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Industry Insight Addressing Regulations

Joe Kelly & Gurinder Singh

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Joe Kelly

Vice President, Maritime Solutions

With 30 years of experience in the maritime industry, Joe Kelly joined the ABS Wavesight team in early 2023 as Vice President, Maritime Solutions. Joe began his tenure at ABS in 2006, starting as a Surveyor in the Chicago Port office and working his way up the ranks to the role of District Manager of Great Lakes Operations. Before joining Wavesight, Joe was the Vice President of North America Operations, responsible for over 250 Surveyors stationed in North America. In his current position, Joe is instrumental in supporting the various products offered by ABS Wavesight.

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Gurinder Singh

Director, Solution Engineering

Gurinder Singh is the Director of Solution Engineering at ABS Wavesight. Gurinder joined ABS in 2011 and has held several leadership roles within ABS Bureau including topics like LNG, sustainability and marine and offshore projects before transitioning to his current role as Head of Solution Engineering for ABS Wavesight. He holds a bachelor's in Mechanical Engineering and a Master's in Engineering Management from the University of New Orleans.

Agenda

Nautical Systems	SIRE 2.0
	Hong Kong Convention Inventory of Hazardous Materials (IHM)
	MSC 102: Safe Mooring
My Digital Fleet	EU ETS
eLogs	Garbage Record Book for Ship 100-400GT
	USCG – Electronic Logbooks

SIRE 2.0

OCIMF Ship Inspection Report Program

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The SIRE system, launched in 1993, is a very large database of up-to-date information about tankers and barges. Essentially, SIRE has focused tanker industry awareness on the importance of meeting satisfactory tanker quality and ship safety standards. Since its introduction, the SIRE Program has received industry-wide acceptance and participation by both OCIMF Members, Program recipients and by ship Operators. The expansion of Barges and small vessels into SIRE was inaugurated in late 2004.

Since its introduction, more than 180,000 inspection reports have been submitted to SIRE. Currently there are over 22,500 reports on over 8000 vessels for inspections that have been conducted in the last 12 months. On average Program Recipients access the SIRE database at a rate of more than 8000 reports per month.

Inspection reports are maintained on the index for a period of 12 months from the date of receipt and are maintained on the database for 2 years. SIRE access is available, at a nominal cost, to OCIMF members, bulk oil terminal operators, port authorities, canal authorities, oil, power, industrial or oil trader companies which charter tankers/barges as a normal part of their business. It is also available, free of charge, to Governmental bodies which supervise safety and/or pollution prevention in respect of oil tankers/barges (e.g., port state control authorities, MOUs, etc.)

SIRE 2.0 Four Key Areas of Focus:

Accuracy

Facilitating an accurate description of how key safety and operational risks are managed and verified onboard a vessel.

Capability

Training and developing inspectors who are of the highest quality, consistency and integrity.

Reliability

Strengthening vessel inspections and reducing the number of repeat inspections required.

Adaptability

More rapid response to human factors, industry changes, regulatory framework updates and technology advances.

Human Factor

One of the most significant updates in SIRE 2.0 is the incorporation of the human factor. This change recognizes the crucial role that crew members play in maintaining vessel safety and performance. The new inspection framework involves interviewing and assessing more crew members during the vetting inspection, ensuring that they are well-prepared to address any SIRE 2.0 question relevant to their vessel and demonstrating their effective operation of the vessel on a day-to-day basis.

Digitalization

SIRE 2.0 has also embraced digitalization to streamline the inspection process and improve communication between stakeholders. Inspectors now use intrinsically safe tablets to complete onboard vetting inspections in real-time and generate inspection reports. This digital approach allows for more efficient data collection and sharing, reducing the time spent on paperwork and enhancing the overall inspection experience for both inspectors and tanker operators.

Vessel Photographs

The updated SIRE 2.0 program places a greater emphasis on vessel photographs in the inspection process. These photographs provide visual evidence of the vessel's condition and compliance with regulations. Tanker operators are now required to follow standardized photo-taking guidelines and upload the images to a dedicated Photo Repository. Ensuring that photographs are accurate, up-to-date (not older than 6 months), and in line with the OCIMF guidelines.

HONG KONG CONVENTION INVENTORY OF HAZARDOUS MATERIALS (IHM)

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Hong Kong Convention Basics

Overview

Resolution MEPC.222(64) adopted 2012 but ratified in June 2023

Applicable for all ships over 500 GT starting 26-Jun-2025

Similar to EU Ship Recycling Regulation (SRR) required when visiting EU/EEA/UK ports.

