



Ref. T5/1.22

BWM.2/Circ.17  
20 October 2008

**INTERNATIONAL CONVENTION FOR THE CONTROL  
AND MANAGEMENT OF SHIPS' BALLAST WATER  
AND SEDIMENTS, 2004**

**Guidance document on arrangements for responding to emergency situations  
involving ballast water operations**

1 The Marine Environment Protection Committee (MEPC), at its fifty-fifth session (9 to 13 October 2006), instructed the Sub-Committee on Bulk Liquids and Gases (BLG) to develop a guidance document on arrangements for responding to emergency situations involving ballast water operations to assist Members to rapidly identify appropriate measure(s) whenever emergency situations occur.

2 The Sub-Committee on Bulk Liquids and Gases, at its twelfth session (4 to 8 February 2008), completed the work on the guidance document and invited the fifty-eighth session of the MEPC (6 to 10 October 2008) to approve this guidance and to instruct the Secretariat to issue a technical circular in this respect.

3 MEPC 58 (6 to 10 October 2008) approved the "Guidance document on arrangements for responding to emergency situations involving ballast water operations", as set out in the annex to this document, and requested the Secretariat to disseminate it through this circular.

4 Member Governments are invited to bring this circular to the attention of all Parties concerned.

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## ANNEX

### DRAFT GUIDANCE DOCUMENT ON ARRANGEMENTS FOR RESPONDING TO EMERGENCY SITUATIONS INVOLVING BALLAST WATER OPERATIONS

#### 1 Introduction

1.1 The International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (BWM Convention) regulates the transfer of harmful aquatic organisms and pathogens from ships' ballast water and sediments. This Convention gives a Party, individually or jointly with other Parties, the right to introduce additional measures (e.g., immediate control measures in emergency or epidemic situations) in accordance with regulation C-1, taking into account the Guidelines for additional measures regarding ballast water management including emergency situations (G13).

1.2 The technical recommendations contained in this document provide guidance for use in emergency/epidemic situations, when specific and rapid measures need to be taken to prevent major threats and damages from the transfer of harmful aquatic organisms and pathogens through ballast water. This guidance would assist a Party to rapidly identify appropriate measure(s) whenever emergency situations occur in relation to ballast water operations. Countries should analyse the risks and nature of the threats that are posed by ballast water transfer in their waters and develop the structure that best suits them, taking into consideration the specific characteristics of the ecosystems involved and the resources available to them. This Guidance is not intended as a mandatory model or a set structure to be followed during potential or actual emergencies.

1.3 Examples of when an emergency situation may arise include:

- the introduction of organisms that may cause significant damage to the human population, human food supply, industry or other economic activities, or an area's natural biodiversity; or
- the threat of such an introduction through ballast water from a vessel that has come from another emergency area.

1.4 Appropriate and efficiently applied emergency measures are vital to minimizing both the potential damage in an affected area and the risk of other areas being affected. Emergency situations relating to environmental, economic and human health issues may represent an immediate threat to a particular location, or to neighbouring locations, as well as areas to be visited by vessels carrying ballast water from this location.

1.5 Rapid and correct handling of the emergency will also affect the likelihood of normalizing the situation in the longer term. It should be noted, however, that the priority for emergency situations should be the prevention of introduction of harmful aquatic organisms and pathogens. Once a relevant species has gained a foothold in an area, it will be very difficult to eradicate it without causing additional significant environmental or habitat damage. Often terrestrial eradication measures do not transfer easily into the coastal, tidal and marine environment.

## **2 Objective**

2.1 The objective of this document is to provide guidance for the planning and implementation of effective measures in emergency situations related to ballast water operations, in order to minimize damage and to enable rapid normalization of the operation of ports and ships.

## **3 Application**

3.1 This guidance document has been developed for Government agencies, bodies and institutions involved in, and responsible for, regulating and controlling harmful aquatic organisms and pathogens (including ballast water management), ports and other interested parties and stakeholders. However, for them to work, industry co-operation will be needed at the time of the emergency.

## **4 Emergency response planning**

4.1 Emergency planning should be undertaken at the appropriate level for the country concerned, based on the risks faced from the introduction of harmful aquatic organisms and pathogens through ballast water. The appropriate level should be defined by the specific nature of the threat and can be at a national level, or if the threat is justified, at a bioregional, regional, estuary or port level. Alternatively, it could be undertaken on a regional seas level, in conjunction with other Member States. However, a sustainable balance between environmental protection and the social and economic impacts from delays or interruptions to port and ship operations, needs to be obtained.

