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NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 03-06

Subj: GUIDANCE ON IMPLEMENTATION OF REVISIONS TO MARPOL ANNEX II AND THE IBC CODE

Ref:
(a) Report of the Marine Environmental Protection Committee on its Fifty-Second Session Report MEPC 52/24/Add.1 Annex 6, "Amendments to the Annex of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, Revised Annex II of MARPOL 73/78" dated November 1, 2004
(b) Report of the Marine Environmental Protection Committee on its Fifty-Second Session Report MEPC 52/24/Add.3 "2004 Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk" dated November 1, 2004
(c) Title 46, Code of Federal Regulations, Parts 30, 98, 151, and 153
(d) Title 33, Code of Federal Regulations, Parts 151 and 158
(e) MEPC.2 Circulars "Provisional Categorization of Liquid Substances"
(f) Chemical Tank Vessel Information Sheet (CTVIS) issued by Coast Guard Marine Safety Center
(g) "Products Which Have been Classified or Re-Classified since the Adoption of the Amended IBC Code in 2004," BLG.1/Circ.19 dated June 20, 2006
(h) Navigation and Vessel Inspection Circular 03-04 "Guidance for the Development of Shipboard Marine Pollution Emergency Plans for Noxious Liquid Substances"

1. PURPOSE. The purpose of this circular is to provide guidance regarding the implementation of the revisions to Annex II of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL), and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) which go into force on January 1, 2007.

DISTRIBUTION – SDL 145

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2. BACKGROUND.

a. MARPOL Annex II originally went into force on April 6, 1987 to protect the environment by controlling operational pollution and reducing accidental pollution resulting from groundings and collisions from vessels carrying noxious liquid substances (NLSs) in bulk. The 2004 revisions to MARPOL Annex II and the IBC Code significantly change carriage requirements for NLSs in bulk. The reasons for these changes were to make MARPOL Annex II simpler to use and to take into account new knowledge about the effects of some products on the marine environment. The lengthy revision work on MARPOL Annex II concluded on October 15, 2004 when the Marine Environmental Protection Committee (MEPC) of the International Maritime Organization (IMO) adopted the revised Annex II of MARPOL 73/78 in Resolution MEPC.118(52). At the same time, the MEPC adopted amendments to the IBC Code in Resolution MEPC.119(52). The revised requirements will take effect internationally on January 1, 2007.

b. MARPOL Annex II, adopted in 1985 by Resolution MEPC.16(22), contained four categories of cargoes: A, B, C, and D. In addition, Appendix III was added to include a list of cargoes that fall outside these four main categories. Appendix III products do not pose an environmental threat and thus have no discharge restrictions. As a result of the re-evaluation process for MARPOL Annex II, existing products will be reclassified into a new "3 plus 1" category system. The new classification system consists of four categories, namely: X, Y, Z, and Other Substances (OS). The fourth category, OS, contains products which do not pose an environmental risk and therefore are considered to fall outside categories X, Y, and Z. Examples of OS products are clay slurry, molasses, and apple juice.

3. ACTION.

a. This NVIC has been developed to implement revisions to MARPOL Annex II and the IBC Code and resolve any conflicts until such time as relevant U.S. laws and regulations are changed to conform to the revised international standards. This NVIC applies to self-propelled and oceangoing non-self-propelled U.S. vessels operating on international voyages and foreign-flagged vessels operating in U.S. waters that carry NLSs in bulk, along with reception facilities that handle these products. This NVIC provides guidance to vessel owners and operators and Coast Guard marine inspection personnel on conducting the initial and subsequent inspection and examinations of U.S. and foreign-flagged vessels carrying NLSs, as well as reception facilities handling those cargoes, as required by the revised Annex II, IBC Code, and current U.S. regulations.

b. Coast Guard Officers in Charge, Marine Inspection (OCMIs), and Captains of the Port (COTPs) should use this Circular when determining whether a vessel or facility, to which references (a) and (b) apply, is in compliance with the applicable requirements of MARPOL Annex II and the IBC Code and the requirements in Titles 33 and 46 Code of

Federal Regulations (CFR). This Circular will be distributed by electronic means only. It is available on the World Wide Web at http://www.uscg.mil/hq/g-m/index.htm.

c. While the guidance contained in this document may assist the industry, public, Coast Guard, and other Federal and State regulators in applying statutory and regulatory requirements, the guidance is not a substitute for applicable legal requirements nor is it a regulation itself. Thus, it is not intended to nor does it impose legally binding requirements on any party outside the Coast Guard.

4. DIRECTIVES AFFECTED. NVIC 5-87 is cancelled.

5. APPLICABILITY AND IMPLEMENTATION.

a. The following governs the applicability of the relevant international and domestic laws related to the shipboard carriage of NLSs in bulk;

i. Foreign-flag vessels operating at U.S. ports, and U.S. vessels certificated to operate internationally, must comply fully with all applicable provisions of Annex II, applicable IMO chemical codes, and all applicable provisions of U.S. law and regulations that may impose stricter requirements. Specifically, ships operating in U.S. waters carrying Annex II cargoes that are considered to be "oil" for the purposes of the Clean Water Act (Title 33, United States Code (USC), Section 1251) and the Oil Pollution Act of 1990 (33 U.S.C. 2702) must also comply with their provisions and implementing regulations.

ii. U.S. vessels for which the keel was laid or at a similar stage of construction, or major conversion started before January 1, 2007, operating from one U.S. port to another U.S. port, transiting through waters under the jurisdiction of a foreign country shall comply with the revised Annex II and IBC Code standards.

iii. U.S. oceangoing vessels, for which the keel was laid or at a similar stage of construction, or major conversion started on or after January 1, 2007, certified to carry NLSs shall be built in accordance with all applicable U.S. regulations, and the revised Annex II and IBC Code standards.

iv. Until such time as relevant laws and regulations are changed to conform to the revised Annex II, U.S. vessels operating from one U.S. port to another U.S. port while remaining exclusively within waters over which the U.S. has jurisdiction, the exclusive economic zone, or the high seas, must comply with all applicable provisions of U.S. law and regulations. Waters over which the U.S. has jurisdiction include navigable waters, inland and internal waters, the territorial sea, and, with respect to certain purposes, the contiguous zone and the exclusive economic zone. U.S. vessels under this section may elect to operate in compliance with the revised Annex II and IBC Code, but shall fully comply at all times with all applicable laws and regulations. U.S. vessels operating under this section may need to have their

Certificate of Inspection amended to accurately reflect the routes and conditions under which they will be operating.

v. U.S. vessels certificated for international voyages prior to January 1, 2007 may elect to operate under paragraph (iv) if they relinquish their international certificates and have their Certificate of Inspection amended to restrict their routes to waters under the jurisdiction of the U.S.

vi. U.S. vessels operating exclusively on the Great Lakes must comply with the Great Lakes Water Quality Agreement; Annex II does not apply to U.S. vessels on the Great Lakes.

vii. For purposes of this NVIC, "waters over which the U.S. has jurisdiction," "internal waters," "inland waters," "contiguous zone," "navigable waters," "territorial sea," "exclusive economic zone," "high seas," and "waters over which the U.S. has jurisdiction" have the meanings contained in 33 CFR §§ 2.22, 2.24, 2.26, 2.28, 2.30, 2.32, 2.36, and 2.38. "Oceangoing" has the meaning contained in 33 CFR §§ 151.05.

b. Cargo Classification.

i. All cargoes carried under the revised Annex II are required to be categorized under the new classification system. Cargoes carried under the old classification system (Category A, B, C, D, or listed in Appendix III) may be carried after January 1, 2007 on foreign-flagged vessels if loaded prior to January 1, 2007. The reclassification of cargoes has also affected the ship type requirements for carriage. All vessel and facility owners and operators are strongly encouraged to review references (b), (e), and (g) for changes in carriage and discharge requirements.

ii. After January 1, 2007, cargoes classified under the old classification system are only authorized for carriage on U.S. vessels that do not implement the revised Annex II. Vessels that implement the revised Annex II may carry cargoes classified under the old classification system if loaded prior to January 1, 2007.

iii. For new cargoes to be carried solely on U.S. vessels operating under the old classification system, manufacturers must specifically request classification of these new cargoes under the old classification system when submitting requests to the Commandant (CG-3PSO-3). All requests for classification under the old classification system should be submitted with all information required for classification under the new classification system (see Enclosure 4). Cargoes will be classified under both the new and old classification systems.

c. Reception Facilities. All facilities that handle NLS residues, as required by 33 CFR 158 Subpart C and Regulation 18 of MARPOL Annex II, should review cargo requirements as changes may have occurred due to changes in cargo classification. U.S. reception facilities will be expected to handle cargoes categorized under the old (A, B, C, D, and Appendix III) and new (X, Y, Z, and OS) classification systems. In some cases, facilities

may be required to submit an application for a new Certificate of Adequacy (see Enclosure 6).

6. ENFORCEMENT. Foreign-flagged vessels operating in the U.S. that do not fully comply with the requirements of the revised MARPOL Annex II and IBC Code may, among other sanctions, be denied entry or be subjected to other operational controls (see Enclosure 5 for more details). U.S. vessels certified to carry NLSs must operate in full compliance with the provisions of their Certificate of Inspection, the applicable requirements of MARPOL Annex II, the IBC Code, and Titles 33 and 46 CFR.

7. DISCLAIMER. Each OCMI/COTP has discretionary authority on how to best address specific safety and security concerns within their area of responsibility (AOR). Nothing in this Circular is meant to override or undermine the discretion of the OCMI/COTP when addressing the unique safety and security concerns within their AOR.

8. CHANGES. This Circular will be posted on the web at www.uscg.mil/hq/g-m/nvic/index00.htm. Changes to this Circular will be issued as necessary. Suggestions for improvements of this circular should be submitted in writing to Commandant (CG-3PSO-3).

C. E. BONE
Rear Admiral, U.S. Coast Guard
Assistant Commandant for Prevention

Encl: (1) Guidance on MARPOL Annex II Implementation for Foreign-flagged Vessels
(2) Guidance on MARPOL Annex II Implementation for U.S. Vessels
(3) Requirements for Third-Party Surveyors of MARPOL Annex II Inspections
(4) Guidance Regarding Classification of Cargo and Tripartite Agreements
(5) Enforcement Guidance for Coast Guard Inspectors
(6) Guidance on MARPOL Annex II Reception Facilities

Guidance on MARPOL Annex II Implementation for Foreign-Flagged Vessels

This enclosure seeks to clarify the effect of any apparent inconsistencies between the revised Annex II and U.S. law and regulations. Foreign-flagged vessels operating in the United States must comply with existing U.S. laws, which may be more stringent than required by the revised Annex II. For example, existing U.S. statutes and regulations require vessels transporting oils, including the OPA 90 materials, oil-like substances carried as an oil, vegetable oils, or animal fats in bulk, to use double-hulled tankers that meet stricter design and construction standards than do the minimum standards contained in the revised Annex II.

1. Definitions

   a. International Bulk Chemical (IBC) Code: The International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk adopted by the Marine Environmental Protection Committee (MEPC) by Resolution MEPC.119(52), as amended by the IMO, provided that such amendments are adopted and brought into force in accordance with the provisions of Article 16 of the present MARPOL Convention concerning amendment procedures applicable to an appendix to an Annex.

   b. Bulk Chemical (BCH) Code: The Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk amended by the MEPC by Resolution MEPC.144(54). The BCH Code generally applies to chemical tank vessels built before July 1, 1986.

   c. MARPOL: The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended.

   d. Noxious Liquid Substance (NLS): Any substance indicated in the pollution category column of chapters 17 or 18 of the amended IBC Code, the most current MEPC.2 Circular, or provisionally assessed under the provisions of Regulation 6.3 of MARPOL Annex II as falling into categories X, Y, and Z. Note: this term applies to all category X, Y, and Z products in Chapter 17 or 18 of the IBC Code, not just those category Z products in Chapter 18 that might be carried under an NLS Certificate.

   e. Procedures and Arrangements Manual (P&A Manual): The manual required by MARPOL Annex II and U.S. regulations containing detailed information on cargo handling equipment, installed systems, and operational procedures concerned with the NLS a vessel is permitted to carry.

   f. Prewash: The washing of cargo tanks after the cargo is discharged, with procedures outlined in MARPOL Annex II, the P&A Manual, and U.S. regulations. Tank washing that is not required under MARPOL is not considered prewash (i.e. tank washing, with subsequent disposal on shore that is done for commercial reasons only and not required under MARPOL).

g. Tripartite Agreement: An agreement for a provisional, or temporary, cargo classification. This agreement is made between the shipping or producing administration(s), the importing administration(s), and the vessel flag state administration(s).

h. Existing Ship: Existing ships are ships for which the keel was laid or at a similar stage of construction, or major conversion started before January 1, 2007. Similar stage of construction includes where construction identifiable with the ship begins or assembly has commenced comprising at least 50 tons or 1% of the estimated mass of all structural material, whichever is less.

