U.S. Department of Homeland Security

United States Coast Guard

Commandant
United States Coast Guard

2100 2nd Street, S.W.
Washington, DC 20593-0001
Staff Symbol: (G-MOC-1)
Phone: (202) 267-1072
FAX: (202) 267-4394

16711
MOC Policy Letter 05-02

MAY 3 2005

From: M. B. Karr, CAPT
COMDT (G-MOC)

To: Distribution

Subj: GUIDELINES FOR INTERIM VOLUNTARY IMPLEMENTION OF ANNEX VI TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS (MARPOL) 73/78; PREVENTION OF AIR POLLUTION FROM SHIPS

Ref: (a) MARPOL 73/78, Annex VI

1. Purpose. To provide interim guidance to Officers-in-Charge, Marine Inspection (OCMI) for applying reference (a) including issuing Statements of Voluntary Compliance (SOVC) to U.S. flagged vessels of 400 Gross Tons (International Tonnage Convention (ITC)) and above engaging in voyages to ports or offshore terminals under the jurisdiction of a party to MARPOL 73/78.

2. Directives Affected. None.

3. Action. OCMIs should apply the following guidance as requested on a voluntary basis. OCMIs should bring this policy to the attention of appropriate individuals in the marine industry. This policy letter is electronically posted at: www.uscg.mil/hq/g-m/moc/docs.htm.

4. Background. MARPOL 73/78, Annex VI outlines international requirements for vessel air emissions and pollution prevention measures for vessels. The entry into force for MARPOL 73/78, Annex VI is 19 May 2005. The U.S. has not ratified Annex VI. Since ratification has yet to occur, the Coast Guard is making interim voluntary SOVCs available to U.S. vessel owners whose vessels fully comply with the provisions of MARPOL 73/78, Annex VI. All vessels 400 Gross Tons (ITC) and over that engage on international voyages should complete an initial survey for issuance of a SOVC in lieu of the required International Air Pollution Prevention (IAPP) Certificate (and its Supplement). The SOVC will serve as proof of shipboard compliance until the U.S. officially ratifies Annex VI. When the U.S. ratifies Annex VI, compliance will be mandatory. At that time, a more comprehensive Navigation and Vessel Inspection Circular will replace this directive and provide more details on Port State Control and enforcement actions.

5. Implementation. In order to assist U.S. vessel operators prove voluntary compliance and mitigate the risks of potential port state control action, vessel owners and operators may contact their cognizant OCMI or Authorized Classification Society for application and issuance of an SOVC. A list of Authorized Classification Societies are electronically posted at: www.uscg.mil/hq/g-m/mse/acp/acp.htm. Vessels that do not comply with reference (a), as directed by enclosures (1) and (2), should be denied an SOVC until voluntary compliance is satisfied. All U.S. vessels of 400 Gross Tons (ITC) and above engaging in voyages to ports or offshore terminals under the jurisdiction of a party to MARPOL 73/78, should have a SOVC aboard to show voluntary compliance with MARPOL, Annex VI as follows:

Subj: GUIDELINES FOR INTERIM VOLUNTARY IMPLEMENTION OF ANNEX VI TO MARPOL 73/78; PREVENTION OF AIR POLLUTION FROM SHIPS

a. Vessels constructed before 19 May 2005 should comply with applicable provisions of MARPOL Annex VI and hold appropriate flag state certification by their first scheduled drydocking after 19 May 2005, but not later than 19 May 2008.

b. Vessels delivered on or after 19 May 2005 are strongly encouraged to immediately comply with MARPOL Annex VI.

6. Port State Control Guidance. As of the date of this policy, the U.S. has not ratified MARPOL 73/78, Annex VI. Therefore, the Coast Guard cannot enforce Annex VI on foreign vessels operating in U.S. ports or waters.

