

EMSA Workshop on Ship Recycling Survey and Certification

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2007-04-24





Draft Convention: Survey and Certification

Part C, Reg 11-15

Survey	Content	Ship	When	Surveyor	Certificate	Validity	Issuance
Initial	IHM Part I	New	Before put in service	Administration Officers, or empowered Surveyors / ROs (Information to Organization for distribution to Parties)	International Certificate for IHM	to be specified by Admin., < 5 yrs	When put into service
		Existing	Before 1 st use of IHM				Renewal of [Safety Construction] or Additional Survey before recycling
Periodical		All	Specified by Admin., < 5 yrs				Compliance verified
Additional	General or part of above	All	On request of shipowner after change, replacement, sign. Repair				Cont. compliance assured or if no [safety renewal] prior to recycling of (exst.) ship took place
Final	IHM Part I, II, III, Recycling Plan		Prior to taking Ship out of service, prior to recycling		IRRC	to be specified by Admin. [< 1 yrs]	

Guideline for the Development of the Inventory of Hazardous Materials

Categories	Part 1 Structure & Equipment	Part 2* Operationally Generated Waste	Part 3* Stores
Table A Materials Obligatory for New and Existing Ships	X		
Table B Materials Obligatory for New Ships and new installations; voluntary for Existing Ships	X		
Table C Potentially Hazardous Goods		X	X
Table D Regular Consumable Goods			X

* to be prepared only prior to recycling

Table A Materials

No.	Materials		Inventory			Threshold level [to be developed]
			Part 1	Part 2	Part 3	
A-1	Asbestos		x			no threshold level
A-2	Polychlorinated Biphenyls (PCBs)		x			50 mg/kg
A-3	Ozone Depleting Substances	CFCs	x			no threshold level
		Halons	x			
		Other fully halogenated CFCs-	x			
		Carbon Tetrachloride	x			
		1,1,1-Trichloroethane (Methyl chloroform)	x			
		Hydrochlorofluorocarbons	x			
		Hydrobromofluorocarbons	x			
		Methyl bromide	x			
		Bromochloromethane	x			
A-4	Organotin compounds	Tributyl Tins	x			2500 mg/kg
		Triphenyl Tins	x			
		Tributyl Tin Oxide (TBTO)	x			

Table B Materials

No.	Materials	Inventory			Threshold level [to be developed]
		Part 1	Part 2	Part 3	
B-1	Cadmium and Cadmium Compounds	x			100 mg/kg
B-2	Hexavalent Chromium and Hexavalent Chromium Compounds	x			1,000 mg/kg
B-3	Lead and Lead Compounds	x			1,000 mg/kg
B-4	Mercury and Mercury Compounds	x			1,000 mg/kg
B-5	Polybrominated Biphenyl (PBBs)	x			1,000 mg/kg
B-6	Polybrominated Diphenyl Ethers (PBDEs)	x			1,000 mg/kg
B-7	Polychloronaphthalenes (more than 3 chlorine atoms)	x			no threshold level
B-8	Radioactive Substances	x			no threshold level
B-9	Certain Shortchain Chlorinated Paraffins (Alkanes, C10-C13, chloro)	x			1 %

Material Declaration

- Declaration of quantity and location of intentionally added HazMat above threshold levels
- Collection of information "upstream" in supply-chain

Appendix 5 Example of Material Declaration Format

<Date of declaration>

Date	
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<Supplier Information>

Company Name	
Division Name	
Address	
Contact Person	
Telephone No.	
Fax No.	
E-mail Address	

<Product Information>

Product Name	Product Number	Product Total Mass		Product Information
		Mass	Unit	

<Material/Substance Information>

Table	Materials Name		Threshold Level	Intentionally added above threshold level	If yes, Material Mass		If yes, Detailed Material Information
				Yes/No	Mass	Unit	
Table A (Materials Listed in Appendix 1 of the Convention)	Asbestos	Asbestos	no threshold level				
	Polychlorinated Biphenyls (PCBs)	Polychlorinated Biphenyls (PCBs)	50 mg/kg				
	Ozone Depleting Substance	CFCs	no threshold level				
		Halons					
		Other fully halogenated CFCs					
		Carbon Tetrachloride					
		1,1,1-trichloroethane (Methyl chloroform)					
		Hydrochlorofluorocarbons					
		Hydrobromofluorocarbons					
		Methyl bromide					
		Bromochloromethane					
	Organotin compounds	Tributyl Tins	2500 mg/kg				
		Triphenyl Tins					
		Tributyl Tin Oxide (TBTO)					