2. Applicability

Unless expressly provided otherwise in the provisions of the revised Annex II, this enclosure shall apply to all foreign-flagged ships certified to carry NLSs in bulk operating in the U.S.

3. Cargo Classification

a. Only those NLS cargoes categorized by the IMO under the new classification system (Category X, Y, Z, or OS) in either the IBC Code or IMO Circulars (unless prohibited by U.S. regulations), or through a tripartite agreement to which the U.S. was party, may be carried in the U.S. if loaded after December 31, 2006.

b. Cargoes carried under the old classification system (Category A, B, C, D, or listed in Appendix III) may be carried and discharged in accordance with the old Annex II standards after January 1, 2007, on vessels which comply with the new Annex II standards, if loaded prior to January 1, 2007. Cargoes carried under the old classification system loaded after January 1, 2007 may not be carried or discharged in U.S. waters.

4. Required Certificates

a. Table 1.1 lists the various types of certificates required for foreign-flagged vessels to carry NLS cargoes in U.S. waters.

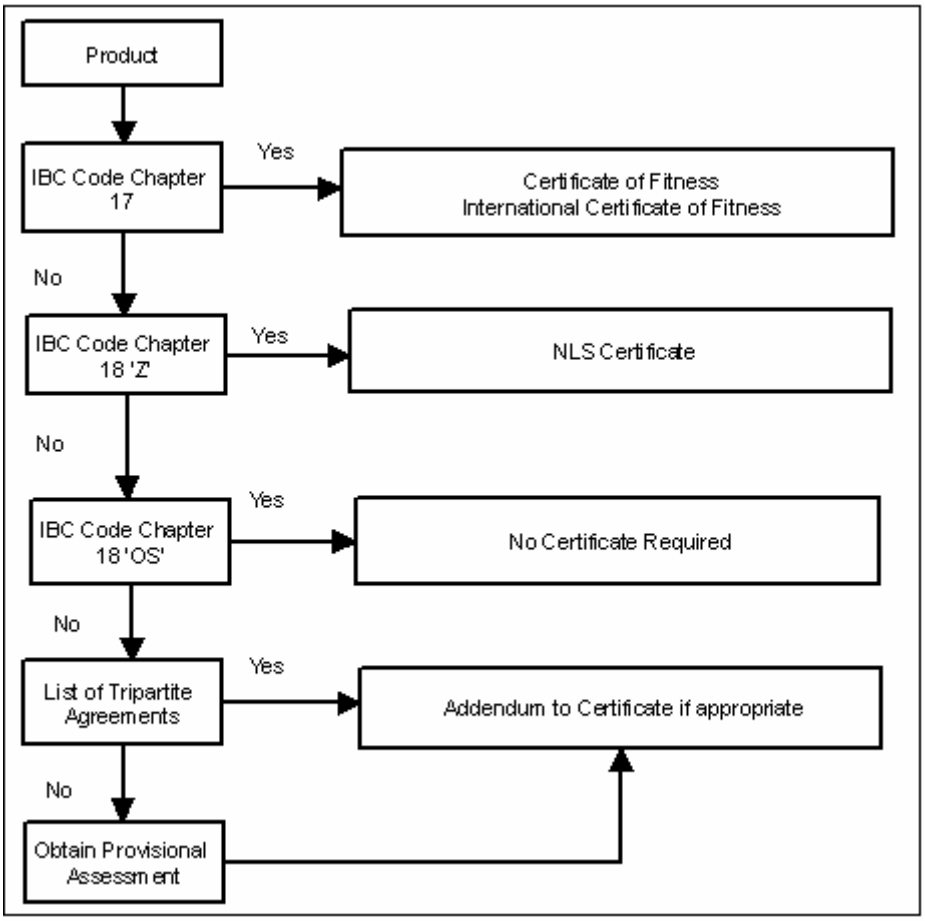

Table 1.1: Certificates Required (Note: This table is valid for those vessels that are not operating under a Regulation 4 exemption of the revised Annex II.)

b. All foreign-flagged vessels authorized for the carriage of NLSs will also be required to have onboard a valid Certificate of Compliance (COC) endorsed to carry the cargoes listed on the appropriate IMO Certificate after a satisfactory Coast Guard examination.

5. Procedures and Arrangements (P&A) Manual

a. All foreign-flagged vessels authorized to carry NLSs are required to have a P&A Manual onboard and approved by their flag administration. For foreign-flagged vessels of nations not signatory to Annex II, P&A Manuals are conditionally approved by the Marine Safety Center. Vessels operating under an exemption from Annex II for the carriage of vegetable oils (see paragraph (10) of this enclosure) must have a P&A Manual. The P&A Manual must be written in the language of the crew's officers with a translation into English, French, or Spanish and must be approved by the flag administration or its designated representative. A P&A Manual incorporating the changes of the revised Annex II must be approved and on board the vessel prior to conducting cargo operations. From January 1, 2007 to March 31, 2007, the Coast Guard will accept revised P&A Manuals with a copy of a letter from their flag administration or

authorized classification society acknowledging receipt of their submittal. From April 1, 2007 to June 30, 2007, the Coast Guard will accept the revised P&A Manual with a copy of the approval letter. After June 30, 2007, the revised P&A Manual, bearing the approval stamp of the flag administration, along with the original copy of the approval letter, must be onboard.

b. The basic contents of the P&A Manual have been standardized in Appendix 4 of Annex II to MARPOL. The contents of this manual must be vessel specific and include the following:

i. A description of the main features of Annex II of MARPOL;

ii. Description of the ship's equipment and arrangements including cargo heating and temperature control, discharge arrangements, schematic of cargo pumping and stripping systems, control equipment, and cargo pump information;

iii. Cargo unloading and tank stripping procedures including any restrictions such as list or trim;

iv. Detailed procedures relating to the cleaning of cargo tanks, residue discharge, ballasting, and deballasting;

v. A table of cargo tank information including the tank designation, capacity, and stripping quantity;

vi. Procedures to be followed when a cargo tank cannot be unloaded in accordance with required procedures;

vii. The applicable portions of the flow diagrams contained in Addendum A of Appendix 4 of Annex II which address tank cleaning and disposal procedures for NLS residue;

viii. Prewash procedures which include the following:

(1) Cleaning machines positions to be used;

(2) Slops pumping out procedures;

(3) Requirements for hot washing;

(4) Number of cycles of cleaning machine (or time);

(5) Minimum operating pressure; and

(6) Instructions for any cleaning agents that are used.

ix. Ventilation procedures which may be used only for cargo with vapor pressures greater than 5 kPa at 20^0C, including:

(1) Ventilation positions to be used;

(2) Minimum flow or speed of fans;

(3) Procedures for venting pipelines, pumps, filters, etc.; and

(4) Procedures for determining that tanks are dry when ventilation is completed (Drager tube sampling of tank atmosphere, visual inspection, etc).

x. Any other information or operational instructions required by the flag administration.

6. Cargo Record Book

Until such a time as when updated Cargo Record Books are made available, existing Cargo Record Books may be corrected manually (initialed pen-and-ink changes acceptable) to reflect changes as a result of the revised Annex II's effective date of January 1, 2007. "White out" should not be used. The needed corrections are as follows:

a. Cover: Add IMO Number for Ship;

b. Cover Note: Change "REGULATION 9" to "REGULATION 15";

c. Introduction: First Paragraph: strike "paragraph 2 of regulation 9" and replace with "regulation 15.2." Fourth paragraph: strike out;

d. List of items to be recorded:

i. Opening sentence: strike "Categories A, B, C and D" and replace with "all Categories of;"

ii. Add asterisks after 14.1, 14.2, 16.2, and 23.2, add a footnote on each page where those asterisks appear: "* Ship's masters should obtain from the operator of the reception facilities, which include barges and tank trucks, a receipt or certificate specifying the quantity of tank washings transferred, together with the time and date of the transfer. The receipt or certificate should be kept together with the Cargo Record Book;"

iii. Strike paragraph 15.3 "dilution of cargo residues with water" and renumber 15.4 "ventilation procedures used" as new 15.3; and

e. On each page where operations are recorded: add the ship's IMO number under the "Distinctive number or letter" entry.

7. Surveys/Examinations

a. Vessels carrying NLS cargoes in bulk loaded on or after January 1, 2007, must have updated certificates onboard. There is no intent to require vessels to submit these updated certificates to the Coast Guard prior to arrival in the U.S, but Coast Guard personnel may review these certificates in the course of their normal activities. Through February 1, 2007, the Coast Guard will accept copies of certificates, after which original certificates must be onboard.

b. As cargoes continue to be reclassified, the authority for carriage may not be incorporated or annotated on the proper certificates. Some flexibility and leniency will be granted to ensure commerce may continue to move while the paperwork is updated. If cargoes are not listed on the appropriate certificate, official documentation of the cargo's new carriage requirements must be onboard. This includes documentation from IMO (e.g. IBC Code, MEPC.2 Circular, IMO Circulars) or documentation from the flag administration responsible for completing the tripartite agreement.

c. All foreign-flagged vessels trading in U.S. waters with NLS cargoes onboard must have valid IMO certificates and a COC issued by the U.S. Coast Guard. The COC must be endorsed to allow carriage of specified NLS cargoes. The U.S. Coast Guard endorsement is requested directly from the Officer in Charge, Marine Inspection (OCMI). Once the application for an endorsement is received by the OCMI, the vessel must schedule a COC examination. After a successful examination, the signature of the OCMI on the COC serves as the cargo endorsement required by 46 CFR 153.900(a)(3). Vessels whose flag administrations do not issue IMO certificates for the carriage of NLSs must follow the plan review process and undergo an inspection as detailed for U. S. vessels (see Enclosure 2).

d. Vessels operating under a valid COC that was issued under the old Annex II will not be required to obtain a new COC until the next scheduled exam, unless it was issued for a vessel carrying only oil-like substances under an NLS Attachment to the International Oil Pollution Prevention (IOPP) Certificate. Those vessels issued a COC for only the carriage of oil-like substance will need to request a COC exam from the local OCMI to continue to carry NLS products in the U.S.

e. Those foreign-flagged vessels which do not have a current COC must undergo an examination following the procedures outlined in paragraph (g) below and:

i. Notify the OCMI of the port where the vessel is to be inspected at least 7 days before the vessel arrives and arrange the exact time and other details of the examination. This notification must include:

(1) The name of the vessel's first U.S. port of call;

(2) The date that the vessel is scheduled to arrive;

(3) The name and telephone number of the owner's local agent; and

(4) The names of all cargoes (IMO Chemical Code) authorized for carriage on board the vessel.

ii. The following plans must be on board the vessel and made available to the attending marine inspector upon request:

(1) A general arrangement (including the location of fire fighting, safety, and lifesaving gear);

(2) A capacity plan;

(3) A schematic diagram of cargo piping on deck and in tanks (including the location of all valves and pumps); and

(4) A schematic diagram of cargo tank vent piping (including the location of relief valves and flame screens).

f. Those foreign-flagged vessels which possess a current COC needing a mid-period tank vessel examination should undergo the examination outlined below in paragraph (g) to verify its compliance with the revised Annex II.

g. The extent of the examination to verify a foreign vessel's compliance with Annex II and related U. S. regulations will vary depending upon such factors as cargoes carried, age and condition of the vessel, and the vessel's examination history. However, at a minimum, the following items should be checked:

i. The P&A Manual should receive a cursory review to see that there are no obvious deficiencies, particularly in the areas of tank stripping, prewashing, and cargo loading;

ii. Various portions of the cargo systems and associated equipment should be spot checked to ensure that they are in agreement with the P&A Manual;

iii. The Cargo Record Book should be examined to ensure it is being properly maintained and there have been no problems with the cargo-related equipment;

iv. It should be determined that any installed cargo heating system is in working order; and

v. It should be determined that any installed ventilation system for removing cargo residues is in working order.