#

Enclosures: (1) Verification of U.S. Flag Vessels
(2) MARPOL Annex VI SOVC Checklist

Distribution: All Area/District (m) offices
Liaison Officer of Recognized and Authorized Classification Societies
All MSOs/MIOs/Activities/Sectors

VERIFICATION OF U.S. FLAG VESSELS

1. Background: Vessels on foreign voyages may need to comply on or after 19 May 2005, with the applicable portions of MARPOL 73/78, Annex VI when engaging in voyages to ports or offshore terminals under the jurisdiction of a party to MARPOL 73/78 as outlined below. Compliance verification, when applicable, should primarily focus on documentation, equipment certification/approval and cursory materiel tests/inspection. Due to the unique situation that the U.S. has not ratified Annex VI, vessel owners cannot be *compelled* to comply. However, it is in the vessel owners' best interest to have a vessel comply to avoid possible port state actions when on foreign voyages. OCMIs should encourage proactive voluntary compliance.

a. Inspected Vessels 400 Gross Tons and over on International Voyages. All vessels 400 Gross Tons (ITC) and over that engage on international voyages should complete an initial survey for issuance of a Statement of Voluntary Compliance (SOVC) (and Supplement) in lieu of the required International Air Pollution Prevention (IAPP) Certificate (and its Supplement). The SOVC will serve as proof of shipboard compliance until the U.S. ratifies Annex VI of MARPOL 73/78. Vessels constructed before the Annex VI entry into force date should comply with applicable regulations of MARPOL Annex VI and hold appropriate flag state certification by the vessel's first scheduled drydocking after 19 May 2005, but not later than 19 May 2008. Each certificate is valid for a maximum of five years. Vessels delivered on or after 19 May 2005 should immediately comply with MARPOL Annex VI.

i. Vessels built before 19 May 2005. The form letter provided as Addendum (1) to this enclosure is designed to apprise Port State Control officials of the vessel's interim IAPP status (for the period between 19 May 2005 and the vessel's first scheduled drydocking or 19 May 2008, which ever occurs first). Coast Guard resources permitting, the cognizant Officer-in-Charge, Marine Inspection (OCMI) may issue the letter as a courtesy to any U.S. flag vessels that are expected to hold IAPP certificates in their fleet of responsibility that were built before 19 May 2005, unless the vessels already hold an SOVC.

ii. Inspection Details. During Annex VI SOVC inspections, the following items should be verified using the checklist provided as Enclosure (2).

(1) Engine International Air Pollution Prevention (EIAPP) Certificate. Verify that all engines over 130kW/175 horse power installed on a vessel constructed on or after 01 January 2000 or went through a major conversion as defined in Annex VI on or after 01 January 2000 have a valid SOVC or an EIAPP certificate issued by the Environmental Protection Agency (EPA) (including re-flagged vessels). EIAPP certificates issued by foreign flag states may not be accepted for U.S. flagged vessels. Engines installed before 01 January 2000 need not comply with the Nitrogen Oxide (NO_x) requirements of Annex VI, Regulation 13 unless those engines went through a major conversion as defined in Annex VI. Engines used exclusively for emergency purposes (e.g., lifeboats, emergency diesel generators, etc.), also do not need to comply with Regulation 13 regardless of the installation date. An engine need not comply

with the NO_x requirements if the engine is fitted with an approved exhaust gas scrubbing system as described in MARPOL 73/78, Annex VI, Regulation 13. No exhaust gas scrubbing systems have been approved as of this policy issuance.

A. Technical File. For each engine required to comply with the NO_x requirements, inspectors should verify that an EPA approved Technical File is maintained aboard the vessel during its service life. A Technical File should be approved by the EPA as part of the engine certification and contain details of engine parameters and settings which may effect the engine's NO_x emissions. Inspectors should confirm that the engine has not been modified or adjusted outside of the levels permitted in the Technical File since the engine's last survey/inspection. A cursory review of Technical File should suffice to generally assure that all of the elements are represented. Specifically, a Technical File should include:

- Identification of components, settings and operating values of the engine impacting NO_x emissions;
- Identification of the full range of allowable adjustments for the engine;
- A full record of the engine's performance, including rated speed and power;
- An onboard system of NO_x verification procedures;
- A copy of the emission test report used to certify the engine;
- If applicable, the designation and any restrictions for the engine;
- A spare part component specification sheet to ensure continued compliance if parts are replaced; and
- The EIAPP Certificate.

