



RULES FOR CLASSIFICATION OF

Ships / High Speed, Light Craft and Naval Surface Craft

PART 6 CHAPTER 27

NEWBUILDINGS
SPECIAL EQUIPMENT AND SYSTEMS – ADDITIONAL CLASS

Recycling

JULY 2010

*This chapter has been amended since the main revision (July 2010), most recently in July 2011.
See “Changes” on page 3.*

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FOREWORD

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The Rules lay down technical and procedural requirements related to obtaining and retaining a Class Certificate. It is used as a contractual document and includes both requirements and acceptance criteria.

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CHANGES

General

The executive committee approved this new chapter in June 2010.

The rules come into force on 1 July 2010.

Text affected by the main rule changes is highlighted in red colour in the electronic pdf version. However, where the changes involve a whole chapter, section or sub-section, only the title may be in red colour.

This chapter is valid until superseded by a revised chapter.

Amendments July 2011

- **General**
 - The restricted use legal clause found in Pt.1 Ch.1 Sec.5 has been added also on the front page. In addition, the layout has been changed to one column in order to improve electronic readability.

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SECTION 1 GENERAL REQUIREMENTS

A. Introduction

A 100 Background

101 A ship contains hazardous materials that can be integrated in the vessel structure and in the onboard systems or components. Since these materials may represent a hazard both for humans and nature, information about onboard occurrence shall be established for the purpose of safeguarding crew, workers and the environment during operation, demolition and recycling of ships.

A 200 Scope

201 These rules cover the requirements for the development of the Inventory of Hazardous Materials (IHM) Part 1 for new buildings and ships in operation.

202 Environmental management systems, e.g. ISO 14000, are not part of the rules.

A 300 Objectives

301 The objective of the requirements in this chapter is to ensure that the presence of hazardous materials onboard is known and to prevent further use of hazardous materials.

302 With the above objective, implementation of the rules document early compliance with the requirements for IHM Part 1 set forth by the IMO Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships.

303 The class notation **Recyclable** identifies the requirements for the development of the IHM Part 1 for newbuildings and ships in operation.

A 400 Application

401 Newbuildings and ships in operation complying with the requirements in section 2 of this chapter may be given the additional class notation **Recyclable**. For further information see Table A1.

402 Newbuildings and ships in operation complying with the requirements in section 2 of this chapter may be given a Statement of Compliance for Inventory of Hazardous Materials Part 1 after the requirements of C301 are met.

403 The rules are applicable to all vessels in DNV class.

Table A1 Application		
	Recyclable	
<i>Applies to:</i>	<i>New Buildings</i>	<i>Ships in Operation</i>
Document Requirements:	C100	C200
Rules:	Sec.2	Sec.2
Survey requirements:	C300	C300

A 500 Relation to other DNV Documents

501 A requirement for class notation **Clean Design** (January 2010 Rules) is to hold and maintain a Green Passport under the IMO Resolution A.962(23), IMO Guidelines on Ship Recycling, and any subsequent additions or amendments hereto adopted at the relevant time.

B. References

B 100 References

101 *SR/CONF/45*: The 'Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009'.

102 *Resolution MEPC.179(59)*: 'Guidelines for the Development of the Inventory of Hazardous Materials'.

B 200 Terminology and Definitions

201 The following definitions apply:

New building means a ship that is not delivered.

Ship in operation means a ship not complying with the above definition of a new building.

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

B 300 Abbreviations and Symbols

IHM Inventory of Hazardous Materials
Part I Part I of the IHM
MD Material Declaration
SDoC Suppliers Declaration of Conformity.

C. General Requirements

C 100 Documentation for newbuildings

- 101** Documents shall be submitted as required by Table C1.
102 For general requirements to documentation, see Pt.0 Ch.3 Sec.1.
103 For a full definition of the documentation types, see Pt.0 Ch.3 Sec.2.

Guidance note:

For detailed explanation on the outline of Part 1 and how the various hazardous materials shall be declared, see 'Guidelines for the Development of the Inventory of Hazardous Materials MEPC.179 (59)'.

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Table C1 Required documents to be submitted for newbuildings			
<i>Object</i>	<i>Documentation type</i>	<i>Additional description</i>	<i>For approval (AP) or For information (FI)</i>
Hazardous materials general	M080 - Inventory of hazardous materials	New ship, Regulation 5.1 SR/CONF/45. The document shall be based on documents listed below	AP
	M110 - Declaration of conformity relating to use of hazardous materials	Supporting materials declarations submitted	FI
	M120 - Hazardous materials location plan	Visualizing hazardous materials based on local arrangement plan	FI
Paint and coating systems	M100 - Material declaration	Paint applied to structure and hull, including primer	FI
Thermal insulation	M100 - Material declaration	Insulation of equipment, minimum including refrigerant and exhaust piping, boilers, air conditioning ducts, liquefied gas tanks.	FI
	M100 - Material declaration	Insulation of structure, in ceilings, walls, floors, doors and bulkheads.	FI
	M100 - Material declaration	Insulation of hatches, watertight doors and fire doors	FI
Refrigeration systems	M100 - Material declaration		FI
Fire fighting and fire detection systems	M100 - Material declaration		FI
Batteries	M100 - Material declaration	Including uninterruptible power supply (UPS)	FI
Deck machinery	M100 - Material declaration	Minimum including cranes, winches, and davits.	FI
Process equipment	M100 - Material declaration	E.g. heat exchangers, bilge water separators, sludge purifiers, ballast water treatment units, sewage treatment units, selective catalytic reduction systems, incinerators.	FI
Gaskets and brake linings	M100 - Material declaration		FI
Electrical cables and cable penetration material	M100 - Material declaration		FI
Electric equipment	M100 - Material declaration	E.g. generators, transformers, condensers, capacitors, switchgear, control gear, electric motors, distribution boards, breakers, frequency drives, rectifiers, chargers, cabinets and enclosures	FI
Light fittings and fixtures	M100 - Material declaration		FI
Instrumentation	M100 - Material declaration	E.g. gauging equipment, thermometers electronic components, PLCs, printed circuit boards, actuators, sensors, gauges, cabinets and enclosures.	FI
Engines and boilers	M100 - Material declaration	For propulsion and auxiliary use.	FI
Thrusters	M100 - Material declaration		FI
Piping systems	M100 - Material declaration	Including piping, flanges, pumps and compressors	FI
Other components containing hazardous materials	M100 - Material declaration		FI

