

INTERNATIONAL SHIPPING REGULATION UPDATE

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Introduction:

My brief today is to provide a review of recent International Regulations and a perspective of what regulations are coming in the near future.

In discussing this subject, two concepts should be borne in mind:

1. Most International Regulations become U.S. National Regulations;
2. All practicing port engineers, vessel owners and managers need to understand the regulations as they apply to the types and ages of vessels they are running.

It should also be noted that it would be cumbersome to cover all of the new and upcoming regulations and take more time than we have available this morning. With this in mind, I will try to cover those, which most greatly impact our group of engineering professionals.

In order to deal with this subject, I will address the regulations in segments, which appear to me to be related.

It should also help us all to remember that International Shipping Regulations are primarily generated and approved at the International Maritime Organization (IMO) and then ratified and enacted by member States (Flag States). We need to also consider that IMO has four Committees of which the two main Committees, the MSC and MEPC, are where most of the regulations are generated prior to being approved by the Assembly. The Committees are:

The Maritime Safety Committee (MSC)	Responsible for safety issues e.g. SOLAS
The Marine Environmental Protection Committee (MEPC)	Responsible for pollution prevention issues e.g. MARPOL
The Facilitation Committee (FAL)	Responsible for facilitation of the Conventions
The Legal Committee (LEGAL)	Provides the legal review of IMO documents and Conventions

Today we will be primarily dealing with the work of the MSC and the MEPC.

Maritime Safety Committee (MSC):

The MSC last met for its 77th session from the 28th of May to the 6th of June 2003. During that meeting, a number of issues were discussed but for the purpose of our discussion today, I will concentrate on agenda items:

- 5. Bulk Carrier Safety
- 8. Places of Refuge

5. Bulk Carrier Safety:

Under this subject, the Committee:

- Adopted performance standards for cargo hold water level detectors as required by SOLAS, Chapter XII, Regulation 12, with a date of application tied to the adoption of Resolution MSC.145(77). Regulation 12 should enter into force on 1 July 2004.

There are two means allowed for detecting water levels under the standards:

1. The direct method which determines the presence of water by physical contact;
2. The indirect method.

The detectors should be located:

- in the aft part of each cargo hold; or
- the lowest part of the hold and;

the detectors should be capable of continuous operation while the ship is at sea.

Alarms must be both visual and audio.

- Adopted Regulation MSC.146(77) on the Application of IACS Unified Requirements S26, S27, S30 and S31. These IACS Unified Requirements address:

S26 - Strength and securing of small hatches on the exposed fore deck;

S27 - Strength requirements for fore deck fittings and equipment

S30 - Cargo hatch cover securing arrangements for bulk carriers not built in accordance with UR S21 (Rev. 3) (Scantling evaluation hatch covers & coamings)

S31 - Renewal criteria for side shell frames in single skin bulk carriers not built in accordance with UR 21 Rev. 1 or subsequent revisions.

- Requested submissions from Member Government relative to Guidelines for bulk carrier hatch cover surveys and owner's inspection and maintenance.
- Discussed the ban on alternate hold loading re-defined as "Banning bulk carrier from sailing with any hold empty" and asked DE 47 to prepare relevant amendments to SOLAS, Chapter XII.

The banning provision, at this time would be:

"Banning bulk carriers from sailing with any hold empty: Bulk carriers in the full load condition (90% of the ship's deadweight at the relevant freeboard) of single-side skin construction and 150 m in length and over, constructed before 1 July 1999, after reaching 10 years of age, or constructed after 1 July 1999 if not in compliance with SOLAS chapter XII and IACS UR S12 Rev 2.1, shall be banned from sailing with any hold empty. The ban shall not apply to ships constructed before 1 July 1999 if they comply with SOLAS chapter XII and IACS UR S12 Rev 2.1".

- Discussed the double hull bulk carrier concept with a double side space minimum clearance of 600 mm if transversely framed or 800 mm if longitudinally framed while maintaining the minimum distance between the outer and inner shells at 1,000 mm.
- Discussed the bulkhead strength requirement but in view of recent regulations determined that no further action be taken on this issue for the time being.

It should be noted that the bulk carrier issues have been ongoing for quite a while and that additional issues are due for discussion at MSC 78 scheduled for May 2004. Some of these are:

- Double hulls for bulk carriers over 150 m in length
- Improved coating
- Steel Repair Standards
- Ballast system capability

8. Places of Refuge:

Resultant from the “PRESTIGE” and previous casualties, the Committee addressed the place of refuge question and forwarded to the Assembly two Resolutions, which were adopted in November 2003.

Resolution A.949(23) Guidelines on places of refuge for ships in the need of assistance covers a situation where the ship needs assistance, but the safety of life is not involved.

Resolution A.950(23) Maritime Assistance (MAS) for situation when both the ship and crew are at risk.

Summary:

Obviously, I have only covered two of the Committee subjects out of 25, but these are the two subjects, which most concern port engineers.

I should note, however, that another pertinent subject was discussed, namely, Measures to Enhance Maritime Security, but I assume our speaker from the U.S. Coast Guard will update us on the U.S. Application of Port and Vessel Security.

