



Department of Marine Administration - Yangon Myanmar

Policy for MARPOL Annex VI Implementation

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Subj: INTERIM GUIDANCE FOR THE IMPLEMENTATION OF MARPOL ANNEX VI

Ref: International Convention for the Prevention of Pollution from ship (MARPOL), Annex VI – Regulations for the Prevention of Air Pollution from ships.

1. Purpose

This policy letter provides interim guidance to ensure Myanmar flagged vessels are in compliance with the requirements of the Annex-VI of MARPOL 73/ 78 and amendments.

2. Action

Myanmar flag state Surveyors and recognized Surveyors shall use this interim guidance in the survey and issuing Document of Compliance to MARPOL Annex-VI of Myanmar flagged vessels.

3. Directives Affected

April 21st, 2014.

4. Background

MARPOL ANNEX VI, REGULATION FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS. However, the Republic of the Union of Myanmar does not ratify the MARPOL Annex-VI, Myanmar flagged vessels shall need to comply with the requirements of the Annex VI.

5. Enforcement

Myanmar flag state surveyors and RO should verify Myanmar flagged Vessels to be with MARPOL Annex VI. For Myanmar ships operating strictly on Myanmar waters, compliance should be verified by Myanmar Flag state Surveyors during normally

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scheduled inspections, but an educational outreach and awareness approach is encouraged. However, current enforcement options remain in place for willful and egregious violators or repeat offenders.

6. Limitation

Survey, certification and means of control

Regulation 5

Surveys

- .1 Every ship of 400 gross tonnage and above and every fixed and floating drilling rig and other platforms shall be subject to the surveys specified below:
 - (a) 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 this Annex;
 - (b) 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 this Annex;
 - (c) 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 this Annex and are in good working order. Such intermediate surveys shall be endorsed on the certificate issued under regulation 6 or 7 of this Annex;
 - (d) 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 4 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

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certificate issued under regulation 6 or 7 of this Annex; and

- (e) 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 4 of this regulation or after a repair resulting from investigations prescribed in paragraph 5 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 this Annex.
- .2 In the case of ships of less than 400 gross tonnage, the Government of the Republic of the Union of Myanmar may establish appropriate measures in order to ensure that the applicable provisions of this Annex are complied with.
- .3 Surveys of ships as regards the enforcement of the provisions of this Annex shall be carried out by officers of the Government of the Republic of the Union of Myanmar.
- (a) The Government of the Republic of the Union of Myanmar may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it. Such organizations shall comply with the guidelines adopted by the Organization;
 - (b) The survey of marine diesel engines and equipment for compliance with regulation 13 of this Annex shall be conducted in accordance with the revised NOx Technical Code 2008;
 - (c) When a nominated surveyor or recognized organization determines that the condition of the equipment does not correspond substantially with the particulars of the certificate, it shall ensure that corrective action is taken and shall in due course notify the Government of the Republic of the Union of Myanmar. If such corrective action is not taken, the certificate shall be withdrawn by the Government of the Republic of the Union of Myanmar. If the ship is in a port or another Party, the appropriate authorities of the port State shall also be notified immediately. When an officer of the Government of the Republic of the Union of Myanmar, a nominated surveyor or recognized organization has notified the appropriate authorities of the port State, the Government of the port State concerned shall give such officer, surveyor or organization any necessary assistance to carry out their obligations under this regulation; and

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- (d) In every case, the Administration concerned shall fully guarantee the completeness and efficiency of the survey and shall undertake to ensure the necessary arrangements to satisfy this obligation.
- .4 The equipment shall be maintained to conform with the provisions of this Annex and no changes shall be made in the equipment, systems, fittings, arrangements or material covered by the survey, without the express approval of the Administration. The direct replacement of such equipment and fittings with equipment and fittings that conform with the provisions of this Annex is permitted.
- .5 Whenever an accident occurs to a ship or a defect is discovered that substantially affects the efficiency or completeness of its equipment covered by this Annex, the master or owner of the ship shall report at the earliest opportunity to the Administration, a nominated surveyor or recognized organization responsible for issuing the relevant certificate.

