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LIBERIA MARITIME AUTHORITY

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MARINE OPERATIONS NOTE 01/2020

Subject: Inventory of Hazardous Materials

- Ref:
- (a) Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 – **The Hong Kong Convention**
 - (b) **Resolution MEPC.269(68)** - 2015, Guidelines for the Development of the Inventory of Hazardous Materials
 - (c) **Resolution MEPC.222(64)** – 2012 Guidelines for the Survey and Certification of Ships under the Hong Kong Convention
 - (d) **Regulation (EU) No 1257/2013** of the European Parliament and of the Council on ship recycling- EU Ship Recycling Regulation
 - (e) **EMSA Guidance on the Inventory of Hazardous Materials**

Dear Shipowners/Operators/Recognized Organizations and Masters,

Purpose

This Marine Operations Note provides information and practical guidance for shipowners, operators, recognized organizations and masters on a cost-efficient, streamlined and quality focused approach to the development and maintenance of inventories of hazardous materials (hereinafter referred to as “the IHM”) in accordance with Regulation 5 of the Hong Kong Convention and Article 12 of the EU Ship Recycling Regulation (EU SRR).

Background

The Hong Kong Convention was adopted in 2009 to effectively address, in a legally binding instrument, the environmental, occupational health and safety risks related to ship recycling, taking into account the particular characteristics of maritime transport and the need to secure the smooth withdrawal of ships that have reached the end of their operating lives.

Upon entry into force, the Hong Kong Convention will require new ships and existing ships of 500 GT and above no later than 5 years after the entry into force of the Convention, or before going for recycling, if this is earlier, to have onboard a valid International Certificate of Compliance on IHM. The objectives of the IHM under the Hong Kong Convention is to document ship-specific information on the actual hazardous materials present on board in order to protect health and safety of the crew, and to protect health and safety of workers at ship recycling facilities and avoid environmental pollution when the ship is going for recycling.

The European Parliament formally adopted the EU SRR on 22 October 2013. The EU SRR entered into force on 30 December 2013. The EU SRR requires all non-EU-flagged ships of 500 GT and above calling at EU ports; from 31 December 2020, to have onboard a valid IHM with a Statement of Compliance in the format specified in Appendix I of this Note.

The EU SRR is aimed at facilitating early ratification of the Hong Kong Convention 2009 - both within the EU and in other countries outside the EU - by applying controls to ships and ship recycling facilities on the

basis of the Hong Kong Convention.

Considering the EU SRR is nearly aligned with the Hong Kong Convention and includes various references to the Hong Kong Convention and related Guidelines, the Liberian Administration has determined there are efficiencies to be gained through combining compliance inspections to avoid unnecessary duplication and administrative burdens of multiple ship visits for Owners and Operators of Liberian flag ships. This will also ensure that upon entry into force of the Hong Kong Convention, the International Certificate of Compliance on IHM may be issued without additional shipboard inspection/survey.

Shipowners with ships calling at ports in the EU are therefore encouraged to develop the IHM for approval prior to 31 December 2020. To meet the requirements of the EU SRR there should be a reference in the Statement of Compliance stating that the IHM has been developed to cover also the requirements of the EU SRR. This would entail that the IHM would include the classification of materials according to the IMO guidelines together with the addition of two hazardous materials (Perfluorooctane Sulfonic Acid -PFOS and Brominated Flame Retardant -HBCDD) required by the EU SRR.

Definitions

Accredited laboratory is a laboratory accredited in accordance with ISO 17025 or an equivalent standard for the purpose of conducting specific tests for hazardous materials included in the Hong Kong Convention including additional materials required under the EU SRR and capable of providing a written report that can be relied upon by all parties

Hazardous Material means any material or substance which is liable to create hazards to human health and/or the environment.

Hazardous Material survey is an investigation to trace and identify the presence or absence of Hazardous Materials contained in the equipment, systems, and/or areas on board a ship and may include review of any relevant documents, visual inspections and sampling.

IHM process is the whole process of development and maintenance of an IHM throughout the operational life-cycle of the ship. It involves all the steps of developing an IHM including issuing/checking of any relevant documentation (e.g. Material Declarations), sampling and analysis, verification and life-cycle management.

Individual IHM Expert is a person who has the appropriate training, qualifications and knowledge to conduct hazardous material surveys for the development and maintenance of an IHM. He or she should have experience on ship structure and on handling of HM and sufficient knowledge of how to compile an IHM and of all the relevant international legislation.

