

# **SOUTH AFRICAN MARITIME SAFETY AUTHORITY**

No. R. 859

(GG 26577)

23 July 2004

MERCHANT SHIPPING ACT, 1951 (ACT No. 57 OF 1951)

## **MERCHANT SHIPPING (CARRIAGE OF CARGOES) REGULATIONS, 2004**

The Minister of Transport has, under section 356 of the Merchant Shipping Act, 1951 (Act No. 57 of 1951), made the regulations in the Schedule.

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*Regulation  
No.*

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## PART 1 INTRODUCTORY

### Title and commencement

1. These regulations are called the Merchant Shipping (Carriage of Cargoes) Regulations, 2004, and come into operation on 1 August 2004.

### Object of regulations

2. These regulations give effect to Chapter VI (Carriage of Cargoes) of the Safety Convention.

### Interpretation

3. (1) In these regulations any word or expression given a meaning in the Act has the meaning so given and, unless the context indicates otherwise—

"**Administration**", in relation to—

- (a) a South African ship, means the Authority; and
- (b) any other ship, means the government of the State in which the ship is registered or, if unregistered, whose flag it is entitled to fly, or a person or organisation recognised by that government;

"**appropriate cargo information**" means information relevant to the cargo and its stowage and securing, and specifying, in particular, the precautions necessary for the safe carriage of that cargo by sea;

"**bulk cargo**" means cargo carried in bulk;

"**cargo**" means any cargo, except liquids in bulk and gases in bulk, that may require special precautions owing to its particular hazard to ships or persons on board;

"**Cargo Securing Manual**", in relation to a ship, means a manual that—

- (a) is drawn up to a standard not inferior to that contained in IMO Maritime Safety Committee Circular MSC/Circ.745, as may be amended from time to time; and
- (b) has been approved by the Administration;

"**cargo ship**" means any ship other than a passenger ship, fishing vessel or pleasure vessel;

"**cargo space**" means any hold, tank or space in a ship appropriated for the carriage of cargo;

"**cargo unit**" means a vehicle, container, flat, pallet, portable tank, packaged unit, or any other cargo, and loading equipment, or any part thereof, that belongs to a ship and is not fixed to it, and includes wheeled cargo and any cargo transport unit;

**"cargoes that may liquefy"** means cargoes that are subject to moisture migration and subsequent liquefaction if shipped with a moisture content in excess of the transportable moisture limit;

**"container"** means a container as defined in Article II of the Safe Containers Convention;

**"contravene"**, in relation to a provision of these regulations, includes failing or refusing to comply with that provision;

**"Convention State"** means any State, other than the Republic, that is a party to the Safety Convention;

**"fishing vessel"** means any fishing, sealing or whaling boat;

**"flow moisture point"** means the percentage moisture content (wet weight basis) at which a flow state develops under the methods of test in a representative sample of the material as prescribed by the Code of Safe Practice for Solid Bulk Cargoes (BC Code), published by IMO, as may be amended from time to time;

**"flow state"** means the condition when a mass of granular material is saturated with liquid to an extent that under prevailing external forces such as vibration, impaction or ship's motion, it loses its internal shear strength and behaves as a liquid;

**"forwarder"** means a person who receives the appropriate cargo information in preparation for eventual delivery of the cargo to the ship or its agent, and may include a cargo packer or consolidator;

**"grain"** has the same meaning as in section 236(5) of the Act;

**"IMDG Code"** means the International Maritime Dangerous Goods (IMDG) Code adopted by IMO Maritime Safety Committee Resolution MSC.122(75), as may be amended from time to time;

**"IMO"** means the International Maritime Organization;

**"in bulk"**, except in relation to roll-on roll-off cargo spaces, means directly and without intermediate form of containment in a cargo space forming a structural part of, or permanently attached to, a ship;

**"International Grain Code"** means the International Code for the Safe Carriage of Grain in Bulk adopted by IMO Maritime Safety Committee Resolution MSC.23(59), as may be amended from time to time;

**"moisture content"** means the amount of moisture present in a particular sample expressed as a percentage by weight of the total wet weight of the sample;

**"owner"**, in relation to a ship that is operated by a person other than its owner (whether on behalf of the owner or some other person, or on the person's own behalf), includes the person so operating the ship;

**"pleasure vessel"** means a vessel that is used solely for sport or recreation;

**"roll-on roll-off cargo spaces"** means spaces not normally subdivided in any way and extending to either a substantial length or the entire length of the ship in which the goods (packaged or in bulk, in or on rail or road cars, vehicles (including road or rail tankers), trailers, containers, pallets, demountable tanks or in or on similar stowage units or other receptacles) can be loaded and unloaded normally in a horizontal direction;

