SHIP RECYCLING
YOUR GUIDE TO COMPLIANCE
Every year, around 1,000 large ships reach the end of their useful life and are sent for dismantling to recycle the steel and equipment. The majority of this recycling takes place in dangerous, polluting conditions.

The European Ship Recycling Regulation (EU SRR - Regulation EU N°1257/2013) entered into force on December 30, 2013 to reduce the negative impacts linked to the recycling of ships. It requires both shipowners and yards to take a proactive approach to safety and environmental protection in ship recycling, with a major focus on management of hazardous materials.

This guide explains the European Ship Recycling Regulation, its impact on you, and how Bureau Veritas Solutions – Marine & Offshore can support you in implementing it.
WHY DID THE EU INTRODUCE THE REGULATION?
The majority of ships today are demolished in South Asia, mainly by grounding ships on beaches and dismantling them there: a practice known as beaching. This is low-cost, but dangerous and polluting. In 2009, IMO introduced the Hong Kong International Convention for the Safe and Sound Recycling of Ships (HKC). It covers the design, construction, operation and preparation of ships, to facilitate sustainable ship recycling without compromising safety and operational efficiency.

The EU SRR closely follows the text of the HKC and is designed to facilitate early adoption of the Convention.

WHAT ARE THE PRINCIPAL REQUIREMENTS?
The main focus of the EU SRR is the preparation of an Inventory of Hazardous Materials (IHM). All EU-flagged vessels must carry an IHM onboard, and corresponding International Certificate of Inventory of Hazardous Materials (ICIHM), or Statement of Compliance (SoC) for non-EU flagged ships docking in EU ports.

In addition, the installation or use of certain hazardous materials will be prohibited or restricted (e.g. asbestos, ozone-depleting substances, polychlorinated biphenyls). Finally, before a final voyage to the recycling facility, a specific Ship Recycling Plan (SRP) must be prepared. EU-flagged ships can only be recycled at a shipyard certified compliant to EU standards.

WHO MUST COMPLY?
All new and existing ships of 500 GT and above, either flying an EU Member State flag, or calling at an EU port, must comply with the EU SRR. It applies to all types of vessel, including submersibles, floating craft and platforms, self-elevating platforms, FSUs and FPSOs, as well as ships stripped of equipment or being towed.

HOW CAN BUREAU VERITAS SOLUTIONS – MARINE & OFFSHORE SUPPORT YOU?

- Understand the regulation and its requirements
- Achieve and maintain compliance
- Take advantage of our network to plan activities based on scheduled drydocks
- Gain fast access to data via our digital tools
- Minimize reputational risk

500 GT
THRESHOLD FOR COMPLIANCE WITH THE REGULATION

50,000
EXISTING VESSELS IMPACTED BY THE REGULATION, INCLUDING 22,000 THAT REGULARLY CALL AT AN EU PORT
Develop Your IHM

The primary requirement of the EU SRR is the preparation of an Inventory of Hazardous Materials (IHM). This is comprised of three parts, required at different stages of a ship’s life:

- Hazardous materials forming part of structure and equipment (Part I), required for newbuildings at the design stage and for in-service ships during their operational life
- Operationally generated wastes (Part II) and Stores (Part III) to be included in the same IHM Manual prior to recycling

The IHM lists, in a standard format, hazardous onboard materials that represent a potential risk to people or the environment, from asbestos, to heavy metals, to ozone-depleting substances used in construction materials and equipment. It also details their location and quantities.

It is preferable to develop an IHM ahead of regulatory enforcement, given the expected workload and demand for quality IHM service.
Many hazardous materials can be found by reviewing the ship’s documentation. As such, the first stage of IHM is collection and assessment of information, and identification of which structure and equipment should be inspected and tested.

A Visual / Sampling Check Plan should be prepared for targeted inspection and sampling of equipment, systems and areas containing or potentially containing hazardous materials.

Collected information should be assessed to cover all hazardous materials. Preparation of a checklist is recommended as an efficient method for developing the Inventory in order to clarify the results of each step.

A Visual / Sampling Check Plan should be prepared for targeted inspection and sampling of equipment, systems and areas containing or potentially containing hazardous materials.

An IHM expert goes onboard the ship with the pre-prepared Visual / Sampling Check Plan, performs inspections and collects samples for laboratory analysis. In the case of sisterships, a reduced quantity of samples can be considered once sampling on the leader ship is complete.

Based on the inspection and laboratory test results, we generate IHM Part I using an advanced digital reporting system and issue the necessary documents, making the ship ready for initial certification.

IHM certification can be provided by Bureau Veritas Marine & Offshore. Once developed, Bureau Veritas and BV Solutions M&O can help you maintain your IHM throughout the ship’s life.

5 STEPS TO DEVELOP IHM PART 1

BV Solutions M&O has the qualified personnel and network to support you throughout the process.

STEP 1

COLLECTION OF NECESSARY INFORMATION

Many hazardous materials can be found by reviewing the ship’s documentation. As such, the first stage of IHM is collection and assessment of information, and identification of which structure and equipment should be inspected and tested.

