

MARINE ENVIRONMENT PROTECTION COMMITTEE 58th session Agenda item 3 MEPC 58/3/7 22 July 2008 Original: ENGLISH

RECYCLING OF SHIPS

Further development of the Draft Guidelines for Safe and Environmentally Sound Ship Recycling

Submitted by Denmark

SUMMARY

Executive summary: This document proposes the inclusion of containment and final

disposal options for hazardous materials in the Guidelines for Safe

and Environmentally Sound Ship Recycling

Strategic direction: 7.1

High-level action: 7.1.2

Planned output: 7.1.2.2

Action to be taken: Paragraph 24

Related documents: MEPC 56/3/4; MEPC 56/3/5; MEPC-ISRWG 2/3; MEPC 56/3 and

MEPC 57/WP.6

Introduction

- 1 MEPC 57 invited the Intersessional Working Group on Ship Recycling to further develop the draft International Convention for the Safe and Environmentally Sound Recycling of Ships including the necessary draft guidelines.
- In view of the time constraints, the Intersessional Working Group has focused its efforts on the development of the convention text, which is scheduled to be finalized at MEPC 58. According to the work plan, the focus will then be redirected toward a rapid finalization of draft Guidelines for Safe and Environmentally Sound Ship Recycling for adoption at MEPC 59.
- 3 Since MEPC 56 a group chaired by Japan has addressed the development of the draft Guidelines on Safe and Environmentally Sound Ship Recycling based on documents MEPC 56/3/4 and MEPC 56/3/5. In document MEPC-ISRWG 2/3 Denmark expressed appreciation for the work carried out by Japan and in the course of the work of the group; Denmark has provided comments to the draft guideline. We are grateful for the inclusion of

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several of our proposals for changes, but must revert to key proposals on some of our concerns that are not yet addressed in the guideline.

- Denmark wishes to point to areas of unclarity regarding the extent of environmentally sound management, in particular with respect to containment of hazardous materials during dismantling and to the options of their final disposal. These issues are also closely linked to the implementation and certification regulations in the Convention and may therefore warrant special attention in the guidelines.
- The environmentally sound management of hazardous materials in the recycling of ships includes all aspects of identification and handling until the materials are safely disposed of. We would therefore draw the attention to the issues of proper containment and proper disposal of hazardous materials under the coming Convention as addressed in its Guidelines.

Containment of hazardous materials

- An important component in environmentally sound ship recycling is the zonation of the recycling facility, separating activities with respect to their characteristics and requirements. The current draft guideline recommends impermeable floors in all zones, where hazardous materials may be present in the objects under recycling, except in the primary cutting zone where impermeable surfaces are only recommended in the dry dock method. For the so-called wet methods, including beaching, landing/slipway and pier/quay methods, less stringent and less efficient measures are allowed to reduce and eliminate spills and discharges to the environment, including steel plates and oil booms.
- Although Denmark is generally in favour of a requirement for impermeable surfaces in the primary cutting zone, it appears unfeasible to demand dry docks for all recycled ships, and we are positive to other solutions providing recognized safeguards for humans and the environment can be met. For the wet methods we see the following issues regarding containment in the primary cutting zones.
- In the landing/slipway method the ship is dismantled from the bow and the primary cutting zone for the lower part of the hull and keel is on land. Although the present practices do not necessarily include environmentally sound drainage, when the integrity of the hull is broken, we believe that with attention to the issue of maintaining impermeability until under proper drainage, the operators of such recycling facilities can develop and install solutions allowing them to contain spills even in this zone.
- In the afloat method or pier/quay method, where a ship is moored alongside a quay or a river bank, the primary cutting of the vessel occurs overall horizontally from the top down to the keel, eventually leaving the still floating hull approximately 0.5-1.0 m high. The keel is then typically transported to a slipway or dock for final vertical cutting in this case on impermeable surfaces similar to the previous methods and with comparable safeguards.
- In both the above cases the floating hull can be used as an impermeable container should spills occur while dismantling. Both wet methods are often carried out in sheltered environments and obligatory booms on the water surface should provide immediate, albeit temporary, containment with respect to floating materials. Such containments must be employed proactively as an environmental safety measure and contain the vessel from the start of dismantling.

- In the beaching method, the vessel is grounded in the intertidal zone and the ship is dismantled from the front: From this primary cutting zone large sections are pulled towards higher ground for further processing in the secondary zones. Thus, one unavoidably cuts through the containment barrier of the vessel potentially releasing accumulated hazardous materials. The strong tidal gauge and the unsheltered conditions severely limit the usefulness of containment booms and steel plates, which are proposed in the current guideline as appropriate measure for containment of hazardous materials.
- Denmark proposes that in wet methods the ship's hull itself may be used as impermeable containment toward the aquatic environment, but only as long as the dismantling progresses without destroying the impermeable barrier. When the impermeable barrier is broken, the hull must be under proper drainage. This requirement must be met by all recycling methods and a permanent safe and environmentally sound management option meeting this have yet to be developed for the beaching method.
- Denmark further proposes that directions for proper upgrade methodology for the existing beaching facilities, specifically addressing the containment of hazardous materials in the primary cutting zone, is included in the guidelines.