h. Upon satisfactory completion of the examination, the vessel will be issued a COC for the NLS cargoes it is authorized to carry by its flag administration and which are acceptable to the Coast Guard. The COC will be valid for a period of two years as long as the vessel has a valid Certificate of Fitness (COF) or NLS Certificate. The COC expiration date will not be affected by reissuance of the COF or NLS Certificate. The COC may, however, be invalidated by a Coast Guard representative. Vessels will also be required to undergo a mid-period tank vessel examination after one year. The regulations do not require the owner or operator to notify the Coast Guard when the annual mid-period examination is due. However, it is recommended that the vessel master contact the cognizant OCMI at least 48 hours in advance to schedule this examination and help avoid delays.

i. Cargoes listed under Annex II and the IMO Chemical Codes must appear in the vessel's list of cargoes, attached to the IMO certificates authorizing carriage of NLSs, before they can be authorized for carriage in U.S. waters. A small number of cargoes have additional requirements applying to their carriage in U.S. waters that are more stringent. Vessel owners and operators are encouraged to review references (b), (c), (e), and (g) to determine which cargoes have additional requirements and contact the Marine Safety Center for specific questions. The U.S. does not intend to impose stricter ship type requirements for those vessels operating under the revised Annex II. In the case where current U.S. regulations impose a more stringent ship type requirement for a specific cargo, the U.S. will accept carriage under the ship type as prescribed in the revised Annex II and IBC Code.

j. Information on all vessel examinations relating to the carriage of NLS shall be entered in the Marine Information for Safety and Law Enforcement (MISLE) system. The information entered in MISLE shall indicate that the vessel was examined for compliance with the revised Annex II, what deficiencies were noted (if any), what action was taken (e.g. issued a certificate, initiated civil penalty actions, etc.), and any requirements placed upon the vessel (obtain P&A Manual before returning to a U.S. port, conduct efficient stripping tests by a specified date, etc.).

k. Foreign-flagged vessels carrying NLSs in bulk are subject to the surveys specified below with the survey annotated on the proper IMO certificate:

   i. Initial Survey: conducted before the ship is put in service or before the appropriate certificate to allow carriage of NLS bulk cargoes is issued.

   ii. Renewal Survey: conducted at intervals not exceeding five years (exceptions noted in Regulation 10.2, 10.5, 10.6, 10.7 of Annex II).

   iii. Intermediate Survey: conducted 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. The intermediate surveys shall be endorsed on the certificate.

iv. Annual Survey: conducted within three months, before or after, each anniversary date of the certificate. The annual surveys shall be endorsed on the certificate.

v. An additional survey, either general or partial, according to the circumstances, shall be made after repairs resulting from investigations or whenever any important repairs or renewals are made (see Regulation 8.1.5 of Annex II).

l. Vessels must have all appropriate surveys conducted and endorsed on their IMO certificates to retain a valid COC. Vessels operating without the appropriate surveys may be subject to enforcement action by the local COTP/OCMI.

8. Prewash Operations

a. Prewash operations should be conducted as outlined in the revised MARPOL Annex II. For cargoes classified and carried under the revised MARPOL Annex II, third-party surveyors will witness the prewash operation and sign the Cargo Record Book in place of a Coast Guard inspector.

b. Vessels conducting prewash operations for category X substances shall use third-party surveyors (see Enclosure 3) and ensure all appropriate entries are made in the Cargo Record Book and endorsed. If the unloading of a category Y or Z substance is not carried out in accordance with the P&A Manual, a prewash shall be carried out before the vessel leaves port, unless alternative measures are approved by the third-party surveyor. When prewashing high-viscosity category Y cargoes and category Y solidifying substances, the local Coast Guard office is not required to be notified, nor is a third-party surveyor required to witness the prewash or sign the Cargo Record Book. However, if any operation has been witnessed by a third-party surveyor, an appropriate entry in the Cargo Record Book shall be made in accordance with Regulation 16.2 of the revised Annex II.

c. At the discretion of the local COTP, a third-party surveyor must notify the local Coast Guard office at least one hour prior to conducting a mandatory prewash. The Coast Guard will continue to witness prewash of cargoes carried under the old MARPOL Annex II. If an accepted third-party surveyor cannot witness the required prewash prior to departure of the discharge berth, a Coast Guard inspector should be requested. The request should reflect why a third-party surveyor could not witness the prewash.

9. Shipboard Marine Pollution Emergency Plans for NLS

For guidance on determining compliance with Regulation 17 of the revised Annex II, Shipboard Marine Pollution Emergency Plan for Noxious Liquid Substances, see reference (h).

10. Carriage of Vegetable Oils in U.S.

a. The IMO Secretariat issued an advisory Circular letter in July 2006 summarizing the principal points of the revised Annex II and the amended IBC Code, including provisions for NLS tankers operating under Regulation 4.1.3. Vessels authorized to carry vegetable oils in U.S. waters under Regulation 4.1.3 (footnote (k) of column (e) in Chapter 17 of the revised IBC Code) include ship type 3 chemical tankers with double bottom and double sides meeting the specifications in regulation 4.1.3. The COF shall indicate the vessel is entitled to operate under the provisions of regulation 4.1.3.

b. Regulation 4.1.3 also allows for vegetable oils to be carried on those product tankers that meet all the requirements for ship type 3 as identified in the IBC Code except for cargo tank location. The entire cargo tank length shall be protected by ballast tanks or spaces other than tanks that carry oil. Cargo tanks shall be located at the minimum distances described in Regulation 4.1.3.2. Moreover, the relevant certificate shall indicate the product tanker is entitled to operate under the exemption granted under the provisions of Regulation 4.1.3.

c. The carriage of vegetable oils, which are listed at: http://www.uscg.mil/vrp/faq/oil.shtml are subject to additional requirements under OPA 90. These requirements include ship construction requirements (double hulls) and Average Most Probable Discharge (AMPD) coverage. For specific requirements, see 33 CFR Chapter I, Subchapter O.

11. Exemptions under 4.1.1 and 4.1.2 of MARPOL Annex II

a. Exemptions granted under regulations 4.1.1 and 4.1.2 of the revised Annex II apply only to existing vessels for the carriage of specific cargoes. Any exemption granted to a foreign vessel by their flag administration must be noted on the appropriate IMO certificate and clearly state the carriage requirements.

b. Foreign-flagged vessels operating under an exemption are still required to meet all applicable U.S. regulations. Vessels operating under exemptions which do not meet U.S. regulations will not be allowed to operate in the U.S.

c. Coast Guard field units should accept exemptions granted under 4.1.1 and 4.1.2 by other flag administrations and examine vessels to the requirements of the certificate. Commandant (CG-3PSO-3) will review exemptions under established procedures with IMO and communicate acceptance or concerns with the provisions of the exemption. If Coast Guard marine inspectors have concerns regarding a specific exemption, the details of the vessel and certificate should be noted and the examination should be allowed to continue if an unsafe environment is not, or will not be, present. Upon completion of the examination, Commandant (CG-3PSO-3) should be contacted to discuss any concerns related to the exemption.

12. Carriage of Other Substances (OS) Products

Vessels carrying only cargoes classified as OS do not require a certificate under MARPOL Annex II. Those vessels certified to carry NLS cargoes but carrying OS cargoes will be examined to the applicable NLS carriage requirements.

Guidance on MARPOL Annex II Implementation for U.S. Vessels

1. Definitions

   a. International Bulk Chemical (IBC) Code: The International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk adopted by the Marine Environmental Protection Committee (MEPC) by Resolution MEPC.119(52), as amended by the IMO, provided that such amendments are adopted and brought into force in accordance with the provisions of Article 16 of the present MARPOL Convention concerning amendment procedures applicable to an appendix to an Annex.

   b. Bulk Chemical (BCH) Code: The Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk amended by the MEPC by Resolution MEPC.144(54). The BCH Code generally applies to chemical tank vessels built before July 1, 1986.

   c. MARPOL: The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended.

   d. New Noxious Liquid Substance (NLS): Any substance indicated in the pollution category column of chapters 17 or 18 of the amended IBC Code, IMO Circular, the most current MEPC.2 Circular, or provisionally assessed under the provisions of Regulation 6.3 of MARPOL Annex II as falling into categories X, Y, and Z. Note: this term applies to all category X, Y, and Z products in Chapter 17 or 18 of the IBC Code, not just those category Z products in Chapter 18 that might be carried under an NLS Certificate.

   e. Old NLS: Any substance listed in Table 1 of 46 CFR 153 and 33 CFR 151.47 (substances listed in 46 CFR 151.12-5 and 33 CFR 151.49 are included in Table 1 of 46 CFR 153) as falling into categories A, B, C, D, or listed in Appendix III.

   f. Procedures and Arrangements Manual (P&A Manual): The manual required by MARPOL Annex II and U.S. regulations containing detailed information on cargo handling equipment, installed systems, and operational procedures concerned with the NLS a vessel is permitted to carry.

   g. Prewash: The washing of cargo tanks after the cargo is discharged, with procedures outlined in MARPOL Annex II, the P&A Manual, and U.S. regulations. Tank washing that is not required under MARPOL is not considered prewash (i.e. tank washing, with subsequent disposal on shore that is done for commercial reasons only and not required under MARPOL).

   h. Tripartite Agreement: An agreement for a provisional or temporary cargo classification. This agreement is made between the shipping and producing administration(s), the importing administration(s), and the vessel flag state administration(s).

i. Cargo Record Book: Book required on all ships carrying NLSs (old and new). U.S. vessels must use form *CG-4602B*. See paragraph 11 of this enclosure for transitional provisions until public availability of the revised *CG-4602B*.

j. Existing Ships: Existing ships are ships for which the keel was laid or at a similar stage of construction, or major conversion started before January 1, 2007. Similar stage of construction includes where construction identifiable with the ship begins or assembly has commenced comprising at least 50 tons or 1% of the estimated mass of all structural material, whichever is less.

k. New Ships: New ships are ships that are not existing ships.

l. Oil-like Substances: All substances listed in 33 CFR 151.49.

2. Applicability

a. U.S. ships certificated to operate internationally must comply fully with all applicable provisions of the revised Annex II and all applicable provisions of U.S. law and regulations that may impose stricter requirements. Specifically, vessels carrying Annex II cargoes that are considered to be "oil" for the purposes of the Clean Water Act and OPA 90 must also comply with their provisions and implementing regulations. The Coast Guard does not intend to impose stricter ship type requirements for those vessels operating under the revised Annex II. In the case where current U.S. regulations impose a more stringent ship type requirement for a specific cargo, the Coast Guard will accept carriage under the revised Annex II and IBC Code.

b. Existing U.S. ships operating from one U.S. port to another U.S. port, where the voyage between U.S. ports requires transit through waters under the jurisdiction of a foreign country, shall comply with the revised Annex II.

c. New U.S. ships on oceangoing routes that intend to carry NLSs shall be built in accordance all applicable U.S. regulations and the revised Annex II and IBC Code standards. Where U.S. regulations and international standards conflict, the more stringent requirements shall be met, except as noted below. Vessel owners and operators are encouraged to review references (b), (c), (e), and (g) to determine which cargoes have additional requirements and contact the Marine Safety Center (MSC) for specific questions.

i. The following sections of 46 CFR Part 153 are superseded by Regulation 13 of the revised Annex II: §§.1102; .1108-.1112; .1116-.1118; and .1120-.1128.

ii. Where current U.S. regulations impose a more stringent ship type requirement for a specific cargo, the Coast Guard will accept carriage in the lesser ship type, as outlined in the revised Annex II and IBC Code.

d. Until such time as relevant laws and regulations are changed to conform to the revised Annex II, existing U.S. ships operating from one U.S. port to another U.S. port while remaining exclusively within waters over which the U.S. has jurisdiction, the exclusive economic zone, or the high seas, must comply with all applicable provisions of U.S. law and regulations. Waters over which the U.S. has jurisdiction include navigable waters, inland and internal waters, the territorial sea, and, with respect to certain purposes, the contiguous zone and the exclusive economic zone. U.S. vessels under this section may elect to operate in compliance with the revised Annex II and IBC Code, but shall fully comply at all times with all applicable laws and regulations. U.S. vessels operating under this section may need to have their Certificate of Inspection (COI) amended to accurately reflect the routes and conditions under which they will be operating (see paragraph (10) of this enclosure for more information).

e. Existing U.S. ships certificated to operate internationally may elect to operate under paragraph (2.d) of this enclosure if they relinquish their international certificates and have their COI amended to restrict their routes to waters under the jurisdiction of the U.S.

f. U.S. vessels operating exclusively on the Great Lakes must comply with the Great Lakes Water Quality Agreement; Annex II does not apply to U.S. vessels on the Great Lakes.