B. Record Book of Engine Parameters. For each engine required to comply with the NO_x requirements after 19 May 2005, verify that the Record Book of Engine Parameters is maintained if required to meet the NO_x emissions standards of MARPOL, Annex VI, Regulation 13. The Record Book of Engine Parameters is used to record engine adjustments, parameter changes, as well as component changes and settings which could influence NO_x emissions. The Record Book of Engine Parameters should be compared to, and match, the current engine settings and should always be within the parameters detailed in the Technical File.

C. Bunker Delivery Notes. Examine the vessel's bunker delivery notes to ensure that the fuel's sulfur content does not exceed 4.5% m/m. Bunker delivery notes should be maintained aboard the vessel for at least three years after the fuel was delivered.

(1) Bunker Samples. Bunker samples of not less than 400 ml should be obtained for each bunker delivery. Samples should be retained under the vessel's control until the fuel is substantially consumed (approximately 80% of each particular fuel delivery), but in no case less than 12 months from the fuel's delivery. Regulation 18 specifies that samples should be

under the vessel's control in accordance with International Maritime Organization (IMO) Resolution MEPC.96(47) "Guidelines for the Sampling of Fuel Oil for Determination of Compliance with Annex VI of MARPOL 73/78." For the interim, the Coast Guard interprets "under the vessel's control" to mean "on board the vessel."

Each bunker sample should be:

- Sealed;
- Uniquely marked with identification;
- Marked with the location and method by which the sample was drawn;
- Marked with the delivery date;
- Marked with the name of the bunker facility;
- Marked with the vessel's name and IMO number;
- Signed by the fuel supplier's representative and the Master or Officer in Charge;
- Marked with the bunker grade; and
- Securely stored at cool/ambient temperature and not be stored in Direct sunlight or in an accommodation space.

D. Ozone Depleting Substances. New installations containing ozone-depleting substances are prohibited from being fitted on or after 19 May 2005, except hydrochloflurocarbons (HCFCs) which are permitted until 01 January 2020. Marine Inspectors should verify the manufacturer's specifications for new equipment installations (e.g. , refrigeration or air conditioning systems) which could use an ozone depleting substance. Existing equipment using ozone depleting substances is permitted, however, deliberate emissions (caused by disposal, repair, maintenance, etc.) is prohibited after 19 May 2005. When removed from service, equipment containing ozone depleting substances should be delivered to an appropriate disposal reception facility.

E. Incinerators. If fitted, vessel incinerators installed on or after 01 January 2000, should be should be approved by the Coast Guard based on IMO Resolution MEPC.76(40). Incinerators installed after 26 March 1998, already require Coast Guard approval. Incinerators installed before 26 March 1998, need not be approved on U.S. flagged vessels. Inspectors should conduct a cursory review of the Garbage Record Book (for required vessels) to ensure that the following prohibited substances have not been incinerated:

- MARPOL Annex I, II, and III cargo residues;
- Polychlorinated biphenyls (PCBs);
- Garbage as define by MARPOL, Annex V containing more than traces of heavy metals;
- Refined petroleum products containing halogen compounds; and
- Polyvinyl chlorides (PVC) (unless the incinerator is specifically type approved by the Coast Guard/IMO for that use).

Inspectors should confirm that all incinerators are in satisfactory condition, the casing insulation is in good condition, and that the system is free of leaks of gas or smoke. Additionally, the appropriate alarms and safety shut downs should be proven per the manufacturers' instructions and specifications.

