ANNEX 10

RESOLUTION MEPC.128(53)

Adopted on 22 July 2005

AMENDMENTS TO THE REVISED SURVEY GUIDELINES UNDER THE HARMONIZED SYSTEM OF SURVEY AND CERTIFICATION (RESOLUTION A.948(23)) FOR THE PURPOSE OF MARPOL ANNEX VI

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by the international conventions for the prevention and control of marine pollution from ships,

RECALLING ALSO resolution A.948(23) by which the Assembly adopted the revised survey guidelines under the harmonized system of survey and certification,

RECALLING FURTHER that MARPOL Annex VI entered into force on 19 May 2005,

NOTING that amendments to MARPOL Annex VI on the introduction of the Harmonized System of Survey and Certification (HSSC) were adopted by resolution MEPC.132(53) which are expected to enter into force on 22 November 2006,

NOTING ALSO that the Assembly, when adopting resolution A.948(23), requested the Maritime Safety Committee and the Marine Environment Protection Committee to keep the Revised Survey Guidelines under review and amend them as necessary,

HAVING CONSIDERED the draft amendments to the revised survey guidelines under the HSSC prepared by the Sub-Committee on Flag State Implementation at its thirteenth session,

- 1. ADOPTS amendments to the revised survey guidelines under the HSSC, as set out in the Annex to this resolution;
- 2. INVITES Governments to apply the Guidelines, as soon as possible.

ANNEX

AMENDMENTS TO THE REVISED SURVEY GUIDELINES UNDER THE HARMONIZED SYSTEM OF SURVEY AND CERTIFICATION (RESOLUTION A.948(23)) FOR THE PURPOSE OF MARPOL ANNEX VI

- In the Contents, the following new section 3 is added after existing section 2 in Annex 3:
- "(A) 3 GUIDELINES FOR SURVEYS FOR INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE AND THE NO_x TECHNICAL CODE
- (AI) 3.1 Initial surveys
- (AA) 3.2 Annual surveys
- (AIn) 3.3 Intermediate surveys
- (AR) 3.4 Renewal surveys"
- 2 In section **GENERAL**:
 - .1 in paragraph 2.8.1, a new line is added after 'MARPOL 73/78/90, Annex II, regulation 10(1)(a)" as follows:
 - "MARPOL Annex VI, regulation 5(1)(a)"
 - .2 in paragraph 2.8.3, a new line is added after "MARPOL 73/78/90, Annex II, regulation 10(1)(b)" as follows:
 - "MARPOL Annex VI, regulation 5(1)(b)"
 - in paragraph 2.8.4, a new line is added after 'MARPOL 73/78/90, Annex II, regulation 10(1)(c)" as follows:
 - "MARPOL Annex VI, regulation 5(1)(c)"
 - .4 in paragraph 2.8.5, a new line is added after 'MARPOL 73/78/90, Annex II, regulation 10(1)(d)" as follows:
 - "MARPOL Annex VI, regulation 5(1)(d)"
 - in paragraph 3.2, after existing text "Annex I regulation 21" add the following new text "and Annex VI regulation 19."
 - in paragraph 3.8, after the existing text "(N) for the International Pollution Prevention Certificate for Carriage of Noxious Liquid Substances in Bulk;" add the following new line:

- "(A) for the International Air Pollution Prevention Certificate;"
- .7 in paragraph 4.8.1, after the existing text "MARPOL 73/78/90 Annex II regulation 10(2)(c)," the following new text is added:

"MARPOL Annex VI regulation 6(1),"

- .8 in paragraph 5.2:
 - .1 in the references, after the existing text 'MARPOL 73/78/90 Annex II," the following new line is added:

"MARPOL Annex VI regulation 9(3),"

.2 in the guideline, after the existing text "MARPOL 73/78/90 Annex II regulations 12(5) and (6)," the following new text is added:

"MARPOL Annex VI regulations 9(4) and (5),"

.3 in the guideline, after the existing text "MARPOL 73/78/90 Annex II regulation 12(2)(b)," the following new text is added:

"MARPOL Annex VI regulation 9(2)(b),"

