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PREVENTION OF POLLUTION OF THE SEA ACT (CHAPTER 243)

PREVENTION OF POLLUTION OF THE SEA (AIR) (AMENDMENT NO. 2) REGULATIONS 2012

In exercise of the powers conferred by section 34 of the Prevention of Pollution of the Sea 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 Prevention of Pollution of the Sea (Air) (Amendment No. 2) Regulations 2012 and shall come into operation on 1st January 2013.

Amendment of regulation 5

2. Regulation 5(2) of the Prevention of Pollution of the Sea (Air) Regulations 2005 (G.N. No. S 134/2005) is amended by deleting the words "regulation 6" and substituting the words "regulations 6 and 20".

Amendment of First Schedule

- **3.** The First Schedule to the Prevention of Pollution of the Sea (Air) Regulations 2005 is amended
 - (a) by deleting the words "and 18" in regulation 1 and substituting the words ", 18, 19, 20, 21, 22 and 23.";
 - (b) by deleting paragraph 21 of regulation 2 and substituting the following paragraphs:
 - "21 Tanker in relation to regulation 15 means an oil tanker as defined in regulation 1 of Annex I or a chemical tanker as defined in regulation 1 of Annex II of the present Convention.

For the purpose of Chapter IV:

22 "Existing ship" means a ship which is not a new ship.

- 23 "New ship" means a ship:
 - .1 for which the building contract is placed on or after 1 January 2013; or
 - .2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after 1 July 2013; or
 - .3 the delivery of which is on or after 1 July 2015.
- 24 "Major Conversion" means in relation to Chapter IV a conversion of a ship:
 - .1 which substantially alters the dimensions, carrying capacity or engine power of the ship; or
 - .2 which changes the type of the ship; or
 - .3 the intent of which in the opinion of the Administration is substantially to prolong the life of the ship; or
 - .4 which otherwise so alters the ship that, if it were a new ship, it would become subject to relevant provisions of the present Convention not applicable to it as an existing ship; or
 - .5 which substantially alters the energy efficiency of the ship and includes any modifications that could cause the ship to exceed the applicable required EEDI as set out in regulation 21.
- 25 "Bulk carrier" means a ship which is intended primarily to carry dry cargo in bulk, including such types as ore carriers as defined in SOLAS Chapter XII, regulation 1, but excluding combination carriers.
- 26 "Gas carrier" means a cargo ship constructed or adapted and used for the carriage in bulk of any liquefied gas.
- 27 "Tanker" in relation to Chapter IV means an oil tanker as defined in MARPOL Annex I, regulation 1 or a chemical tanker or an NLS tanker as defined in MARPOL Annex II, regulation 1.
- 28 "Container ship" means a ship designed exclusively for the carriage of containers in holds and on deck.
- 29 "General cargo ship" means a ship with a multi-deck or single deck hull designed primarily for the carriage of general cargo. This definition excludes specialized dry cargo ships, which are not included in the calculation of reference lines for general cargo ships, namely livestock carrier, barge carrier, heavy load carrier, yacht carrier, nuclear fuel carrier.
- 30 "Refrigerated cargo carrier" means a ship designed exclusively for the carriage of refrigerated cargoes in holds.
- 31 "Combination carrier" means a ship designed to load 100% deadweight with both liquid and dry cargo in bulk.