IHM Expert Company is an entity employing or contracting individual IHM experts to conduct any relevant work or task in relation to the IHM process for the purpose of compiling or updating Inventories of Hazardous Materials. The IHM expert company should use a documented management system and should work on suitable standards, covering the relevant activities of the company.

Sampling check is the taking of samples to identify the presence or absence of HM contained in the equipment, systems, and/or areas on board a ship, by suitable and generally accepted methods such as laboratory analysis.

Operational Guidance

The IHM consists of:

- Part I: Hazardous materials contained in ship structure or equipment, their location and approximate quantities and referred to in Appendices 1 and 2 of the **Hong Kong Convention** and clarify that the ship complies with the controls of ships hazardous materials;
- Prior to recycling - Part II: Operationally generated wastes; and
- Part III: Stores.

In general, the guidelines in **Resolution MEPC.269(68)** provide sufficient information for the development of the IHM in relation to the hazardous material included in Appendices 1 and 2 of the Hong Kong Convention as well as an indicative list of these hazardous materials with CAS numbers and respective specific test methods. Therefore, for information on the hazardous materials included in appendices 1 and 2 of the Hong Kong Convention and in annexes 1 and 2 of the EU SRR, reference should be made to the IMO guidelines.

Part I of the IHM shall remain with a vessel throughout its operational life, and be updated as all new installations enter the ship, as these may potentially contain hazards. The presence of the inventory will then ensure the safety of crewmembers during the vessel's operational life, and the safety of workers during the recycling process.

The shipowner is responsible for developing Part I of the IHM and should draw upon expert assistance. This is strongly recommended for safety and health protection reasons and in order to have a minimum assurance that the work is carried out by competent personnel, under a quality management system and in accordance with IMO guidelines in Resolution MEPC. 269(68). However, such IHM Expert Company should not be the same as the Recognized Organization authorized by the Administration to approve the IHM. The development and maintenance of the IHM should be subject to the principles of independence, quality and accountability.

The following procedure should be followed for determination of Part I of the IHM:

- Collection of necessary information
- Assessment of collected information
- Preparation of Visual/Sampling Check Plan (VSCP);
- Onboard Visual/Sampling Check; and
- Preparation of Part I of the IHM and related documentation

Maintaining and updating Part I of the IHM during operations

The Hong Kong Convention requires that the shipowner maintain the IHM, throughout the operational life of the ship.

If any machinery or equipment is added, removed or replaced or the hull coating is renewed, Part I of the IHM should be updated. Updating is not required if identical parts or coatings are installed or applied.

Part I of the IHM should belong to the ship and the continuity and conformity of the information should be confirmed, especially if the flag, owner or operator of the ship changes.

Requirements for ascertaining the conformity of Part I of the IHM

The conformity of the IHM for new ships (or new installations on existing ships) should be ascertained by reference to the Supplier's Declaration of Conformity and the related Material Declarations collected from suppliers at the design and construction stage. To enforce the delivery of Material Declarations, builder's and operator's purchase departments are strongly advised to include related clauses in the contracts with suppliers of equipment, systems and installations.

Material Declaration (MD)

Suppliers to the shipbuilding industry should identify and declare whether or not the materials listed in Appendices 1 and 2 of the Hong Kong Convention. However, this provision does not apply to chemicals which do not constitute a part of the finished product.

Information required in the MD

At a minimum the following information is required in the MD:

1. date of declaration;
2. MD identification number;
3. supplier's name;
4. product name (common product name or name used by manufacturer);
5. product number (for identification by manufacturer);
6. declaration of whether or not the materials listed in Appendices 1 and 2 of the Hong Kong Convention are present in the product above the threshold value stipulated in reference (b); and
7. mass of each constituent material listed in 6. above

Suppliers Declaration of Conformity (SDOC)

The purpose of the Supplier's Declaration of Conformity is to provide assurance that the related Material Declaration conforms to the information above, and to identify the responsible entity.

The SDOC should contain the following:

1. unique identification number;
2. name and contact address of the issuer;
3. identification of the subject of the Declaration of Conformity (e.g. name, type, model number, and/or other relevant supplementary information);
4. statement of conformity;
5. date and place of issue; and
6. signature (or equivalent sign of validation), name and function of the authorized person(s) acting on behalf of the issuer.