Table	Material	Threshold Level	Intentionally added above threshold level	If yes, Substance Mass		If yes, Detailed Substance Information
			Yes/No	Mass	Unit	
Table B (Materials Listed in Appendix 2 of the Convention)	Cadmium and Cadmium Compounds	100 mg/kg				
	Hexavalent Chromium Compounds	1,000 mg/kg				
	Lead and Lead Compounds	1,000 mg/kg				
	Mercury and Mercury Compounds	1,000 mg/kg				
	Polybrominated Biphenyl (PBBs)	1,000 mg/kg				
	Polybrominated Diphenyl ethers (PBDEs)	1,000 mg/kg				
	Polychloronaphthalenes (Cl≥ 3)	no threshold level				
	Radioactive Substances	no threshold level				
	Certain Shortchain Chlorinated Paraffins	1%				

Declaration of Conformity

Appendix 6 Example of Supplier's Declaration of Conformity

- Name / address
- Object of the declaration
- Convention, title, date of issue...
- Additional information
- Signature

Supplier's declaration of conformity for Material Declaration Management		
1) No.	_____	
2) Issuer's name:	_____	
Issuer's address:	_____	
3) Object of the declaration:	_____ _____ _____	
4) The object of the declaration described above is in conformity with the requirement of the following documents :		
Document No.:	Title:	Edition/Date of issue
5) _____	Guidelines for the development of the Inventory of Hazardous Materials	_____
6) Additional Information :	<i>this is to declare that the above mentioned object of the declaration</i> <i>does not contain any of the in their context to be listed materials</i>	
Signed for and on behalf of:		
_____ _____		
(Place and date of issue)		
7) _____	_____	
(Name, function)	(Signature)	



Inventory of Hazardous Materials Part I

New Ships > 500GT:

- Ship Yards (design & construction stage):
 - Requiring, Collection and Structuring of Information
 - Preparation of Inventory (Table A & B)
 - Updating in case of repair / conversion
- Manufacturer / Supplier:
 - Listing of Substances
 - Self Declarations



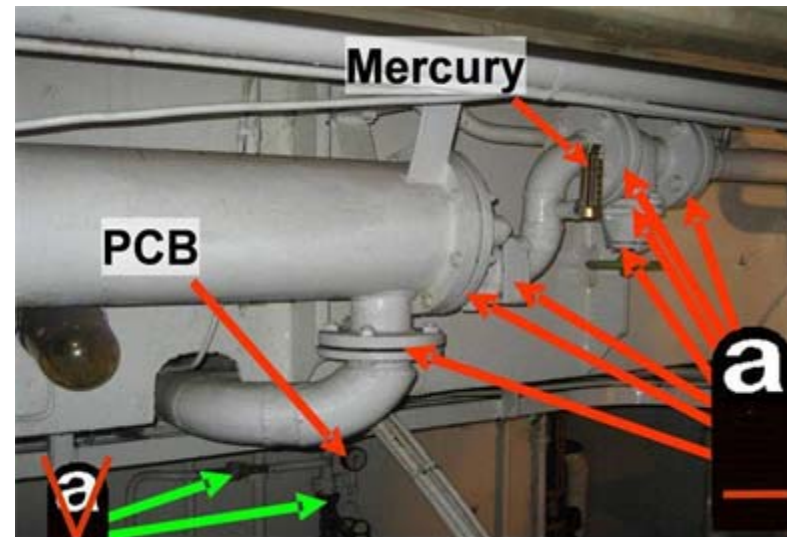


Inventory of Hazardous Materials Part I

Existing Ships > 500GT:

“Specialist” prepares IHM on behalf of Owner

- Collection of information
(systems, coatings, plans, manuals, IHMs ...)
- Indicative List
 - **Scope of investigations**
- Preparation of Check Plan
- Approval of Plan by Administration
- Onboard Check and Sampling
- Preparation of IHM Part I (Table A)