- 32 "Passenger ship" means a ship which carries more than 12 passengers.
- 33 "Ro-ro cargo ship (vehicle carrier)" means a multi deck roll-on-roll-off cargo ship designed for the carriage of empty cars and trucks.
- 34 "Ro-ro cargo ship" means a ship designed for the carriage of roll-on-roll-off cargo transportation units.
- 35 "Ro-ro passenger ship" means a passenger ship with roll-on-roll-off cargo spaces.
- 36 "Attained EEDI" is the EEDI value achieved by an individual ship in accordance with regulation 20 of Chapter IV.
- 37 "Required EEDI" is the maximum value of attained EEDI that is allowed by regulation 21 of Chapter IV for the specific ship type and size.";
- (c) by deleting paragraphs 1 and 2 of regulation 5 and substituting the following paragraphs:
 - "1 Every ship of 400 gross tonnage and above and every fixed and floating drilling rig and other platforms shall to ensure compliance with Chapter III be subject to the surveys specified below:
 - An initial survey before the ship is put into service or before the certificate required under regulation 6 of this Annex is issued for the first time. This survey shall be such as to ensure that the equipment, systems, fittings, arrangements and material fully comply with the applicable requirements of Chapter III;
 - .2 A renewal survey at intervals specified by the Administration, but not exceeding five years, except where regulation 9.2, 9.5, 9.6 or 9.7 of this Annex is applicable. The renewal survey shall be such as to ensure that the equipment, systems, fittings, arrangements and material fully comply with applicable requirements of Chapter III;
 - 3 An intermediate survey within three months before or after the second anniversary date or within three months before or after the third anniversary date of the certificate which shall take the place of one of the annual surveys specified in paragraph 1.4 of this regulation. The intermediate survey shall be such as to ensure that the equipment and arrangements fully comply with the applicable requirements of Chapter III and are in good working order. Such intermediate surveys shall be endorsed on the IAPP Certificate issued under regulation 6 or 7 of this Annex;

- .4 An annual survey within three months before or after each anniversary date of the certificate, including a general inspection of the equipment, systems, fittings, arrangements and material referred to in paragraph 1.1 of this regulation to ensure that they have been maintained in accordance with paragraph 5 of this regulation and that they remain satisfactory for the service for which the ship is intended. Such annual surveys shall be endorsed on the IAPP Certificate issued under regulation 6 or 7 of this Annex; and
- .5 An additional survey either general or partial, according to the circumstances, shall be made whenever any important repairs or renewals are made as prescribed in paragraph 5 of this regulation or after a repair resulting from investigations prescribed in paragraph 6 of this regulation. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory and that the ship complies in all respects with the requirements of Chapter III.
- 2 In the case of ships of less than 400 gross tonnage, the Administration may establish appropriate measures in order to ensure that the applicable provisions of Chapter III are complied with.":
- (d) by inserting, immediately after paragraph 3 of regulation 5, the following paragraph:
 - "4 Ships to which Chapter IV applies shall also be subject to the surveys specified below, taking into account Guidelines adopted by the Organization*:

[†]Refer to Guidelines on Survey and Certification of the Energy Efficiency Design Index.

^{.1} An initial survey before a new ship is put in service and before the International Energy Efficiency Certificate is issued. The survey shall verify that the ship's attained EEDI is in accordance with the requirements in Chapter IV, and that the SEEMP required by regulation 22 is on board;

^{.2} A general or partial survey, according to the circumstances, after a major conversion of a ship to which this regulation applies. The survey shall ensure that the attained EEDI is recalculated as necessary and meets the requirement of regulation 21, with the reduction factor applicable to the ship type and size of the converted ship in the phase corresponding to the date of contract or keel laying or

- delivery determined for the original ship in accordance with regulation 2.23;
- .3 In cases where the major conversion of a new or existing ship is so extensive that the ship is regarded by the Administration as a newly constructed ship, the Administration shall determine the necessity of an initial survey on attained EEDI. Such a survey, if determined necessary, shall ensure that the attained EEDI is calculated and meets the requirement of regulation 21, with the reduction factor applicable corresponding to the ship type and size of the converted ship at the date of the contract of the conversion, or in the absence of a contract, the commencement date of the conversion. The survey shall also verify that the SEEMP required by regulation 22 is on board; and
- .4 For existing ships, the verification of the requirement to have a SEEMP on board according to regulation 22 shall take place at the first intermediate or renewal survey identified in paragraph 1 of this regulation, whichever is the first, on or after 1 January 2013.";
- (e) by renumbering the existing paragraphs 4 and 5 of regulation 5 as paragraphs 5 and 6 of that regulation, respectively;
- (f) by deleting the words "a Certificate" in the regulation heading of regulation 6 and substituting the word "Certificates";
- (g) by inserting, immediately after the regulation heading of regulation 6, the following regulation sub-heading:
 - "International Air Pollution Prevention Certificate";
- (h) by deleting the words "the date of entry into force of Annex VI for such ship's Administration" in paragraph 2 of regulation 6 and substituting the words "the date Annex VI enters into force for that particular ship's Administration,";
- (i) by inserting, immediately after paragraph 3 of regulation 6, the following regulation sub-heading and paragraphs:

