

**ANNEX 10**

**RESOLUTION MEPC.185(59)**

**Adopted on 17 July 2009**

**GUIDELINES FOR THE DEVELOPMENT OF  
A VOC MANAGEMENT PLAN**

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 conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING that the revised MARPOL Annex VI was adopted by resolution MEPC.176(58) which is expected to enter into force on 1 July 2010,

NOTING ALSO that regulation 15.6 of the revised Annex VI requires a tanker carrying crude oil to have onboard and implement a VOC management plan approved by the Administration, and that such a plan shall be prepared taking into account the guidelines developed by the Organization,

HAVING CONSIDERED the draft Guidelines for the development of a VOC management plan prepared by the Sub-Committee on Bulk Liquids and Gases at its thirteenth session,

1. ADOPTS the Guidelines for the development of a VOC management plan, as set out in the Annex to this resolution; and
2. INVITES Governments to apply the Guidelines from 1 July 2010.

## ANNEX

### **GUIDELINES FOR THE DEVELOPMENT OF A VOC MANAGEMENT PLAN**

#### **1 Objectives**

- .1 The purpose of the VOC management plan is to ensure that the operation of a tanker, to which regulation 15 of MARPOL Annex VI applies, prevents or minimizes VOC emissions to the extent possible.
- .2 Emissions of VOCs can be prevented or minimized by:
  - .1 optimizing operational procedures to minimize the release of VOC emissions; and/or
  - .2 using devices, equipment, or design changes to prevent or minimize VOC emissions.
- .3 To comply with this plan, the loading and carriage of cargoes which generate VOC emissions should be evaluated and procedures written to ensure that the operations of a ship follow best management practices for preventing or minimizing VOC emissions to the extent possible. If devices, equipment, or design changes are implemented to prevent or minimize VOC emissions, they shall also be incorporated and described in the VOC management plan as appropriate.
- .4 While maintaining the safety of the ship, the VOC management plan should encourage and, as appropriate, set forth the following best management practices:
  - .1 the loading procedures should take into account potential gas releases due to low pressure and, where possible, the routing of oil from crude oil manifolds into the tanks should be done so as to avoid or minimize excessive throttling and high flow velocity in pipes;
  - .2 the ship should define a target operating pressure for the cargo tanks. This pressure should be as high as safely possible and the ship should aim to maintain tanks at this level during the loading and carriage of relevant cargo;
  - .3 when venting to reduce tank pressure is required, the decrease in the pressure in the tanks should be as small as possible to maintain the tank pressure as high as possible;
  - .4 the amount of inert gas added should be minimized. Increasing tank pressure by adding inert gas does not prevent VOC release but it may increase venting and therefore increased VOC emissions; and

- .5 when crude oil washing is considered, its effect on VOC emissions should be taken into account. VOC emissions can be reduced by shortening the duration of the washing or by using a closed cycle crude oil washing programme.

## **2 Additional considerations**

- .1 A person in charge of carrying out the plan
  - .1 A person shall be designated in the VOC management plan to be responsible for implementing the plan and that person may assign appropriate personnel to carry out the relevant tasks;
- .2 Procedures for preventing or minimizing VOC emissions
  - .1 Ship-specific procedures should be written or modified to address relevant VOC emissions, such as the following operations:
    - .1 Loading;
    - .2 Carriage of relevant cargo; and
    - .3 Crude oil washing;
  - .2 If the ship is equipped with VOC reduction devices or equipment, the use of these devices or equipment should be incorporated into the above procedures as appropriate.
- .3 Training
  - .1 The plan should describe the training programmes to facilitate best management practices for the ship to prevent or minimize VOC emissions.

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