3. <u>Cargo Classification</u>

a. Cargoes carried under the old classification system (Category A, B, C, D, or listed in Appendix III) and included on a vessel's COI, may continue to be carried on those U.S. vessels which are operating under paragraphs (2.d) and (2.f) above and do not elect to implement the revised Annex II standards.

b. U.S. vessels which are operating under paragraphs (2.d) and (2.f) above may add cargoes listed in Table 1 to 46 CFR 153 to their COI subject to vessel's configuration and inspection Subchapter. Cargoes not listed in Table 1 to 46 CFR 153 will need to be classified by the Coast Guard in accordance with Enclosure (4), unless documentation can be provided on the conditions of carriage in the U.S.

c. All cargoes carried under the revised Annex II are required to be classified under the new classification system and be assigned to a NLS category (X, Y, or Z) or designated as an Other Substance (OS). Only those NLS cargoes either designated on a tripartite agreement to which the U.S. was party, or listed either in the IBC Code or an IMO Circular, may be carried in the U.S. if loaded after December 31, 2006.

d. Cargoes carried under the old classification system (Category A, B, C, D, or listed in Appendix III) may be carried and discharged in accordance with the old Annex II standards after January 1, 2007, on vessels which comply with the new Annex II standards, if loaded prior to January 1, 2007.

e. The new classification system has affected some of the carriage requirements, including ship type. All vessel owners and operators are strongly encouraged to review references (b), (e), and (g) for changes in carriage and discharge requirements.

f. Oil-like substances, as defined in 33 CFR 151.49, and substances defined as an oil under OPA 90, as listed at http://www.uscg.mil/vrp/faq/oil.shtml, may continue to be carried between the U.S. ports if carried in accordance with all applicable U.S. regulations and international standards. Changes to MARPOL Annex II will not affect the requirements under OPA 90 for the carriage of any product. Carriage of a cargo as an oil-like substance by a vessel through the waters of another country will require application to Commandant (CG-3PSO-3) for an exemption under Regulation 4 of the revised Annex II. Any exemption granted by the U.S. will be submitted to the IMO for circulation and comment to all countries party to the MARPOL convention.

g. It is the intent of the Coast Guard to harmonize the cargo classification system of the U.S. with the international standards. For new cargoes to be carried solely on U.S. vessels which are operating under paragraph (2.d), manufacturers must specifically request assignment of new cargoes under the old classification system (Category A, B, C, D, or listed in Appendix III) when submitting requests to the Commandant (CG-3PSO-3). All requests for assignment under the old classification system should be submitted with all information required for classification under the new classification system (see Enclosure 4). Cargoes will be categorized under both the new and old classification systems.

4. Surveys/Inspections/Tests

a. Initial Surveys:

i. Whenever a U.S. vessel owner desires to carry a new NLS cargo, the application along with other required information, must be submitted in accordance with 46 CFR 153.8, unless the NLS is to be carried in a marine portable tank under 46 CFR Part 98.

ii. When the cargo system plans and P&A Manual are approved by the MSC, a marine inspector will conduct an initial survey to verify that the arrangements and particulars of the cargo systems for NLS are in accordance with the plans and P&A Manual. It will also be necessary to determine the stripping quantity and total residue so that this information can be entered in the P&A Manual. In those instances where a vessel owner may desire to conduct the stripping tests prior to the approval of the P&A Manual by the MSC, the marine inspector should conduct the tests in accordance with the P&A Manual aboard. This P&A Manual should be the same as the one submitted to the MSC for approval.

iii. For vessels participating in the Alternative Compliance Program (ACP), the classification society technical department and the classification society surveyor

will replace MSC and OCMI, respectively, in this section (Surveys/Inspections/Tests).

iv. The initial inspection should include checks of the following:

(1) Tank washing equipment such as number and types of washing machines;

(2) Cargo Record Book;

(3) Ventilation equipment for removal of cargo residues;

(4) Underwater discharge outlet(s); and

(5) Cargo heating system and temperature sensors, if required.

v. Any discrepancies noted should be brought to the attention of the MSC and a determination made as to whether or not the plans/P&A Manual must be corrected or the installation aboard the vessel changed to reflect what is indicated in the plans/P&A Manual.

vi. Once the arrangements and cargo system are checked and any discrepancies corrected, an operational test must be conducted to check the efficiency of the stripping system to see that it meets Annex II requirements as appropriate. See Table 2.1.

Table 2.1: Stripping Requirements (in liters)

	Category X	Category Y	Category Z
New ship: keel laid after January 1, 2007	75	75	75
IBC ships on/before January 1, 2007	100 + 50 tolerance	100 + 50 tolerance	100 + 50 tolerance
BCH ships	300 + 50 tolerance	300 + 50 tolerance	900 + 50 tolerance
Others ships: keel laid on/before January 1, 2007	N/A	N/A	Empty to the most possible extent

Note: There is a 50-liter tolerance (allowance) for vessels with keel laid date on/before January 1, 2007. For vessels with keel laid date after January 1, 2007, there is no tolerance.

b. Stripping Tests:

i. Only one stripping test needs to be conducted for each NLS cargo tank. The standards for the highest category of NLS to be carried in the tank must be met. For

those cargo tanks which are identical (size, internal structures, pump and sump locations, types and capacities of pumps, and stripping equipment and methods) only one of these tanks needs to be tested. In such instances, the tank tested should be the one located furthest from the manifold. However, the number of tanks tested should not be less than 25% of the total number intended to carry NLS. If the vessel intends to conduct stripping tests in different ports, the marine inspector in each involved port should document in MISLE what items have been checked, what tanks have been tested, the results of any tests, and any discrepancies noted either with the vessel or P&A Manual.

ii. Those vessels that conducted stripping tests under the old Annex II standards will have those tests accepted for an interim period for certification under the new standards. Vessels will need to complete new stripping tests, as outlined in Appendix 5 of the revised Annex II, at or before the next scheduled dry dock.

iii. The following guidelines supplement the requirements for testing stripping efficiency contained in Subpart D of 46 CFR 153, excluding 153.1608. Water should be used as the testing medium.

(1) The vessel must be at the most favorable position of list and trim as indicated by the P&A Manual. The vessel's trim shall not exceed three degrees by the stern and the vessel's list shall not exceed one degree.

(2) A backpressure of at least 100 kPa (14.7 psig) must be maintained at the cargo tank's unloading manifold. This backpressure may be accomplished by the methods illustrated in Figures 2.1 or 2.2 below.

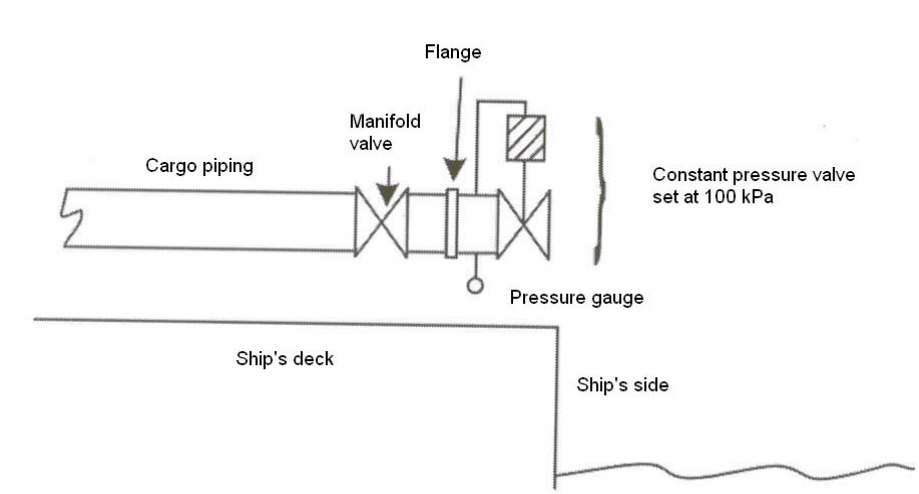

Fig 2.1: Test arrangements that would provide a backpressure of not less than 100kPa (14.7 psig) at the cargo tank's unloading manifold.

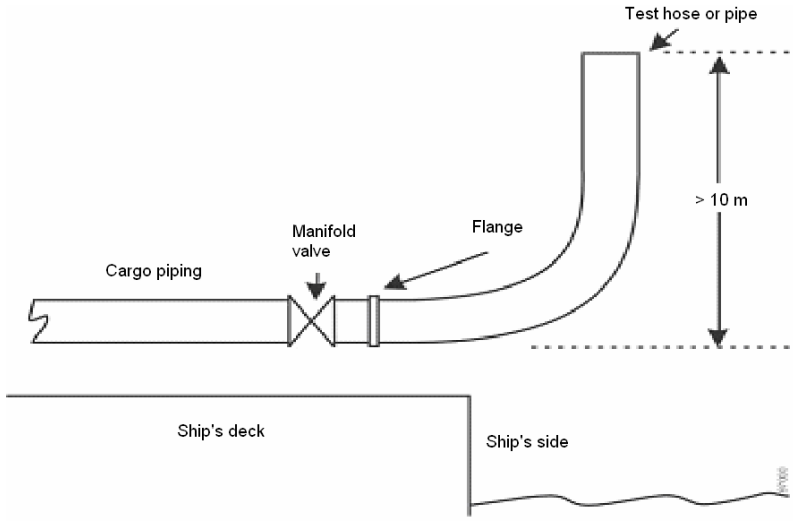

Fig 2.2: Test arrangements that would provide a backpressure of not less than 100kPa (14.7 psig) at the cargo tank's unloading manifold.

(3) The tank(s) to be tested must be "gas free" and "safe for workers" by a certified marine chemist.

(4) The tank and associated piping must be clean before the test, but need not be dry.

(5) Means must be available to accurately measure the amount of water collected from the tank and associated piping after stripping. If a calibrated container is used for measuring the stripping quantity, it must be accurate to $\pm$5%. An uncalibrated container of normal configuration may be used for measuring the "stripping quantity" if the marine inspector can readily calculate the volume of residue based on the container's dimensions and depth of residue. Additionally, equipment must be available for removing and collecting any water remaining in the tank and piping after stripping is completed. This equipment may consist of squeegees, buckets, a wet vacuum, positive displacement pump, or an eductor with an air/water separator in line.

(6) The tank should be filled with water to a depth equal to that at which stripping is commenced as stated in the P&A Manual.

(7) Following the procedures in the P&A Manual, the tank is to be pumped and stripped.

(8) The time taken to complete the test should be recorded for each tank tested. This time period will include the operation interval of the stripping pump and shall be entered in the P&A Manual for each tank tested. The time recorded may need to be amended after subsequent tests.

(9) Upon completion of stripping, the discharge manifold on deck is to be secured.

(10) Except for the manifold valve, all valves in the system for the test tank must be opened to allow any water to drain back to the tank. Also, any cargo pump foot valve must be opened to allow trapped water to drain to the tank.

(11) Collect all water from the following areas:

(a) Cargo tank suction and vicinity;

(b) Entrapped areas on the cargo tank bottom;

(c) Low point drain of the cargo pumps;

(d) Puddles on the tank bottom; and

(e) All low point drains in the affected cargo piping system up to the manifold valve. It should be noted that any water collected from a cargo line servicing more than one tank may be equally apportioned between such tanks provided that the vessel owner has requested this and the P&A Manual specifies that no tank associated with that portion of piping be washed until all the tanks associated with that piping have been discharged.