.9 in paragraph 5.4, after the existing text in the references "MARPOL 73/78/90 Annex II regulation 12(6)," the following new text is added:

"MARPOL Annex VI regulation 9(6)"

in paragraph 5.5, third line from top, after the existing text "MARPOL 73/78/90 Annex II regulation 12(7)," the following new text is added:

"MARPOL Annex VI regulation 9(7)"

- In Annex 1 'SURVEY GUIDELINES UNDER THE 1974 SOLAS CONVENTION, AS MODIFIED BY THE 1988 PROTOCOL RELATING THERETO":
 - .1 the following new subparagraph .8bis is added after existing paragraph 1.2.1.8:
 - "(EA) .8bis checking, when appropriate, the validity of the International Air Pollution Prevention Certificate;"
 - .2 the following new subparagraph .8bis is added after existing paragraph 2.2.1.8:
 - "(CA) .8bis checking, when appropriate, the validity of the International Air Pollution Prevention Certificate;"

- .3 the following new subparagraph .8bis is added after existing paragraph 4.2.1.8:
 - "(RP) .8bis checking, when appropriate, the validity of the International Air Pollution Prevention Certificate;"
- .4 the following new subparagraph .5bis is added after existing paragraph 5.2.1.5:
 - "(PR) .5bis: checking, when appropriate, the validity of the International Air Pollution Prevention Certificate;"
- 4 In Annex 2 "SURVEY GUIDELINES UNDER THE 1966 LOAD LINE CONVENTION, AS MODIFIED BY THE 1988 PROTOCOL RELATING THERETO":
 - .1 the following new subparagraph .8bis is added after existing paragraph 1.2.1.8:
 - "(LA) .8bis checking, when appropriate, the validity of the International Air Pollution Prevention Certificate;"
- 5 In Annex 3 "SURVEY GUIDELINES UNDER THE 1973/78 MARPOL CONVENTION":
 - .1 the following new subparagraph .7bis is added after existing paragraph 1.2.1.7:
 - "(OA) .7bis: checking, when appropriate, the validity of the International Air Pollution Prevention Certificate;"
 - .2 the following new subparagraph .6bis is added after existing paragraph 2.2.1.6:
 - "(NA) .6bis checking, when appropriate, the validity of the International Air Pollution Prevention Certificate:"
 - .3 the following new section 3 is added:
- "(A) 3 GUIDELINES FOR THE SURVEYS FOR THE INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE AND THE NO_x TECHNICAL CODE
- (AI) **3.1 Initial surveys** see part "General", section 4.1
- (AI) **3.1.1** For air pollution prevention the examination of plans and designs should consist of:
- (AI) examining the arrangements for systems using ozone-depleting substances (regulation 12 of Annex VI);
- (AI) .2 examining the arrangements for Sulphur Oxides exhaust gas cleaning systems or other technological methods, if applicable (regulation 14 of Annex VI):
- (AI) as examining the arrangements for vapour collection systems, if applicable (regulation 15 of Annex VI and MSC/Circ.585);

(AI)	.4		ning the arrangements for shipboard incinerators, if applicable ation 16 of Annex VI);
(AI) 3.1.2	For ai	or air pollution prevention the survey should consist of:	
(AI)	.1	Ozone-	-depleting substances (regulation 12 of Annex VI):
(AI)		.1	confirming the satisfactory installation and operation of systems using ozone depleting substances and there are no emissions of ozone depleting substances.
(AI)	.2	Nitroge Annex	en oxide emissions from Diesel engines (regulation 13 of VI):
		.1	confirmed that all engines which are required to be certified are pre-certified in accordance with section 2.2 of the NO_x Technical Code.
(AI)		.1.1	If engine parameter check method is used:
(AI)		.1.1.1	an on-board verification survey in accordance with paragraph 6.2 of the NO_x Technical Code.
		.1.2	If the simplified method is used:
(AI)		.1.2.1	an on-board verification survey in accordance with paragraph 6.3 of the NO_x Technical Code.
(AI)	.3	Sulphu	r Oxides (regulation 14 of Annex VI):
(AI)	.3.1		ning the satisfactory installation and operation of the fuel switching ements when tanks are provided for low and normal sulphur content
(AI)	.3.2		ning the satisfactory installation and operation of the exhaust gas ag system (if fitted);
(AI)	.4	Volatil	e Organic Compounds (regulation 15 of Annex VI) (if applicable):
(AI)	.4.1	confirm	ning the satisfactory installation of the vapour collection piping;
(AI)	.4.2	provide	ning the satisfactory installation and operation of the means ed to eliminate the collection of condensation in the system, such as in low points of the line end;
(AI)	.4.3		ning the satisfactory installation of the piping to ensure it is cally continuous and electrically bonded to the hull;
(AI) .4	1.4	confirm	ning the satisfactory installation and operation of the isolation