Marine Environmental Protection Committee (MEPC-50)

The MEPC met from the 24th of November through the 5th of December 2003, during the IMO Assembly/Council Meetings and enacted new amendments to MARPOL, which included:

- New Tanker Regulations:
 1. Revisions to Annex I, Regulation 13G
 2. A new Annex I, Regulation 13H
 3. Amendments to the CAS (Condition Assessment Scheme), which is contained in MARPOL under Additional Information 8 (after the Annex) with reference to Regulation 13G.

Note 1: For single hull tankers at age 15 years

4. Other changes of an incidental nature, including an on-board requirement for a Continuous Synopsis Record, changes in the IOPP Certificate, etc.

These amendments indicated in (1) and (2) above will come into force upon ratification in the 2004-2005 timeframe, in fact, the plan is for new Regulations

13H and the amendments to Regulation 13G to enter into force in April 2004 (4th).

These two changes to MARPOL 73/78 are major in that they effectively eliminate Category 1 tankers over 5000 gt as of 2005 and require Category 2 and 3 tankers on a sliding scale from 2005 to 2010 to be subjected to a CAS for further trading.

Reg. 13G

The actual dates as determined by MSC50 under Regulation 13G are:

An oil tanker to which this regulation applies shall comply with the requirements of regulation 13F of this Annex not later than [4] April 2005 or the anniversary of the date of delivery of the ship on the date or in the year specified in the following table:

Category of oil tanker	Date of year
Category 1	[4] April 2005 for ships delivered on [4] April 1982 or earlier 2005 for ships delivered after [4] April 1982
Category 2 and Category 3	[4] April 2005 for ship delivered on [4] April 1977 or earlier 2005 for ships delivered after [4] April 1977 but before 1 January 1978 2006 for ships delivered in 1978 and 1979 2007 for ships delivered in 1980 and 1981 2008 for ships delivered in 1982 2009 for ships delivered in 1983 2010 for ships delivered in 1984 or later

Notwithstanding the provisions of the preceding paragraph of the regulation, in case of a Category 2 or 3 oil tanker fitted with only double bottoms or double sides not used for the carriage of oil and extending to the entire cargo tank length or double hull spaces which are not used for the carriage of oil and extend to the entire cargo tank length, but does not fulfill conditions for being exempted from the provisions of paragraph (1)(c) of the regulation, the Administration may allow continued operation of such a ship beyond the date specified in the above paragraph provided that:

- (a) the ship was in service on 1 July 2001;
- (b) the Administration is satisfied by verification of the official records that the ship complied with the conditions specified above;
- (c) the conditions of the ship specified above remain unchanged; and

- (d) such continued operation does not go beyond the date on which the ship reaches 25 years after the date of its delivery.

CAS:

These dates and the requirement for Category 2 & 3 tankers leads us naturally into item 3 (CAS) as Regulation 13G states:

“(6) A Category 2 or 3 oil tanker of 15 years and over after the date of its delivery shall comply with the Condition Assessment Scheme adopted by the Marine Environment Protection Committee by resolution MEPC.94 (46), as may be amended, provided that such amendments shall be adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention relating to amendment procedures applicable to an appendix to an Annex.

(7) The Administration may allow continued operation of a Category 2 or 3 oil tanker beyond the date specified in paragraph (4) of this regulation, if satisfactory results of the Condition Assessment Scheme warrant that, in the opinion of the Administration, the ship is fit to continue such operation, provided that the operation shall not go beyond the anniversary of the date of delivery of the ship in 2015 or the date on which the ship reaches 25 years after the date of its delivery, whichever is the earlier date.”

For the purpose of this regulation, oil tankers are divided into the following categories:

“Category 1 oil tanker” means an oil tanker of 20,000 tons deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo, and of 30,000 tons deadweight and above carrying oil other than the above, which does not comply with the requirements of new oil tankers as defined in regulation 1(26) of this Annex;

“Category 2 oil tanker” means an oil tanker of 20,000 tons deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo, and of 30,000 tons deadweight and above carrying oil other than the above, which complies with the requirements for new oil tankers as defined in regulation 1(26) of this Annex; and

“Category 3 oil tanker” means an oil tanker of 5,000 tons deadweight and above but less than that specified in subparagraph (a) or (b) of this paragraph.

Condition Assessment Surveys are, in fact, thorough and complex Surveys roughly equivalent to the classification ESP Surveys and may well be performed

by a classification society on behalf of an Administration with one notable exception. CAS requires that the Administration confirm the effectiveness of the survey planning, survey and reporting, and only the Administration can issue the CAS Certificate.

With this in mind, some Administrations are appointing intermediate organizations to conduct this review on their behalf and recommend issuance of the Certificate.

Martin & Ottaway has been requested by at least one administration to conduct such services on their behalf.

Reg. 13H:

New Regulation 13H addresses the European Union (EU) concerns and actions regarding heavy oil tankers in the wake of the “PRESTIGE” casualty and one of the key discussion points at IMO was the definition of heavy oil in order to ban single hull tankers over 5000 dwt carrying heavy oil on international trade routes.