4.2 Such planning should result in the formation of an Emergency Response Plan based upon identified scenarios. Such scenarios should be provided by undertaking a risk assessment to identify problems that are likely to occur. The size and content of such a Plan should be appropriate to provide a robust response to the high risk problems identified. By adopting this approach, a Member State can identify how to implement rapidly appropriate mitigation measures and establish preventative procedures, allocate resources, and conduct training. Provision of such resources should be based upon the appropriate risk, and be focused on mitigating any high risk scenarios. In practice, such measures are likely to be very simple and may only be identifiable for situations where ballast water discharges from certain vessels need to be prevented. The Party may also wish to broaden the scope of the Plan to cover other potential vectors for harmful aquatic organisms and pathogens, such as bio-fouling or accidental release of aquarium species.

4.3 In order to identify the most appropriate means of reducing the immediate threats represented by the emergency and to limit the longer-term consequences it may cause, an understanding of the threat is critical. The process of identifying and applying the most appropriate response must reflect the nature of the potential incident and its likely occurrence. Planning any response should include:

- identification of the potential source(s) of introduction and emergencies that could occur;
- calculation of the risk that these potential emergency scenarios may occur;

- identification of the impact of each potential scenario, beginning with the emergency that is most likely to occur. This should include the impacts on human health issues, proliferation of diseases and epidemics, damage to biodiversity and economic risk;
- identification of mitigation measures to reduce these risks should they arise;
- identification of measures to be implemented to mitigate an emergency situation, with appropriate coordination and clear identification of responsibilities for actions;
- identification of process to determine limits of the affected area; and
- identification of the responsible parties, including the lead agency, communication links, resources and information that will facilitate this decision making process and the resulting emergency operations.

It should be noted that information and data collection will be an integral part of each of these stages. This could be provided by, amongst others, existing physical, biological and chemical datasets of the environment; local knowledge (especially from fishermen and local boat operators); existing biological, physical and public health prediction programme/models; knowledge of vectors (such as shipping, fishing vessels, and recreational vessels) that could transfer harmful aquatic organisms and pathogens; and, expertise from third parties and other Parties to the Convention.

## **5 Risk assessment**

5.1 A Party should identify the threats its coastal areas are exposed to by vessels discharging ballast water. Assessing such threats may be done by applying a risk assessment model. Such assessments may enable the identification of likely threat scenarios upon which an emergency strategy may be developed, taking into account the specific environmental and human health concerns, socio-economic impacts of an invasion, commitments in relation to any regional agreements, safety and biosecurity. The risk assessment procedure may be based upon the risk assessment principles defined in the Guidelines for risk assessment under regulation A-4 of the BWM Convention (G7).

## **6 Preparedness**

6.1 For the identified higher risk scenarios, an assessment of the appropriate and readily available support and resources should be undertaken and, to the extent possible, a procedure should be set up to obtain such environmental and health-related resources when necessary. It is also recommended that the relevant resources to respond and mitigate these higher risk scenarios are identified along with an assessment of where they can be obtained from. Equipment can be sourced from existing resources, stockpiled resources, call-off contracts or a contract with a third party to provide equipment and/or management of the emergency. It should be noted, however, that the level of resources actually needed, will be a fraction of that needed for an oil or chemical spill, and simple technology should be used to mitigate any impacts. For example, the use of land-based tanks, when available, to receive ballast water from a ship that has arrived from another emergency area.

6.2 Agreements should also be established with capable institutions with relevant resources, experience and knowledge, in order to guarantee the provision of appropriate services and resources in case of an emergency. A network of experts may be identified either within the country, within a region or internationally. It should be noted that these resources should only be identified where the threat is very high, otherwise significant resources could be wasted and sit idle. Information on resource availability and capacity should be regularly updated in the Emergency Response Plan.

6.3 It is recommended that a procedure and a sampling format for emergency situations are developed in the Emergency Response Plan, in line with the IMO's Guidelines for ballast water sampling (G2). Ballast water samples, from one or more ships, as well as from port water, may need to be analysed. It may also be necessary to establish temporary environmental monitoring in certain areas which should be clearly identified, delimited and defined. These procedures should also make provisions for: sending and receiving samples; correct preservation and packaging; chain of custody arrangements; analysis methodologies; and identifying capable laboratories.

## **7 Responsibilities**

7.1 The Emergency Response Plan should establish an appropriate organizational structure in order to handle those emergency situations deemed likely to occur. Sufficient and appropriate management resources should be identified. Resource capability for emergency response should be available at all times. The ability to quickly cascade information on a particular threat is vital.

