printing Ink Council

EXAMPLE

[www.imarest.org/bmeg](http://www.imarest.org/bmeg)



**IPPIC**  
International  
Paint & Printing  
Ink Council

Institute of  
Marine Engineering,  
Science & Technology

**IMAREST**



## Introduction and background

The International Maritime Organization's Guidelines for the Control and Management of Ships' Biofouling to Minimize the Transfer of Invasive Aquatic Species, adopted under resolution MEPC.207(62) in July 2011, provide a globally consistent approach to the management of biofouling on ships.

The Guidelines give recommendations on general measures to be considered in order to reduce the risk of transfer of invasive aquatic species not only in relation to the aspects of choosing the right fouling control paint for the different parts of the ship but also to give consideration to other parameters such as the ship design, drydock and maintenance, recycling, crew training etc.

The Guidelines suggest that plans for managing the biofouling are developed for each individual ship. Each ship shall also keep on board a biofouling record book to document the various management procedures that have been taken throughout the lifespan of the ship.

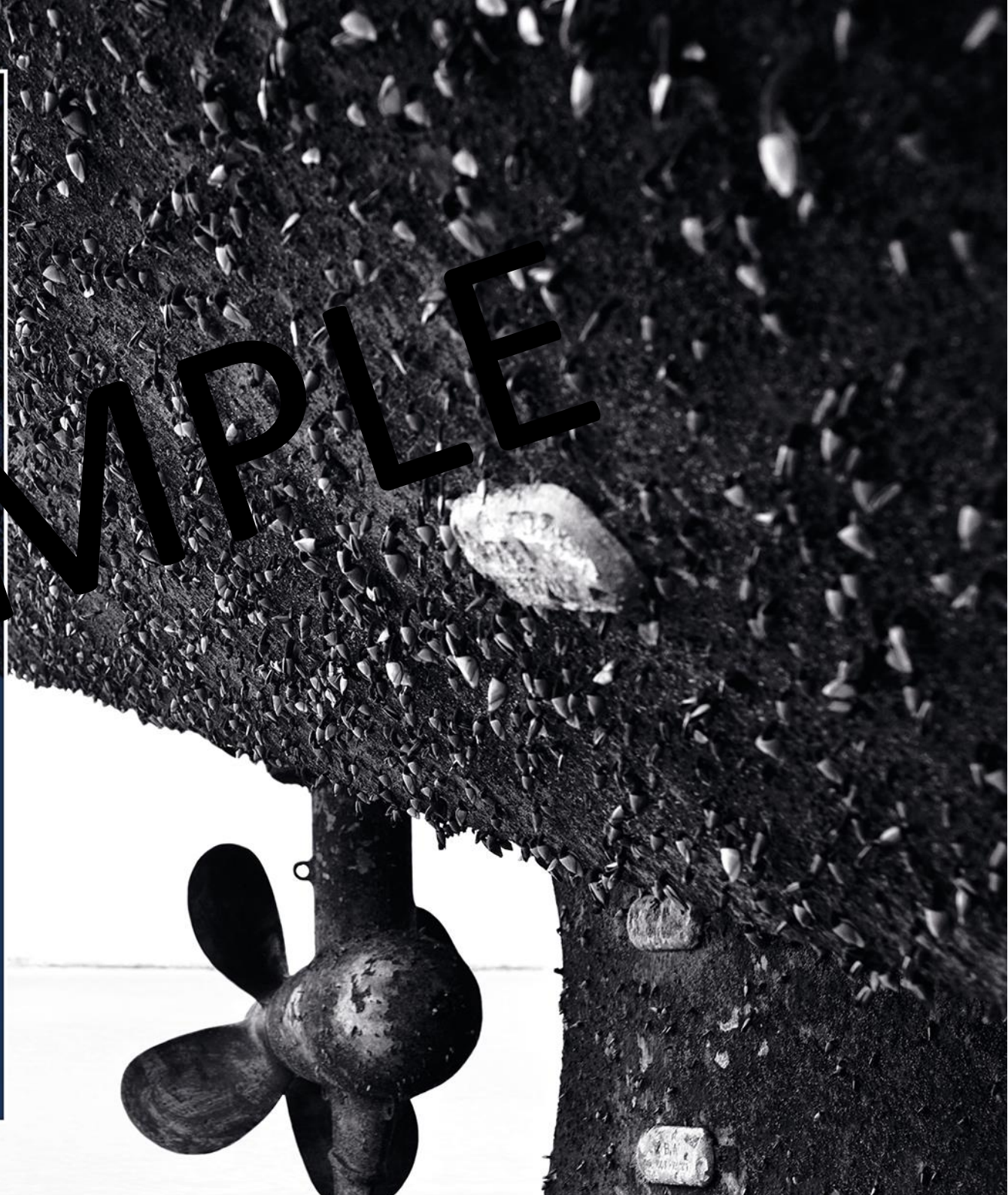
## Objectives

Whilst IMO guidance details the information which is important to be recorded regarding fouling control, no formal template is provided in which to capture that information. This document provides such a template to capture all relevant information prescribed in the IMO guidance with particular attention to coatings.

The template encompasses:

- The choice of anti-fouling system (AFS) for the external hull with a check list system to inform this choice;
- Selection of AFS for niche areas where hydrodynamic conditions may differ from those found on the external hull; and
- Planned management actions to be completed between scheduled dry-dockings to minimize the biofouling on the hull

Note: It is ultimately the ship owner or operator's decision to have and to maintain a biofouling management plan and biofouling record book on-board their ship.