STEP 2

ASSESSMENT OF COLLECTED INFORMATION

Collected information should be assessed to cover all hazardous materials. Preparation of a checklist is recommended as an efficient method for developing the Inventory in order to clarify the results of each step.

STEP 3

PREPARATION OF VISUAL/SAMPLING CHECK PLAN

A Visual / Sampling Check Plan should be prepared for targeted inspection and sampling of equipment, systems and areas containing or potentially containing hazardous materials.

STEP 4

ON BOARD VISUAL/SAMPLING CHECK

An IHM expert goes onboard the ship with the pre-prepared Visual / Sampling Check Plan, performs inspections and collects samples for laboratory analysis. In the case of sisterships, a reduced quantity of samples can be considered once sampling on the leader ship is complete.

STEP 5

REPORTING

Based on the inspection and laboratory test results, we generate IHM Part I using an advanced digital reporting system and issue the necessary documents, making the ship ready for initial certification.

IHM certification can be provided by Bureau Veritas Marine & Offshore. Once developed, Bureau Veritas and BV Solutions M&O can help you maintain your IHM throughout the ship’s life.

PRAXIS IHM
YOUR DIGITAL ROUTE TO COMPLIANCE

PRAXIS IHM is a user-friendly digital application designed to help BV Solutions M&O experts, selected HAZMAT laboratories and shipowners meet the IHM manual development and in-service maintenance requirements of the European Ship Recycling Regulation (EU SRR) and IMO Hong Kong convention.

With Praxis IHM, fleet managers can control and maintain multiple IHM Manuals, keep track of HAZMAT locations and record the quantity of transported good. The digital interactive tool provides useful, reliable and traceable maintenance records based on easily catalogued drawing extracts and material declaration libraries.

PRAXIS IHM interfaces with Bureau Veritas survey and reporting tools, prompting survey requests and generating survey checklists for the validation of HAZMAT changes recorded on board. As such, it keeps owners up-to-date and offers a simplified process for IHM certification.
The Ship Recycling Plan (SRP) is a mandatory set of instructions on how to dismantle a ship, it must be ready before scrapping, and approved by a designated competent (governmental) authority responsible for a ship recycling facility within a specified area.

BV Solutions M&O can offer consultancy support to shipowners and their selected ship recycling facility in preparing SRP’s.

**REGULATION TIMETABLE**

**HELPING YOU MEET THE CHALLENGE FROM NOW TO 2021**

<table>
<thead>
<tr>
<th>MAY 2009</th>
<th>OCTOBER 2013</th>
<th>DECEMBER 31, 2018</th>
<th>DECEMBER 31, 2020</th>
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<tbody>
<tr>
<td>HKC Adopted by IMO</td>
<td>EU SRR regulation adopted</td>
<td>Deadline for EU-flagged new buildings to carry onboard a verified IHM with an Inventory Certificate</td>
<td>Deadline for:</td>
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<tr>
<td></td>
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<td>• EU-flagged existing ships to carry onboard verified IHM report with an Inventory certificate</td>
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<tr>
<td></td>
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<td>• Non-EU ships coming to EU ports to carry onboard a verified IHM report with Statement of Compliance</td>
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The EU SRR and the HKC also have implications for ship recycling facilities, as they aim to improve the safety of workers and reduce environmental damage.

**SHIP RECYCLING FACILITY SERVICES**

**OBTAIN A LICENSE TO OPERATE: EU COMPLIANT FACILITY CERTIFICATION**

In addition to the HKC guidelines for safe and environmentally sound recycling of ships, large commercial seagoing vessels flying the flag of an EU Member State may be recycled only in facilities included on the European List of ship recycling facilities. To be included on the European List, any ship recycling facility, irrespective of its location, has to comply with a number of safety and environmental regulations.

Further, an application must be made to the European Commission. BV Solutions M&O can offer support to ship recycling facilities throughout the whole process, providing shipowners with a wider selection of compliant facilities.

**DEMONSTRATE BEST PRACTICE IN TENDERS**

With environmental and social practices rising up the agenda, owners increasingly demand proof that the recycling facility is capable of proper dismantling in line with IMO and EU requirements. BV Solutions M&O can carry out third party audits during the dismantling process at the chosen facility, a report of which can be offered in tender documents.

**PROTECT YOUR BRAND: MONITORING AND MANAGEMENT OF SHIP RECYCLING**

NGOs have targeted high-profile shipping company brands to highlight poor safety and environmental practices. For shipowners who are concerned with where and how their ship will be recycled, and seek to safeguard their reputation, BV Solutions M&O can provide services, including on-site monitoring and management of the dismantling process.
Bureau Veritas Solutions Marine & Offshore is an entrepreneurial, collaborative solutions provider, building on 190 years of experience. We provide technical advisory, asset management and assurance solutions for the Marine and Offshore energy markets. Our top-tier, added-value solutions enable clients to resolve new and complex issues, de-risk projects and optimize costs.

By listening to our clients and gaining an in-depth understanding of their challenges, our experts can deliver tangible improvements to asset and business performance, safely and responsibly. In an increasingly digital world, we partner with clients to go beyond compliance, enabling their assets to perform reliably, efficiently and with a significantly reduced level of risk and cost.

Together we build on what we know today to change how things are done tomorrow... for good.