valves at the vapour manifolds;

(AI)	.4.5	confirming that the ends of each line are properly identified as vapour collection lines;
(AI)	.4.6	confirming that the vapour collection flanges are in accordance with the IMO guidelines and industrial standards;
(AI)	.4.7	confirming that where portable vapour lines are provided that they are electrically continuous;
(AI)	.4.8	confirming the satisfactory installation and operation of the closed gauging system and the readouts in the cargo control area;
(AI)	.4.9	confirming the satisfactory installation and operation of the overflow control system;
(AI)	.4.10	confirming the satisfactory installation and operation of both the audible and visual alarms, that the alarms are properly labelled; that the power failure alarm operates and that there is a means to check the operation of the alarms;
(AI)	.4.11	confirming the satisfactory installation and operation of the high and low pressure alarms provided for each main vapour line and that these alarms operate at the correct set points;
(AI)	.5	Shipboard Incinerators (regulation 16 of Annex VI) (installed on or after 1 January 2000):
(AI)	.5.1	confirming the satisfactory installation and operation of each incinerator;
(AI)	.5.2	confirming that warning and instruction plates are satisfactorily secured in prominent positions on or near the incinerator;
(AI)	.5.3	confirming that the manufacturers name, incinerator model number/type and capacity in heat units per hour is permanently marked on the incinerator;
(AI)	.5.4	confirming the satisfactory operation of the following alarms and safety devices are in good condition and fully operational;
(AI) (AI) (AI) (AI) (AI)	.5.4.1 .5.4.2 .5.4.3 .5.4.4 .5.4.5	flue gas high temperature alarms and shutdowns; combustion temperature controls and shutdowns; combustion chamber negative pressure; flame safeguard control, alarms and shutdowns; all alarms both visual and audible are functioning and they indicate the cause of their failure; power loss alarms and auto shutdown arrangements;

(AI) (AI) (AI) (AI)	.5.4.7 .5.4.8 .5.4.9 .5.4.10	charging arrangements; low fuel oil pressure alarm/shutdown; emergency stop switch and electrical isolating arrangements; interlocks;
(AI)	.5.5	confirming the satisfactory installation of drip trays under each burner, pump, and strainer.
(AI) 3.1.3		ir pollution prevention the check that certificates and other relevant nentation have been placed on board should consist of:
(AI)	.1	review (AA) 3.2.2.2 except for the bunker delivery notes and the records required in (AA) 3.2.2.2.3 and (AA) 3.2.2.2.7.
(AI) 3.1.4	For ai	r pollution prevention the completion of the initial survey should consist of:
(AI)	.1	after satisfactory survey the International Air Pollution Prevention Certificate should be issued.
(AA) 3.2	Annu	al surveys – see "General", section 4.2
(AA) 3.2. 1		ir pollution prevention the examination of current certificates and other is should consist of:
(AA)	.1	checking the validity, as appropriate, of the Cargo Ship Safety Equipment Certificate, the Cargo Ship Safety Radio Certificate and the Cargo Ship Safety Construction Certificate or the Cargo Ship Safety Certificate;
(AA)	.2	checking the validity of the Safety Management Certificate (SMC) and that a copy of the Document of Compliance (DOC) is on board, where applicable;
(AA)	.3	checking the validity of the International Load Line Certificate or International Load Line Exemption Certificate;
(AA)	.4	checking the validity of the International Oil Pollution Prevention Certificate;
(AA)	.5	checking the certificates of class, if the ship is classed with a classification society;
(AA)	.6	checking, when appropriate, the validity of the International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk or the Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk;

checking that the ship's complement complies with the Minimum Safe Manning Document (SOLAS 74/88, regulation V/13(b));