# BIOFOULING MANAGEMENT PLAN

In accordance with Appendix I of MEPC Resolution MEPC.207 (62) of 2011:  
'Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species'  
**Any management action undertaken should be recorded in the Biofouling Record Book.**

## Ship particulars

Ship's name	
Flag State	
Port of registry	
IMO number	
Gross tonnage	
Time (LR classified)	
Registration length	
Beam	
International call sign and MMSI	
Ship owner (current)	

AFS specification particulars/operating profile

Typical operating speed (knots)	
Period underway / activity (%)	
Expected lay-up periods (anchored, moored) (weeks) (location)	
Typical operating region or trading routes	
Planned duration between dry-docking / slipping	
Expected dry-docking country (if known)	
Dry-docking and maintenance history	

EXAMPLE

## Description of areas on the Ship susceptible to biofouling

**Areas particularly susceptible to biofouling** [Please indicate on the diagrams the areas particularly susceptible to biofouling, including niche areas and seawater systems access points in the internal seawater systems]



Identify the niche areas relevant for the ship in question in the table below (Tick as appropriate). Include other niche areas if required:

General hull and appendages	Niche areas
<input type="checkbox"/> Flat-bottom	<input type="checkbox"/> Sea chests
<input type="checkbox"/> Vertical sides	<input type="checkbox"/> Inlet gratings
<input type="checkbox"/> Bow dome	<input type="checkbox"/> Sea inlet pipes
<input type="checkbox"/> Boot-top	<input type="checkbox"/> Bow and stern thruster
<input type="checkbox"/> Bilge keels	<input type="checkbox"/> Propeller and shaft
<input type="checkbox"/> Stabilizer fins	<input type="checkbox"/> Rope guards
<input type="checkbox"/> Rudder	<input type="checkbox"/> Box coolers
<input type="checkbox"/> Dock block positions	<input type="checkbox"/> Moon pools
<input type="checkbox"/> A-bracket stern tube	<input type="checkbox"/> Free-flood spaces / voids
<input type="checkbox"/> Cathodic protection anodes and systems	<input type="checkbox"/> Other:
<input type="checkbox"/> Draft and hull markings	