"International Energy Efficiency Certificate

4 An International Energy Efficiency Certificate for the ship shall be issued after a survey in accordance with the provisions of regulation 5.4 to any ship of 400 gross tonnage and above before that ship may engage in voyages to ports or offshore terminals under the jurisdiction of other Parties.

5 The certificate shall be issued or endorsed either by the Administration or any organization duly authorized by it*. In every case, the Administration assumes full responsibility for the certificate.

- (*j*) by deleting paragraph 1 of regulation 7 and substituting the following paragraph:
 - "1 A Party may, at the request of the Administration, cause a ship to be surveyed and, if satisfied that the applicable provisions of this Annex are complied with, shall issue or authorize the issuance of an International Air Pollution Prevention Certificate or an International Energy Efficiency Certificate to the ship, and where appropriate, endorse or authorize the endorsement of such certificates on the ship, in accordance with this Annex.";
- (k) by deleting paragraph 4 of regulation 7 and substituting the following paragraph:
 - "4 No International Air Pollution Prevention Certificate or International Energy Efficiency Certificate shall be issued to a ship which is entitled to fly the flag of a State which is not a Party.";
- (1) by deleting the word "Certificate" in the regulation heading of regulation 8 and substituting the word "Certificates";
- (m) by inserting, immediately after the regulation heading of regulation 8, the following regulation sub-heading:
 - "International Air Pollution Prevention Certificate";
- (n) by renumbering regulation 8 as paragraph 1 of that regulation, and by inserting immediately thereafter the following regulation sub-heading and paragraph:
 - "International Energy Efficiency Certificate
 - 2 The International Energy Efficiency Certificate shall be drawn up in a form corresponding to the model given in Appendix VIII to this Annex and shall be at least in English, French or Spanish. If an official language of the issuing Party is also used, this shall prevail in case of a dispute or discrepancy.";

^{*}Refer to the Guidelines for the authorization of organizations acting on behalf of the Administration, adopted by the Organization by resolution A.739(18), as may be amended by the Organization, and the Specifications on the survey and certification functions of recognized organizations acting on behalf of the Administration, adopted by the Organization by resolution A.789(19), as may be amended by the Organization.";

- (o) by deleting the word "Certificate" in the regulation heading of regulation 9 and substituting the word "Certificates";
- (p) by inserting, immediately after the regulation heading of regulation 9, the following regulation sub-heading:

"International Air Pollution Prevention Certificate";

(q) by inserting, immediately after paragraph 9 of regulation 9, the following regulation sub-heading and paragraphs:

"International Energy Efficiency Certificate

- 10 The International Energy Efficiency Certificate shall be valid throughout the life of the ship subject to the provisions of paragraph 11 below.
- 11 An International Energy Efficiency Certificate issued under this Annex shall cease to be valid in any of the following cases:
 - .1 if the ship is withdrawn from service or if a new certificate is issued following major conversion of the ship; or
 - .2 upon transfer of the ship to the flag of another State. A new certificate shall only be issued when the Government issuing the new certificate is fully satisfied that the ship is in compliance with the requirements of Chapter IV. In the case of a transfer between Parties, if requested within three months after the transfer has taken place, the Government of the Party whose flag the ship was formerly entitled to fly shall, as soon as possible, transmit to the Administration copies of the certificate carried by the ship before the transfer and, if available, copies of the relevant survey reports.";
- (r) by inserting, immediately after paragraph 4 of regulation 10, the following paragraph:
 - "5 In relation to Chapter IV, any port State inspection shall be limited to verifying, when appropriate, that there is a valid International Energy Efficiency Certificate on board, in accordance with article 5 of the Convention.";
- (s) by deleting paragraph 6 of regulation 13 and substituting the following paragraph:
 - "6 For the purpose of this regulation, emission control areas shall be:
 - .1 the North American area, which means the area described by the coordinates provided in Appendix VII to this Annex;
 - .2 the United States Caribbean Sea area, which means the area described by the coordinates provided in Appendix VII to this Annex; and