(12) All water collected from the tank and associated piping must be measured in the container mentioned in paragraph (4.b.iii.(5)) of this enclosure. This quantity must be entered in the cargo information table of the P&A Manual.

(13) If the “total residue” is within the limits allowed by Table 2.1, these amounts will be entered in the cargo tank information table of the P&A Manual. If the total residue exceeds the allowed amount, steps must be taken to alter the procedures followed or the vessel's arrangement and another stripping test conducted.

(14) Although it is intended that only one stripping test be conducted, it may be necessary or desirable to conduct more than one test. If this is the case, then the average of all stripping quantities and times from the several tests will be taken as the final figure provided that no modifications are made to the tank, pumping system, or stripping procedures for the different tests. If modifications are made to the tank, pumping system, or stripping procedures, then the stripping quantity and time will be that determined from the test(s) performed after the last modification.

c. Cargo Record Book/P&A Manual Review:

i. Those vessels carrying NLS cargo in bulk, which do not discharge NLS residues to the sea, must maintain a Cargo Record Book and have an endorsement on their COI prohibiting them from discharging NLS residues to the sea as required by 46 CFR 98.31-l0(a)(1) and (b).

ii. Upon satisfactory completion of all tests and inspections conducted as part of the initial survey, the P&A Manual will receive final approval by the cognizant OCMI. Any discrepancies noted between the plans or P&A Manual and the conditions or procedures noted aboard the vessel should be brought to the attention of the MSC for resolution. After the OCMI and MSC decide upon what corrective action should be taken, the MSC will determine if the P&A Manual must be resubmitted for further review.

iii. Once the P&A Manual receives final approval, the OCMI will deliver it to the vessel with appropriate amendments to the COI indicating the NLS cargoes approved for carriage. If the vessel engages in foreign voyages, the OCMI will also issue the appropriate IMO certificate.

iv. Any subsequent changes made to the plans or P&A Manual must be approved by the MSC and verified by a marine inspector as correctly reflecting conditions aboard a vessel. Any changes to a tank or pumping or stripping equipment or procedures will necessitate another stripping test for the affected tank(s).

v. Information on all vessel inspections and examinations relating to the carriage of NLS shall be entered in MISLE. The information entered in MISLE shall indicate that the vessel was examined/inspected for compliance with Annex II, what deficiencies were noted, if any, what action was taken (e.g issued a certificate, issued a CG-835, commenced civil penalty action, etc.), and any requirements placed upon the vessel (e.g obtain P&A Manual before returning to a U.S. port, conduct efficient stripping tests by a specified date, etc.).

5. Renewal, Intermediate, and Annual Surveys:

U.S. vessels will be issued the appropriate certificate(s) to carry NLSs for a period not to exceed five years. All surveys will normally be conducted as part of a vessel's inspection for certification, periodic, and the annual inspection required in 46 CFR.

a. The renewal and intermediate survey is conducted to ensure the arrangements and procedures are in full compliance with the regulations. It must be sufficient in scope to determine that the cargo pumping, stripping, and tank cleaning equipment is satisfactory. Any recording equipment should be checked for proper operation. The P&A Manual should be compared against the conditions found and procedures followed to ensure its accuracy.

b. Procedures for subsequent renewal and intermediate surveys on vessels will be similar to those followed for the initial survey. Intermediate surveys should occur either on the second or third year after the anniversary date of the renewal survey. Upon satisfactory completion of the intermediate survey, the marine inspector shall endorse the appropriate block of the relevant IMO certificate.

c. For annual surveys, a marine inspector should examine the Cargo Record Book to see that it is properly maintained. The cargo pumping, stripping, and tank cleaning equipment should be spot-checked to see that it appears adequately maintained and is operational. The P&A Manual should be aboard and spot checked to ensure it still accurately reflects the equipment aboard the ship and the procedures followed. Upon satisfactory completion of the annual survey, the marine inspector shall sign and date the appropriate certificate in the space so marked.

d. In all cases, a MISLE entry shall be made to indicate the type of MARPOL survey conducted.

6. Shipboard Marine Pollution Emergency Plans for NLS

For guidance on preparing, submitting and determining compliance with Regulation 17 of the revised Annex II, Shipboard Marine Pollution Emergency Plan for Noxious Liquid Substances, see reference (h).

7. Prewash Operations

a. Vessels certificated under the revised Annex II shall conduct prewash operations as outlined in the revised MARPOL Annex II. For cargoes classified and carried under the revised MARPOL Annex II, third-party surveyors will witness the prewash operations and sign the Cargo Record Book in place of the Coast Guard.

b. Vessels conducting prewash operations for category X substances shall use third-party surveyors (see Enclosure 3) and ensure all appropriate entries are made in the Cargo Record Book and endorsed. If the unloading of a category Y or Z substance is not carried out in accordance with the P&A Manual, a prewash shall be carried out before the vessel leaves port, unless alternative measures are approved by the third-party surveyor. When prewashing high-viscosity category Y cargoes and category Y solidifying substances, the Coast Guard is not required to be notified, nor is a third-party surveyor required to witness the prewash or sign the Cargo Record Book. However, if any operation has been witnessed by a third-party surveyor, an appropriate entry in the Cargo Record Book shall be made in accordance with Regulation 16.2 of the revised Annex II.

c. At the discretion of the local COTP, a third-party surveyor must notify the local Coast Guard office at least one hour prior to conducting a mandatory pre-wash. If an accepted third-party surveyor cannot witness the required prewash prior to departure of the discharge berth, a Coast Guard inspector should be requested. The request should reflect why a third-party surveyor could not witness the prewash.

d. Vessels operating under current U.S. regulations, and to which paragraphs (2.d) and (2.f) apply, shall continue to follow the prewash and stripping requirements in the U.S. regulations. A Coast Guard inspector will continue to witness prewash operations of the old NLS cargoes.

8. Request for Exemption under Regulation 4.1.1, 4.1.2, and 4.1.3 of the revised Annex II

a. U.S. vessels operating and complying with the revised Annex II may request an exemption under Regulations 4.1.1, 4.1.2, and 4.1.3 on a case-by-case basis. When the revised Annex II comes into effect on January 1, 2007, there may be some inconsistencies between certain provisions and applicable U.S. regulations. The U.S. Coast Guard intends to review current regulations with a view toward conforming them to the provisions of the revised Annex II. In the meantime, existing ships must comply with all applicable U.S. regulations, which are in some cases stricter than the revised Annex II.

b. Under the applicable regulatory scheme, the changes to Annex II may limit the cargoes currently carried on existing ships unless the ship operator has applied for and been granted an exemption. To the extent that there is any conflict between the provisions of the revised Annex II and applicable U.S. regulations, the U.S. Coast Guard intends to grant exemptions for ships to the extent legally permissible to avoid disruptions of trade while continuing to protect the marine environment. Three circumstances for which exemptions may be granted are:

i. For existing ships, generally product tankers, which carry oil-like cargoes (listed in 33 CFR 151.49). For such ships, operators may request an exemption to continue to carry oil-like cargoes that the Congress and the Coast Guard have previously allowed to operate until their OPA 90 phase-out date. Certain vessels may also need to comply with the accelerated double-hull provisions under MARPOL Annex I. In this situation, the earlier compliance date for double-hull requirements under OPA 90 and MARPOL Annex I shall be used for determining the duration of the exemption.

ii. For existing ships where the carriage requirements of their cargoes have become more stringent (e.g., a cargo was carried in a type-3 hull which, under the revised Annex II, now requires a type-2 hull). Operators of such ships may request an exemption specifying the cargoes for which they are requesting and the length of time the exemption is to be in effect. Generally the length of time will be limited to either five years from the next scheduled dry dock, or the date the ship reaches 25 years of age, whichever is longer. If the ship has an OPA 90 phase-out date, which is earlier than the 25 year age limit, that date shall be used.

iii. Regulation 4.1.3 also allows for the carriage of individually identified vegetable oils on those product tankers that meet all the requirements for ship type 3 as identified in the IBC Code except for cargo tank location. The entire cargo tank length shall be protected by ballast tanks or spaces other than tanks that carry oil. Cargo tanks shall be located at the minimum distances described in Regulation 4.1.3.2. Moreover, the

relevant certificate shall indicate the product tanker is entitled to operate under the exemption granted under the provisions of Regulation 4.1.3.

c. The owners and operators of existing ships should be aware that, if they are engaged in international trade, they must:

   i. Comply with all applicable U.S. regulations, the revised Annex II and any regulations that may have been adopted by the Port State(s) into which their ships sail.

   ii. For ships with an exemption under paragraph (8.b) of this enclosure, it is the ship owner or operator's responsibility to ensure that a copy of this exemption is on board the vessel and available for review by the Port State authorities upon request.

d. Requests for exemptions should include the following information:

   i. Name of the ship;

   ii. The ship's call sign;

   iii. The ship's IMO number;

   iv. A table to include: (see Note below)

      (1) Proper cargo name of cargoes;

      (2) Proposed carriage requirements for each cargo under exemption; and

      (3) Proposed expiration date of the exemption requested.

   v. The type of trade in which the ship is engaged;

   vi. Date of next scheduled dry dock; and

   vii. Owner or operator contact information and, if applicable, contact information for company or individual coordinating request.

   Note - The table will be used to distinguish whether the exemption will expire based on OPA 90 compliance, the next scheduled dry dock or age of the existing ship.

e. The owners or operators of existing ships should submit requests for exemptions via e-mail to hazmat@comdt.uscg.mil with "MARPOL Annex II Exemption Request" in subject line, or via mail to the following address:

Commandant (CG-3PSO-3)
2100 Second Street, SW
Washington, DC 20593

f. New ships are not eligible for any exemptions under 4.1.1 or 4.1.2 of the revised Annex.

9. Procedures and Arrangements (P&A) Manual

a. P&A Manuals are conditionally approved by the Marine Safety Center (MSC) or by an authorized classification society for ACP vessels. The basic contents of the manuals have been standardized by Appendix 4 of the revised Annex II to MARPOL. The P&A Manual must be written in English. Any previously granted waiver of the P&A Manual terminates with the issuance of a new Certificate of Fitness (COF).

b. The P&A Manual incorporating the changes of the revised Annex II must be approved and on board the vessel prior to commencing cargo operations. Vessels requiring a P&A Manual incorporating the changes of the revised Annex II are encouraged to submit their proposed manuals as soon as possible to either the MSC or authorized classification society for review and approval. From January 1, 2007 to March 31, 2007, the Coast Guard will accept the revised P&A Manuals with a copy of the letter from MSC or authorized classification society acknowledging receipt of the revisions. From April 1, 2007, to June 30, 2007, the Coast Guard will accept the revised P&A Manual with a copy of the approval letter. After June 30, 2007, the original approved P&A Manual must be onboard. The U.S. cannot guarantee the relaxation of enforcement in other Port States and strongly recommends vessels that are traveling to foreign ports to contact the Port State administration for clarification on enforcement ahead of time.

c. The contents of the P&A Manual shall be arranged in accordance with Appendix 4 of MARPOL Annex II. It must be vessel specific and include the following:

i. A description of the main features of Annex II of MARPOL;

ii. Description of the ship's equipment and arrangements including cargo heating and temperature control, discharge arrangements, schematic of cargo pumping and stripping systems, control equipment, and cargo pump information;

iii. Cargo unloading and tank stripping procedures including any restrictions such as list or trim;

iv. Detailed procedures relating to the cleaning of cargo tanks, residue discharge, ballasting, and deballasting;

v. A table of cargo tank information including the tank designation, capacity, and stripping quantity;

vi. Procedures to be followed when a cargo tank cannot be unloaded in accordance with required procedures;

vii. The applicable portions of the flow diagrams contained in Addendum A of Appendix 4 of Annex II which address tank cleaning and disposal procedures for NLS residue;

viii. Prewash procedures which include the following:

(1) Cleaning machines positions to be used;

(2) Slops pumping out procedures;

(3) Requirements for hot washing;

(4) Number of cycles of cleaning machine (or time);

(5) Minimum operating pressure; and

(6) Instructions for any cleaning agents that are used.

ix. Ventilation procedures which may be used only for cargo with vapor pressures greater than 5 kPa at 20^0C, including:

(1) Ventilation positions to be used;

(2) Minimum flow or speed of fans;

(3) Procedures for venting pipelines, pumps, filters, etc.; and

(4) Procedures for determining that tanks are dry when ventilation is completed (Draeger tube sampling of tank atmosphere, visual inspection, etc.).

x. Any other information or operational instructions required by the MSC or authorized classification society.

