

ClassNK



ClassNK Solution on Ship Recycling Convention

A World Leader in Ship Classification

The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009, the “Ship Recycling Convention” was adopted in May 2009. Once the convention enters into force, all ships greater than 500GT will be required to maintain an Inventory of Hazardous Materials [Inventory (IHM)].

The development of the Inventory (IHM) will be a significant task for shipowners of both existing ships and newbuildings. ClassNK is working to ensure that all concerned parties including shipowners, shipbuilders, and suppliers are able to implement the convention requirements smoothly and efficiently.

ClassNK provides shipowners with total care solutions for Ship Recycling Convention in every aspect of a ship’s life.

Trust ClassNK for Ship Recycling Convention

ClassNK offers the following services for Ship Recycling Convention...

Inventory (IHM) Development Assistance

- ★ For existing ships: introducing and providing Experts to assist with Inventory (IHM) development
- ★ For new ships: Developing and updating software for Inventory (IHM) development in order to reduce workloads of shipbuilders and suppliers.

Statements of Facts for early implementation

Prior to the convention’s entry into force, ClassNK can issue a Statement of Fact (SOF) for the Inventory (IHM) which can be rewritten into a conventional certificate once the convention enters into force.

Q: What is an Inventory (IHM)?

A: An Inventory (IHM) is a list of Hazardous Materials, waste, and stores, identifying their locations and approximate quantities on board the ship. As you can see on the following table, Part 1 of the Inventory (IHM) is to be developed at the delivery of the ship, and Part 2 & 3 are to be completed immediately prior to recycling. Meanwhile, for those ships whose building contract are not placed before the convention enters force (defined as “Existing ships”), Part 1 of the Inventory (IHM) has to be developed within 5 years the convention enters into force.

Materials/items to be listed in the Inventory (IHM) are set forth as follows. Materials are classified under “Table A”, “Table B”, “Table C” or “Table D” according to their properties.

	Part 1	Part 2	Part 3
	Hazardous Materials contained in ship structure or equipment	Operationally generated wastes	Stores
To be developed at	Delivery *Existing ships shall comply not later than 5 years after entry in force	Just before the Recycling	
Materials/Items to be listed	Table A: Prohibited/Restricted Materials (Asbestos, PCB, Ozone Depleting Substances, Organotin compounds) Table B: Harmful Materials (Cadmium, Hexavalent Chromium, Lead, Mercury etc.) *Existing ships shall comply as far as practicable for Table B Materials.	Table C: Potentially hazardous items	Table C: Potentially hazardous items Table D Regular consumable goods potentially containing Hazardous Materials

In accordance with the convention, the ship recycling will be executed in line with the inventory, with considerations towards the safety/health of laborers and prevention of environmental pollution

Q: What are the requirements for the convention to enter into force?

A: The Convention will enter into force 24 months after;

- ① Ratification by not less than 15 States
- ② The combined merchant fleets of the ratifying States constitute not less than 40% of the gross tonnage of the world’s merchant fleet
- ③ The combined maximum annual ship recycling volume of the ratifying States during the preceding 10 years constitutes not less than 3% of the gross tonnage of the States.

Due to increasing environmental awareness, many states are highly motivated to ratify the convention.

An early entry into force is expected.

Existing Ships —Inventory (IHM) Development for Existing Ships—

The Ship Recycling Convention applies to existing ships as well as a newly constructed ships. For existing ships, Part 1 of the Inventory (IHM) is to be prepared by a third party “Expert”.

* For existing ship, complete clarification of Table A materials (Asbestos, PCB, Ozone depleting substances, Organotin compounds) is required. Meanwhile, the locations and quantities of Table B materials (Cadmium, Hexavalent Chromium, Lead, Mercury etc.) need to be clarified as much as practicable.

What ClassNK Offers

Expert Introduction



In addition to introducing shipowners to third party Experts, ClassNK is developing its own worldwide network of Experts capable of preparing Part 1 of the Inventory (IHM). ClassNK is also available to answer shipowner questions about Inventory (IHM) development for existing ships.

* ClassNK is now preparing for providing the Expert service in near future.

