



PORTS and MARITIME AFFAIRS

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Directive No. SOLAS/09

OXYGEN ANALYSIS & GAS DETECTION EQUIPMENT

Issued under the enabling power of the Ministerial Resolution 20/2016

Issue Date: 27 December 2016

1 Introduction

- (1) With reference to;
 - PMA resolution no. 8/2016: regarding the implementation of the requirements of the International Convention for the Safety of Life at Sea, 1974 and its amendments
 - SOLAS 1974, regulation VI/3 and
 - MSC.1/Circ.1370
- (2) The Ports and Maritime Affairs (PMA) issue this directive for ensuring the safety of crew in respect of toxic gases in the atmosphere or oxygen deficiency in or near cargo spaces and for protecting vessel structure.
- (3) This directive provides standard of oxygen analysis and gas detection equipment for use in Bulk carrier under SOLAS 74 regulation VI/3, for measuring the oxygen content prior to entry in cargo spaces and for determining the behaviour of certain bulk cargoes during the voyage.

2 Application

Bahraini registered Ship transporting or accepting for transport a bulk cargo in reference to SOLAS Chapter VI, which is liable to emit toxic or flammable gas or cause oxygen depletion in the cargo space.

3 Company Responsibility

- (1) When ships carry solid bulk cargo that may emit hazardous gases or cause oxygen depletion in the cargo space, an instrument that can



measure the concentration of oxygen or detect hazardous gases shall be provided on board

- (2) The instrument shall be of a type approved by a certifying authority
- (3) Operating instructions in working language shall be kept on board and be available for those crew members who are likely to use it.
- (4) It shall be maintained in good working condition and calibrated regularly as per the manufacturer instructions.
- (5) Drills to be carried out on its usage before loading or discharging cargo, such drills must be incorporated into the safety management system (SMS) and conducted regularly as a prudent precaution, and
- (6) Persons entering enclosed spaces should be provided with calibrated and tested multi-gas detectors that monitor the level of oxygen, carbon monoxide and other gas as appropriate.

4 Penalty

- (1) A shipowner and a master who fail to provide sufficient and appropriate oxygen analysis and gas detection equipment is a breach of SOLAS Regulations and Law for Registration of Ships and Determination of Safety Conditions thereof (Legislative Decree Law no.14/1978).
- (2) Also, the shipowner or the master who fails to ensure that the crew of the ship are trained on the use of oxygen analysis and gas detection equipment and meeting the requirements above shall be guilty of an offence.

5 Revision History:

Revision No. 1 of the present Directive is the first revision.

Hassan Ali Al Majed
Undersecretary for Ports and Maritime Affairs
27th December 2016