(AA)

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(AA)	.8	checking that the master, officers and ratings are certificated as required by the STCW Convention;
(AA)	.9	checking whether any new equipment has been fitted and, if so, confirm that it has been approved before installation and that any changes are reflected in the appropriate certificate;
(AA) 3.2.2	For ai	r pollution prevention the annual survey should consist of:
(AA)	.1	General:
(AA)	.1.1	confirm that no changes have been made or any new equipment installed which would affect the validity of the certificate;
(AA)	.2	Documentation:
(AA)	.2.1	confirm that there are Engine International Air Pollution Prevention (EIAPP) Certificates for each engine, required to be certified, as described in Chapter 2.1 of the NO_x Technical Code;
(AA)	.2.2	confirm that there is on board an approved technical file for each engine required to be certified;
(AA)	.2.3	confirm that there are bunker delivery notes on board and fuel oil samples are kept under the ships control (regulation 18 of Annex VI);
(AA)	.2.4	confirm that there is for each Exhaust Gas Cleaning System (EGCS)- SO_x either a SO_x Emission Control Area (SECA) Compliance Certificate for the EGCS- SO_x , or an Onboard Monitoring Manual (OMM) as appropriate, plus in either cases a SECA Compliance Plan (regulation 14(4)(b) of Annex VI);
(AA)	.2.5	confirm that there is an IMO Type Approval Certificate for each incinerator on board (regulation 16(2)(a) of Annex VI);
(AA)	.2.6	confirm that there is a record book of engine parameters for each engine required to be certified in the case where the engine parameter check method is used as a mean of onboard NO_x verification (NO_x Technical Code, paragraph 6.2.3);
(AA)	.2.7	confirm that there is a record of fuel change over this record should take form of a log-book as described by the Administration (regulation 14.6 of Annex VI)*;
(AA)	.2.8	confirm that there is a transfer procedure for the VOC collection system;
(AA)	.2.9	confirm that there is an instruction manual for each incinerator if required (regulation 16(7) of Annex VI);

^{*} This information could be contained in the engine room log-book, the deck log-book, the official log-book, the oil record book or a separate log-book solely for this purpose.

(AA)	.3	Ozone-depleting substances:
(AA)	.3.1	confirm that no new installation or equipment except those covered by (AA) 3.2.2.3.1 have been fitted to the ship after 19 May 2005. (regulation 12.1 of Annex VI);
(AA)	.3.2	confirm that no installations containing hydrochlorofluocarbons (HCFCs) have been fitted after 1 January 2020;
(AA)	.3.3	examine externally any installation or equipment as far as practicable to satisfactory maintenance to ensure that there are no emission of ozone-depleting substances.
(AA)	.4	Nitrogen oxide emissions from each Diesel engines:
(AA)	.4.1	If engine parameter check method is used:
(AA)	.4.1.1	review engine documentation contained in the technical file and the record book of engine parameters to check, as far as practicable, engine rating, duty and limitation/restrictions as given in the technical file;
(AA)	.4.1.2	confirm that the engine has not undergone any modifications or adjustments outside the options and ranges permitted in the technical file since the last survey;
(AA)	.4.1.3	conduct survey as detailed in the technical file;
(AA)	.4.2	If the simplified method is used:
(AA)	.4.2.1	review engine documentation contained in the technical file;
(AA)	.4.2.2	confirm that the test procedure has been approved by the Administration;
(AA)	.4.2.3	confirm that the analysers, engine performance sensors, ambient condition measurement equipment, span check gases and other test equipment are the correct type and have been calibrated in accordance with the NO_x Technical Code;
(AA)	.4.2.4	confirm that the correct test cycle, as defined in the engine's technical file, is used for this onboard confirmation test measurements;
(AA)	.4.2.5	ensure that a fuel sample is taken during the test and submitted for analysis;
(AA)	.4.2.6	witness the test and confirm that a copy of the test report has been submitted for approval on completion of the test.