For maintaining and updating the Part I of the IHM throughout the operational life of the ship, reflecting new installations containing Hazardous Materials listed in Appendix 2 of the Hong Kong Convention including the additional materials in the EU SRR and relevant changes in ship structure and equipment, shipowners should implement the following measures in order to ensure the conformity of Part I of the IHM:

- Management policy to maintain the IHM: Designate a responsible person (ashore or on board);
- Management System to maintain the IHM:
 - Request of Hazardous Material Information
 - Review of Collected Information of Hazardous Materials
 - Development of Revision of the Inventory
 - Review of Revision and Instruction of Updating Inventory
 - Update of the Inventory on Board
 - Ascertaining the Conformity of the Inventory;
- Continuity of Conformity of the inventory;
- Provide related documents as required for the survey or sale of the ship

Hazardous Materials Survey and Certification

The Hong Kong Convention identifies the following surveys to be performed by the Administration or organizations recognized by the Administration:

Initial survey: to verify whether Part I of the IHM has been prepared in accordance with the Hong Kong Convention. Note that there are different requirements for the initial surveys of new ships and those for existing ships.

Initial survey for new ships:

1. Prior to the initial survey for a new ship, a request for the initial survey should be submitted by the shipowner or the shipyard to an authorized Recognized Organization along with the ship data required for the Statement of Compliance on IHM;
2. The request for an initial survey should be supplemented by Part I of the IHM along with the MD and SDOC and all other documents used to develop the IHM;
3. The survey should verify that Part I of the IHM identifies the Hazardous Materials, their location and approximate quantities, by checking the MD and SDOC and especially the location of Hazardous Materials, is consistent with the arrangements, structure and equipment of the ship, through onboard visual inspection.

Initial survey for existing ships

1. In the case of an existing ship, an initial survey shall be conducted before the Statement of Compliance on IHM is issued;
2. Prior to the initial survey, a request for the initial survey shall be submitted by the shipowner to an authorized Recognized Organization along with the ship data for the Statement of Compliance on IHM;
3. The request for an initial survey shall be supplemented by Part I of the IHM;
4. Part I of the IHM shall be developed through a visual check and/or sampling check on board the ship, based on the visual/sampling check plan in accordance with Resolution MEPC.268(68) and be submitted by the shipowner to an authorized Recognized Organization along with supporting information such as the report of the visual/sampling check and/or MD and SDOC;
5. The visual/sampling check plan and Part I of the IHM shall be prepared by an IHM Expert Company in accordance with Resolution MEPC.269(68);
6. The survey shall verify that Part I of the IHM identifies the Hazardous Materials, their location and approximate quantities, by checking supporting information such as the report of the visual check and/or sampling check and/or MD and SDOC. the MD and SDOC and especially the location of Hazardous Materials, is consistent with the arrangements, structure and equipment of the ship, through onboard visual inspection;
7. The survey shall further verify that the IHM, especially the location of Hazardous Materials, is consistent with the arrangements, structure and equipment of the ship, through onboard visual inspection;

Renewal survey: is to be carried out at intervals not exceeding five years. This survey shall verify that Part I

of the Inventory of Hazardous Materials complies with the requirements of this Convention.

Additional survey: at the request of the shipowner after change, replacement or significant repair of the structure, equipment, systems, fittings, arrangements and material, which have an impact on the IHM.

Final survey: conducted before a ship is taken out of service and before the recycling of the ship has started. Prior to recycling, the Inventory shall, in addition to the properly maintained and updated Part I, incorporate Part II for operationally generated wastes and Part III for stores, and be verified by an authorized Recognized Organization, taking into account the guidelines in **Resolution MEPC.269(68)**.

Issuance and endorsement of certificates

A Statement of Compliance on IHM shall be issued either by an authorized Recognized Organization after successful completion of an initial or renewal survey conducted in accordance with paragraph above.

Upon entry into force of the Hong Kong Convention, the Statement of Compliance may be replaced with an International Certificate on IHM without additional onboard surveys, provided the IHM has been maintained and updated as required.

Requirements for IHM Expert Companies, Recognized Organizations and Shipowners

IHM Expert Companies

The IHM for Liberian registered ships should be developed by IHM Expert Companies accepted by the Administration as meeting the criteria listed below and described in Appendix 2 of this Marine Operations Note.