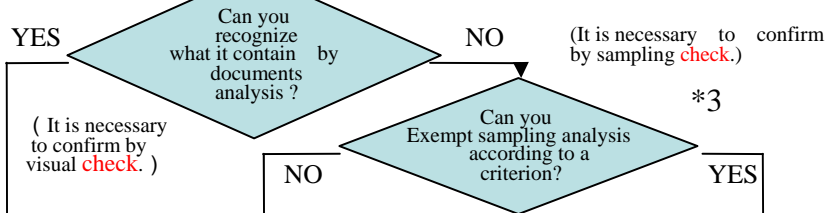
Appendix 3 Flow Diagram for Development of Part I of the Inventory for existing ships

Step1

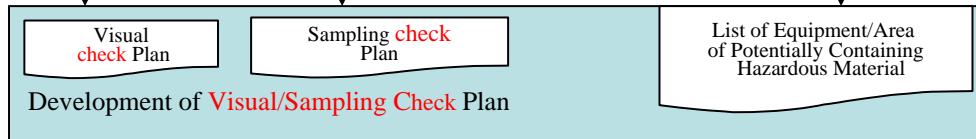
Collection of necessary information *1

Step2

Analysis and Definition of scope of investigation *2



Step3

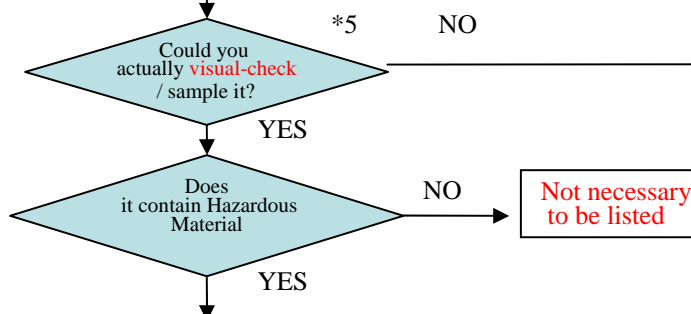


Step4

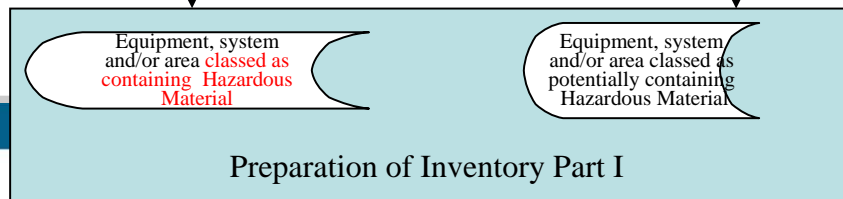
Approval of **Visual/Sampling Check Plan** by Administration

On board **Visual Check**, Sampling and Analysis of Sample *4

Step5



Step6



*1 : Documents include any certificates, manuals, ship's plans, drawings, technical specifications and information from sister and/or similar ships.

*2 : Investigation should cover all materials listed in Table A of Appendix 1 of the Guideline; the materials listed in Table B are exempted from being listed obligatorily. It is impossible to investigate all equipment and area including those which are assumed not to contain Hazardous Materials described above. Through analysis of available documents based on knowledge and experience, it is necessary to make clear which equipments and/or area should be put into scope of investigation. [e.g. Asbestos is only included in a non-combustible material of A,B and C class division, coating, lagging, brake shoe lining, gasket and packing except special case.]

*3 : Equipment, system and/or area which can not be specified regarding presence of the substances listed in Appendix 1 of the Guideline by documents can be listed in the List of equipment, system and/or area classed as "Potentially containing hazardous material" without the sampling **check**. Prerequisite for this classification is a comprehensible justification of the conclusion or when little or no effect on disassembly as a unit and later ship recycling and disposal operations can be assumed.

*4 : Sampling **check** means to identify approximate quantity of Hazardous Material in the equipment and /or area, conducting chemical analysis of test piece taken from the equipment and /or area on board ship. Sampling **check** should be applied where presence of Prohibited and Restricted Hazardous Material is assumed but cannot be recognized with analysis of available documentation.

*5 : When equipment, system and/or area of the vessel can not be accessible for **visual check** or **sampling check**, this equipment, system and/or area is classified to "Potentially containing hazardous material".

*6 : Any equipment, system and/or area classed as "Containing potentially hazardous material" should be disposed according to the requirement of the Convention and the Guidelines.



Inventory of Hazardous Materials Part I

All Ships:

- Repair / Conversion Yard
 - Updating at repair, conversion etc.
- Owner / Operator:
 - Updating during operational life
- Administration / RO:
 - Survey / Certification
 - Control





Thank You!