The following are additional tests and examinations for incinerators installed on or after 01 January 2000:

(1) Verify that the appropriate crew can competently and safely operate installed incinerators per the manufacturer's instructions;
(2) Verify that the incinerator has a current manufacturer's manual;
(3) Verify the proper operation of combustion flue gas temperature device;
(4) On continuous feed incinerators, verify that waste cannot be fed into the combustion chamber if the combustion temperature is below 850° C; and/or
(5) On batch-loaded incinerators, verify that combustion temperature reaches 600° C within 5 minutes after start-up.

F. Volatile Organic Compounds. If the vessel is equipped with a vapor recovery system, then the system should be verified for compliance with 46 Code of Federal Regulations (CFR) Part 39 as part of the Annex VI inspection. Otherwise, existing inspection polices prevail for vapor control systems and their components.

G. Alternate Compliance Program (ACP). Vessels enrolled in the ACP should seek SOVCs from their Authorized Classification Society (ACS) during the period between 19 May 2005 and final U.S. ratification of Annex VI. A regulatory change is required to authorize classification societies to issue IAPP certificates. Until the change is codified, IAPP certificate issuance (after ratification) should follow the processes below:

(1) Post Ratification initial IAPP certificate issuance. After U.S. ratification, SOVCs will no longer be valid and should not be issued. After U.S. ratification, for vessels seeking an initial IAPP certificate via the ACP, the ACS should submit all Annex VI survey documents to the cognizant OCMI, who will in turn issue an IAPP certificate (CG-6056) and supplement (CG-6056A) to the vessel based on a satisfactory review of the survey records.

(2) Post Ratification SOVC replacement. After ratification, SOVCs should be replaced with official IAPP certificates (CG-6056) and supplements (CG-6056A). Vessel operators who were previously issued SOVCs by an ACS should submit copies of all Annex VI surveys including a copy of the SOVC and supplement to the cognizant OCMI, who will in turn issue an IAPP certificate to the vessel based on a satisfactory review of the survey records.

(3) Non ACP Vessels. Non ACP vessel operators who choose to use an ACS to conduct their MARPOL Annex VI surveys may also follow this process.

(4) Future ACP Alignment. Since there are many variables affecting the policy of this paragraph, expect significant revision regarding ACS IAPP certificate issuance policy. This interim policy will be aligned with the current ACP process once Annex VI is ratified and Title 46 CFR Part 8 is amended.

b. Inspected vessels less than 400 Gross Tons on International Voyages. U.S. inspected vessels less than 400 Gross Tons (ITC) may be voluntarily inspected to the same scope as described in the applicable portions of paragraph 1.a.ii (except paragraph 1.a.ii (1) C. Due to the unique nature of the pending Annex VI ratification, a vessel owner cannot be compelled to comply. Therefore, a Certificate of Inspection (COI) cannot be withheld for non or partial compliance. It is in the vessel owners' best interest to comply to avoid port state action. OCMIs should strongly encourage proactive compliance. No COI endorsement may be made if a vessel fails to fully comply with the provisions of Annex VI which are applicable to the vessel. In any event, compliant vessels should not be issued SOVCs. For vessels that fully comply, a valid COI with the following endorsement will prove voluntary compliance:

"This vessel complies with the applicable provisions of MARPOL 73/78, Annex VI."

c. Unninspected Vessels over 400 Gross Tons on International Voyages. Upon request, Marine Safety Offices, Activities, Sectors and other Marine Safety units should furnish uninspected vessels over 400 Gross Tons (ITC) engaged in international voyages with an SOVC following the provisions of paragraph 1.a.ii. Uninspected vessels may also employ an ACS for MARPOL Annex VI surveys following the same process described in paragraph 1.a.ii. (1)G. It is incumbent upon the vessel's owner to contact the OCMI or ACS to schedule initial certificate, annual endorsement and renewal surveys.