IHM Expert Companies desiring to be accepted by the Administration for conducting IHM related work described above on Liberian registered ships should make an application to the Administration at technical@lisr.com and be able to demonstrate:

1. Independence - Include Organization structure and a list of all Individual IHM Experts engaged with a copy of each person's training certification.
2. Quality - Include a certificate or report verifying that the IHM Expert Company has a documented quality system.
3. Accountability – Include a Statement from the Company with the elements described in appendix 2.
4. Accreditation and Certification – Include the following:
 - a. ISO 17020 certification or equivalent standard and ISO 17025 certification or equivalent standard of the laboratories used;
 - b. Approval by an IACS classification society as a service provider for visual/sampling checks and testing of hazardous materials and preparing the IHM.

Fees

The Administration will assess the following administrative and documentation fees for the review of the application for acceptance as an IHM Expert Company and for the issuance of initial Acceptance Document valid for a period of three (3) years, and the subsequent renewal of the Document valid for a period of three (3) years.

1. Initial Review and Acceptance – US\$ 1250.
2. Renewal Review and Acceptance – US\$1250.

Recognized Organizations (RO)

In order to be authorized by the Administration as a Recognized Organization to conduct the relevant survey for verification and approval of the IHM and issue the Statement of Compliance on IHM on behalf of Liberia, IACS classification societies should make an application to the Administration at technical@liscr.com with the information listed below and be able to demonstrate:

- competence assurance management system of exclusive surveyors to conduct onboard surveys for verification and approval of the IHM.
- process to be followed by exclusive surveyors for verification and approval of the IHM.
- IHM survey checklist and survey report to be used for new construction and initial and periodical surveys of existing ships.
- procedure for approval and oversight of service providers as IHM Expert Companies.
- procedure for oversight of their surveyors delegated with responsibility for on-board verification and approval of IHM.

Shipowners

- The responsibility for maintaining, updating and ascertaining the conformity of Part I of the IHM lies primarily with the ship owner. They have the duty of exercising due diligence when they appoint or instruct any person or party to conduct hazardous materials surveys, to compile reports or to perform any kind of work within the context of the IHM process. Appointing an IHM Expert Company to compile/update an IHM should, in principle, be considered as exercise of due diligence in order to meet the relevant requirements of the Hong Kong Convention.
- Shipowners desiring to obtain a Statement of Compliance on IHM should use only IHM Expert Companies that have been accepted by the Administration, with the onboard verification survey for approval of the IHM and issuance of the Statement of Compliance on IHM conducted by a Recognized Organization.
- A list of IHM Expert Companies accepted by the Administration may be obtained by contacting the Administration at technical@liscr.com or on Liberian Registry website www.liscr.com under ‘the “Maritime” tab and “List of IHM Expert Companies”

If you have any questions please contact Technical Department at Technical@liscr.com or telephone +1 703 790 3434.

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APPENDIX I

**FORM OF THE STATEMENT OF COMPLIANCE ON INVENTORY OF
HAZARDOUS MATERIALS**

STATEMENT OF COMPLIANCE ON INVENTORY OF HAZARDOUS MATERIALS

(Note: This certificate shall be supplemented by Part I of the Inventory of Hazardous Materials)

(Official seal)

(State)

Issued under the provisions of the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (hereinafter referred to as “the Convention”) under the authority of the Government of

.....

(Full designation of the country)

by

(Full designation of the person or organization authorized under the provisions of the Convention)

Particulars of the Ship

Name of Ship

Distinctive number or letters

Port of Registry

Gross tonnage

IMO number

Name and address of shipowner

IMO registered owner identification number

IMO company identification number

Date of Construction

Particulars of Part I of the Inventory of Hazardous Materials

Part I of the Inventory of Hazardous Materials identification/verification number:

Note 1: Part I of the Inventory of Hazardous Materials, as required by regulation 5 of the Annex to the Convention, is an essential part of the International Certificate on Inventory of Hazardous Materials and must always accompany the International Certificate on Inventory of Hazardous Materials. Part I of the Inventory of Hazardous Materials should be compiled on the basis of the standard format shown in the guidelines developed by the Organization.

Note 2: The IHM has been developed to cover also the requirements of EU Regulation No. 1257/2013.

THIS IS TO CERTIFY:

1. that the ship has been surveyed in accordance with regulation 10 of the Annex to the Convention; and
2. that the survey shows that Part I of the Inventory of Hazardous Materials fully complies with the applicable requirements of the Convention.