**"Safe Containers Convention"** means the International Convention for Safe Containers done at Geneva on 2 December 1972, as may be amended from time to time;

**"shipper"** means any person who, whether as principal or as agent for another, consigns goods for carriage by sea;

**"South African ship"** includes an unregistered ship having South African nationality;

**"terminal"** means any terminal, jetty, pier, floating structure or other works within a port at which ships can obtain shelter or ship and unship goods or passengers;

**"the Act"** means the Merchant Shipping Act, 1951 (Act No. 57 of 1951);

**"transportable moisture limit"** means 9/10 of the flow moisture point;

**"trimmed"** means any levelling of the material within a cargo space, either partial or total, by means of loading spouts or chutes, portable machinery, equipment or manual labour.

(2) In interpreting the International Grain Code—

- (a) the requirements of the Code having been made mandatory under regulation 13, the language thereof is to be construed accordingly;
- (b) the definitions set out in section A2 of the Code apply; and
- (c) references to the Administration, in relation to South African ships, and to the Contracting Government of the port of loading, in relation to all ships in the Republic, are to be read as references to the Authority.

### **Application**

4. (1) Subject to subregulations (2) and (3), these regulations apply to every ship that is loaded or intended to be loaded with any cargo, and so apply to—

- (a) South African ships anywhere; and
- (b) other ships when in the Republic or its territorial waters.

(2) These regulations do not apply to small vessels, pleasure vessels or fishing vessels.

(3) These regulations apply to the carriage of all cargoes but are subject to the requirements of the Merchant Shipping (Dangerous Goods) Regulations, 1997, respecting the carriage of dangerous goods as defined in those regulations. Where those regulations regulate an aspect of carriage provided for in these regulations, those regulations apply to that extent, and not these.

## **PART 2**

### **GENERAL REQUIREMENTS**

#### **Cargo information**

5. (1) (a) Subject to subregulation (4), the shipper must provide the owner or master with appropriate cargo information sufficiently in advance of loading so as to enable them to ensure that—

- (i) the different commodities to be carried are compatible with each other or suitably separated;
- (ii) the cargo is suitable for the ship;

- (iii) the ship is suitable for the cargo; and
- (iv) the cargo can safely be stowed and secured on board the ship and transported under all expected conditions during the intended voyage.
  - (b) The cargo information must include—
    - (i) in the case of general cargo and cargo carried in cargo units, a general description of the cargo, the gross mass of the cargo or cargo units and any relevant special properties of the cargo;
    - (ii) in the case of bulk cargoes, information on the stowage factor of the cargo, the trimming procedures, the likelihood of shifting including angle of repose, if applicable, and any other relevant special properties and, in the case of a concentrate or other cargo that may liquefy, additional information in the form of a certificate indicating the moisture content of the cargo and its transportable moisture limit;
    - (iii) in the case of bulk cargoes not classified in accordance with the IMDG Code but having chemical properties that may create a potential hazard, information about the cargo's chemical properties in addition to the information required by subparagraph (ii).
- (2) The cargo information required by subregulation (1) must be confirmed in writing and by appropriate shipping documents before loading the cargo on the ship.\*
- (3) In preparing cargo units for carriage by ships, the shipper or the forwarder, as the case may be, must ensure that the gross mass of the units is in accordance with the gross mass declared in the shipping documents.
- (4) Where the shipper does not deliver the cargo to the ship or its agent, the shipper must provide the forwarder with the cargo information required by subregulation (1).
- (5) If the shipper does not deliver the cargo to the ship or its agent, then the forwarder must provide the owner or master with the cargo information required by subregulation (1).
- (6) Every shipper or forwarder commits an offence who—
  - (a) fails to provide appropriate cargo information as required by this regulation;
  - (b) furnishes cargo information that he or she knows to be false; or
  - (c) recklessly furnishes cargo information that is false.
- (7) Every owner or master commits an offence who accepts for carriage, or takes or receives on board, any cargo for which appropriate cargo information as required by this regulation has not been furnished.

### **Carriage of documentation**

- 6. (1) The owner and master of every ship, other than a ship engaged in the carriage of grain, must ensure that the ship has on board appropriate documentation, relevant to the cargo and its stowage and securing, and specifying, in particular, the precautions necessary for the safe carriage of that cargo by sea. This documentation may consist of one or more of the following codes of safe practice:
  - (a) the Code of Safe Practice for Cargo Stowage and Securing adopted by IMO Assembly Resolution A.714(17), as may be amended from time to time;

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\* Reference to writing and documents in this regulation does not preclude the use of electronic data processing (EDP) and electronic data interchange (EDI) transmission techniques as an aid to paper documentation.