C 200 Documentation for ships in operation

201 Documents shall be submitted as required by Table C2.

202 For general requirements to documentation, see Pt.0 Ch.3 Sec.1.

203 For a full definition of the documentation types, see Pt.0 Ch.3 Sec.2.

Guidance note:

For detailed explanation on the outline of Part 1 and how the various hazardous materials shall be declared, see 'Guidelines for the Development of the Inventory of Hazardous Materials MEPC.179 (59)'.

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Table C2 Required documents to be submitted for ships in operation			
<i>Object</i>	<i>Documentation type</i>	<i>Additional description</i>	<i>For approval (AP) or For information (FI)</i>
Hazardous materials general	M080 - Inventory of hazardous materials	Existing ship, Regulation 5.2 SR/CONF/45. The document shall include visual/sampling check plan (ref. MEPC. 179(59) Section 4.2.3).	AP
Location of hazardous materials	M120 - Hazardous materials location plan	The hazardous materials identified should be visualized based on local arrangement plan (e.g. engine room, bridge etc.)	FI
Asbestos	M081 - Hazardous materials documentation-asbestos	A document providing drawings and specifications of insulation and other components that may contain asbestos	FI
Polychlorinated biphenyls	M083 - Hazardous materials documentation-PCB	A document providing a list of components containing PCB	FI
Ozone depleting substances	M084 - Hazardous materials documentation-ozone depleting substances	A document providing a list of ozone depleting substances sealed in vessel's equipment or machinery	FI
Hazardous materials specified in Appendix 2 of SR/CONF/45	M085 - Hazardous materials documentation-appendix 2 substances	The hazardous materials listed in Appendix 2 of SR/CONF/45 shall be declared as far as practicable	FI
Anti- fouling system	Z260 - Certificate AFS Compliance	Valid documentation stating compliance with the International convention on the control of harmful anti- fouling systems on ships, 2001	FI

C 300 Survey requirements for newbuildings and ships in operation

301 An initial survey before the Statement of Compliance for Inventory of Hazardous Materials Part 1 is issued. This survey shall verify that Part I of the Inventory of Hazardous Materials (IHM) is in accordance with the requirements of the Convention SR/CONF/45.

302 A renewal survey, ref. Rules for Classification of Ships Pt.7 Ch.1 Sec.7 K.

303 An occasional survey, ref Rules for Classification of Ships Pt.7 Ch.1 Sec.7 K.

SECTION 2

CLASS NOTATION RECYCLABLE

A. Introduction

A 100 General

101 This section covers the requirements for the development of the IHM Part 1 for newbuildings and ships in operation.

B. Requirements

B 100 Requirements for newbuildings

101 The IHM Part 1 shall be based on MDs submitted from suppliers.

102 It is required to identify as Part 1, hazardous materials listed in Appendix 1 and 2 of SR/CONF/45 contained in ship's structure or equipment, their location and approximate quantities.

103 It is prohibited to install or use hazardous materials listed in Appendix 1, except that new installations containing hydro chlorofluorocarbons (HCFCs) are permitted until 1 January 2020.

104 The IHM Part 1 shall be prepared in accordance with Regulation 5.1 of SR/CONF 45 and section 4.1 in its Guidelines, Resolution MEPC.179 (59).

Guidance note:

It is not required to list materials according to item 301 provided they are used in general construction, such as hull, superstructure, pipes, or housings for equipment and machinery.

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B 200 Requirements for ships in operation

201 The IHM Part 1 should be based upon documentation of material-use, including onboard assessment and material sampling from selected components and systems to determine the nature of materials when available documentation is insufficient. The scope of onboard assessment and material sampling should be decided based on the quality of available documentation.

202 It is required to identify as far as practicable, hazardous materials listed in Appendix 1 and 2 of SR/CONF/45 contained in ship's structure or equipment, their location and approximate quantities.

203 New installation of materials which contains hazardous materials listed in Appendix 1 is prohibited, except that new installations containing hydro chlorofluorocarbons (HCFCs) are permitted until 1 January 2020.

204 The IHM Part 1 shall be prepared in accordance with Regulation 5.2 of SR/CONF 45 and section 4.2 in its Guidelines, Resolution MEPC.179 (59).

205 Sampling shall be conducted in accordance with a visual/sampling check plan and shall be submitted from the hazardous material expert party as part of the IHM Part 1.

206 Sampling shall only be undertaken by an identified hazardous material expert party and the samples shall be analysed at an accredited laboratory. The results shall be available as part of the IHM Part 1 submitted for review.

Guidance note:

It is not required to list materials in Appendix 2 of SR/CONF/45 that are inherent in solid metals or metal alloys, provided they are used in general construction, such as hull, superstructure, pipes, or housings for equipment and machinery.

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B 300 Hazardous Materials

301 Controls of hazardous materials are listed in Appendix 1 and 2 of SR/CONF/45.