2. Deficiencies regarding MARPOL Annex VI components. If a vessel has Annex VI discrepancies, the SOVC should be withheld until compliance is proved.

3. Vessels on Voyages to Sulfur Oxides (SO_x) Emission Control Areas (SECA). SECAs are defined in MARPOL, Annex VI, Regulation 14 and currently includes the Baltic Sea (and may later include the North Sea). MARPOL 73/78, Annex VI, Regulation 14 (7) exempts vessel compliance until 19 May 2006. Vessels sailing in SECAs will *eventually* need to meet additional measures to reduce SO_x as follows:

- The vessel's fuel sulfur content (consumed in a SECA) should not exceed 1.5 % m/m, (and should follow the same documentation and sample retention protocol discussed in MARPOL, Annex VI, Regulation 18); or
- The vessel may employ an approved exhaust gas cleaning system as defined MARPOL, Annex VI, Regulation 14(4) (b) which reduces Sulfur Oxides to 6.0 g SO_x/kW or less [No exhaust gas cleaning systems are approved by the U.S. at the issuance of this policy.]; or

- Other technological methods to reduce SO_x may be employed on U.S. vessels, but should be approved by the Coast Guard.
- Vessels should be provided with separate tanks for 4.5% and 1.5% fuel, but should allow time for the fuel oil service system to be fully flushed of all fuels exceeding 1.5% m/m sulfur content before entering a SECA.
- Vessels should record the date, time, and position of fuel-change-over operations (both entering and departing a SECA), which may be contained in an engine, deck, or other appropriate log book. If logged in the Oil Record Book, the entry should be coded as (I).

4. Marine Information for Safety and Law Enforcement (MISLE).

- Following all initial MARPOL Annex VI inspections on U.S. flag vessels, the following Special Note should be entered in MISLE with an expiration date of not less than 5 years:

  "DD/MM/YYYY Vessel satisfactorily inspected for compliance with MARPOL, Annex VI."

- Select appropriate MISLE "document" drop down option to record IAPP (or SOVC) issuance.

5. International Safety Management Code. A well crafted Safety Management System (SMS) is an appropriate tool to assist vessel operators meet the requirements of MARPOL 73/78, Annex VI. Annex VI elements should be included in the vessel's SMS in order to obtain a SOVC. Further guidance will be promulgated via a Coast Guard published Navigation and Vessel Inspection Circular after ratification. For planning purposes, logical processes for inclusion in a shipboard SMS may include:

- NO_x Requirements;
- SO_x Requirements;
- Fuel Oil Quality Requirements (including sample retention);
- Incineration Requirements (including training and prohibitions);
- Ozone Depleting Substance Requirements;
- Volatile Organic Compound Requirements; and.
- Sulfur Emission Control Area Requirements.

Addendum (1) to Enclosure (1) MOC Policy Letter 05-02

U.S. Department of Homeland Security

United States Coast Guard

Commandant
United States Coast Guard

2100 Second Street, S.W.
Washington, DC 20593-0001
Staff Symbol: G-MOC
Phone: (202) 267-2735
Fax: (202) 267-4394

16711

Shipping Company
Attn: Point of Contact
Address
City, State, 01106

VESSEL NAME has been assessed by the Coast Guard for compliance with MARPOL 73/78 Annex VI. The assessment revealed that VESSEL NAME should meet all applicable provisions of MARPOL 73/78 Annex VI not later than [*enter drydock date* ***or*** *May 19, 2008 which ever occurs first*].

VESSEL NAME is not required to hold an International Air Pollution Prevention Certificate until the date listed above. This letter should be retained aboard the vessel in the event the vessel's Annex VI certification status is questioned.

If you have any questions regarding this determination, please do not hesitate to contact Lieutenant Commander Brian Downey at (202) 267-2735.