- (b) the Code of Safe Practice for Ships Carrying Timber Deck Cargoes adopted by IMO Assembly Resolution A.715(17), as may be amended from time to time;
- (c) the Code of Safe Practice for Solid Bulk Cargoes (BC Code) adopted by IMO Assembly Resolution A.434(XI), as may be amended from time to time;
- (d) the Code of Safe Practice for the Safe Loading and Unloading of Bulk Carriers adopted by IMO Assembly Resolution A.862(20), as may be amended from time to time.

(2) The owner and master of every ship carrying grain must ensure that the International Grain Code is carried on board.

(3) The owner and master of every passenger ship and of every cargo ship carrying a cargo other than solely a solid bulk cargo, except a cargo ship of less than 500 gross tonnage that is a coasting ship, must ensure that a Cargo Securing Manual is carried on board.

(4) Every owner or master who contravenes subregulation (1), (2) or (3) commits an offence.

### **Stowage and securing**

7. (1) The owner and master must ensure that—

- (a) cargo and cargo units carried on or under deck are loaded, stowed and secured so as to prevent as far as is practicable, throughout the voyage, damage or hazard to the ship and the persons on board, and loss of cargo overboard;
- (b) appropriate precautions are taken during loading and transport of heavy cargoes or cargoes with abnormal physical dimensions to ensure that no structural damage to the ship occurs and to maintain adequate stability throughout the voyage;
- (c) appropriate precautions are taken during loading and transport of cargo units on board ro-ro ships, especially with regard to the securing arrangements on board such ships and on the cargo units and with regard to the strength of the securing points and lashings;
- (d) in the case of a ship to which regulation 6(3) applies, all cargoes, other than solid bulk cargoes, and cargo units on board are stowed and secured throughout the voyage in accordance with the Cargo Securing Manual; and
- (e) in the case of a ship with roll-on roll-off cargo spaces to which regulation 6(3) applies, all cargoes and cargo units on board are stowed and secured in accordance with the Cargo Securing Manual before the ship leaves the berth.

(2) Where packaged goods have been packed into or onto a cargo unit, the shipper or forwarder of such goods must ensure that—

- (a) the cargo is packed and secured so as to prevent, throughout the voyage, damage or hazard to the ship and the persons on board; and
  - (b) if the cargo unit is a container, it is not loaded to more than the maximum gross weight indicated on the Safety Approval Plate attached to the container in accordance with the Safe Containers Convention.
- (3) Every owner or master who contravenes subregulation (1) commits an offence.
- (4) Every shipper or forwarder who contravenes subregulation (2) commits an offence.

### **Oxygen analysis and gas detection equipment**

**8.** (1) Every ship carrying or accepting for carriage a bulk cargo that is liable to emit a toxic or flammable gas, or cause oxygen depletion in the cargo space, must be provided with an appropriate instrument for measuring the concentration of gas or oxygen in the air together with detailed instructions for its use. The instrument must be of a type approved by the Administration, and the crew of the ship must be trained in its use.

(2) Every owner of a ship that carries, or every master who accepts for carriage, a bulk cargo of the kind described in subregulation (1) without ensuring that that subregulation has been complied with commits an offence.

### **Use of pesticides in ships**

**9.** (1) Where pesticides are used in cargo spaces, they must be used in accordance with such guidance as the Authority may issue from time to time in a marine notice.

(2) If subregulation (1) is contravened, the owner and master each commits an offence.

## **PART 3**

### **SPECIAL REQUIREMENTS FOR BULK CARGOES**

#### **OTHER THAN GRAIN**

### **Application of Part 3**

**10.** This Part applies only to bulk cargoes other than grain.

### **Acceptability for loading**

**11.** (1) Before loading a bulk cargo, the master must be in possession of comprehensive information, to the satisfaction of the Authority, on the ship's stability and on the distribution of cargo and ballast for the standard loading conditions.

(2) The master must not accept for loading concentrates or other cargoes that may liquefy unless—

- (a) the moisture content of the cargo, as indicated in the certificate referred to in regulation 5(1)(b)(ii), is less than its transportable moisture limit; or
- (b) if the moisture content is above that limit, appropriate safety arrangements are made to the satisfaction of the Authority to ensure adequate stability in the case of cargo shifting, and the ship has adequate structural integrity.