Completion date of survey on which this certificate is based: (dd/mm/yyyy)

This certificate is valid until (dd/mm/yyyy)

Issued at
(Place of issue of certificate)

(dd/mm/yyyy)
(Date of issue) (Signature of duly authorized official issuing the certificate)

(Seal or stamp of the authority, as appropriate)

**ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR
LESS THAN FIVE YEARS WHERE REGULATION 11.6 APPLIES***

The ship complies with the relevant provisions of the Convention, and this certificate shall, in accordance with regulation 11.6 of the Annex to the Convention, be accepted as valid until

(dd/mm/yyyy):

Signed:

Place:

Date: (dd/mm/yyyy)

(Seal or stamp of the authority, as appropriate)

**ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED AND
REGULATION 11.7 APPLIES***

The ship complies with the relevant provisions of the Convention, and this certificate shall, in accordance with regulation 11.7 of the Annex to the Convention, be accepted as valid until

(dd/mm/yyyy):

Signed:

(Signature of duly authorized official)

Place:

Date: (dd/mm/yyyy)

(Seal or stamp of the authority, as appropriate)

* This page of the endorsement at survey shall be reproduced and added to the certificate as considered necessary by the Administration.

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE REGULATION 11.8 OR 11.9 APPLIES*

This certificate shall, in accordance with regulation 11.8 or 11.9** of the Annex to the Convention, be accepted as valid until (dd/mm/yyyy):

Signed:
(Signature of duly authorized official)

Place:

Date: (dd/mm/yyyy)
(Seal or stamp of the authority, as appropriate)

ENDORSEMENT FOR ADDITIONAL SURVEY*

At an additional survey in accordance with regulation 10 of the Annex to the Convention, the ship was found to comply with the relevant provisions of the Convention.

Signed:
(Signature of duly authorized official)

Place:

Date: (dd/mm/yyyy)
(Seal or stamp of the authority, as appropriate)

* This page of the endorsement at survey shall be reproduced and added to the certificate as considered necessary by the Administration.

** Delete as appropriate.

APPENDIX II

In order to be accepted by the Administration to conduct visual/sampling checks and testing of hazardous materials and preparing the IHM including updating and maintaining the IHM as may be required by the shipowner, the IHM Expert Company shall be able to demonstrate:

1. Independence

- that the Individual IHM Experts they engage are able to exercise personal integrity in the performance of their duties.
- that anyone involved in the IHM process including the Individual IHM Experts exercise impartiality and objectivity in all work conducted.
- independence from the authorized Recognized Organization responsible for the verification of the IHM on behalf of the Administration. In this regard, conflicts of interest between the IHM Expert Company developing or updating the IHM and the Recognized Organization verifying and approving the IHM on behalf of the Administration should be prevented.

2. Quality

- that the persons involved in the IHM process are able to exercise a high level of professional competence in the performance of their duties.
- the work of any person or party involved in the IHM process should be of the highest possible quality and in compliance with the requirements of any applicable international legislation.
- application of a documented quality management system and quality controls to ensure the credibility of the IHM process for the development or maintenance of the Inventory.

3. Accountability

- any person or party involved in the IHM process should have a clear understanding of the duties and responsibilities he/she/it assumes in this process.
- the persons or parties involved in the IHM process should keep records of the hazardous material surveys performed. Written records should be kept to the extent possible. Every person involved in the IHM process may be held liable in case of fault or gross negligence in the execution of his/her duties. Every party involved in the IHM process may also be held liable in case of fault or gross negligence of any of its employees.
- the persons involved in the IHM process should exercise due professional care in conducting and supervising the respective activities and in preparing related reports. They should use their professional judgment when exercising their duties during the IHM process.

4. Accreditation and Certification

- engage Individual IHM Experts who are adequately trained and qualified for development of IHM by visual/sampling check and testing.
- implement quality processes and procedures preferably in accordance with ISO 17020 or any equivalent standard covering all the relevant activities of the company.
- use laboratories to carry out specific tests that are accredited in accordance with ISO 17025 or an equivalent standard for the purpose of conducting specific tests for hazardous materials included in appendices 1 and 2 of the Hong Kong Convention and annexes 1 and 2 of the EU SRR.
- approved by an IACS classification society as a service provider for visual/sampling checks and testing of hazardous materials and preparing the IHM.