The heavy oil definitions agreed on were:

crude oils having a density at 15° C higher than 900 kg/m³;

fuel oils having either a density at 15° C higher than 900 kg/m³ or a kinematic viscosity at 50° C higher than 180 mm²/s;

bitumen, tar and their emulsions.

For reference, some additional “in force” dates are:

- Permanent IMO Number markings on tankers over 300 gt – 1 July 2004 (MSC)
- Freeboard changes to tankers over 24m – 1 January 2005 (MSC)
- Standards for permanent access to ballast tanks – 1 January 2005 (MSC)
- Change in the bow height formula for tankers – 1 January 2005 (MSC)
- Requirement for manual intervention from the bridge on automated engine control – 1 July 2004 (MSC)

MEPC-51:

Another meeting of the MEPC (MEPC 51) was held from the 29th of March to the 2nd of April 2004 and dealt with the following selected subjects:

- Editorial changes in MARPOL Regulations:

Regulation 13G becomes Regulation 20

Regulation 13H becomes Regulation 21

To be adopted at MEPC 52 in October 2004

- Prevention of Air Pollution on Ships – Ongoing with considerable dispute from a number of Countries
- Anti-fouling systems – Only 8 Governments have ratified (9% world tonnage) therefore the likelihood of entering into force are slim in the near future (req: 25 States/25%)
- Particularly Sensitive Sea Areas (PSSA's)
 - Western Europe – previously agreed
 - Torres Strait – previously agreed
 - Galapagos Islands – agreed at this session
 - Canary Islands – agreed at this session
 - Baltic – agreed at this session
- Ship recycling

Guidelines were adopted at Assembly 22 (2002) as voluntary. Despite the pressure from various environmental groups, but discussion continues.

- Amendments to MARPOL 73/78 – Annex IV

The revised MARPOL Annex IV containing regulations for the prevention of pollution by sewage from ships was formally adopted and is expected to enter into force on 1 August 2005. Annex IV contains a set of regulations regarding the discharge of sewage into the sea, ships' equipment and systems for the control of sewage discharge, the provision of facilities at ports and terminals for the reception of sewage, and requirements for survey and certification. It also includes a model International Sewage Pollution Prevention Certificate to be issued by national shipping administrations to ships under their jurisdiction. The revised Annex will apply to new ships engaged in international voyages, of 400 gross tonnage and above or which are certified to carry more than 15 persons. Existing ships will be required to comply with the provisions of the revised Annex IV five years after the date of its entry into force. The Annex requires ships to be equipped with either a sewage treatment plant or a sewage comminuting and disinfecting system or a sewage holding tank. The discharge of sewage into the sea will be prohibited, except when the ship has in operation an approved sewage treatment plan and is discharging comminuted and disinfected sewage using an approved system at a distance of more than three nautical miles from the nearest

land; or is discharging sewage which is not comminuted or disinfected at a distance of more than 12 nautical miles from the nearest land.

- Harmful aquatic organisms in ballast water

A Ballast Water Conference was held from the 29th through the 31st of March 2004 and adopted the International Convention for the Control and Management of Ship's Ballast Water and Sediments. This Convention is presently out there for ratification by Member States.

The Convention states the criteria to be met under Standard/Regulations D-2 which reads:

"Ballast Water Performance Standard

Ships conducting Ballast Water Management in accordance with this regulation shall discharge less than 10 viable organisms per cubic metre greater than or equal to 50 micrometres in minimum dimension and less than 10 viable organisms per milliliter less than 50 micrometres in minimum dimension and greater than or equal to 10 micrometres in minimum dimensions; and discharge of the indicator microbes shall not exceed the specified concentrations described in paragraph 2."

(Paragraph 2 refers to pumping rates – Ballast Water Exchange Method)

At the session of the MEPC, the discussion centered on:

- The inter-relation of the Convention guidelines and possible training
- Development of an action plan supporting the Convention and in particular the Regulation D-5 review

Reference is made to the working group timeline.

Regarding the ongoing correspondence groups(s) work on the subject it is important to note that no machinery or equipment has yet been approved under this convention and that there are differing opinions as to testing and sampling e.g.

- methods
- ease of use
- at prototype, type approval or on-board the ship

The Convention application to ships subject to verification would be:

- If built prior to 2009
Ballast capacity 1500 – 5000 M³ exchange or cleaned (D-1/D-2) until 2014 then D-2
- Ballast capacity less than 1500 or more than 5000 m³ D-1 or D-2 until 2016 then D-2
- If built 2009 or later
In accordance with D-2
- Generally D-1 if used applies
200 nautical miles from land in 200m

An additional issue addressed by the Convention is the requirement for sediment facilities.

The Convention will enter into force 12 months after ratification by Member States representing 35% of world tonnage.

Conclusion:

What I just went through is just a sampling of the new and upcoming International Regulation affecting us all but hopefully served to give you at least a glimpse into the future.

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