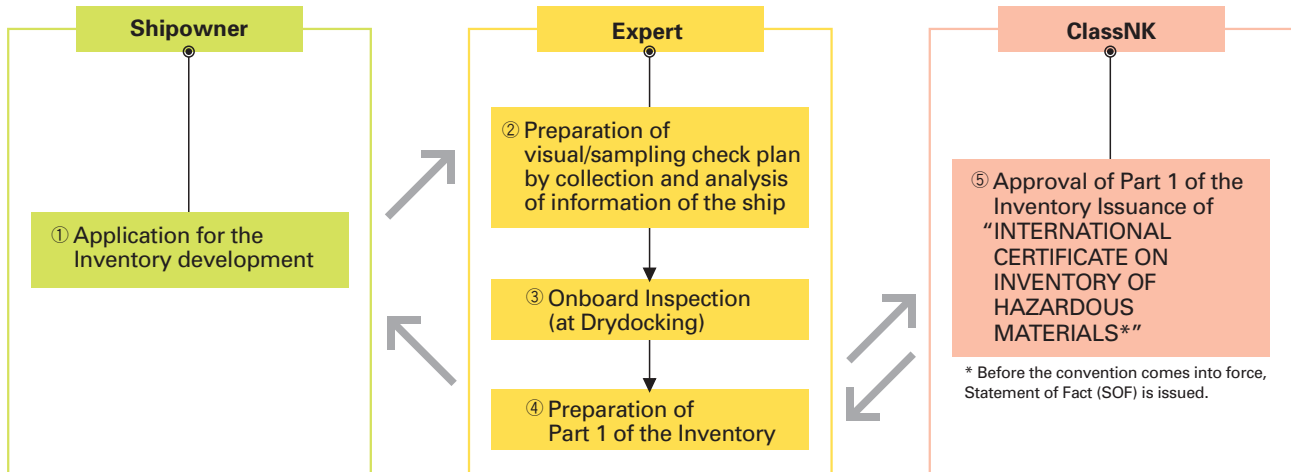
Issuance of Statement of Fact (SOF)

Class will issue a Statement of Fact (SOF) for Part 1 of the Inventory (IHM) developed before the convention enters into force, subject to satisfactory completion of our examination. After the convention enters into force, ClassNK will rewrite the SOF as a conventional certificate.

Once the convention comes into force, demand for experts is expected to be very high. We recommend shipowners begin the process as soon as practical.

Statement of Fact	
No. KC 09N2-XXXX	Date:
THIS IS TO CERTIFY that the undersigned Surveyor did, at the request of ---, examine the report of "Inventory of Hazardous Materials" of the following vessel:	
MV "---"	
Flag :	
Port of Registry :	
Signal Letters :	
IMO Number :	
Type of Vessel :	
Gross Tonnage :	
Shipbuilder :	
Name of Owners :	
In accordance with "MEPC 58/02, Draft Guidelines for the Development of the Inventory of Hazardous Materials", and found satisfactory, excluding the materials listed in the remaining list of "Material declaration" and "Supplier's declaration of conformity" attached hereto.	
Nippon Kaiji Kyokai, Marine & Industrial Service Department	

■ Development process for Part 1 of the Inventory (IHM) by Expert



Info.: Cost & Time for an Inventory (IHM) Development by the Expert

【Cost】

Cost for the Expert consists of manpower for the following:

- Collection/document analysis of the ship's information, preparation of visual/sampling check plan, onboard inspection, and preparation of the Inventory (IHM) format
- Additional expenses for sampling analysis, etc

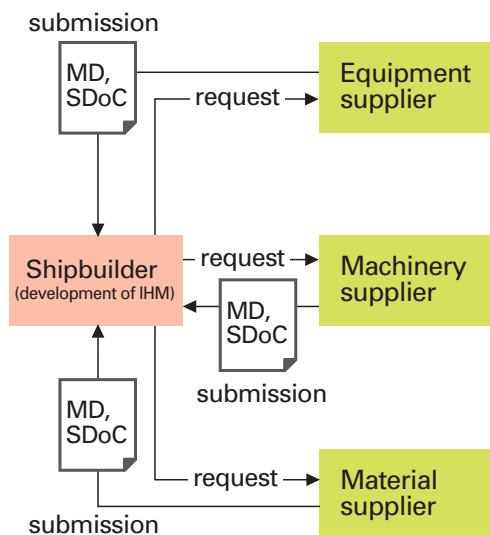
Costs depend on type, age, ship size, and availability of related resources. Our partner Expert, JSTRA (Japan Ship Technology Research Association), gives a reference price of USD30,000-50,000. Preparing enough documents in advance may reduce the required manpower. Please also be aware that the the ClassNK approval fee is charged separately from the Expert's analysis and work.

【Time】

A minimum of three months or more is expected to be required to complete the inventory. After the convention enters into force, it might take longer due to limited availability of Experts.

New Ships — Inventory (IHM) Development for New Ships—

Part 1 of the Inventory (IHM) for new ships is to be developed at delivery by the following process.



Development process of Part 1 of Inventory (IHM) for shipbuilders

① Collection of Hazardous Material information

The shipbuilder collects Material Declaration (MD) and Supplier's Declaration of Conformity (SDoC) from suppliers for all procured products. Material Declaration show whether the Hazardous Materials above threshold level set forth in the convention are contained in the product. SDoC confirms MD and identifies the supplier's responsibility.