Regulation 6

Issue or endorsement of a Certificate

- .1 An International Air Pollution Prevention Certificate shall be issued, after an initial or renewal survey in accordance with the provisions of regulation 5 of this Annex, to:
- .1 any ship of 400 gross tonnage and above engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties; and
- .2 platforms and drilling rigs engaged in voyages to waters under the sovereignty or jurisdiction of other Parties.
- .2 A ship constructed before the date of entry into force of Annex VI for such ship's, Government of the Republic of the Union of Myanmar shall be issued with an International Air Pollution Prevention Certificate in accordance with paragraph 1 of this regulation no later than the first scheduled dry-docking after the date of such entry into force, but in no case later than three years after this date.
- .3 Such certificate shall be issued or endorsed either by the Administration or by any person or organization duly authorized by it. In every case, the Administration assumes full responsibility for the certificate.

Regulation 7

Issue of a Certificate by another Party

- .1 A Party may, at the request of the Administration, cause a ship to be surveyed and,

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if satisfied that the provisions of this Annex are complied with, shall issue or authorize the issuance of an International Air Pollution Prevention Certificate to the ship, and where appropriate, endorse or authorize the endorsement of that certificate on the ship, in accordance with this Annex.

- .2 A copy of the certificate and a copy of the survey report shall be transmitted as soon as possible to the requesting Administration.
- .3 A certificate so issued shall contain a statement to the effect that it has been issued at the request of the Administration and it shall have the same force and receive the same recognition as a certificate issued under regulation 6 of this Annex.
- .4 No International Air Pollution Prevention Certificate shall be issued to a ship that is entitled to fly the flag of a State which is not a Party.

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Appendix I

DOCUMENT OF COMPLIANCE FOR AIR POLLUTION PREVENTION

Issued under the provisions of the Protocol of 1997, as amended by resolution MEPC.176(58) in 2008, to amend the International Convention for the Prevention of Pollution from 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 country)

by
(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

IMO Number

Port of registry

Gross tonnage

THIS IS TO CERTIFY:

1 That the ship has been surveyed in accordance with regulation 5 of Annex VI of the Convention; and

2 That the survey shows that the equipment, systems, fittings, arrangements and materials fully comply with the applicable requirements of Annex VI of the Convention.

This Certificate is valid until (dd/mm/yyyy)
subject to surveys in accordance with regulation 5 of Annex VI of the Convention.

Completion date of the survey on which this Certificate is based (dd/mm/yyyy)

Issued at

(place of issue of Certificate)

Date (dd/mm/yyyy)

(date of issue) (signature of duly authorized official issuing the Certificate)

(seal or stamp of the authority, as appropriate)

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ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEYS

THIS IS TO CERTIFY that, at a survey required by regulation 5 of Annex VI of the Convention, the ship was found to comply with the relevant provisions of that Annex: Annual survey

Signed

(signature of duly authorized official)

Place

Date(dd/mm/yyyy).....

(seal or stamp of the authority, as appropriate)

Annual/Intermediate' survey

Signed

(signature of duly authorized official)

Place

Date(dd/mm/yyyy).....

(seal or stamp of the authority, as appropriate)

Annual/Intermediate' survey

Signed

(signature of duly authorized official)

Place

Date (dd/mm/yyyy)

(seal or stamp of the authority, as appropriate)

Annual survey

Signed

(signature of duly authorized official)

Place

Date(dd/mm/yyyy).....

(seal or stamp of the authority, as appropriate)

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**ANNUAL/INTERMEDIATE SURVEY IN ACCORDANCE
WITH REGULATION 9.8.3**

THIS IS TO CERTIFY that, at an annual/intermediate' survey in accordance with regulation 9.8.3 of Annex VI of the Convention, the ship was found to comply with the relevant provisions of that Annex:

Signed

(signature of duly authorized official)

Place

Date(dd/mm/yyyy).....

(seal or stamp of the authority, as appropriate)

**ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR LESS
THAN 5 YEARS WHERE REGULATION 9.3 APPLIES**

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 9.3 of Annex VI of the Convention, be accepted as valid until (dd/mm/yyyy)

Signed

(signature of duly authorized official)

Place

Date (dd/mm/yyyy)

(seal or stamp of the authority, as appropriate)

Delete as appropriate.