(3) Before loading a bulk cargo referred to in regulation 5(1)(b)(iii), appropriate special precautions for its safe carriage must be taken.

(4) The owner must ensure that the master is furnished with the information referred to in subregulation (1).

(5) The master must not accept cargo for loading unless—

- (a) he or she is in possession of the information required by subregulation (1);

- (b) he or she is satisfied by calculations that the proposed loading arrangements would ensure sufficient stability in accordance with the stability information provided pursuant to subregulation (1); and
- (c) he or she is satisfied that, in the case of a cargo to which subregulation (3) applies, the precautions required by that subregulation have been taken.
  - (6) Every owner who contravenes subregulation (4) commits an offence.
  - (7) Every master who contravenes subregulation (2) or (5) commits an offence.

### **Loading, unloading and stowage of bulk cargoes**

**12.** (1) (a) In this regulation "terminal representative" means an individual who represents the terminal or other facility where the ship is loading or unloading and who has responsibility for operations conducted by that terminal or facility with regard to the particular ship.

(b) For the purposes of subregulations (3) and (7), the appropriate authority in the Republic is the harbour authority of the port at which the ship is. If a terminal in the port is not operated by the harbour authority, then the person under whose control are the activities at the terminal is the appropriate authority.

(2) To enable the master to prevent excessive stresses in the ship's structure, the owner must ensure that the ship is provided with a cargo loading manual in a language with which the ship's officers responsible for cargo operations are familiar. If this language is not English, the ship is to be provided with a manual also in the English language. The manual may consist of one or more booklets and must, as a minimum, include—

- (a) stability data, to the extent required by regulation II-1/22 of the Safety Convention;
- (b) ballasting and deballasting rates and capacities;
- (c) maximum allowable load per unit surface area of the tank top plating;
- (d) maximum allowable load per hold;
- (e) general loading and unloading instructions with regard to the strength of the ship's structure, including any limitations on the most adverse operating conditions during loading, unloading, ballasting operations and the voyage;
- (f) any special restrictions, such as limitations on the most adverse operating conditions, imposed by the Administration (if applicable); and
- (g) where strength calculations are required, maximum permissible forces and moments on the ship's hull during loading, unloading and the voyage.

(3) Before loading or unloading a bulk cargo, the master and the terminal representative must agree on a plan (in this regulation called a cargo loading plan) that—

- (a) ensures that the permissible forces and moments on the ship are not exceeded during loading or unloading; and
- (b) includes the sequence, quantity and rate of loading or unloading,

taking into account the intended speed of loading or unloading, intended number of pours and the deballasting or ballasting capability of the ship. The plan and any subsequent amendment to it must be lodged with the appropriate authority of the port State.

(4) The master must ensure that bulk cargoes are loaded and trimmed reasonably level, as necessary, to the boundaries of the cargo space so as to minimise the risk of shifting and to ensure that adequate stability will be maintained throughout the voyage.

(5) Where bulk cargoes are carried in 'tween-decks, the master must ensure that—

- (a) the hatchways of the 'tween-decks are closed in those cases where the loading information indicates an unacceptable level of stress of the bottom structure if the hatchways are left open;
- (b) the cargo is trimmed reasonably level and either extends from side to side or is secured by additional longitudinal divisions of sufficient strength; and
- (c) the safe load-carrying capacity of the 'tween-decks is observed to ensure that the deck-structure is not overloaded.

(6) The master and terminal representative must ensure that loading and unloading operations are carried out in accordance with the cargo loading plan.

(7) (a) If during loading or unloading any of the limits of the ship referred to in subregulation (2) are exceeded or are likely to become so if the loading or unloading continues, the master has the right to suspend operation and the duty to notify accordingly the appropriate authority of the port State with which the cargo loading plan has been lodged.

(b) Where paragraph (a) applies, the master and terminal representative must ensure that corrective action is taken.

(c) When unloading cargo, the master and terminal representative must ensure that the unloading method does not damage the ship's structure.

(8) The master must ensure—

- (a) that ship's personnel continuously monitor cargo operations;
- (b) where practicable, that the ship's draught is checked regularly during loading or unloading to confirm the tonnage figures supplied, and that each draught and tonnage observation is recorded in a cargo log-book; and
- (c) if significant deviations from the cargo loading plan are detected, that cargo or ballast operations, or both, are adjusted to correct the deviations.

(9) Every owner who contravenes subregulation (2) commits an offence.

