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RECYCLING OF SHIPS

Comments on the report of the correspondence group on Ship Recycling, and a proposal for the framework of guidance on safe-for-entry and safe-for-hot work conditions in safe and environmentally sound ship recycling

Submitted by the United States

SUMMARY

Executive summary:	This document provides comments on the report of the correspondence group on Ship Recycling, taking into account the results of the 2009 International Conference on the Safe and Environmentally Sound Recycling of Ships, held in Hong Kong, China. A framework is proposed for guidance on the establishment, maintenance, and monitoring of safe-for-entry and safe-for-hot work conditions.
Strategic direction:	7.1
High-level action:	7.1.2
Planned output:	7.1.2.2
Action to be taken:	Paragraph 7
Related documents:	MEPC 58/23; MEPC 59/3/1; and SR/CONF/46 (Conference resolution 4)

Introduction

1 This document is submitted in accordance with paragraph 4.10.5 of the Committee's Guidelines (MSC-MEPC.1/Circ.2). It comments on document MEPC 59/3/1, which presents the report of the correspondence group on Ship Recycling established by MEPC 58.

2 Through MEPC 58/23, a correspondence group was convened to "further develop the text of the Guidelines for Safe and Environmentally Sound Ship Recycling". Under the leadership of Japan, the correspondence group convened and produced its report, document MEPC 59/3/1. In the discussions in the correspondence group and in its report, it was noted that the treatment of safe-for-entry/safe-for-hot work issues is an important area for technical guidance and must be fully addressed.

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3 We also note that resolution 4 of the 2009 International Conference on the Safe and Environmentally Sound Recycling of Ships, invites “*the Organization to develop as a matter of urgency*” guidelines for the safe and environmentally sound ship recycling and other guidelines or circulars.

4 At the Diplomatic Conference, the members present recognized the importance of safe-for-entry and safe-for-hot work conditions during ship recycling. To help prevent worker asphyxiation, poisoning from inhalation, and harm from fire and explosion, the Convention includes requirements for ensuring that, within ship spaces: (1) the atmospheric oxygen content and the concentration of flammable vapours are within safe limits; and (2) any toxic materials in the atmosphere are within permissible concentrations. Furthermore, the requirements address work which might release toxic materials and residues, or flammable vapours. In regard to safe hot work, the Convention contains a strong requirement that preparations for non-explosive environments include: (1) a prerequisite for safe-for-entry criteria, (2) consideration of the condition of adjacent spaces; and (3) consideration of potential changes in atmospheric conditions as a result of hot work. Both safe-for-entry and safe-for-hot work conditions are to be established, maintained, and monitored throughout the ship recycling process.

5 In light of the results of the report of the correspondence group on ship recycling (document MEPC 59/3/1) and the 2009 International Conference for the Safe and Environmentally Sound Recycling of Ships, in Hong Kong, China, we believe that a framework for the discussion of safe-for-entry and safe-for-hot work issues will be useful in the continuing development of guidelines for the safe and environmentally sound recycling of ships.

Discussion

6 The Convention sets a high standard for safe entry and safe hot work during ship recycling. To achieve safe recycling operations it may be necessary to explain this standard by expanding the discussion of safe-for-entry and safe-for-hot work criteria within the guidelines. Below, we offer a framework to facilitate discussion and development of guidance on the establishment, maintenance, and monitoring of safe-for-entry and safe-for-hot work conditions. Specifically, we suggest the following relevant subject matter headings that warrant discussion, and we provide important information related to those topics.

- .1 “*Additional Definitions*”, an example of an additional definition would be “Adjacent Space – those spaces bordering a space in all directions, including all points of contact, corners, diagonals, decks, tank tops, and bulkheads”.
- .2 “*Safe-for-entry Criteria*”, to include information on:
 - i. the percentage of oxygen required for entry into a space, to be expressed as a range or as a specific number;
 - ii. the percentage of the lower explosive limit under which entry is safe; and
 - iii. limits on the concentrations of environmentally harmful substances in the work environment, to be expressed as Threshold Limit Values. We note that extensive work on threshold limit values has already been done, and that existing standards, such as the ACGIH or other already developed standards, should be considered. In regard to chemical substances, threshold limit values should have two components. One component is the Threshold Limit Value-Time Weighted Average (TLV-TWA) – an airborne

concentration of chemical substances under which it is believed that nearly all workers may be continually exposed a certain number of hours per day, for a certain number of hours per week, for a full working lifetime without adverse health effects. We note that 8 hours per day is the commonly agreed upon time period. ACGIH uses 40 hours a week for a full 30 year period (for those companies with work days and/or work weeks differing from 8 hours and 40 hours respectively, the TLV can be revised in inverse proportion to the length of the work day and work week). Short term exposure should be addressed by a Threshold Limit Value – Short Term Exposure Limit (TLV-STEL) – the limit for a certain amount of time of exposure to a particular chemical substance which must not be exceeded any time during the working day. We note the common use of 15 minutes for the time component. Exposure below the TLV-STEL but above the TLV-TWA should not occur more than four times per day but should require at least 60 minutes between exposure periods.

- .3 “*Safe-for-entry Inspection, Testing and Certification*”, to include information on: inspection procedures, equipment and calibration, certification as safe-for-entry, and situations which invalidate safe-for-entry certification.
- .4 “*Responsibilities of the Competent Person*”
- .5 “*Safe-for-entry Operational Measures*”, to include information on: safe-for-entry permit systems, communication requirements, attendants, provision of protective clothing and equipment, provision of functioning rescue and resuscitation equipment, and rescue and emergency procedures.
- .6 “*Safe-for-hot work Criteria and Certification*”, to include information on: any criteria; inspection and testing measures required for safe hot work above safe-for-entry criteria; treatment of immediate spaces; treatment of adjacent spaces; certification and permit processes for hot work; and situations which invalidate safe-for-hot work certification (e.g., changes in temperature, time, ballasting and trimming, in addition to lack of attendance and work in the space).
- .7 “*Safe-for-hot work Operational Measures*”, to include information on: general issues; cleaning and housekeeping; ventilation; fire safety; and fire, rescue, and emergency procedures.
- .8 “*Certificate Form, Warning Signs, and Labels*”
- .9 “*Training and Personal Protective Equipment*”

Action requested of the Committee

7 The Committee is invited to consider this proposed framework, and take action as appropriate.