Also applies to Ship Recycling Facilities

Three-part approach to Inventory of Hazardous Materials (IHM):

- Part I - Materials contained in ship structure or equipment;
- Part II - Operationally generated wastes; and
- Part III – Stores.

Part I is needed to initial certification and renewals.

Part II and III are required prior to recycling.

Hong Kong Convention Basics

Basic Process for Certification

Standard forms are provided in Annex of the regulation to assist in preparation of the IHM booklet

An independent 3rd party is required to conduct the necessary sampling to confirm presence/absence of hazardous materials from suspected areas

Authorized RO provides the IHM certificate after the booklet has been reviewed and survey completed

Certification will require:

- IHM booklet with Visual/Sampling Check plan completed
- Material Declaration (MD) and Suppliers' Declaration of Conformity (SDoC) are required from suppliers
- Preferred is an onboard system that can track the inventory along with required records and location diagram

SAFE MOORING

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Safe Mooring Basics

Overview

Applicable for ships constructed after 1-Jan-2024

Will not affect vessel in your fleet currently or any vessel you purchase that has a build year of 2023 of earlier.

If any major modification changes the build year of the ship on the Certificate of Inspection, then the regulation applies

Main topics addressed:

- Mooring Plan
- Mooring Plan Execution
- Best practices during adverse conditions
- Maintenance of mooring lines
- Maintenance of mooring winches

Safe Mooring Basics

Effect on Data Collection and Equipment Maintenance

Mooring plan needs to be aligned with the system for recording/capturing relevant mooring information.

Activities should be recorded in the vessel noon/daily reporting system as work involves deck personnel and officers.

Weather information and adverse conditions need to be captured for assessment of risk based on the mooring plan

Usage of equipment needs to be aggregated and passed onto the Planned Maintenance system.

Assessment and Inspection inline with the new regulations will be subject to Port State inspections and Class Surveys

A condition-based approach is intended to be adopted to avoid incidents and unsafe work conditions

EU ETS

EU ETS Basics

Overview

From 2024, shipping companies operating vessels greater than 5000gt in size on voyages to EU ports are required to surrender EUA's (EU allowances, units equivalent to one ton of CO2 emitted)

- 40% of 100% of intra-EU voyages CO2 emissions
- 40% of 50% of incoming/outgoing voyages CO2 emissions

Responsibility for monitoring the total year's emissions within the EU, submitting reporting to authority, and surrendering allowances lie with the company that has assumed shipowner technical duties, i.e. Document of Compliance holder.

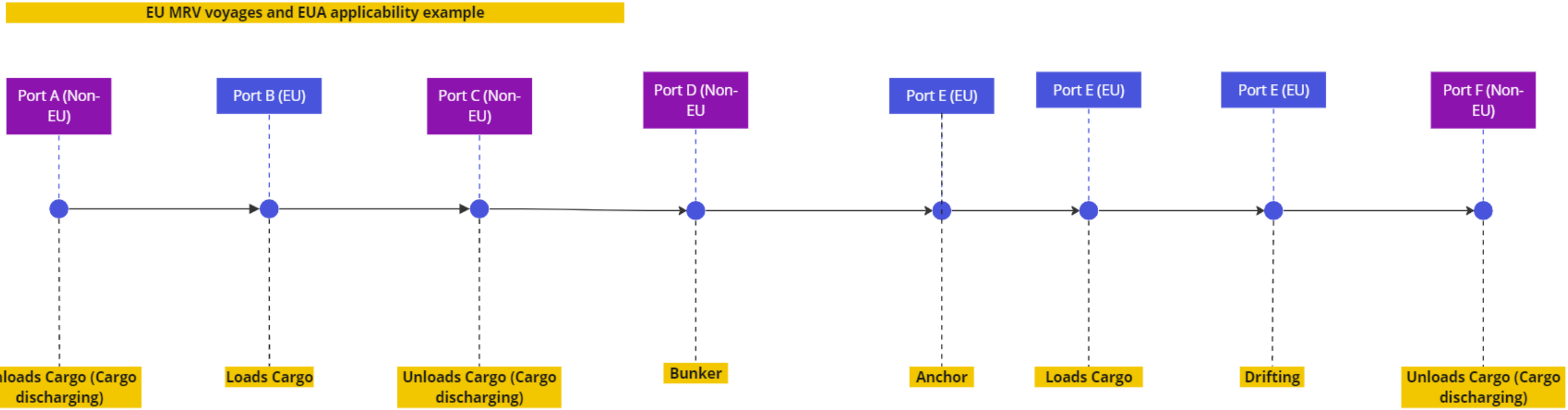
Failure to surrender the required EU allowances will lead to fines of 100 Euros per ton missed. Liability for covering the missing amount will roll over. 2 or more failures to meet requirement risk operational banning from EU

