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No. S 430

# MERCHANT SHIPPING ACT (CHAPTER 179)

# MERCHANT SHIPPING (LOAD LINE) (AMENDMENT) REGULATIONS 2014

In exercise of the powers conferred by section 100 of the Merchant Shipping Act, the Maritime and Port Authority of Singapore, with the approval of the Minister for Transport, hereby makes the following Regulations:

## Citation and commencement

1. These Regulations may be cited as the Merchant Shipping (Load Line) (Amendment) Regulations 2014 and shall come into operation on 1st July 2014.

### Amendment of Annex I

- **2.** Regulation 27 of Annex I of the Merchant Shipping (Load Line) Regulations (Rg 5) is amended
  - (a) by deleting the words "50% of the individual total capacity of all tanks and spaces fitted to contain consumable liquids" in paragraph (11)(b)(iv) and substituting the words "50% of the ship's total capacity of tanks and spaces fitted to contain each type of consumables";
  - (b) by deleting sub-paragraphs (v) and (vi) of paragraph (11)(b) and substituting the following sub-paragraphs:
    - "(v) ballast water tanks shall normally be considered to be empty and no free surface correction shall be made for them;
    - (vi) alternative treatment for free surface may be considered when developing the final condition for application of damage specified in paragraph (12):

- (A) Method 1 (appropriate to virtual corrections). The virtual centre of gravity for the initial condition is determined as follows:
  - (AA) the loading condition shall be developed in accordance with sub-paragraphs (i) to (iv);
  - (AB) the correction for the free surfaces is added to the vertical centre of gravity;
  - (AC) one virtual initial condition with all compartments empty is generated on summer load line draught with level trim, using the vertical centre of gravity from the above loading condition; and
  - (AD) the damage cases will be checked for compliance with the damage stability criteria using the above initial condition;
- (B) Method 2 (appropriate to the use of actual free surface moments according to the assumed tank fillings for damage case). The virtual centre of gravity for the initial condition is determined as follows:
  - (BA) the loading condition shall be developed in accordance with sub-paragraphs (i) to (iv);
  - (BB) one virtual initial condition for each damage with liquid-filled case compartments may be generated on summer load line draught with level trim, using the initial virtual condition with filled compartments generated on summer load line draught with level trim. Using the vertical centre of gravity and free surface correction from the above loading condition, separate calculations for each damage case are performed. Only the liquidfilled compartments to be damaged are left empty before damage; and

- (BC) the damage cases will be checked for compliance with the damage stability criteria using the above initial conditions (one initial condition for each damage case);
- (vii) weights shall be calculated on the basis of the following values for specific gravities:

salt water	1.025
fresh water	1.000
oil fuel	0.950
diesel oil	0.900
lubricating oil	0.900.

"; and

- (c) by inserting, immediately after sub-paragraph (f) of paragraph (13), the following sub-paragraph:
  - "(g) Compliance with the residual stability criteria specified in sub-paragraphs (a), (c), (d) and (e) above is not required to be demonstrated in service loading conditions using a stability instrument, stability software or other approved method.".

[G.N. Nos. S 12/2005; S 690/2006; S 403/2008; S 330/2010; S 834/2013]

Made this 23rd day of June 2014.

#### LUCIEN WONG

Chairman, Maritime and Port Authority of Singapore.

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