10. Certificates

a. Numerous U.S. vessels which carry cargoes regulated under the revised Annex II and 46 CFR Section 153 may need their certificates updated to accurately reflect the cargoes and routes for which they are authorized. Vessel owners and operators are highly encouraged to review this document to determine if their vessels should have updated certificates prior to engaging in foreign trade to avoid control actions (e.g., prohibition of cargo operations and/or detention) by Port State control authorities in foreign ports.

b. There are several certificates which may be issued to a vessel to allow it to carry NLS. The type of certificate issued will depend upon the vessel type, the cargoes it carries (in addition to NLS), and which of the IMO chemical codes it meets, if any. Certain vessels may be issued one of the several certificates discussed below depending upon the cargoes carried. Additionally, those Offshore Supply Vessels (OSVs) which do not meet the requirements of 46 CFR 153 shall have their COI endorsed to indicate that the discharge of NLSs at sea is prohibited as specified in 46 CFR 98.31-10(b). Any vessel issued a waiver under 46 CFR 153.491(a) shall have an endorsement on its COI to indicate this. The endorsement must indicate the specific cargoes allowed and the tanks affected.

c. U.S. vessels operating from one U.S. port to another U.S. port carrying old NLSs (category A, B, C, D, or Appendix III) while remaining exclusively within waters over

which the U.S. has jurisdiction, or the high seas, shall have their COI amended to include the following endorsement:

"VESSEL DOES NOT COMPLY WITH MARPOL ANNEX II AND MAY ONLY TRANSPORT NLS CARGOES REGULATED UNDER TITLE 33 CFR OR 46 CFR BETWEEN U.S. PORTS VIA WATERS OVER WHICH THE U.S. HAS JURISDICTION OR ON THE HIGH SEAS."

d. U.S. vessels operating under the revised Annex II carrying NLS cargoes will require a new Cargo Authority Attachment (CAA) to reflect the new cargo carriage requirements. The issuance of a new CAA will also require an endorsement to the COI to reflect the new CAA, as well as the issuance of the appropriate international certificate for the carriage of NLSs. U.S. vessels requesting a new CAA should follow the procedures outlined in paragraph 15 or contact the cognizant classification society.

e. Vessels with a valid COI that have not implemented the revised Annex II shall contact the local OCMI to amend the COI. OCMI's shall enter the endorsement listed in paragraph 10.c above on the vessel's COI. These vessels will also need to surrender their international certificate authorizing the carriage of NLSs, if appropriate.

f. In addition to a COI, all U.S. self-propelled and oceangoing non-self- propelled vessels sailing on foreign voyages and carrying NLS cargoes in bulk must have one of the following certificates endorsed for the NLS cargoes carried:

   i. <u>International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk</u> - issued under the IBC Code (IMO Resolution MEPC 119(52)). This certificate is required for all oceangoing chemical tank ships and oceangoing tank barges making foreign voyages which carry any of the cargoes designated on a tripartite agreement to which the U.S. is a party or listed either in the IBC Code or an IMO Circular for which the IBC Code applies.

   ii. <u>Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk</u> - issued under the BCH Code (IMO Resolution MEPC.144(54)). This certificate is required for all oceangoing chemical tank ships and oceangoing barges making foreign voyages which carry any of the cargoes designated on a tripartite agreement to which the U.S. is a party or listed either in the IBC Code or an IMO Circular for which the BCH Code applies, unless the vessel has an International Certificate of Fitness.

   iii. <u>International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (NLS Certificate)</u>. This certificate may be issued to all oceangoing vessels on foreign voyages which carry only those category Z NLS cargoes listed in Chapter 18 of the IBC Code.

11. Cargo Record Book

Until such a time as when updated Cargo Record Books are made available, existing Cargo Record Books may be corrected manually (initialed pen-and-ink changes acceptable) to reflect changes as a result of the revised Annex II's effective date of January 1, 2007. "White out" should not be used. The needed corrections are as follows:

a. Cover: Add IMO Number for Ship.

b. Cover Note: Change "REGULATION 9" to "REGULATION 15."

c. Introduction: First Paragraph: strike "paragraph 2 of regulation 9" and replace with "regulation 15.2." Fourth paragraph: strike out.

d. List of items to be recorded:

   i. Opening sentence: strike "Categories A, B, C and D" and replace with "all Categories of;"

   ii. Add asterisks after 14.1, 14.2, 16.2, and 23.2, add a footnote on each page where those asterisks appear: "* Ship's master should obtain from the operator of the reception facilities, which include barges and tank trucks, a receipt or certificate specifying the quantity of tank washings transferred, together with the time and date of the transfer. The receipt or certificate should be kept together with the Cargo Record Book;"

   iii. Strike paragraph 15.3 "dilution of cargo residues with water" and renumber 15.4 "ventilation procedures used" as new 15.3; and

e. On each page where operations are recorded: add the ship's IMO number under the "Distinctive number or letter" entry.

12. Marine Portable Tanks

U.S. vessels carrying NLS cargoes in portable tanks loaded in bulk must comply with the requirements of 46 CFR 98.30-14. U.S. vessels in foreign waters must operate under the revised Annex II; application shall be made to Commandant (CG-3PSO-3) in accordance with that regulation.

13. Guidance for U.S. Vessels Operating under U.S. Regulations Transiting To/From Shipyards

a. For those U.S. vessels that do not comply with the revised Annex II and IBC Code, and operate under conditions of paragraph (2.d) above, which transit to and from foreign shipyards, or transit to and from shipyards in the U.S. but will not be remaining exclusively within waters which the U.S. has jurisdiction, shall only operate in a non-

tanker status. The cognizant OCMI shall remove the COI from the vessel and issue a temporary COI restricting the vessel to non-tank vessel operations. In addition, the OCMI shall remove the vessel's IOPP Certificate, Form B Supplement and replace it with a Form A Supplement. This does not waive the requirement to have other required international certificates, as applicable. Upon their return to the U.S., these vessels may continue to operate under the conditions of paragraph (2.d).

b. In such cases, the vessel must meet the following conditions and obtain the required certificates:

i. Vessel Conditions: The vessel must be empty of cargo and/or slops and operate in a gas-free condition. All NLSs, as defined under the revised Annex II, must be removed from their cargo tanks prior to departure from the U.S. Additionally, the cargo related systems, including Crude Oil Washing and Inert Gas Systems, must be left out of service and may only be used in an emergency. The transport of NLS cargoes will be prohibited until the vessel's return to the U.S.

ii. Certificates: The IOPP Certificate, Form B Supplement should be removed from the vessel for the duration of the voyage and replaced with an IOPP Certificate, Form A Supplement. The COI shall be removed from the vessel and replaced with a temporary COI restricting the vessel to non-tank vessel operations. When the vessel returns to domestic trade, the vessel's IOPP Certificate, Form B Supplement and COI may be re-instated, and the Form A Supplement and temporary COI should be permanently removed from the vessel. OCMIs shall enter a special note in MISLE explaining the intended duration and purpose of the transit.

14. Guidance for Submitting Plans to the MSC

a. Existing Vessels in Compliance with Revised IBC Code & MARPOL Annex II:

i. Vessel owners are encouraged to engage the certificating OCMI prior to submitting plans to MSC. Vessels enrolled in the ACP should contact the appropriate authorized classification society for plan review and issuance of new IMO Certificates. All correspondence with MSC should identify the vessel name, official number, shipyard and hull number, the certificating OCMI, and the vessel's expected plans for international voyages after January 1, 2007.

ii. At a minimum, all vessels carrying NLS cargoes on international voyages will require a new CAA to reflect the new cargo carriage requirements. The following items should be submitted to the MSC without delay:

(1) MSC's Tank Group Characteristics Loading Form for Tank Vessels Certified for International Voyages (request form from MSC), and;

(2) Revised P&A Manual or waiver request in accordance with 46 CFR 153.491. Any previously granted waiver of the P&A Manual terminates with the issuance of a new COF. P&A Manuals shall conform to the standard format contained in Appendix 4 of Annex II and paragraph 9 of this enclosure.

iii. If the vessel is converting from a Subchapter D/Product Carrier to a Subchapter O/Chemical Carrier or upgrading ship type, plans or calculations must be submitted demonstrating compliance with the applicable sections of the IBC Code and/or 46 CFR Part 153 for the ship type and cargoes desired. Such items include, but are not limited to:

(1) General Arrangement Plan;

(2) Tank Capacity Plan;

(3) Cargo Piping Plans;

(4) Fire Protection System Plans and Calculations; and

(5) Stability Calculations.

iv. Plan review conducted by the MSC typically takes 30 days. It is recommended that required plans are submitted as early as possible to avoid vessel delays.

b. Domestic Vessels Not Complying with Revised Annex II. The MSC will no longer approve changes to Table 1 of the P&A Manual for a vessel not implementing the revised Annex II. The existing Table 1 of a P&A Manual may be replaced with the following statement: "This vessel is authorized to carry those Noxious Liquid Substances listed in the Cargo Authority Attachment attached to and referenced by the vessel's valid Certificate of Inspection."

Requirements for Third-Party Surveyors of MARPOL Annex II Inspections

1. When required, vessels conducting prewash operations under the revised rules of MARPOL Annex II effective January 1, 2007, must be surveyed by an independent third-party surveyor (company or individual) meeting the criteria and conditions listed below:

   a. The third-party surveyor must:

      i. Possess knowledge of the rules of Annex II and applicable U.S. regulations, including requirements for the P&A Manual and Cargo Record Book;

      ii. Possess knowledge of the equipment and its operation used for tank prewashes including washing machines, ballasting operations (for trim and list), and stripping pumps;

      iii. Be engaged, as a regular part of its business, in performing inspections or tests of bulk liquid cargo tanks or bulk liquid cargo handling equipment, and comply with 19 CFR 151.13 (Customs and Border Protection Regulations; Examination, Sampling, and Testing of Merchandise);

      iv. Possess and utilize appropriate personal safety equipment;

      v. Have the ability to monitor and evaluate cargo operations and results;

      vi. Not be controlled by an owner or operator of a vessel or directly employed by the Marine Transportation Related facility where the cargo and/or prewash is to be discharged;

      vii. Not be dependent upon Coast Guard acceptance under this section to remain in business; and

      viii. Not cause an undue delay of a ship.

   b. Any false statement or misrepresentation, or the knowing and willful concealment of a material fact may subject the surveyor or its nominator to prosecution under the provisions of 18 U.S.C. 1001, and may result in denial or termination of acceptance of the surveyor.

   c. Any person surveying for the purposes of Annex II may be examined by the Coast Guard to verify qualifications and to ensure compliance with the international standards.

   d. The Coast Guard may elect to recognize certification programs developed by appropriate organizations as meeting the qualification requirements under paragraph (a) above, such as the program developed by the International Federation of Inspection Agencies (IFIA).

e. It is recommended that surveyors utilize a checklist that includes, as a minimum, the information shown in Attachment 1 to this enclosure.

f. The surveyor must be able to provide evidence to the Coast Guard, upon request, that the surveyor meets the qualifications listed in this enclosure.

g. A surveyor may be terminated by the local COTP if surveys are not conducted in accordance with Annex II. Notification of termination of third-party surveyors needs to be made to Commandant (CG-3PSO-3).