- .3 any other sea area, including any port area, designated by the Organization in accordance with the criteria and procedures set forth in Appendix III to this Annex.";
- (t) by deleting the words "a ship with" in paragraph 7.3 of regulation 13;
- (u) by deleting paragraph 3 of regulation 14 and substituting the following paragraph:
 - "3 For the purpose of this regulation, emission control areas shall include:
 - .1 the Baltic Sea area as defined in regulation 1.11.2 of Annex I and the North Sea area as defined in regulation 1.12.6 of Annex V;
 - .2 the North American area as described by the coordinates provided in Appendix VII to this Annex;
 - .3 the United States Caribbean Sea area as described by the coordinates provided in Appendix VII to this Annex; and
 - .4 any other sea area, including any port area, designated by the Organization in accordance with the criteria and procedures set forth in Appendix III to this Annex.";
- (v) by deleting the word "and" at the end of paragraph 4.2 of regulation 14;
- (w) by deleting the full-stop at the end of sub-paragraph 3 of paragraph 4 of regulation 14 and substituting the word "; and", and by inserting immediately thereafter the following sub-paragraph:
 - ".4 Prior to 1 January 2020, the sulphur content of fuel oil referred to in paragraph 4 of this regulation shall not apply to ships operating in the North American area or the United States Caribbean Sea area defined in paragraph 3, built on or before 1 August 2011 that are powered by propulsion boilers that were not originally designed for continued operation on marine distillate fuel or natural gas.";
- (x) by deleting the words "following an amendment designating a specific emission control area under paragraph 3.2" in paragraph 7 of regulation 14 and substituting the words "following entry into force of an amendment designating a specific emission control area under paragraph 3";

(y) by inserting, immediately after regulation 18, the following Chapter:

"CHAPTER IV

REGULATIONS ON ENERGY EFFICIENCY FOR SHIPS

Regulation 19

Application

- 1 This Chapter shall apply to all ships of 400 gross tonnage and above.
 - 2 The provisions of this Chapter shall not apply to:
 - 11 ships solely engaged in voyages within waters subject to the sovereignty or jurisdiction of the State the flag of which the ship is entitled to fly. However, each Party should ensure, by the adoption of appropriate measures, that such ships are constructed and act in a manner consistent with Chapter IV, so far as is reasonable and practicable.
- 3 Regulation 20 and regulation 21 shall not apply to ships which have diesel-electric propulsion, turbine propulsion or hybrid propulsion systems.
- 4 Notwithstanding the provisions of paragraph 1 of this regulation, the Administration may waive the requirement for a ship of 400 gross tonnage and above from complying with regulation 20 and regulation 21.
- 5 The provision of paragraph 4 of this regulation shall not apply to ships of 400 gross tonnage and above:
 - .1 for which the building contract is placed on or after 1 January 2017; or
 - .2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after 1 July 2017; or
 - .3 the delivery of which is on or after 1 July 2019; or
 - .4 in cases of a major conversion of a new or existing ship, as defined in regulation 2.24, on or after 1 January 2017, and in which regulation 5.4.2 and regulation 5.4.3 of Chapter II apply.
- 6 The Administration of a Party to the present Convention which allows application of paragraph 4, or suspends, withdraws or declines the application of that paragraph, to a ship entitled to fly its flag shall forthwith communicate to the Organization for circulation to the Parties to the present Protocol particulars thereof, for their information.