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**ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN
COMPLETED AND REGULATION 9.4 APPLIES**

The ship complies with the relevant provisions of the Annex, and this Certificate shall, in accordance with regulation 9.4 of Annex VI of the Convention, be accepted as valid until (dd/mm/yyyy)

Signed
(signature of duly authorized official)
Place
Date (dd/mm/yyyy)

(seal or stamp of the authority, as appropriate)

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE

**UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE
WHERE REGULATION 9.5 OR 9.6 APPLIES**

This Certificate shall, in accordance with regulation 9.5 or 9.6* of Annex VI of the Convention, be accepted as valid until (dd/mm/yyyy)

Signed
(signature of duly authorized official)
Place
Date (dd/mm/yyyy).....

(seal or stamp of the authority, as appropriate)



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ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE

WHERE REGULATION 9.8 APPLIES

In accordance with regulation 9.8 of Annex VI of the Convention, the new anniversary date is (dd/mm/yyyy)

.....

Signed

(signature of duly authorized official)

Place

Date (dd/mm/yyyy)

(seal or stamp of the authority, as appropriate)

In accordance with regulation 9.8 of Annex VI of the Convention, the new anniversary date is (dd/mm/yyyy)

Signed

(signature of duly authorized official)

Place

Date (dd/mm/yyyy).....

(seal or stamp of the authority, as appropriate)

, Delete as appropriate.



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SUPPLEMENT TO INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE (IAPP CERTIFICATE) RECORD OF CONSTRUCTION AND EQUIPMENT

Notes:

- 1 This Record shall be permanently attached to the IAPP Certificate. The IAPP 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 country 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 answer "yes" and "applicable" or a (-) for the answers "no" and "not applicable" as appropriate.
- 4 Unless otherwise stated, regulations mentioned in this Record refer to regulations of Annex VI of the Convention and resolutions or circulars refer to those adopted by the International Maritime Organization.

1 Particulars of ship

- 1.1 Name of ship
- 1.2 IMO Number
- 1.3 Date on which keel was laid or ship was at a similar stage of construction (dd/mm/yyyy).....
- 1.4 Length (L) metres

2 Control of emissions from ships

2.1 Ozone-depleting substances (regulation 12)

2.1.1 The following fire-extinguishing systems, other systems and equipment containing ozone-depleting substances, other than hydrochlorofluorocarbons (HCFCs), installed before 19 May 2005 may continue in service:

System or equipment	Location on board	Substance



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2.1.2 The following systems containing HCFCs installed before 1 January 2020 may continue in service:

System or equipment	Location on board	Substance

2.2 Nitrogen oxides (NOx) (regulation 13)

2.2.1 The following marine diesel engines installed on this ship comply with the applicable emission limit of regulation 13 in accordance with the revised NOx Technical Code 2008:

	Engine #1	Engine #2	Engine #3	Engine #4	Engine #5	Engine #6
Manufacturer and model						
Serial number						
Use						
Power output (kW)						
Rated speed (rpm)						
Date of installation (dd/mm/yyyy)						
Date of major conversion (dd/mm/yyyy)	According to Reg. 13.2.2					
	According to Reg. 13.2.3					
Exempted by regulation 13.1.1.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tier I Reg.13.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tier II Reg.13.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tier II Reg. 13.2.2 or 13.5.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tier III Reg.13.5.1.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approved method exists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approved method not commercially available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approved method installed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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2.3 Sulphur oxides (SOx) and particulate matter (regulation 14)*

2.3.1 When the ship operates outside of an Emission Control Area specified in regulation 14.3, the ship uses:

.1 fuel oil with a sulphur content as documented by bunker delivery notes that does not exceed the limit value of:

- 4.50% m/m (not applicable on or after 1 January 2012); or
- 3.50% m/m (not applicable on or after 1 January 2020); or:
- 0.50% m/m, and/or.