Compliance updates beyond 2024 include phase in process (40%->100%) and additional emissions

Starts with CO2 and adding CH4 and N2O in reporting in 2024 and EUA additions by 2026

EU MRV Voyages and EUA Applicability

An example covering a few typical scenarios



GARBAGE RECORD BOOK
VESSELS 100GT - 400GT

Every ship of 100 gross tonnage and above, and every ship certified to carry 15 persons or more, shall carry a garbage management plan. This plan shall provide written procedures for minimizing, collecting, storing, processing and disposing of ship-generated garbage, including the use of the equipment on board. It shall also designate the person or persons in charge of carrying out the plan. Such a plan shall be in accordance with the guidelines developed by the company and written in the working language of the crew.

Additionally, every ship of 400 gross tonnage and above, and every ship certified to carry 15 persons or more engaged in voyages to ports or offshore terminals under the jurisdiction of another party to MARPOL shall carry a Garbage Record Book.

Also, every ship of 12 meters or more in length overall shall display placards to notify the crew and passengers of the ship’s disposal requirements.

Does the garbage management plan have to be approved or certified?
No. but there must be a garbage management plan for the crew to follow in accordance with the guidelines for the implementation of Annex V MARPOL 73/78. It shall provide written procedures for minimizing, collecting, storing, processing and disposing of garbage, including the use of equipment on board. It shall also designate the person or persons in charge of carrying out the plan. There shall also be a record book for recording each discharge into the sea, to a reception facility or a completed incineration.

Do garbage records have to be kept?
Yes. Each discharge into the sea or to a reception facility, or completed incineration, shall be recorded in the Garbage Record Book and signed for on the date of the incineration or discharge by the officer in charge.

Is training required?
Yes. Training should include instruction on the definitions of garbage as well as the applicable requirements for handling and disposal.

Can port State inspections be carried out?
Yes. The competent authority of the Government of a Party to the Convention may inspect the Garbage Record Book onboard any ship to which regulation ten applies while the ship is in its ports or offshore terminals and may make a copy of any entry in that book and may require the master of the ship to certify that the copy is a true copy of such an entry.

USCG POLICY ON ELECTRONIC LOGBOOKS

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- NAVIGATION AND VESSEL INSPECTION CIRCULAR (NVIC) number 01-23
- GUIDANCE FOR THE VOLUNTARY USE OF MARPOL ELECTRONIC RECORD BOOKS ON U.S. FLAG VESSELS
- PUBLISHED: August 4, 2023

As ship owners and operators increasingly focus on ways to operate in an environmentally responsible manner and aim to ease the burden associated with paperwork through electronic means, keeping operational logs in an electronic format has become a popular consideration. The use of electronic record books has benefits for the retention of records by companies, crew, and officers.

The use of an electronic record book is an alternative method to a hard-copy record book. The electronic record book allows ships to utilize shipboard technology to reduce administrative burdens and contribute to onboard environmental initiatives (e.g., reduction of paper use). Existing U.S. regulations do not specifically address the design and installation of electronic record books on commercial vessels.

Applicable record books: This circular applies to any U.S.-flagged vessel seeking to use electronic record books to meet the recordkeeping requirements in the following MARPOL regulations:

(1) Oil Record Book, parts I and II (MARPOL Annex I, regulations 17.1 and 36.1);
(2) Cargo Record book (MARPOL Annex II, regulation 15.1);
(3) Garbage Record Book, parts I and II (MARPOL Annex V, regulation 10.3);
(4) Ozone-depleting Substances Record Book (MARPOL Annex VI, regulation 12.6);
(5) Recording of the tier and on/off status of marine diesel engines (MARPOL Annex VI, regulation 13.5.3);
(6) Record of Fuel Oil Changeover (MARPOL Annex VI, regulation 14.6); and
(7) Record Book of Engine Parameters (NOx Technical Code, paragraph 6.2.2.7).

Following a review of the documentation requested in paragraph 1 of this section, CG-ENG may require in-person or virtual demonstration of the electronic record book by the manufacturer requesting the acknowledgment of assessment for general compliance.