Regulation 20

Attained Energy Efficiency Design Index (Attained EEDI)

- 1 The attained EEDI shall be calculated for:
 - .1 each new ship;
 - .2 each new ship which has undergone a major conversion; and
 - .3 each new or existing ship which has undergone a major conversion, that is so extensive that the ship is regarded by the Administration as a newly constructed ship

which falls into one or more of the categories in regulations 2.25 to 2.35. The attained EEDI shall be specific to each ship and shall indicate the estimated performance of the ship in terms of energy efficiency, and be accompanied by the EEDI technical file that contains the information necessary for the calculation of the attained EEDI and that shows the process of calculation. The attained EEDI shall be verified, based on the EEDI technical file, either by the Administration or by any organization* duly authorized by it.

2 The attained EEDI shall be calculated taking into account guidelines[†] developed by the Organization.

Regulation 21

Required EEDI

- 1 For each:
 - .1 new ship;
 - .2 new ship which has undergone a major conversion; and
 - .3 new or existing ship which has undergone a major conversion that is so extensive that the ship is regarded by the Administration as a newly constructed ship

^{*}Refer to the Guidelines for the authorization of organizations acting on behalf of the Administration, adopted by the Organization by resolution A.739(18), as may be amended by the Organization, and the Specifications on the survey and certification functions of recognized organizations acting on behalf of the Administration, adopted by the Organization by resolution A.789(19), as may be amended by the Organization.

[†]Guidelines on the method of calculation of the Energy Efficiency Design Index for new ships.

which falls into one of the categories defined in regulations 2.25 to 2.31 and to which this Chapter is applicable, the attained EEDI shall be as follows:

Attained EEDI \leq Required EEDI = $(1-X/100) \times$ Reference line value where X is the reduction factor specified in Table 1 for the required EEDI compared to the EEDI Reference line.

2 For each new and existing ship that has undergone a major conversion which is so extensive that the ship is regarded by the Administration as a newly constructed ship, the attained EEDI shall be calculated and meet the requirement of paragraph 21.1 with the reduction factor applicable corresponding to the ship type and size of the converted ship at the date of the contract of the conversion, or in the absence of a contract, the commencement date of the conversion.

Table 1. Reduction factors (in percentage) for the EEDI relative to the EEDI Reference line

Ship Type	Size	Phase 0 1 Jan 2013 – 31 Dec 2014	Phase 1 1 Jan 2015 – 31 Dec 2019	Phase 2 1 Jan 2020 – 31 Dec 2024	Phase 3 1 Jan 2025 and onwards
Bulk carrier	20,000 DWT and above	0	10	20	30
Bulk carrier	10,000 – 20,000 DWT	n/a	0 - 10*	0 - 20*	0 - 30*
Gas carrier	10,000 DWT and above	0	10	20	30
Gas carrier	2,000 – 10,000 DWT	n/a	0 - 10*	0 - 20*	0 - 30*
Tamban	20,000 DWT and above	0	10	20	30
Tanker	4,000 – 20,000 DWT	n/a	0 - 10*	0 - 20*	0 - 30*
Container	15,000 DWT and above	0	10	20	30
ship	10,000 - 15,000 DWT	n/a	0 - 10*	0 - 20*	0 - 30*
General Cargo ships	15,000 DWT and above	0	10	15	30
	3,000 – 15,000 DWT	n/a	0 - 10*	0 - 15*	0 - 30*
Refrigerated	5,000 DWT and above	0	10	15	30
cargo carrier	3,000 – 5,000 DWT	n/a	0 - 10*	0 - 15*	0 - 30*

Ship Type	Size	Phase 0 1 Jan 2013 – 31 Dec 2014	Phase 1 1 Jan 2015 – 31 Dec 2019	Phase 2 1 Jan 2020 – 31 Dec 2024	Phase 3 1 Jan 2025 and onwards
Combination	20,000 DWT and above	0	10	20	30
carrier	4,000 – 20,000 DWT	n/a	0 - 10*	0 - 20*	0 - 30*

^{*}Reduction factor to be linearly interpolated between the two values dependent upon vessel size. The lower value of the reduction factor is to be applied to the smaller ship size.

n/a means that no required EEDI applies.