Attachment:
(1) Prewash Check-off List

Prewash Check-off List

1. Pre-Arrival Information

Ship's Name	
Notification of prewash made at (Time/Date/Contact Information)	
Expected time prewash to commence	
NLS (by name and category) to be prewashed	
Estimate Volume of Prewash residue	
Location of unloading terminal	
Ship's ETA at unloading terminal	
Cargo tank(s) to be prewashed	
Name and location of reception facility (if other than unloading terminal)	

2. Reconfirmation and Preliminary Safety Preparations

Confirm that the cargo is a category X NLS or category Y high-viscosity NLS	
Determine what the associated exposure hazards are (Reference USCG Chemical Data Guide, CHRIS Manual, ICS Tanker Safety Guide, MSDS or other documents)	
Determine what protective clothing is needed to monitor prewash	

3. Arrival at Terminal

Confirm that the terminal has a valid Certificate of Adequacy (COA)	
Confirm that the NLS to be unloaded is listed on the COA	
Confirm that the reception facility can receive the prewash residue	
Confirm that the reception facility has sufficient capacity to handle the estimated volume of prewash residues	

4. Arrival Aboard Vessel and Conducting Prewash Operations

Confirm the ship has necessary documentation		
Verify the tank(s) were prewashed in accordance with the ship's P&A Manual		
	Required	Used
Number of Machines:		
Location of Machines:		
Washing Pressure:		
Washing Temperature:		
Number of cycles:		
Acceptable tank cleaning agents:		
Pre-programmed "washing cycle" (portable drives only)		
Other:		
Make entry to ship's Cargo Record Book at completion of prewash operations		

5. Other Comments:

Guidance Regarding Classification of Cargo and Tripartite Agreements

This document outlines the changes to the classification system for bulk liquid chemicals and the new procedures to classify or reclassify chemicals.

1. Introduction

   a. The new classification rules change the criteria for assigning values for both the ship type and pollution category. The existing pollution categories A, B, C, D, and III have been replaced by X, Y, Z, and Other Substances (OS). All bulk cargoes are divided into four categories. Category X has the most severe pollution hazards, category Y has moderate pollution hazards, category Z has low pollution hazards, and category OS has no hazards when discharged from tank cleaning or deballasting operations.

   b. The new classification system will go into effect on January 1, 2007, for international trade. Until January 1, 2007, exporting administrations will classify NLSs under the existing system and, to the extent possible, the new classification system as well.

   c. All existing international cargo classifications, both permanent and provisional, will expire on January 1, 2007, meaning cargoes will not be permitted in international trade unless they have been reclassified. IMO has been working diligently to reclassify all existing permanently classified chemicals and in most cases had enough information in their data files supplemented by information from industry to reclassify these "existing" chemicals. IMO has not reclassified any trade name products, which are defined as mixtures of two or more chemicals.

2. Definitions

   a. International Bulk Chemical (IBC) Code: means the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk adopted by the MEPC of the Organization by resolution MEPC.119(52), as amended by the IMO, provided that such amendments are adopted and brought into force in accordance with the provisions of article 16 of the present Convention concerning amendment procedures applicable to an appendix to an Annex.

   b. MARPOL: means the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended.

   c. Noxious Liquid Substance (NLS): means any substance indicated in the pollution category column of chapters 17 or 18 of the IBC Code, the current MEPC.2 Circular, or provisionally assessed under the provisions of regulation 6.3 of MARPOL Annex II as falling into categories X, Y, and Z.

d. Tripartite Agreement: means an agreement for a provisional, or temporary, cargo classification. This agreement is made between the exporting administration, the importing administration(s), and the vessel flag state administration(s).

3. Determining if a Product Has Been Classified Under the New MARPOL Annex II

a. Process to determine if a product for international trade has been reclassified under the new MARPOL Annex II:

i. Review the IBC Code, Chapters 17, 18 or 19. If a product is permanently classified, it must be shipped according to the product name listed in chapter 17 or 18 of the IBC Code.

ii. Review the current MEPC.2 Circular.

iii. Contact the administration of the exporting country to determine if the product has already been provisionally assessed and is classified by a tripartite agreement. If the product has been previously classified by tripartite agreement, any newly initiating shipping or producing administration should review the previous assessment with a view toward agreeing with the previous assessment taking into account any new data available.

4. Process for New Cargo Classification

a. If the product has not been reclassified, the tripartite process will be followed by companies requesting classification by the U.S. administration. Requests for tripartite agreements fall into two general categories; mixtures and pure components. To have a cargo classified by the U.S., the following steps needs to be taken.

i. Mixtures:

(1) Compile composition data using the attached Mixture Data form (Attachment 1 to this enclosure).
(2) Specify which importing countries and flag states need to be included in the tripartite agreement.
(3) Specify classification for International, Domestic, or International and Domestic trade.
(4) Submit all data to the U.S. Coast Guard (CG-3PSO-3) to begin the tripartite agreement process or classification.
(5) Additional data may be required if more than 1% of the components have not been classified.

ii. Pure Components:

(1) Compile all data for the product using the attached Bulk Data form (Attachment 2 to this enclosure).
(2) Specify classification for International, Domestic, or International and Domestic trade.
(3) Specify which importing countries and flag states need to be included in the tripartite agreement.
(4) Submit all data to the U.S. Coast Guard (CG-3PSO-3) to begin the tripartite agreement process.

b. Relevant information may be sent via e-mail to: hazmat@comdt.uscg.mil with "Cargo Classification" in the subject line or via mail to the following address:

U.S. Coast Guard (CG-3PSO-3)
Attn: Cargo Classification
2100 Second Street, S.W.
Washington, DC 20593-0001

5. Tripartite Process

a. The tripartite agreement process begins with the exporting country's administration preparing a classification for the chemical based on data submitted by the chemical manufacturer. The proposed classification is then sent to the administrations of the importing countries and the vessel's flag state carrying the chemical for their review and approval. The administrations have two weeks in which to reply, and either agree or work out a mutually agreeable classification. If, after two weeks, an administration has not replied, the exporting administration can assume their concurrence. The exporting administration will issue a letter to the cargo owner containing the provisional cargo classification after the two week period has elapsed, or after agreement among the administrations has been reached. This classification is valid only for those countries participating in the provisional classification process. If a cargo owner needs additional flag states or importing countries, the exporting administration must reach a tripartite agreement with these additional countries.

b. Provisional assessments by tripartite agreement will expire after three years of publication in MEPC.2 Circular. During this period, companies owning the cargo must submit data, as outlined in the revised MARPOL Annex II, to IMO for permanent classification. IMO has stated that they will not renew or extend the three year tripartite agreement period.

6. Detailed Chemical Classification Process for International Trade

a. Products assessed by IMO are limited to those listed in the IBC Code, and List 1 (without an expiration date) and List 5 of the latest MEPC.2 Circular. Cargoes which have not been previously classified, can be divided into four groups:

i. Group 1 - pure or technically pure products.
ii. Group 2 - pollutant only mixtures containing at least 99% by weight of components already assessed by IMO.
iii. Group 3 - (trade named) mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards.
iv. Group 4 - mixtures containing one or more components, forming more than 1% by weight of the mixture, which have yet to be assessed by IMO.

b. Cargoes in groups 1, 3, and 4 will be provisionally assessed through a tripartite agreement initiated by the exporting or producing administration. After the provisional assessment of the products in group 1, 3, and 4 is completed, an addendum to the appropriate certificate authorizing the carriage of NLSs must be issued by the administration of the flag state of the ship. Cargoes in group 2 will be assessed by a calculation method using data already known from the individual components of the mixture. Group 2 cargoes do not need the concurrence of the flag states for receiving countries, but they need to be notified of the assessment of the mixture. Group 2 cargoes will be shipped under the applicable generic entry to the IBC Code (i.e. Noxious Liquid (n.o.s.) or Non-Noxious Liquid (n.o.s.)) and the classification is permanent and valid for all signatory nations to MARPOL.

c. A provisional hazard profile will be derived for cargoes in group 1, when data is available, using the criteria developed by the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) and Evaluation of Safety and Pollution Hazards (ESPH) Working Group (see MARPOL Annex II, Appendix 1, Abbreviated Legend to the revised GESAMP Hazard Evaluation Procedure). From this provisional hazard profile, a provisional pollution category, ship type, and carriage requirements will be derived according to the MARPOL Annex II, Appendix 1 "Guidelines for the Categorization of Noxious Liquid Substances" and chapter 21 of the IBC Code. When there is not enough data, or sufficient data is not available, the provisional assessment will be made by comparing chemically similar structures from the IBC Code, the latest MEPC.2 Circular, and other documents. The safety hazards of the product are then assessed by using the relevant parts of chapter 21 from a safety point of view. The carriage requirements will be assigned based on the criteria presented in chapter 21, but the most stringent set of requirements will normally be adopted for the provisional categorization. If necessary, the ship type previously assigned for pollution considerations only will be revised.

d. Cargoes in group 2 may contain components with safety hazards as long as they are so diluted that the final mixture presents no safety hazard. The pollution category and ship type are determined by using the assessed values for each component of the mixture. On the basis of the calculated pollution category, ship type and the flash point of the mixture, the product is assigned to the appropriate "Noxious Liquid, n.o.s." generic entry to the IBC Code with the corresponding carriage requirements.

e. Cargoes in group 3 are mixtures that contain components with safety hazards to such an extent that they impart a safety hazard to the resulting mixture. For these mixtures, the pollution category is calculated in the same manner as group 2, and a tentative ship type, for pollution prevention purposes only, is also calculated in the same manner as group 2. Carriage requirements are then assigned based on the most stringent requirement of the components present in the mixture, unless it is proven that safe carriage can be ensured by less stringent conditions. These mixtures cannot be shipped under "Noxious Liquid n.o.s." generic entries in the IBC Code. An appropriate shipping name will need to be assigned to the mixture which identifies the principal substances responsible for the safety and pollution hazards (if applicable) of the mixture. The provisional classification will be evaluated by IMO based on the information provided in the Data Reporting form submitted for final inclusion of the mixture in the MEPC.2 Circular, List 3 without an expiration date.

f. Cargoes in group 4 are assessed using the previously mentioned ways or combination of ways as described above. If sufficient data is available on the mixture as a whole, it will be assessed as a pure or technically pure product (group 1). If data is not available on the mixture as a whole, each unassessed component will be provisionally assessed as described in group 1. The mixture will then be assessed by the methods described in group 2 or group 3, depending on the safety hazards. For mixtures falling in group 4, the manufacturer will forward to GESAMP/EHS the available data on the mixture as a whole or on each individual unassessed component in order to assign the respective Hazard Profiles.

g. In each instance, a copy of the letter is sent to IMO where it is added to the annual listing of cargo classifications published as the MEPC.2 Circular. Eventually, chemical cargoes (but not trade name mixtures) that are permanently classified by IMO, are added to the next bound volume of the IBC Code. IMO keeps all trade name mixture classifications in the MEPC.2 Circular.

7. <u>Chemical Classification Process for Domestic Only Trade</u>

For new cargoes carried solely on U.S. vessels operating under the old classification system, manufacturers must specifically request classification of new cargoes under the old classification system (Category A, B, C, D, or listed in Appendix III) when submitting requests to the Commandant (CG-3PSO-3). All requests for classification under the old classification system should be submitted with all information required for classification under the new classification system using Attachment 1 for Mixtures, and Attachment 2 for Pure Components. Cargoes will be classified under both the new and old classification systems.

