ANNEX 9

RESOLUTION MEPC.213(63)

Adopted on 2 March 2012

2012 GUIDELINES FOR THE DEVELOPMENT OF A SHIP ENERGY EFFICIENCY MANAGEMENT PLAN (SEEMP)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

RECALLING ALSO that, at its sixty-second session, the Committee adopted, by resolution MEPC.203(62), amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (inclusion of regulations on energy efficiency for ships in MARPOL Annex VI),

NOTING the amendments to MARPOL Annex VI adopted at its sixty-second session by inclusion of a new chapter 4 for regulations on energy efficiency for ships, are expected to enter into force on 1 January 2013 upon their acceptance on 1 July 2012,

NOTING ALSO that regulation 22 of MARPOL Annex VI, as amended, requires each ship to keep on board a ship specific Ship Energy Efficiency Management Plan taking into account guidelines developed by the Organization,

RECOGNIZING that the amendments to MARPOL Annex VI requires the adoption of relevant guidelines for smooth and uniform implementation of the regulations and to provide sufficient lead time for industry to prepare,

HAVING CONSIDERED, at its sixty-third session, the draft 2012 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP),

1. ADOPTS the 2012 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP), as set out at annex to the present resolution;

2. INVITES Administrations to take the annexed Guidelines into account when developing and enacting national laws which give force to and implement provisions set forth in regulation 22 of MARPOL Annex VI, as amended;

3. REQUESTS the Parties to MARPOL Annex VI and other Member Governments to bring the annexed Guidelines related to the Ship Energy Efficiency Management Plan (SEEMP) to the attention of masters, seafarers, shipowners, ship operators and any other interested groups;

4. AGREES to keep these Guidelines under review in light of the experience gained; and

5. REVOKES the Guidance circulated by MEPC.1/Circ.683, as from this date.

ANNEX

2012 GUIDELINES FOR THE DEVELOPMENT OF A SHIP ENERGY EFFICIENCY MANAGEMENT PLAN (SEEMP)

CONTENTS

1 INTRODUCTION

1.1 These Guidelines have been developed to assist with the preparation of Ship Energy Efficiency Management Plan (hereafter referred to as the "SEEMP") that are required by regulation 22 of Annex VI of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) (hereafter referred to as the "Convention").

1.2 A SEEMP provides a possible approach for monitoring ship and fleet efficiency performance over time and some options to be considered when seeking to optimize the performance of the ship.

1.3 These Guidelines should be used primarily by ships' masters, operators and owners in order to develop the SEEMP.

1.4 A sample form of a SEEMP is presented in the appendix for illustrative purposes.

2 DEFINITIONS

2.1 For the purpose of these Guidelines, the definitions in the Annex VI of the Convention apply.

2.2 "Company" means the owner of the ship or any other organization of person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the shipowner.

2.3 "Safety Management system" means a structured and documented system enabling company personnel to implement effectively the company safety and environmental protection policy, as defined in paragraph 1.1 of International Safety Management Code.

3 GENERAL

3.1 In global terms it should be recognized that operational efficiencies delivered by a large number of ship operators will make an invaluable contribution to reducing global carbon emissions.

3.2 The purpose of a SEEMP is to establish a mechanism for a company and/or a ship to improve the energy efficiency of a ship's operation. Preferably, the ship-specific SEEMP is linked to a broader corporate energy management policy for the company that owns, operates or controls the ship, recognizing that no two shipping companies are the same, and that ships operate under a wide range of different conditions.

3.3 Many companies will already have an environmental management system (EMS) in place under ISO 14001 which contains procedures for selecting the best measures for particular vessels and then setting objectives for the measurement of relevant parameters, along with relevant control and feedback features. Monitoring of operational environmental efficiency should therefore be treated as an integral element of broader company management systems.

3.4 In addition, many companies already develop, implement and maintain a Safety Management System. In such case, the SEEMP may form part of the ship's Safety Management System.

3.5 This document provides guidance for the development of a SEEMP that should be adjusted to the characteristics and needs of individual companies and ships. The SEEMP is intended to be a management tool to assist a company in managing the ongoing environmental performance of its vessels and as such, it is recommended that a company develops procedures for implementing the plan in a manner which limits any onboard administrative burden to the minimum necessary.

3.6 The SEEMP should be developed as a ship-specific plan by the company. The SEEMP seeks to improve a ship's energy efficiency through four steps: *planning*, *implementation*, *monitoring*, and *self-evaluation and improvement*. These components play a critical role in the continuous cycle to improve ship energy management. With each iteration of the cycle, some elements of the SEEMP will necessarily change while others may remain as before.

3.7 At all times safety considerations should be paramount. The trade a ship is engaged in may determine the feasibility of the efficiency measures under consideration. For example, ships that perform services at sea (pipe laying, seismic survey, OSVs, dredgers, etc.) may choose different methods of improving energy efficiency when compared to conventional cargo carriers. The length of voyage may also be an important parameter as may trade specific safety considerations.

4 FRAMEWORK AND STRUCTURE OF THE SEEMP

4.1 Planning

4.1.1 Planning is the most crucial stage of the SEEMP, in that it primarily determines both the current status of ship energy usage and the expected improvement of ship energy efficiency. Therefore, it is encouraged to devote sufficient time to planning so that the most appropriate, effective and implementable plan can be developed.

Ship-specific measures

4.1.2 Recognizing that there are a variety of options to improve efficiency – speed optimization, weather routeing and hull maintenance, for example – and that the best package of measures for a ship to improve efficiency differs to a great extent depending upon ship type, cargoes, routes and other factors, the specific measures for the ship to improve energy efficiency should be identified in the first place. These measures should be listed as a package of measures to be implemented, thus providing the overview of the actions to be taken for that ship.

4.1.3 During this process, therefore, it is important to determine and understand the ship's current status of energy usage. The SEEMP then identifies energy-saving measures that have been undertaken, and determines how effective these measures are in terms of improving energy efficiency. The SEEMP also identifies what measures can be adopted to further improve the energy efficiency of the ship. It should be noted, however, that not all measures can be applied to all ships, or even to the same ship under different operating conditions and that some of them are mutually exclusive. Ideally, initial measures could yield energy (and cost) saving results that then can be reinvested into more difficult or expensive efficiency upgrades identified by the SEEMP.

4.1.4 Guidance on Best Practices for Fuel-Efficient Operation of Ships set out in chapter 5, can be used to facilitate this part of the planning phase. Also, in the planning process, particular consideration should be given to minimize any onboard administrative burden.