## Description of the anti-fouling systems

DFTD	Area / Location applied and Date of Application	Dry Film Thickness	Expected Life time	Manufacturer	If requirements for cleaning - method should be specified	AFS Certificate (Y / N)
Products(s) / systems applied <sup>1</sup> <i>[Enter details of the coating applied for each section of the ship – hull and niche area. For sea chests, indicate function and if MGPS dosed, or containing box coolers]</i>						
Detail any immersed areas where AFS are not applied or installed						
Marine Growth Prevention Systems <sup>2</sup> (MGPSs) Dosing frequency	<i>Enter details of fitted systems, including System Name, Manufacturer, type, and of dosing locations, seawater systems protected, dosing regime etc.]</i>					
List seawater systems without fitted MGPSs, and presence and location of box						
Operating profile required for each AFS to be effective	<i>[Refer to Product Data Sheet for application AFS]</i>					
Other specifications relevant to AFS performance, if any						
Previous reports of performance (if available)						

<sup>1</sup> This section can be completed using the AFS 'specification' or warranty document provided by your AFS supplier.

<sup>2</sup> This section should be completed in collaboration with your MGPS provider

<sup>3</sup> Product data sheets should be attached as an appendix

# Biofouling management action plan to minimise the transfer of invasive aquatic species

Ship area <i>(To be completed for areas particularly susceptible to biofouling – see previous)</i>	Planned management action and frequency <i>(e.g., inspections, cleaning, repairs and maintenance)</i>	Management action if ship operates outside its usual operating profile
<b>Hull</b>		
Vertical		
Flat-bottom		
Docking block positions	<i>[Variation in block plan between dockings / bouncing the ship in the dock / in-water cleaning before / after docking / routine in-water cleaning]</i>	
Boot-top		
Bow dome		
<b>Hull appendages and fittings:</b>		
Bilge keels		
A-brackets		
Stabilizer fins		
CP anodes		
<b>Steering, propulsion and positioning:</b>		
Propellers		
Worm tube seal		
Rudder guards		
Propulsor body and nozzle		
Anchor and chain		
Chain locker		
Rudder		

Ship area (To be completed for areas particularly susceptible to biofouling – see previous)	Planned management action and frequency (e.g., inspections, cleaning, repairs and maintenance)	Management action if ship operates outside its usual operating profile	
Steering, propulsion and positioning (continued):			
Rudder recesses (pintle recesses, lifting tubes etc.)			
Thruster propeller(s)			
Thruster body(s)			
Thruster rope guards / shaft seals			
Tunnel(s)			
Tunnel grates			
Intake and internal seawater systems			
Engine cooling system	[include associated sea chests, box coolers, grates, internal pipework etc.]		
Sea chests (identify number, position, box cooler presence)			
Emergency fire-fighting system	[include associated sea chests, box coolers, grates, internal pipework etc.]		
Auxiliary services system			
Portable water production			
Ballast water uptake			
Ancillary systems			
Other systems (itemise each)			

# Operation and maintenance of the anti-fouling systems

## Timing of operational and maintenance activities

*Schedule of planned inspections, repairs, maintenance and renewal of AFS*

## In-water cleaning and maintenance procedures

*Schedule of planned maintenance procedures to be completed between dry-docking events*

*Treatment / cleaning conducted and detailed operational procedures, chemicals, discharge standards applied to specific areas*

## Operation of on board treatment processes

*MGPS fitted, internal sensor system covered by the system associated maintenance and inspection schedule and procedures*

*Operational frequency and cleaning / maintenance requirements and condition*

## Planned biofouling management if MGPS is temporarily out of operation

*Document procedures*

EXAMPLE

## Safety procedures for the ship and crew

### Safety procedures to be followed during ship inspections

*Details of specific operational or safety restrictions, including those associated with the management system that affects the ship and / or the crew*

## Disposal of biological waste

### Procedures for the disposal of biological waste generated by treatment / cleaning processes

*When the cleaning is conducted by, or under the direct supervision of, the ship owner, master or crew*

## Biofouling record book

### Recording requirements

*Documentation to be kept to verify operations / treatments*

*[record reference details and location of the ship's Biofouling Record Book]*



## Crew training and familiarisation

### **Safety procedures to be followed during ship inspections**

*Details of specific operational or safety restrictions, including those associated with the management system that affects the ship and/or the crew*

### **Date of plan (day/month/year)**

EXAMPLE