② Screening the collected information

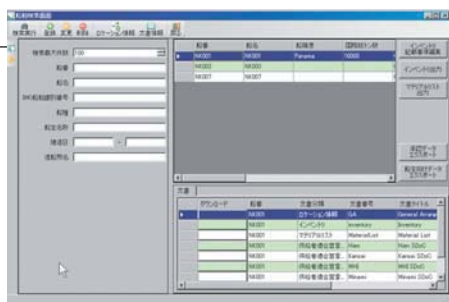
The shipbuilder screens the products containing Hazardous Materials by checking submitted MD.

③ Preparation of the Inventory (IHM)

For the screened products, the shipbuilder identifies their locations and approximate quantities of Hazardous Materials and fill in the information on the Inventory (IHM) format.

What ClassNK Offers

Inventory (IHM) Development Software "PrimeShip-INVENTORY"



Collecting the huge number of Material Declaration (MD) from suppliers will be a huge additional burden for shipbuilders. ClassNK has developed the software to reduce the workload & cost associated with this process by allowing shipbuilders and suppliers to exchange MD data electronically; PrimeShip-INVENTORY.

In order to ensure that shipbuilders and suppliers will be able to use Inventory (IHM) smoothly, ClassNK is distributing PrimeShip-INVENTORY free of charge and is providing technical assistance to concerned parties. Please also feel free to contact ClassNK about any questions or concerns you might have related to Inventory (IHM) development of new ships.

Issuance of Statement of Fact (SOF)

Class will issue Statement of Fact (SOF) for Part 1 of the Inventory (IHM) before the convention enters into force, subject to satisfactory completion of our examination. After the convention enters into force, ClassNK will rewrite the SOF into a conventional certificate.

For newly constructed ships built before the convention enters into force, the MD/SDoC method as well as Expert method are applicable. By preparing the Inventory (IHM) using MD/SDoC method, shipowners can save time and cost for the Expert after the ship is delivered.



Maintenance —Inventory (IHM) Maintenance—

The Inventory (IHM) has to be maintained throughout the operational life of the ship.

Updating the Inventory (IHM)

For changes or conversions to the the ship structure or equipment involving Hazardous Materials, the Inventory (IHM) should be updated based on the related Material Declaration (MD) and Supplier’s Declaration of Conformity (SDoC).

Periodical Survey

Part 1 of the Inventory (IHM) shall be subject to renewal surveys at intervals, not exceeding five years.

Completion of Inventory (IHM) at Recycling

At the recycling stage, Part 2 (Wastes) & Part 3 (Stores) of the Inventory (IHM) shall be incorporated to Part 1 and provided to the ship recycling facility.

What ClassNK Offers

Technical Services for Inventory (IHM) Maintenance

As the one of our consulting services, ClassNK offers technical services related to Inventory (IHM) maintenance during the operational life of the vessel and for inventory (IHM) completion.



Inventory of Hazardous Materials :						
Part I. HAZARDOUS MATERIALS CONTAINED IN THE SHIP'S STRUCTURE AND EQUIPMENT						
1.1 Paints and Coating Systems containing materials listed in Table A and Table B of Appendix 1 of the Guidelines						
No	Application of Paint	Name of Paint	Location	Materials (Classification in Appendix I)	Approx Quantity	Remarks
1		*Tin type AF paint of KP ACE SSP A/P 100 Brown & Red Oxide until April, 1994. *Then, sealer coat applied on January, 2004.	Boat top	TBT	To be written after the result of sampling analyses has been gotten.	kg
2		*Then, sealer coat applied on January, 2004.	Vertical bottom	TBT	To be written after the result of sampling analyses has been gotten.	kg
3	Antifouling	*Tin type AF paint of KP ACE SSP A/P 100 Brown & Red Oxide until August, 1991. *Then, sealer coat applied on January, 2004.	Flat bottom	TBT	To be written after the result of sampling analyses has been gotten.	kg
1.2 Equipment and Machinery containing materials listed in Table A and Table B of Appendix 1 of the Guidelines						
No	Name of Equipment and Machinery	Location	Materials (Classification in Appendix I)	Parts of Use	Approx Quantity	Remarks
1			Asbestos	Packing for air cooler	0.24kg	
2	Main engine		Asbestos	Gasket for governor	0.02kg	
3			Asbestos	Brake lining for turning gear	0.02kg	
4	Propeller		Asbestos	Sheet Packing	0.32kg	
5			Asbestos	Sheet packing(No.11)	0.29kg	
6	Stern tube seal		Asbestos	Sheet packing(No.10)	0.15kg	
7		Lower floor	Asbestos	Sheet packing(No.12)	0.29kg	
8	Main L.O. pump		Asbestos	Packing for bottom cover	0.13kg	
9	Sludge pump		Asbestos	Gland packing	0.35kg	
10	Bilge circ. Pump		Asbestos	Gland packing	0.32kg	
11	Boiler water circ. pump		Asbestos	Gasket	0.03kg	



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For further information, please visit our website (<http://www.classnk.or.jp>): Information Services > Ship Recycling Convention.