

# THE CHANGING FACE OF SHIP RECYCLING



By Anand M. Hiremath  
Coordinator, Ship Recycling  
Projects, GMS Inc.

**Ship recycling is at its core a green process; more than 90% of materials from end-of-life vessels are recyclable or reusable.**

The reuse of engines, winches, power generators, air-conditioners, refrigerators, gadgets, furniture and other objects recovered from ships creates important commercial activity and extends the useable life of products with carbon- and energy-intensive manufacturing processes. The recycling of ferrous (steel plates and metal scrap) and non-ferrous metals (copper, aluminium, bronze, zinc etc) from ships also helps to conserve the energy and natural resources needed to produce virgin steel and other metals from conventional processes.

However, the nature of operations carried out at ship recycling yards in the South Asian countries that recycle the majority of the world's vessels - India, Bangladesh and Pakistan - has raised concerns around occupational health, safety, and environmental management. There is escalating pressure for obsolete ships to be recycled in certified safe and environmentally friendly yards from national and international regulations and conventions (EU Ship Recycling Regulation and the International Maritime Organisation's Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships), and from shipowners and operators seeking to extend their CSR policies and sustainability strategies to the end of their vessels' lifecycles.

In response to this, we are seeing significant improvements being made at yards, particularly those in South Asia. In recent months, the first yards in India have been certified as compliant with the Hong Kong Convention (HKC).

Although it is yet to be formally ratified, the standards within the HKC are making strong headway towards changing the industry, enabling achievable, sustainable goals for ship recycling. These yards have installed impervious layers to avoid soil and water pollution, as well as oily water and storm water collection tanks; developed their own Ship Recycling Facility Plan including roles and responsibility of management; designated location for each work activity in the yard; emergency preparedness and response planning; and documented procedures for each work activity. They also conduct environmental (sea water, soil and air sample) monitoring, and monitor the performance and calibration of equipment.

HKC compliant yards work and manage each project according to a bespoke ship-specific recycling plan, using the design of the vessel and Inventory of Hazardous Materials (IHM) provided by the ship owner to plan a safe and environmentally-friendly dismantling sequence. They identify and manage the location of hazardous waste onboard and have developed safe waste removal procedures, and installed advanced waste handling facilities at their yards (for example, negative pressure asbestos handling units). In addition, specialist employees have been trained and equipped for handling specific wastes. All workers are provided with health insurance, an identity card and have a dress code based on tasks and PPEs where necessary. Periodic training is also mandatory for workers including training for working at height, or in a confined space, oil spill control, fire prevention, control and evacuation, and for safe welding, cutting and grinding.

In summary, these upgraded yards are setting the benchmark for

responsible and sustainable recycling. This is also having a positive knock-on effect as other yards have also started moving in the same direction. GMS has partnerships with leading HKC-certified yards in South Asia, and is seeing significant growth in demand for this service, which demonstrates that compliant yards are reaping the commercial benefits. As these yards have seen demand grow for their services, other yards are left to compete for poorer quality ships at high prices. This has forced other, non-compliant yards to consider HKC compliance and ISO and OSHSAS certification to boost their businesses.



Making good CSR and sustainable ship recycling a fundamental demand from owners is starting to deliver change, and we will see this even more as the HKC comes into force. But if the demand peters out due to poor EU regulation deeming all beach recycling "dirty", the incentive to improve these yards will also disappear. This is the case across the industry, not just in this region, and this globally recognised standard must be supported and given the chance to achieve its potential, and change yards around the world for the better. ■