.2 an equivalent arrangement approved in accordance with regulation 4.1 as listed in 2.6 that is at least as effective in terms of sax emission reductions as compared to using a fuel oil with a sulphur content limit value of:

- 4.50% m/m (not applicable on or after 1 January 2012); or
- 3.50% m/m (not applicable on or after 1 January 2020); or
- 0.50% m/m

2.3.2 When the ship operates inside an Emission Control Area specified in regulation 14.3, the ship uses:

.1 fuel oil with a sulphur content as documented by bunker delivery notes that does not exceed the limit value of:

- 1.00% m/m (not applicable on or after 1 January 2015); or
- 0.10% m/m, and/or.

.2 an equivalent arrangement approved in accordance with regulation 4.1 as listed in 2.6 that is at least as effective in terms of SOx emission reductions as compared to using a fuel oil with a sulphur content limit value of:

- 1.00% m/m (not applicable on or after 1 January 2015); or
- 0.10% m/m

2.4 Volatile organic compounds (VOCs) (regulation 15)

2.4.1 The tanker has a vapour collection system installed and approved in accordance with

MSC/Circ.585.....

2.4.2.1 For a tanker carrying crude oil, there is an approved VOC management plan.



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2.4.2.2 VOC management plan approval reference:

2.5 Shipboard incineration (regulation 16)

The ship has an incinerator:

.1 installed on or after 1 January 2000 that complies with resolution MEPC.76(40).

.2 installed before 1 January 2000 that complies with:

.2.1 resolution MEPC.59(33)

.2.2 resolution MEPC.76(40)

2.6 Equivalentents (regulation 4)

The ship has been allowed to use the following fitting, material, appliance or apparatus to be fitted in a ship or other procedures, alternative fuel oils, or compliance methods used as an alternative to that required by this Annex:

System or equipment	Equivalent used	Approval reference

THIS IS TO CERTIFY that this Record is correct in all respects.

Issued

at.....

(place of issue of the Record)

Date (dd/mm/yyyy)

.....

(date of issue)

(signature of duly authorized official issuing the Record)

(seal or stamp of the authority, as appropriate)



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Appendix II

Test cycles and weighting factors (Regulation 13)

The following test cycles and weighting factors shall be applied for verification of compliance of marine diesel engines with the applicable NOx limit in accordance with regulation 13 of this Annex using the test procedure and calculation method as specified in the revised NOx Technical Code 2008 .

- . 1 For constant-speed marine engines for ship main propulsion, including diesel-electric drive, test cycle E2 shall be applied;
- .2 For controllable-pitch propeller sets test cycle E2 shall be applied;
- .3 For propeller-law-operated main and propeller-law-operated auxiliary engines the test cycle E3 shall be applied;
- .4 For constant-speed auxiliary engines test cycle 02 shall be applied; and
- .5 For variable-speed, variable-load auxiliary engines, not included above, test cycle C1 shall be applied.

Test cycle for constant-speed main propulsion application

(including diesel-electric drive and all controllable-pitch propeller installations)

Test cycle type E2	Speed	100%	100%	100%	100%
	Power	100%	75%	50%	25%
	Weighting factor	0.2	0.5	0.15	0.15

Test cycle for propeller-law-operated main and propeller-law-operated auxiliary engine application

Test cycle type E3	Speed	100%	91%	80%	63%
	Power	100%	75%	50%	25%
	Weighting factor	0.2	0.5	0.15	0.15

Test cycle for constant-speed auxiliary engine application

Test cycle type D2	Speed	100%	100%	100%	100%	100%
	Power	100%	75%	50%	25%	10%
	Weighting factor	0.05	0.25	0.3	0.3	0.1



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Test cycle for variable-speed and variable-load auxiliary engine application

Test cycle	Speed	Rated				Intermediate			Idle
		Torque	100%	75%	50%	10%	100%	75%	50%
Type C1	Weighting factor	0.15	0.15	0.15	0.15	0.1	0.1	0.1	0.15

In the case of an engine to be certified in accordance with paragraph 5.1.1 of regulation 13, the specific emission at each individual mode point shall not exceed the applicable NOx emission limit value by more than 50% except as follows:

- .1 The 10% mode point in the D2 test cycle .
- . 2 The 10% mode point in the test cycle .
- . 3 The idle mode point in the C1 test cycle.