(10) Every master who contravenes subregulation (3), (4), (5), (6), (7)(b) or (c), or (8) commits an offence.

(11) Every terminal representative in the Republic who contravenes subregulation (3), (6), or (7)(b) or (c) commits an offence.

## **PART 4**

### **SPECIAL REQUIREMENTS FOR BULK GRAIN CARGOES**

#### **International Grain Code**

**13.** (1) Subject to section 236(3) of the Act, every ship carrying a cargo of grain as defined in subsection (5) of that section must comply with the requirements of the International Grain Code.

(2) Without limiting subregulation (1) or any other requirement of these regulations, the owner and master must ensure that—

- (a) a ship loading grain complies with the International Grain Code; and
- (b) subject to subregulation (3)(b), the ship has on board a document of authorisation as required by the International Grain Code. In the case of a South African ship, the document of authorisation is to be issued by the Authority.

(3) No person may order grain to be loaded into a ship in the Republic unless that person is satisfied that—

- (a) the ship has on board a document of authorisation required by subregulation (2)(b); or
  - (b) the master has demonstrated to the satisfaction of the Authority that the ship will, in its proposed loaded condition, comply with the appropriate requirements of the International Grain Code and has obtained a document to this effect signed by a surveyor.
- (4) Every owner or master who contravenes subregulation (2) commits an offence.
- (5) Every person who contravenes subregulation (3) commits an offence.

## **PART 5**

### **SUPPLEMENTAL**

#### **Equivalents, exemptions and approvals**

**14.** (1) Where these regulations, or documentation referred to in these regulations, require that a particular piece of equipment, or type thereof, must be provided or carried in a ship, or that any particular provision must be made, the Authority may permit any other piece of equipment to be provided or carried, or any other provision to be made, in that ship, if it is satisfied by trial thereof or otherwise that such other piece of equipment or provision is at least as effective as that required by these regulations, or documentation referred to in these regulations.

(2) For the purposes of these regulations, the results of a verification or test are to be accepted if the verification or test was carried out—

- (a) in accordance with these regulations or with a standard, code of practice, specification or technical description of a Convention State offering equivalent levels of safety, suitability and fitness for the purpose; and
- (b) by a person in a Convention State offering suitable and satisfactory guarantees of technical and professional competence and independence.

(3) The Authority may grant exemption, on such terms (if any) as it may specify, from all or any of the provisions of these regulations (as may be specified in the exemption) for classes of cases or individual cases and may, after reasonable notice, alter or cancel any such exemption.

(4) Every approval given pursuant to these regulations—

- (a) must be given in writing;
- (b) must specify the date on which it takes effect and the conditions (if any) on which it is given; and
- (c) may, after reasonable notice, be altered or cancelled.

### **Penalties and defences**

**15.** (1) A person who commits an offence in terms of these regulations is liable on conviction to a fine or to imprisonment for a period not exceeding 12 months.

(2) In proceedings for an offence in terms of these regulations it is a defence to prove that the accused took reasonable precautions and exercised due diligence to avoid the commission of the offence.

### **Offences due to fault of another person**

**16.** Where the commission by any person of an offence in terms of these regulations is due to the act or omission of some other person, that other person also commits the offence and may be charged with and convicted of the offence by virtue of this regulation, whether or not proceedings are taken against the first-mentioned person.

### **Repeal of regulations**

**17.** The Merchant Shipping (Carriage of Grain) Regulations, 1995, published by Government Notice No. R. 1443 of 22 September 1995, are repealed.

## **EXPLANATORY NOTE**

*(This note is not part of the regulations)*

These regulations give effect, in relation to South African cargo carrying ships and to other cargo carrying ships while they are in the Republic or its territorial waters, to Chapter VI [Carriage of cargoes] of the International Convention for the Safety of Life at Sea, 1974. To this end the regulations revoke and replace the Merchant Shipping (Carriage of Grain) Regulations, 1995.

The regulations require appropriate information relevant to the cargo and its stowage and securing to be provided in advance of loading.

Shipowners and masters are required to carry codes of safe practice, or equivalent information. One of these codes, the International Grain Code, is made mandatory for ships carrying grain, and penalties are provided for certain breaches of that code.

Information about a ship's stability and about the distribution of cargo for the standard loading conditions must be supplied by the owner and must be in the master's possession before loading. Before a solid bulk cargo is loaded or unloaded, the master and the terminal representative are required to agree on a plan. This plan, and any amendments to it, must be filed with the relevant harbour authority. The plan must be adhered to, and the master may stop cargo operations if the permissible limits are or might be breached.