3 The Reference line values shall be calculated as follows: Reference line value = $a \times b^{-c}$ where a, b and c are the parameters given in Table 2.

Table 2. Parameters for determination of reference values for the different ship types

Ship type defined in regulation 2	a	b	c
2.25 Bulk carrier	961.79	DWT of the ship	0.477
2.26 Gas carrier	1120.00	DWT of the ship	0.456
2.27 Tanker	1218.80	DWT of the ship	0.488
2.28 Container ship	174.22	DWT of the ship	0.201
2.29 General cargo ship	107.48	DWT of the ship	0.216
2.30 Refrigerated cargo carrier	227.01	DWT of the ship	0.244
2.31 Combination carrier	1219.00	DWT of the ship	0.488

- 4 If the design of a ship allows it to fall into more than one of the above ship type definitions, the required EEDI for the ship shall be the most stringent (the lowest) required EEDI.
- 5 For each ship to which this regulation applies, the installed propulsion power shall not be less than the propulsion power needed to maintain the manoeuvrability of the ship under adverse conditions as defined in the guidelines to be developed by the Organization.
- 6 At the beginning of Phase 1 and at the midpoint of Phase 2, the Organization shall review the status of technological developments and, if proven necessary, amend the time periods, the EEDI reference line parameters for relevant ship types and reduction rates set out in this regulation.

Regulation 22

Ship Energy Efficiency Management Plan (SEEMP)

- 1 Each ship shall keep on board a ship specific Ship Energy Efficiency Management Plan (SEEMP). This may form part of the ship's Safety Management System (SMS).
- 2 The SEEMP shall be developed taking into account guidelines adopted by the Organization.

Regulation 23

Promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships

- 1 Administrations shall, in co-operation with the Organization and other international bodies, promote and provide, as appropriate, support directly or through the Organization to States, especially developing States, that request technical assistance.
- 2 The Administration of a Party shall co-operate actively with other Parties, subject to its national laws, regulations and policies, to promote the development and transfer of technology and exchange of information to States which request technical assistance, particularly developing States, in respect of the implementation of measures to fulfil the requirements of Chapter IV of this annex, in particular regulations 19.4 to 19.6.";
- (z) by deleting the Appendix heading of Appendix VII and substituting the following Appendix heading:

"EMISSION CONTROL AREAS

(Regulation 13.6 and Regulation 14.3)";

- (*za*) by deleting the words "The North American area comprises:" in the first paragraph of Appendix VII and substituting the following paragraphs:
 - "1 The boundaries of emission control areas designated under regulations 13.6 and 14.3, other than the Baltic Sea and the North Sea areas, are set forth in this Appendix.
 - 2 The North American area comprises:";

- (zb) by inserting, immediately after paragraph 2 of Appendix VII, the following paragraph:
 - "3 The United States Caribbean Sea area includes:
 - .1 the sea area located off the Atlantic and Caribbean coasts of the Commonwealth of Puerto Rico and the United States Virgin Islands, enclosed by geodesic lines connecting the following coordinates:

POINT	LATITUDE	LONGITUDE
1	17° 18' 37" N.	67° 32' 14" W.
2	19° 11' 14" N.	67° 26' 45" W.
3	19° 30' 28" N.	65° 16' 48" W.
4	19° 12' 25" N.	65° 6' 8" W.
5	18° 45' 13" N.	65° 0' 22" W.
6	18° 41' 14" N.	64° 59' 33" W.
7	18° 29' 22" N.	64° 53' 51" W.
8	18° 27' 35" N.	64° 53' 22" W.
9	18° 25' 21" N.	64° 52' 39" W.
10	18° 24' 30" N.	64° 52' 19" W.
11	18° 23' 51" N.	64° 51' 50" W.
12	18° 23' 42" N.	64° 51' 23" W.
13	18° 23' 36" N.	64° 50' 17" W.
14	18° 23' 48" N.	64° 49' 41" W.
15	18° 24' 11" N.	64° 49' 0" W.
16	18° 24' 28" N.	64° 47' 57" W.
17	18° 24' 18" N.	64° 47' 1" W.
18	18° 23' 13" N.	64° 46' 37" W.
19	18° 22' 37" N.	64° 45' 20" W.
20	18° 22' 39" N.	64° 44' 42" W.
21	18° 22' 42" N.	64° 44' 36" W.
22	18° 22' 37" N.	64° 44' 24" W.
23	18° 22' 39" N.	64° 43' 42" W.
24	18° 22' 30" N.	64° 43' 36" W.
25	18° 22' 25" N.	64° 42' 58" W.
26	18° 22' 26" N.	64° 42' 28" W.
27	18° 22' 15" N.	64° 42' 3" W.
28	18° 22' 22" N.	64° 40' 60" W.

POINT	LATITUDE	LONGITUDE
29	18° 21' 57" N.	64° 40' 15" W.
30	18° 21' 51" N.	64° 38 23" W.
31	18° 21' 22" N.	64° 38' 16" W.
32	18° 20' 39" N.	64° 38' 33" W.
33	18° 19' 15" N.	64° 38' 14" W.
34	18° 19' 7" N.	64° 38' 16" W.
35	18° 17' 23" N.	64° 39' 38" W.
36	18° 16' 43" N.	64° 39' 41" W.
37	18° 11' 33" N.	64° 38' 58" W.
38	18° 3' 2" N.	64° 38' 3" W.
39	18° 2' 56" N.	64° 29' 35" W.
40	18° 2' 51" N.	64° 27' 2" W.
41	18° 2' 30" N.	64° 21' 8" W.
42	18° 2' 31" N.	64° 20' 8" W.
43	18° 2' 3" N.	64° 15' 57" W.
44	18° 0' 12" N.	64° 2' 29" W.
45	17° 59' 58" N.	64° 1' 4" W.
46	17° 58' 47" N.	63° 57' 1" W.
47	17° 57' 51" N.	63° 53' 54" W.
48	17° 56' 38" N.	63° 53' 21" W.
49	17° 39' 40" N.	63° 54' 53" W.
50	17° 37' 8" N.	63° 55' 10" W.
51	17° 30' 21" N.	63° 55' 56" W.
52	17° 11' 36" N.	63° 57' 57" W.
53	17° 4' 60" N.	63° 58' 41" W.
54	16° 59' 49" N.	63° 59' 18" W.
55	17° 18' 37" N.	67° 32' 14" W.

; and

(zc) by inserting, immediately after Appendix VII, the following Appendix:

"APPENDIX VIII

FORM OF INTERNATIONAL ENERGY EFFICIENCY (IEE) CERTIFICATE

INTERNATIONAL ENERGY EFFICIENCY CERTIFICATE

Issued under the provisions of the Protocol of 1997, as amended by resolution MEPC.203(62), to amend the International Convention for the Prevention of Pollution by Ships, 1973, as modified by the Protocol of 1978 related thereto (hereinafter referred to as "the Convention") under the authority of the Government of:

(Full designation of the Party)				
эу				
(Full designation of the competent person or organization authorized under the provisions of the Convention)				
Particulars of ship*				
Name of ship				
Distinctive number or letters				
Port of registry				
Gross tonnage				
IMO Number [†]				

^{*}Alternatively, the particulars of the ship may be placed horizontally in boxes.

[†]In accordance with IMO ship identification number scheme, adopted by the Organisation by resolution A.600(15).

THIS IS TO CERTIFY:

- 1. That the ship has been surveyed in accordance with regulation 5.4 of Annex VI of the Convention; and
- 2. That the survey shows that the ship complies with the applicable requirements in regulation 20, regulation 21 and regulation 22.