(AA)	.4.3	If the direct measurement and monitoring method is used:
(AA)	.4.3.1	review engine documentation method and technical file and verify that the direct measurement and monitoring manual is approved by the Administration;
(AA)	.4.3.2	the procedures to be checked in the direct monitoring and measure method and the data obtained as given in the approved onboard monitoring manual should be followed;
(AA)	.5	Sulphur Oxides:
(AA)	.5.1	review bunker notes for the use of the correct sulphur content fuel for the area of operation;
(AA)	.5.2	confirm that where there are tanks fitted for low and normal sulphur content fuel that fuel switching arrangement or procedures are provided and operational;
(AA)	.5.3	verify that there are records of the change over to and from low sulphur fuel during transit through a SO_x emission control area;
(AA)	.5.4	alternative to .2 and .3 above, where EGCS- SO_x or other equivalent devices are fitted, confirmation from the approved procedures for the equipment that it is in a satisfactory condition and operated in accordance with the required documentation.
(AA)	.6	Volatile Organic Compounds (VOCs):
(AA)	.6.1	confirm that the vapour collect system, if required, is approved taking into account MSC/Circ.585 "Standards for Vapour Emission Control Systems";
(AA)	.6.2	confirm from a general examination that the vapour collection piping is in a satisfactory condition;
(AA)	.6.3	confirm that there is a means provided to eliminate the collection of condensation in the system, such as drains in low points of the line end. The drains should be checked to ensure they function correctly;
(AA)	.6.4	confirm that the piping is electrically bonded to the hull and that the bonding is intact;
(AA)	.6.5	confirm that the isolation valves at the vapour manifolds are operational and that the valve position indicators operate correctly;
(AA)	.6.6	confirm that the ends of each line is properly identified as vapour collection lines;

(AA)	.6.7	confirm that the vapour collection flanges are in accordance with the IMO guidelines and industrial standards;
(AA)	.6.8	confirm that where portable vapour lines are provided that they are in good condition;
(AA)	.6.9	confirm that the closed gauging system is operational and the readouts in the cargo control area are functional;
(AA)	.6.10	confirm that there is an overflow control system provided and that it is operational;
(AA)	.6.11	confirm that the alarm system is operational, both audible and visual alarms operate, the alarms are properly labelled; the power failure alarm operates and that there is a means to check the operation of the alarms and that this means is operational;
(AA)	.6.12	confirm that there are high and low pressure alarms provided for each main vapour line and that these alarms operate at the correct set points;
(AA)	.6.13	confirm that the high level and high high level (overfill) alarms act independently of each other.
(AA)	.7	Incinerators (installed on or after 1 January 2000):
(AA)	.7.1	confirm from an external examination that each incinerator is in a generally satisfactory condition and free from leaks of gas or smoke;
(AA)	.7.2	confirm that the warning and instruction plates are legible and secured in prominent positions on or near the incinerator;
(AA)	.7.3	confirm that the manufacturers name, incinerator model number/type and capacity in heat units per hour is permanently marked on the incinerator;
(AA)	.7.4	confirm that the incinerator casing insulation arrangements are in good condition;
(AA)	.7.5	confirm as far as it is practicable, that the following alarms and safety devices are in good condition and fully operational;
(AA)	.7.5.1	flue gas high temperature alarms and shutdowns;
(AA)	.7.5.2	combustion temperature controls and shutdowns;
(AA)	.7.5.3	combustion chamber negative pressure;
(AA)	.7.5.4	flame safeguard control, alarms and shutdowns;

