

IV. OCEANS

2. Marine Pollution

B. Vessel Source Pollution

(1) International Issues

(A) International Convention for the Prevention of Pollution from Ships (MARPOL Convention)

Amendments to Annex I (Regulations for the Prevention of Pollution by Oil) of the MARPOL Convention to ban heavy fuel oil from the Antarctic (adopted in 2010 Resolution MEPC 189(60)) entered into force on 1 August. A new Chapter 9 on special requirements for the use or carriage of oils in the Antarctic area was added in Regulation 43, with the goal of protecting the Antarctic from pollution by heavy grade oil. This means that ships, when traversing the Antarctic area, whether they are passenger or cargo ships, would need to switch to a different fuel type.

The Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO) held its sixty-second session on 11–15 July. MEPC-62 approved the Guidelines for the Carriage of Blends of Petroleum Oil and Bio-Fuels, and these guidelines are effective as of 1 September. The guidelines are designed to clarify the confusion as to similar products composed of petroleum oil and bio-fuels bearing different trade names. The guidelines make clear the definition and carriage requirements for bio-fuel blends. When bio-fuels contain 75 percent or more of petroleum oil, the carriage and discharge of such blends are subject to MARPOL Annex I; bio-fuel blends containing greater than 1 percent but less than 75 percent of petroleum oil are subject to MARPOL Annex II; and bio-fuel blends containing 1 percent or less of petroleum oil are subject to MARPOL Annex II. The guidelines also specify that the physical blending of petroleum oil and bio-fuels to create new products while on board during a sea voyage shall be prohibited.

MEPC-62 also adopted amendments to the Regulations for the Prevention of Air Pollution from Ships under MARPOL Annex VI and to introduce energy efficiency measures to reduce greenhouse gases from international shipping. A new Chapter 4 (added to Annex VI) was adopted on Regulations on Energy Efficiency for Ships, which makes the Energy Efficiency Design Index (EEDI) mandatory for new ships. Instead of prescribing the specific design of a ship, the EEDI sets a performance level by establishing a minimum energy efficiency level with respect to greenhouse gas emissions reduction per capacity mile. Therefore, the EEDI leaves the choice of technologies to use in the design of a specific ship to the industry, as long as the required energy-efficiency level is

achieved. The industry may thus choose the most cost-efficient solutions for ships to comply with the regulations. In addition, these amendments require all ships to keep on board a ship-specific Ship Energy Efficiency Management Plan (SEEMP). The SEEMP establishes a mechanism for ship owners and operators to review the operational practices and take into account technology improvement to achieve the optimal energy efficiency of a ship. The regulations are expected to enter into force as of 1 January 2013.

(B) International Convention for the Safety of Life at Sea (SOLAS Convention)

The IMO's Maritime Safety Committee (MSC) approved a draft amendment to the SOLAS Convention's Regulation VI/5 to Prohibit the Physical Blending of Bulk Liquid Cargoes during the Sea Voyage (blending while in port is accepted) at its eighty-ninth session (MSC-89) on 11-20 May. Physical blending utilizes the ship's cargo pumps and piping system to circulate onboard two or more different cargoes with the intent to achieve a cargo with a new product designation.

MSC-89 approved the guidelines on the procedures for in-service maintenance and the repair of coating systems for cargo oil tanks of crude oil tankers. The guidelines take into account the amendments to SOLAS Regulation II-1/3-11 on Corrosion Protection of Cargo Oil Tanks of Crude Oil Tankers adopted by Resolution MSC.291(87) and Resolution MSC.288(87) on the Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers adopted in May 2010. The purpose of the guidelines is to assist surveyors, ship owners, ship managers, shipyards, flag state administrations, and other interested parties in monitoring, assessing, maintaining, and repairing protective coatings in the cargo tanks of crude oil tankers. These guidelines make a distinction between 'maintenance' and 'repair' and contain coating assessment methods to evaluate whether the coating is in 'poor,' 'fair,' or 'good' condition. 'Maintenance' means minor coating restoration work regularly performed by a ship's crew using normal shipboard means and tools to maintain 'good' or 'fair' conditions, whereas 'repair' refers to coating restoration work of a long-term nature, usually carried out in dry dock, to restore a 'fair' or 'poor' condition to a 'good' condition and often the specialized preparation, manpower, and equipment that are needed.

The IMO Assembly adopted the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers (ESP Code) on 30 November. The ESP Code is a comprehensive revision of the 1993 Assembly Resolution A.744 (18) setting forth the guidelines on the enhanced program of inspections during surveys of bulk carriers and oil tankers (the ESP Guidelines), with subsequent revisions. Regulation XI-1/2 of the SOLAS Convention makes the ESP Guidelines mandatory. Given the numerous amendments made to the guidelines, it was considered necessary to have a

comprehensive revision of the guidelines in order to ensure the effective implementation of their provisions and to maintain the highest practical level of safety. For this reason, the ESP Code was adopted. The ESP Code will become effective upon entry into force of the associated amendments to Chapter XI-1 of the SOLAS Convention, which is expected to take place in May 2012.

(C) International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW-F Convention)

The requirement for the entry into force of the 1995 STCW-F Convention was met on 29 September when the Republic of Palau ratified the convention, thus bringing the number of ratifications to the required fifteen. As a result, the convention will enter into force on 29 September 2012. In addition to Palau, the other countries that have ratified the convention include Canada, Denmark, Iceland, Kiribati, Latvia, Mauritania, Morocco, Namibia, Norway, the Russian Federation, Sierra Leone, Spain, the Syrian Arab Republic, and Ukraine.

The STCW-F Convention sets the certification and minimum training requirements for crews of seagoing fishing vessels of twenty-four metres in length and above. The convention consists of fifteen articles and an annex containing technical regulations.