Sincerely,

J. J. LAST NAME
Rank, U. S. Coast Guard
Officer in Charge, Marine Inspection

MARPOL ANNEX VI SOVC CHECKLIST

Initial Examination for SOVC:_____ Vessel:_____

O.N.:_____

Shaded blocks are required elements.

	Inspection Item	= >400 GT on Int'l Voyage	< 400 GT on Int'l Voyage	Comments
A	Engine International Air Pollution Certificate (or SOVC)			
1	EIAPP or SOVC issued by **EPA** for diesel engines over 130kW installed on ships built on/after 1 Jan 00 or modified on/after 01 Jan 00.			
B	Technical File (for engines requiring EIAPP) (installed or modified on/after 01 Jan 00).			
1	Identification of components, settings of engines impacting NO_x emissions.			
2	Identification of full range of allowable engine adjustments.			
3	Record of engine performance, rated speed & power			
4	Shipboard NO_x verification procedures			
5	Copy of manufacturers' emission report used for engine certification.			
6	Any applicable engine restrictions			
7	Spare part component specification sheet			
C	Record Book of Engine Parameters (RBEP) (for engines requiring EIAPP)			
1	Maintained for each engine			
2	All engine adjustments impacting NO_x recorded			
3	All Component changes impacting NO_x recorded			
4	All engine values impacting NO_x recorded			
5	Briefly compare actual engine settings with those documented in the RBEP for match			
D	Fuel Oil Quality			
1	Examine Bunker Delivery Notes			
2	Sulfur content of not more than 4.5 % m/m			
3	Kept aboard for 3 years after bunker delivery			
E	Bunker Samples			
1	Sealed			
2	Each sample uniquely identified			
3	Location (including facility), date & method drawn			
4	IMO number			
5	Each samples not be less than 400 ml for each delivery,			
6	Signed by Master or officer in charge and facility rep.			
7	Bunker grade			
E-1	On board sample retention			
8	Written procedure to track & control samples			
9	Custodian designated			
10	Sample not stored in accommodation space			
11	Sample in cool/ambient temp.			
12	Sample retain for a minimum of 12 months			

	Inspection Item	= >400 GT on Int'l Voyage	< 400 GT on Int'l Voyage	Comments
F	Ozone Depleting Substances			
1	Installations fitted onboard on/after 19 May 05 must not contain Ozone depleting substances			
2	Hydrochloroflurocarbons (HCFC) permitted until 2020			
F-1	Typical Shipboard Ozone Depleting Substances			
• Halon 1211 • Halon 1301 *Found in Fire Suppression Systems* • Halon 2402				
• CFC-11 • CFC-12 • CFC-113 *Found in refrigeration systems* • CFC-114 • CFC-115				
G	Incinerators (if installed)			
1	If installed on/after 26 Mar 98 must be CG approved			
2	If installed on/after 01 Jan 00 must be approved be CG Approved under MEPC.76(40) as amended by MEPC.93(45)			
3	Manufacturer's manual			
4	Verify appropriate crew training is documented			
5	Test flue gas temp device			
6	Continuously fed systems cannot feed unless 850° C			
7	Batch fed systems must reach 600° C within start-up			
G-1	Prohibited Materials			
• MARPOL Annex I, II, and III cargo residues; • Polychlorinated biphenyls (PCBs); • Garbage as define by MARPOL Annex V containing more than traces of heavy metals; • Refined petroleum products with halogen compounds; • Polyvinyl chlorides (PVC) (unless the incinerator is specifically type approved by the Coast Guard/IMO for that use).				
H	Volatile Organic Compounds (if applicable)			
1	System CG approved under 46 CFR Part 39			
I	Sulfur Emission Control Areas (SECA) (if applicable) Not enforceable until 19 May 2006			
1	Sulfur content cannot exceed 1.5% m/m			
2	Approved exhaust gas cleaning system (if installed)[1]			
I-1	SECAs			
• Baltic Sea				

[1] The U.S. has not approved any exhaust gas cleaning systems as of the issuance of this policy.