Electronic record books that receive an acknowledgment of assessment for general compliance with MEPC.312(74) will be listed on the Coast Guard's website (https://www.dco.uscg.mil/CG-ENG/). It is important to note that this acknowledgment by the Coast Guard does not constitute allowance for use on a particular U.S.-flagged vessel. This acceptance authorizes those electronic record books to be considered for use on a U.S.-
flagged vessel, as outlined below.

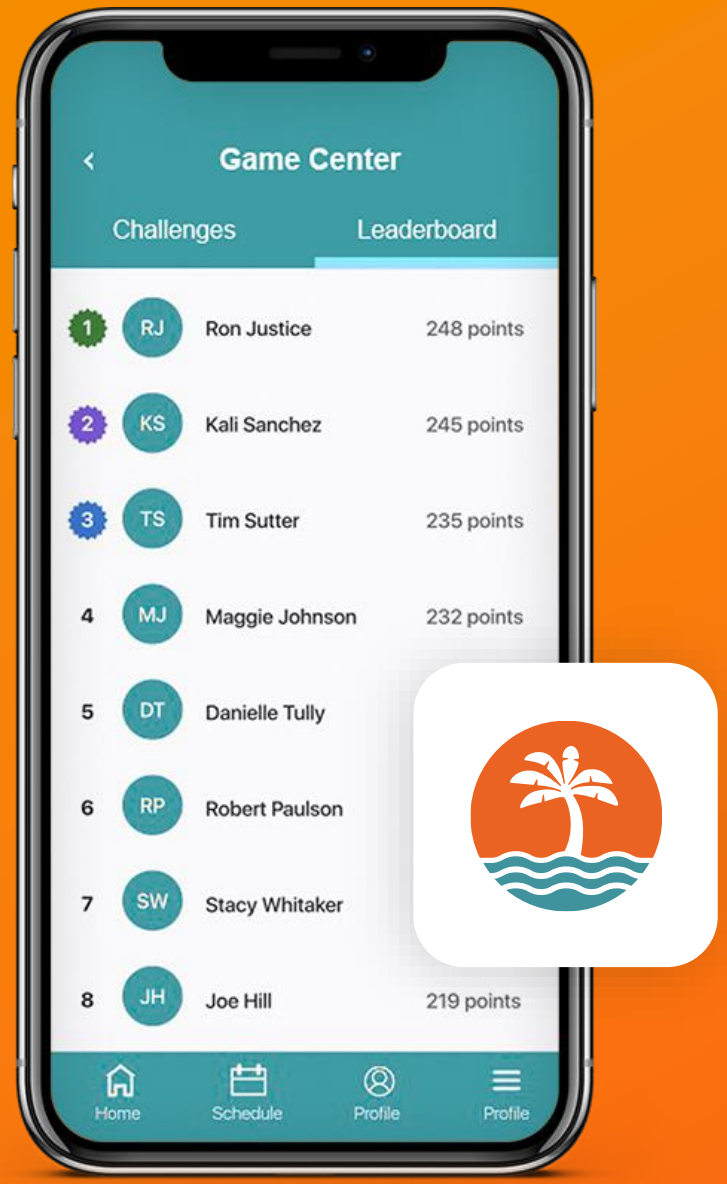
U.S.-flagged vessels seeking use of assessed electronic record books: In order to use a Coast Guard assessed electronic record book to meet MARPOL requirements, ship owners and operators must obtain a Declaration of MARPOL Electronic Record Book. Per 46 CFR § 8.130, the Coast Guard has delegated authority to multiple Authorized Classification Society (ACS) to issue convention certificates on behalf of the United States.

Upon successful application and onboard verification by the ACS in accordance with reference (a) section 4, the vessel will be issued a “Declaration of MARPOL Electronic Record Book” from an ACS on behalf of the United States Government. This declaration will be required to be kept onboard the vessel for inspection.

If a vessel is not serviced by an ACS, the owner or operator may apply to the local Officer in Charge, Marine Inspection (OCMI) for a “Declaration of MARPOL Electronic Record Book” to use an accepted product that is listed on the Coast Guard’s website (https://www.dco.uscg.mil/CG-ENG/).

- Upon successful application and onboard verification by a Coast Guard marine inspector, in accordance with reference (a) section 4, the OCMI will issue a “Declaration of MARPOL Electronic Record Book” letter.

- This declaration will be required to be kept onboard the vessel for inspection.



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