Completion date of the subased:	urvey on which this Certificate is
(dd/mm/y	yyyy)
Issued at(Place of issu	ue of certificate)
(dd/mm/yyyy):(Date of issue)	(Signature of authorized official issuing the certificate)
(Seal or stamp of the	authority, as appropriate)

SUPPLEMENT TO THE INTERNATIONAL ENERGY EFFICIENCY CERTIFICATE

(IEE CERTIFICATE)

RECORD OF CONSTRUCTION RELATING TO ENERGY EFFICIENCY

Notes:

- 1. This Record shall be permanently attached to the IEE Certificate. The IEE Certificate shall be available on board the ship at all times.
- 2. The Record shall be at least in English, French or Spanish. If an official language of the issuing Party is also used, this shall prevail in case of a dispute or discrepancy.
- 3. Entries in boxes shall be made by inserting either: a cross (x) for the answers "yes" and "applicable"; or a dash (–) for the answers "no" and "not applicable", as appropriate.
- 4. Unless otherwise stated, regulations mentioned in this Record refer to regulations in Annex VI of the Convention, and resolutions or circulars refer to those adopted by the International Maritime Organization.

^{*}Insert ship type in accordance with definitions specified in regulation 2. Ships falling into more than one of the ship types defined in regulation 2 should be considered as being the ship type with the most stringent (the lowest) required EEDI. If ship does not fall into the ship types defined in regulation 2, insert "Ship other than any of the ship type defined in regulation 2".

3.	Atta	Attained Energy Efficiency Design Index (EEDI)			
	3.1	The Attained EEDI in accordance with regulation 20.1 is calculated base on the information contained in the EEDI technical file which also show the process of calculating the Attained EEDI			
		The A	Attained EEDI is: grames-CO ₂ /tonne-mile		
3.2 The Attained EEDI is not calculated as:			Attained EEDI is not calculated as:		
		3.2.1	the ship is exempt under regulation 20.1 as it is not a new ship as defined in regulation 2.23		
		3.2.2	the type of propulsion system is exempt in accordance with regulation 19.3		
		3.2.3	the requirement of regulation 20 is waived by the ship's Administration in accordance with regulation 19.4		
		3.2.4	the type of ship is exempt in accordance with regulation 20.1		
4.	Req	quired EEDI			
	4.1 Required EEDI is: grames-CO ₂ /tonne-mile				
	4.2 The required EEDI is not applicable as:				
		4.2.1	the ship is exempt under regulation 21.1 as it is not a new ship as defined in regulation 2.23		
		4.2.2	the type of propulsion system is exempt in accordance with regulation 19.3		
		4.2.3	the requirement of regulation 21 is waived by the ship's Administration in accordance with regulation 19.4		
		4.2.4	the type of ship is exempt in accordance with regulation 21.1		
		4.2.5	the ship's capacity is below the minimum capacity threshold in Table 1 of regulation 21.2		
5	Ship	hip Energy Efficiency Management Plan			
	5.1		ship is provided with a Ship Energy Efficiency Management Plan MP) in compliance with regulation 22		
6	EEI	EDI technical file			
	6.1		IEE Certificate is accompanied by the EEDI technical file in liance with regulation 20.1		
	6.2	The I	EEDI technical file identification/verification number		
	6.2	The I	EEDI toohnigal file verification data		

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THIS IS TO CERTIFY that this R	ecord is correct in all respects.
Issued at	
(Place of issu	ue of Record)
(dd/mm/yyyy):(Date of issue)	(Signature of authorized official issuing the Record)
(Seal or stamp of t	he authority, as appropriate)".
	[G.N. Nos. S 620/2006; S 331/2010; S 398/2011; S 21/2012]

Made this 21st day of December 2012.

LUCIEN WONG

Chairman, Maritime and Port Authority of Singapore.

[MPA 46/06.O11.V05/CAH; AG/LLRD/SL/243/2010/2 Vol. 1]