Final disposal options

- The draft Convention definition of ship recycling includes "associated operations such as storage and treatment of components and materials on site, but not their further processing or disposal in separate facilities". While this definition is convenient for the sake of delimitation of the applicability of the Convention it may jeopardize the anticipated improvement in environmental conditions, if the final fates of the hazardous materials are not addressed. It appears to harbour the seed of a conflict between the ship owners and the recyclers, if the responsibility to identify environmentally sound disposal is not clear. The shipowner's informed choice of ship recycling facility should be based on the assurance that the entire recycling process, including the final disposal, is carried out in accordance with the principles of safe and environmentally sound ship recycling.
- Disposal is addressed in the draft Convention regulation 21.3 which states that "Waste management and disposal sites shall be identified, and materials disposed shall be labelled to provide for the further safe and environmentally sound handling of these materials." The "further" may be interpreted as governing final disposal but may equally well be taken to cover just the remaining handling on the recycling facility. However, regulation 21.4 states that wastes shall only be "transferred to a waste management facility authorised to deal with their proper treatment and disposal".
- Denmark is of the opinion that the Organization, in agreement with the cradle-to-grave approach of the draft Convention, does intend to improve the recycling practices, also including the final disposal of the waste materials. It is therefore the proposal of Denmark to ensure that guidance to this effect is to be found in the Guidelines as developed for adoption at MEPC 59.
- Presently in MEPC 56/3/4 and MEPC 56/3/5, a section "4.6 Facilities commonly/publicly used" addresses the issue. It is stated that the recycling facilities may themselves manage the disposal of hazardous waste, but that it is more likely that the activity is shared with other facilities or consigned to an external facility, hence the section headline. It does, however, not provide any guidance to the recycling facilities as to the necessary quality of the selected service or facilities except that they should be "authorized".

Guidance to the selection of appropriate disposal facilities should therefore be given. Such guidance of the adequate procedures of disposal facilities may include the following or similar information on the methods used and duly certified:

Solid hazardous waste	
Asbestos-containing materials	To be disposed in hazardous waste landfill.
Other non-metallic inorganic	Some glass fractions are to be disposed in
materials	hazardous waste landfill.
Metals and metal bearing wastes	Reusable and recyclable are separated. Fractions
(non-ferrous)	containing hazardous materials to be sent to secure
	disposal.
Liquid hazardous waste	
PCBs and related substances	Stored under Environmental Sound Management
	procedures or definitively disposed.
Oil, fuel and oily wastes	Under certain conditions oil and fuel may be
	reused. Waste oil and sludge must be collected and
	disposed safely.
Paints and coatings, varnishes,	Collected from removal operations and incinerated
solvents	or stored in secure landfill.
Bilge water	Treated water may comply to standards and be
	discharged. Sludge is disposed in secure landfill.
Equipment	
Various hazardous materials	Equipment may contain any of the above
	mentioned hazardous materials. Some fractions are
	found in particular instrument, etc.

- Aspects of Environmentally Sound Management of hazardous materials are addressed in several international conventions and guidelines where common disposal methods for hazardous waste from recycling include, e.g., cement kiln co-incineration, hazardous waste incineration, a number of non-incineration destructive methods, irreversible transformation processes, and specially engineered landfills. The disposal facilities used by authorized ship recycling facilities should adhere to international standards or national standards to the same effect. In the absence of national legislation conforming to such conventions, the proper standards for handling and disposal of common hazardous materials in ship recycling can be found in guidance supplied by the Secretariats of the Basel and Stockholm Conventions, the UNECE, ILO and from UNEP.
- It is considered an integral part of the environmental management system that the destination and fate of the categories and amounts of hazardous materials removed from each recycled vessel can be traced to their final destination. Thus, the recycling facility must ensure their contractors' compliance with the relevant national and international disposal regulations and keep certified copies of contractor's operating licences, transport and disposal permits and other documents to the same effect.
- Although it is the opinion of Denmark that the information on the appropriate standards of disposal facilities should be included in the guidance to the ship recycling facilities as they have a vested interest in a compliant and cost-effective choice, it may be considered appropriate also to include the final disposal options available to ship recycling facilities in their authorization. It should therefore be part of the Party's authorization process for recycling facilities to establish that the facilities are indeed capable of disposing of hazardous materials in an environmentally sound manner either by themselves of by contractors.

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The draft Convention regulation 17.1 states: "Ship Recycling Facilities which recycle ships to which this Convention applies, or ships treated similarly pursuant to article 3.4 shall be authorized by a Party taking into account the guidelines developed by the Organization", regulation 21.4 mentions "... waste management facilities authorised..", and Denmark propose that wording to address the authorization of such facilities is included as a part of the authorization procedure guideline.

This should however not exclude the inclusion of such guidance in documents directed toward the facilities, i.e. Guidelines for Safe and Environmentally Sound Ship Recycling as presented in MEPC 56/3/4 and MEPC 56/3/5.

Action requested of the Committee

The Committee is invited to consider the information provided during its deliberations on the development of a guideline on ship recycling facilities and take action as appropriate.