- (AA) .7.5.5 all alarms both visual and audible are functioning and they indicate the cause of their failure;
- (AA) .7.5.6 power loss alarms and auto shutdown arrangements;
- (AA) .7.5.7 charging arrangements;
- (AA) .7.5.8 low fuel oil pressure alarm/shutdown;
- (AA) .7.5.9 emergency stop switch and electrical isolating arrangements;
- (AA) **.7.5.10** interlocks;
- (AA) .7.6 confirm that drip trays are fitted under each burner, pump, and strainer and that they are in good condition;
- (AA) **3.2.3** For air pollution prevention the completion of the annual survey should consist of:
- (AA) .1 after a satisfactory survey, the International Prevention of Air Pollution certificate should be endorsed:
- (AA) .2 if a survey shows that the condition of the ship or its equipment is unsatisfactory see "General", section 4.8.
- (AIn) **3.3** Intermediate survey see "General", section 4.3
- (AIn) **3.3.1** For air pollution prevention the examination of current certificates and other records should consist of:
- (AIn) $\mathbf{.1}$ the provisions of (AA) 3.2.1.
- (AIn) **3.3.2** For air pollution prevention the intermediate survey should consist of:
- (AIn) .1 the provisions of (AA) 3.2.2.
- (AIn) **3.3.3** For air pollution prevention the completion of the intermediate survey should consist of:
- (AIn) .1 after a satisfactory survey, the International Prevention of Air Pollution Certificate should be endorsed;
- (AIn) .2 if a survey shows that the condition of the ship or its equipment is unsatisfactory see "General", section 4.4.
- (AR) **3.4** Renewal surveys see "General", section 4.5
- (AR) **3.4.1** For air pollution prevention the examination of current certificates and other records should consist of:
- (AR) .1 the provisions of (AA) 1.2.1 except the validity of the International Air Pollution Prevention Certificate.

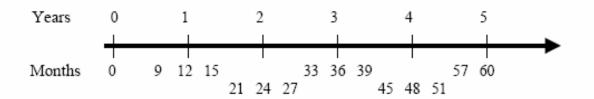
(AR) 3.4.2	For air pollution prevention the renewal survey should consist of:		
(AR)	.1	the provisions of (AA) 3.2.2;	
(AR)	.2	confirming, if necessary by simulated test or equivalent, the satisfactory operation of the vapour collection systems' closed gauging system and associated readouts;	
(AR)	.3	confirming, if necessary by simulated test or equivalent, the satisfactory operation of the vapour collection systems' overflow control and it's audible and visual alarms;	
(AR)	.4	confirming, if necessary by simulated test or equivalent, the satisfactory operation of the vapour collection systems' high and low pressure alarms for each main vapour line;	
(AR)	.5	confirm that the vapour collection systems piping is electrically continuous;	
(AR)	.6	confirm that the portable vapour lines are electrically continuous;	
(AR)	.7	confirming, if necessary by simulated test or equivalent, the satisfactory operation of the following alarms and safety devices:	
(AR)	.7.1	flue gas high temperature alarms and shutdowns;	
(AR)	.7.2	combustion temperature controls and shutdowns;	
(AR)	.7.3	combustion chamber negative pressure;	
(AR)	.7.4	flame safeguard control, alarms and shutdowns;	
(AR)	.7.5	all alarms both visual and audible are functional and they indicate the	
(AD)	7.6	cause of their failure;	
(AR) (AR)	.7.6 .7.7	power loss alarms and auto shutdown arrangements; charging arrangements;	
(AR)	.7.7 .7.8	low fuel oil pressure alarm/shutdown;	
(AR)	.7.9	emergency stop switch and electrical isolating arrangements;	
(AR)	.7.10	interlocks.	
(AR) 3.4.3	For ai	r pollution prevention the completion of the renewal survey should consist	
(AR)	.1	after satisfactory survey the International Prevention of Air Pollution	

Certificate should be issued.

6 In Annex 4 'SURVEY GUIDELINES UNDER THE MANDATORY CODES":

- .1 the following new subparagraph .6bis is added after existing paragraph 1.2.1.6:
 - "(DA) .6bis checking, when appropriate, the validity of the International Air Pollution Prevention Certificate;"
- .2 the following new subparagraph .6bis is added after existing paragraph 2.2.1.6:
 - "(GA) .6bis checking, when appropriate, the validity of the International Air Pollution Prevention Certificate:"

7 In appendix "THE HARMONIZED SYSTEM OF SURVEY AND CERTIFICATION - DIAGRAMMATIC ARRANGEMENT":



the following new lines are added after existing line "MARPOL Annex II":