(D) Protocol to the 1996 International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS Protocol)

On 14 April, Denmark signed (subject to ratification) the HNS Protocol, which makes it the first country to sign the protocol.

(E) 2004 International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention)

Following the recommendations of the three meetings of the Joint Group of Experts on the Scientific Aspects of Marine Environment Protection Ballast Water Working Group, MEPC-62 granted final approval to two, and basic approval to seven, ballast water management systems that make use of active substances. The two ballast water management systems that acquired final approval were the HHI Hi-Ballast system (filter version) and the Purimar TM system. The seven basic systems that received approval were the ERMA FIRST system, the BlueSeas system, the PERACLEAN® OCEAN system, the JFE BallastAce system, the GEA Westfalia Separator Ballast Master system, the BlueWorld system, and the Neo-Purimar TM system.

In response to the concerns raised by the Belgian and Dutch delegations on hopper dredgers, MEPC-62 agreed that water that is present in the hopper area is not considered to be ballast water.

MEPC-62 reiterated that the rate of bio-invasions continues to increase, so it will be in the interest of flag states to ratify the BWM Convention to achieve its entry into force at the earliest opportunity. This convention complies with the policy of cleaner shipping.

(2) Miscellaneous Issues

(A) 2009 International Convention for the Safe and Environmentally Sound Recycling of Ships (Hong Kong Convention)

MEPC-62 adopted two updated guidelines to assist in the implementation of the Hong Kong Convention: the 2011 Guidelines for the Development of the Ship Recycling Plan (which revoked the earlier 2004 version) and the 2011 Guidelines for the Development of the Inventory of Hazardous Materials (which replaced the earlier 2009 version). The 2011 Guidelines for the Development of the Ship Recycling Plan provides recommendations for stakeholders on the development of a ship-specific recycling plan (SRP) in accordance with the requirements of the Ship Recycling Convention. The 2011 Guidelines for the Development of the Inventory of Hazardous Materials are designed to assist the stakeholders in the practical and logical development of the inventory in accordance with the Hong Kong Convention.

(B) 2007 Nairobi International Convention on the Removal of Wrecks (Wreck Removal Convention)

The Legal Committee met on 4-8 April for its ninety-eighth session and approved a draft Assembly resolution on the issue of wreck removal certificates to bareboat-registered vessels, which recommends, among other things, that such certificates should be issued by the flag states. The draft Assembly resolution aims to assist those states preparing to ratify the Wreck Removal Convention and encourage standard practice in this regard, by providing certainty in the future application of the convention; removing ambiguity regarding the issuing of wreck removal certificates to bareboat-registered vessels and avoiding the co-existence of certificates; assisting in applying the convention in a uniform manner; and ensuring consistency with Resolution A.1028 (26) on the Issue of Bunkers Certificates under the 2001 International Convention on Civil Liability for Bunker Oil Pollution Damage.

(C) Port State Control

The IMO Assembly's twenty-seventh session, which was held on 21-30 November, has adopted Resolution A.1052 (27) on Procedures for Port State

Control. The goal of this resolution is to update the port state procedures based on the experience gained so far from their implementation.

(3) Regional Issues

(A) North American Emission Control Area (ECA) and the United States Caribbean Sea ECA

Under the MARPOL Convention, Annex VI, the emission of sulphur oxides, nitrogen oxides, and particulate matter from ships in an ECA are subject to more stringent controls than the global limits. The first two designated ECAs are the Baltic Sea area and the North Sea area. The third is the North American ECA, which was adopted in March 2010 and entered into force on 1 August 2011. It will take effect in August 2012.

The United States Caribbean Sea, which is forty to fifty nautical miles from Puerto Rico, was designated as an ECA through an amendment adopted at MEPC-62. This area includes the waters adjacent to the coasts of Puerto Rico (part of US territory) and the Virgin Islands (also part of US territory). However, under these regulations, exemptions from the requirements of 0.1 percent sulphur in fuel will be made for old steam ships in the North American and Caribbean ECAs until 2020. These MARPOL amendments are expected to enter into force on 1 January 2013, with the new ECA taking effect twelve months later.

(B) Bonifacio Particularly Sensitive Sea Area (PSSA) Approved

MEPC-62 approved the designation of the Strait of Bonifacio as a PSSA, yet the associated protective measures are still subject to the decision of the MSC in 2012.

(4) Offshore Facilities

Following the oil spill caused by the *Montara* (in Australia in 2009) and the *Deepwater Horizon* (in the United States in 2010) offshore installations, discussions at the regional and international levels were initiated to address the issue of liability and compensation for damage caused by offshore facilities. At the international level, the Legal Committee of the IMO discussed liability and compensation issues connected with transboundary pollution damage from offshore oil exploration and exploitation activities at its ninety-eighth session in April.

The European Commission has been active in proposing new legislation. On 27 October, the European Commission initiated two legislative proposals. One proposal was for Regulation COM(2011)588 on Safety of Offshore Oil and Gas Prospection, Exploration and Production Activities. It introduces clear rules for the effective prevention of, and response to, offshore accidents through licensing

procedures, emergency planning, involvement of independent verifiers, and inspections. The second proposal was for Regulation COM (2011) 690 final on the Accession of the EC to the Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and Its Subsoil (Offshore Protocol). In this proposal, the Commission proposed to ratify the 1976 Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, which is a regional convention among Mediterranean states to take measures to prevent, abate, combat, and, to the fullest possible extent, eliminate pollution of the Mediterranean Sea area from exploration and exploitation of the continental shelf and the seabed and its subsoil. The Offshore Protocol was adopted on 14 October 1994 and entered into force on 24 March 2011. The goal of the Offshore Protocol is to take into account the provisions of the 1982 United Nations Convention on the Law of the Sea.

Hui Wang
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