



MARITIME

MANAGING THE HIDDEN HAZARDS ONBOARD SHIPS

HazMat Inspection

Safe working environment

There are many hazardous materials (HazMats) used daily in the seafaring environment: in ship operations, housekeeping, maintenance and repair, and in construction. Yet often, very little is known about them and how to protect against them, although the UNO and IMO have adopted and ratified several conventions and guidelines which restrict or ban HazMats within the maritime world.

Some of these HazMats can have negative effects on the health of your personnel, including crews. In addition, the use of harmful substances such as asbestos in ship structures has created a mounting legacy and financial liability in the industry. The challenge is being aware of these hazards, which is essential for proper risk assessment and responsible management.

What are HazMats?

The term "HazMats" refers to any material that has properties which may result in risk or injury to health and/or extensive damage to facilities. Many neither smell nor can be tasted. Some can be detected because they cause physical reactions such as watering eyes or nausea. Sometimes the substance can be identified from placards, labels or markings. HazMats can be: corrosive; ignitable; reactive to water, heat or pressure; radioactive; toxic or infectious.

The most common HazMats on board ships:

Asbestos

Asbestos is a group of inorganic, naturally occurring crystalline silicates. Continuous exposure to elevated levels causes serious illness and can be deadly. Onboard ships, asbestos is used in gaskets, floor tiles or brake linings, paint colours and other coatings. It may also be present in ropes, insulating blankets, exhaust insulation, wall panels and ceiling tiles. According to the latest SOLAS Chapter II-1 Regulation 3-5 requirement, adopted by MSC on 5 June 2009, and its accompanying Unified Interpretation as from 8 December 2010, asbestos is banned without exception for all new installations effective as of 1 January 2011.



Ozone Depleting Substances (ODS)

ODS are fluorocarbon compounds that contribute to stratospheric ozone depletion when they break down. Onboard ships, ODS are found as a refrigerant in cooling and air condition systems. They are also widely used in insulation foams. Chlorofluorocarbons (CFCs R11, R12, R113, R500) are banned under the Montreal Protocol, Hong Kong Convention and MARPOL Annex VI as well. Hydrochlorofluorocarbons (HCFCs R22, R123) will be phased out at the latest in 2020/2040.



Potential sources of HazMats: cooling systems onboard ships.



Why work with DNV GL to manage HazMats?

To fulfil your individual requirements, DNV GL has designed an integrated and sustainable programme for managing HazMats onboard ships through the ship's entire life cycle. Our years-long experience in dealing with this issue at the IMO, along with our comprehensive know-how in shipbuilding and operation, make us ideally suited to support you in optimising your facilities.

Your benefits

- Be in step with current and future legal regulations
- Enhance your image as an environmentally friendly company
- Demonstrate excellence standards (DNV GL Environmental Class Notation, Blue Angel)
- Increase the resale value of your vessel
- Manage your investments and maintenance more effectively
- Enhance shipbuilding quality through IHM (asbestos and ODS-free status)
- Generate synergies by choosing an integrated DNV GL approach

RELATED SERVICES

IHM certification

We offer certification of inventories for hazardous materials for new and existing ships.

Consulting services

Our Maritime Advisory service offers "Material Declaration Consulting for Shipyards and Suppliers" based on individually tailored concepts for the smart establishment and management of integrated Material Declaration databases.

Ship recycling services

Specifically for shipyards and shipowners, our Maritime Advisory offers performance assessments, gap analysis and project supervision services related to HKC and EUSRR.

Advanced courses

Furthermore, the Maritime Academy offers specific advanced training courses.

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