7.2 A Lead Agency should be identified (which in reality should be the Administration or another Government body) to take overall responsibility for emergency response. This includes the allocation of responsibilities and competence requirements. This could be done in parallel with oil and chemical spill plans and contingency planning, or in parallel with terrestrial pest and disease response arrangements. The Lead Agency should be authorized to request or to provide assistance whenever necessary.

7.3 The Lead Agency would be responsible for both implementing and standing down the emergency operation. During an incident the area of concern should be identified and be designated with an Emergency Status. This status should be replaced by a note of normalization once the emergency has passed and the response has been stood down. The declaration of an emergency should activate the procedures appropriate to the threats being faced. When these measures have been identified, agreed, and implemented, the emergency operation may enter into an operational phase where the Emergency Status may be lifted. This should happen following proven improvements of the situation where the level of risks and threats can be properly controlled. Criteria for both these options should be identified in the Emergency Response Plan. The Lead Agency should monitor the development of the situation and should lift the Emergency Status as soon as it is deemed appropriate to do so.

7.4 The Lead Agency should develop a responsibility matrix to be incorporated in the Emergency Response Plan. Roles and responsibilities may be defined for the following Parties:

- authorities including maritime, environmental, public health, port, and legal organizations;
- the owner, operator, shipping company, shipping agencies and ships;

- classification societies or recognized organizations;
- any supporting organization, e.g., research centres, universities, consulting and specialized services companies, reception facilities, etc.;
- representatives from the industry, tourism, fishing, aquaculture, etc.;
- analysis laboratories; and
- manufacturers of systems and equipment for treating ballast water.

## **8 Notification**

8.1 The appointed Lead Agency should develop procedures in the Emergency Response Plan for the immediate notification of all stakeholders of any emergency status, or change in that status, in areas under the jurisdiction of the Party. These include mariners, ports, ship agents, local authorities and the International Maritime Organization (the Organization). The notification should identify the area to which the emergency status applies (delimiting the area in terms of latitude and longitude) as well as the cause of the emergency status.

8.2 Ships carrying ballast water away from a declared emergency status area should also be notified. Such notification should be done through the ship's flag State and should include the ship's name, IMO number, call sign, flag and position (in terms of latitude and longitude at the moment of such notification), origin, destination and route. Any relevant port States should also be notified with the estimated time of arrival of the ship in question. Such vessels may be considered of high risk and be subjected to a risk assessment (in accordance with the Guidelines for risk assessment under regulation A-4 of the BWM Convention (G7)). They also may have any exemptions granted under regulation A-4 withdrawn and be subject to additional ballast water management procedures.

8.3 Each State should also notify the Organization about critical areas where uptake and discharge of ballast water is prohibited, presenting their geographical limits, also indicating the motives for such decision, as well as whether the prohibition is temporary or permanent.

8.4 It is recommended that standard format for such notification is developed and, as appropriate, be included in the Emergency Response Plan.

## **9 Other elements in an Emergency Response Plan**

9.1 Communication procedures between the institutions involved in the emergency response operation should be identified and established. A list containing national contact points and any dormant contract arrangements should also be prepared and maintained.

9.2 The Administration should facilitate the immediate entry into the country of resources and experts from other Member States under the same conditions as provided for in IMO's OPRC Convention, so that they can be deployed and give assistance as fast as possible.

## **10 Preventive actions**

10.1 An emergency situation may be caused by vessels arriving from an area subjected to an emergency or epidemic situation (see paragraph 8.2). In such case, a measure may be established to prohibit the ship from discharging ballast water in certain areas (e.g., inside 200 nautical miles from the coast of the Party). In this case, the Party should be responsible for providing proper guidance to the ship's master, identifying alternative ballast water management measures and for sending information to the Organization. In all cases, the safety of the ship and its crew should be a primary consideration. Options for such action should be laid down in the Emergency Response Plan.

10.2 For certain emergency situations, appropriate surveillance methods (e.g., maritime crafts, aircrafts, remote sensing, etc.) should be developed in order to define and monitor the status of areas affected by the growth of toxic algae, or other outbreaks of harmful aquatic organisms and pathogens.

10.3 Examples of the impacts from existing harmful aquatic organisms and pathogens or epidemics that have already occurred should be incorporated in the Emergency Response Plan and the plan should be reviewed regularly to incorporate best practice and lessons learnt. Brief information on how problems have been mitigated could also be included.

## **11 Technical and scientific co-operation**

11.1 Administrations should also share experiences of how they have responded, or are planning to respond, to emergency situations through the Organization, so that best practice can be promulgated. Reports following emergencies should contain descriptions of the problem, mitigation measures, time-scales, source, damages and losses caused, as well as any technical recommendations resulting from these experiences.

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