Attachments:
(1) U.S. Coast Guard Mixture Data Submission Form
(2) BLG Product Data Reporting Form

U.S. Coast Guard Mixture Data Submission Form

Company Name: _____

Point of Contact (including phone number & email): _____

Address 1: _____

Address 2: _____

Product Name: _____

Mixture Components:

	Name of Component	Percent (by weight) in mixture	IMO Regulated Cargo (Yes/No)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Mixture Properties (if known):

Closed cup flash point: _____

Melting or pour point: _____

Viscosity at 20°C: _____

Density at 20°C or 15.6°C: _____

Attachment (2) to Enclosure (4)

BLG Product Data Reporting Form: Characteristics of Products proposed for Bulk Marine Transport

1: Product Identity

Product Name:

This is the only name that should appear on the shipping document and will be reflected in the IBC Code

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1.1: Other Names and Identification Numbers

Main Trade Name:

Main Chemical Name:

Chemical Formula:

C.A.S Number:

EHS Number:

BMR Number:

RTECS Number:

Structure:

1.2: Associated Synonyms

Synonym Name	Type

1.3: Composition

Component Name	%	Type

(For Additional Space, Please Attach Separate Form)

2: Physical Properties

Property	Units	Qual	Lower Value	Upper Value	References & Comments
Molecular weight					
Density @ 20 º C	kg/m3				
Flash Point (cc)	°C				
Boiling Point	°C				
Melting Point/Pour Point	°C				
Water solubility @ 20 ºC	mg/l				
Viscosity @ 20 ºC	mPa.s				
Vapor Press. @ 20 ºC	Pa				
Auto-ignition Temp	°C				
Explosion Limits	% v/v				
Carriage Temperature	°C				
Unloading Temperature	°C				
MESG	mm				

3: Relevant Chemical Properties

Water Reactivity (0 - 2)

Details:

0=No Reactivity 1=Reactive 2=Highly

Does the product react with air to cause a potentially hazardous situation **[Y / N]**
If so, provide details:

Reference:

Is an Inhibitor or Stabilizer needed to prevent a hazardous reaction? **[Y / N]**
If so, provide details:

Reference:

Is refrigeration needed to prevent a hazardous reaction? **[Y / N]**
If so, provide details:

Reference:

4: Mammalian Toxicity

4.1: Acute Toxicity

LD50	**Qual**	**Lower Value**	**Upper Value**	**Species**	**Reference/Comments**
Oral (mg/kg)					
Dermal (mg/kg)					
Inhalation (mg/l/4h)					

4.2: Corrosivity and Irritation

	Qual	**Lower Value**	**Upper Value**	**Reference/Comments**
Skin Corrosion Time (hours)				

	Resultant Observation	**Species**	**Reference/Comments**
Skin Irritation (4h exposure)			
Eye Irritation			

Observations: Not irritating, Slightly irritating, Mildly irritating, Moderately irritating, Severely irritating or Corrosive

4.3: Sensitization

Respiratory Sensitizer (in humans) **[Y / N]**
Reference:

Skin Sensitization **[Y / N]**

Reference:

4.4: Other Specific Long-Term Effects

Carcinogen: **[Y / N]**
Reference:

Mutagen: **[Y / N]**
Reference:

Toxic to Reproduction: **[Y / N]**
Reference:

Other Long term: **[Y / N]**
Reference:

4.5: Other Relevant Mammalian Toxicity

5: GESAMP Hazard Profiles and Carriage Requirements

5.1: GESAMP Hazard Profiles

Column	**Property**	**Value**
A1	Bioaccumulation	
A2	Biodegradation	
B1	Acute Aquatic Toxicity	
B2	Chronic Aquatic Toxicity	
C1	Acute Oral Toxicity	
C2	Acute Dermal Toxicity	
C3	Acute Inhalation Toxicity	
D1	Skin Irritation/Corrosivity	
D2	Eye Irritation/Corrosivity	
D3	Specific Health Concerns	
E1	Tainting and Odor	
E2	Wildlife and Seabeds	
E3	Beaches and Amenities	
F	Remarks	

5.2: Proposed Carriage Requirements

Column in the IBC Code	**Property**	**Value**
c	Pollution Category	
d	Safety/Pollution Properties	
e	Ship Type	
f	Tank Type	
g	Tank Vents	
h	Tank Environmental Control	
i’	Electrical Equipment - Class	
ii”	Electrical Equipment - Group	
iii”’	Electrical Equipment – Flashpoint > 60ºC	
j	Gauging	
k	Vapor Detection	
l	Fire Protection	
n	Emergency Escape	
o	Special Requirements	

Enforcement Guidance for Coast Guard Inspectors

1. Operational Control/Enforcement Action – Foreign-Flagged Vessels (for cargoes subject to the revised Annex II – loaded after December 31, 2006)[1]

P&A Manual	**Not Updated / Not Onboard**	**Submitted, not approved by Flag Administration**	**Approved, original Manual not onboard**	**Approved, original Manual onboard**
	Prohibit cargo operations for those cargoes subject to revised Annex II (X, Y, Z) and remove COC	1. Until March 31, 2007: copy of letter from Flag/Class acknowledging receipt of submitted Manual onboard - allow cargo ops. 2. After March 31, 2007: prohibit cargo ops and detain vessel IAW regulation 16 of Annex II.	1. Until June 30, 2007: copy of approval letter from Flag/Class onboard– allow cargo ops. 2. After June 30, 2007: prohibit cargo ops and detain vessel IAW regulation 16 of Annex II.	Allow cargo ops IAW P&A Manual. Conduct routine verification during examination.
Certificate of Fitness (COF) or NLS Certificate[2,3]	**Not Updated or Reissued**		**Issued, original not onboard**	**Issued, original onboard**
	Prohibit cargo operations for those cargoes subject to revised Annex II (X, Y, Z), if vsl has X, Y, or Z cargoes onboard, detain IAW regulation 16 of Annex II and remove COC.		1. Until March 31, 2007: copy of approved Certificate onboard- allow cargo ops. 2. After March 31, 2007: prohibit cargo ops and detain vessel IAW regulation 16 of Annex II.	Allow cargo ops IAW P&A Manual. Conduct routine verification during examination.
Certificate of Compliance (COC)	**Expired**	**Issued under old Annex II (for Cat A, B, C & D cargoes) & <u>not</u> carrying valid COF or NLS Certificate issued for revised Annex II (X, Y & Z cargoes)**	**Issued under old Annex II (for Cat A, B, C & D cargoes) & carrying valid COF or NLS Certificate issued for revised Annex II (X, Y & Z cargoes)**	**Issued under revised Annex II (Cat X, Y & Z cargoes)**
	Prohibit cargo operations and conduct compliance exam	Prohibit cargo operations and remove COC	Valid until expiration date on certificate. Allow cargo ops. Conduct routine verification during examination.	Allow cargo ops IAW P&A Manual. Conduct routine verification during examination.

Cargo Record Book	**Not Onboard / Cargo Operations Not Detailed**	**Not updated with required correction & additions** (See Enclosure 1, para 6)		**Updated & Onboard**
	Prohibit cargo operations and detain vessel IAW regulation 16 of Annex II.	Allow cargo ops. Inform Master of requirements for updates. Issue requirement to provide proper documentation prior to next U.S. port after sailing foreign.		Allow cargo ops IAW P&A Manual. Conduct routine verification during examination.
Stripping Tests	**No Stripping Tests Conducted**	**Stripping Tests Conducted under old Annex II standards (B & C cargoes)**		**Stripping Tests Completed under revised Annex II standards (X, Y, & Z cargoes)**
	Prohibit cargo operations for those cargoes subject to revised Annex II (X, Y, Z) and detain vessel IAW regulation 16 of Annex II if X, Y or Z cargoes onboard.	Allow cargo ops IAW P&A Manual. Stripping tests under the revised standards need to be conducted at next scheduled dry dock.		Allow cargo ops IAW P&A Manual. Conduct routine verification during examination.

Notes:

1. Exemptions issued in accordance with regulation 4.1.1 and 4.1.2 of the revised Annex II need to be considered with any enforcement action as it may modify or change these guidelines.
2. It is not the intent for the Coast Guard to require vessels to submit updated copies of their Certificates prior to arrival in the U.S. from January 1, 2007 to March 1, 2007.
3. During the initial implementation period, approximately from January 1, 2007 to June 30, 2007, cargoes will continue to be reclassified and may not be incorporated or annotated on the proper certificates. Official documentation detailing the carriage requirements must be onboard, or readily available, for all cargoes carried. Questions regarding cargo classification should be directed to the Commandant (CG-3PSO-3).

2. Enforcement Action – U.S. Vessels that implement revised Annex II (full compliance required with Annex II and applicable U.S. regulations)

P&A Manual	**Not Updated / Not Onboard**	**Submitted, not approved by MSC**	**Approved, original Manual not onboard**	**Approved, original Manual onboard**
	Prohibit cargo operations for those cargoes subject to revised Annex II (X, Y, Z)	1. Until March 31, 2007: copy of letter from MSC/Class acknowledging receipt of submitted Manual onboard - allow cargo ops. 2. After March 31, 2007: prohibit cargo ops	1. Until June 30, 2007: copy of approval letter from MSC/Class onboard– allow cargo ops. 2. After June 30, 2007: prohibit cargo ops.	Allow cargo ops IAW P&A Manual. Conduct routine verification during inspection.
Certificate of Fitness or NLS Certificate	**Not Updated or Reissued**			**Issued, original onboard**
	Allow cargo ops. Issue CG-835 restricting vessel to domestic operations until issuance of applicable IMO certificate.			Allow cargo ops IAW P&A Manual. Conduct routine verification during inspection.
Cargo Record Book	**Not Onboard / Cargo Operations Not Detailed**	**Not updated with required correction & additions** (See Enclosure 2, par 11)		**Updated**
	Prohibit cargo ops until vessel can present necessary info regarding the cargoes carried. Issue CG-835 to obtain Cargo Record Book and make the necessary entries for the current cargoes onboard the vsl. Initiate investigation.	Allow cargo ops. Issue CG-835 to make necessary corrections & additions prior to departure from port.		Allow cargo ops IAW P&A Manual. Conduct routine verification during inspection.

Guidance on MARPOL Annex II Reception Facilities

1. Applicability. Parties to Annex II have agreed to provide adequate reception facilities according to the needs of ships using their terminals, ports, and ship repair facilities. Reception facilities must be able to handle the NLS residues and mixtures generated for disposal as a consequence of the revised Annex II without causing undue delay to ships. Annex II mandates that ships unloading certain NLS cargoes prewash tanks in port and transfer the NLS residue/water mixtures to reception facilities, unless the ship is operating under a waiver. Reception facilities should be available at unloading terminals and ports. The Coast Guard inspects and then issues a Certificate of Adequacy (COA) certifying that ports or terminals reception facilities meet the requirements found in the regulations and therefore meet international (IMO) requirements. The regulations pertaining to reception facilities are found in 33 CFR Part 158.

2. NLS Cargo Classification

   a. Cargoes under the new classification system include any new NLS defined as any substance indicated in the pollution category column of chapters 17 or 18 of the amended IBC Code, IMO Circular, the most current MEPC.2 Circular, or provisionally assessed under the provisions of Regulation 6.3 of MARPOL Annex II as falling into categories X, Y, and Z.

   b. Cargoes carried under the old classification system include any old NLSs defined as any substance listed in Table 1 of 46 CFR 153 and 33 CFR 151.47 (substances listed in 46 CFR 151.12-5 and 33 CFR 151.49 are included in Table 1 of 46 CFR 153) with pollution categories A, B, C and D.

3. Prewash Operations

   a. Under the current U.S. regulations, ports or terminals must provide reception facilities for those vessels transferring category A NLS, category B and C solidifying NLS, and category B and C high-viscosity NLS. Reception facilities must be capable of receiving NLS residue as specified in 33 CFR Parts 158.320 and 158.330. For U.S. vessels that transfer old NLSs and that are not certificated under the revised Annex II, regulations for stripping and prewash requirements are specified in 46 CFR Part 153, Subpart C.

   b. Under the new classification system, ports or terminals must provide reception facilities for those vessels transferring category X NLS, category Y solidifying NLS, and category Y high-viscosity NLS. As a result of the NLS reclassification, the requirements for prewashing may impact a port or terminal to the extent that a chemical now requires prewashing where it did not under the old classification system (e.g. a chemical currently classified as category D is reclassified as a high-viscosity category Y).

c. Facility owners and operators are encouraged to review references (b), (e), and (g) for changes in carriage and discharge requirements for the cargoes authorized for transfer at their facility.

d. According to regulation 1.17.1 of reference (a), the definition of a High-Viscosity Substance has changed for the new classification system. Under the new classification system, High-Viscosity Substance means a NLS in Category X or Y with a viscosity equal to or greater than 50 mPa.s at 20º C. This change may eliminate the need to prewash a number of chemicals that required a prewash under the old Annex II.

4. Reception Facility Capacity

a. Facilities accepting cargo under the old classification system are required to comply with all applicable U.S. regulations.

b. Facilities accepting cargoes under the new classification system should use the following to determine adequate capacity:

i. Receiving category X residue:
(1) Category X solidifying/high-viscosity - 75 m^3 (19,810 gallons).
(2) Other category X cargoes - 50 m^3 (13,210 gallons).

ii. Receiving solidifying/high-viscosity category Y cargoes – 50 m^3 (13,210 gallons).

iii. Receiving only category Y and Z cargoes – meet requirements in 33 CFR 158.330.

5. Certificates

a. Annex II Certificate of Adequacy Application Form (CG- 5401B Rev 6-04) will be revised to incorporate the new cargo classification format of X, Y, Z, and OS. Ports and terminals that do not have an existing COA but will handle category X or Y materials requiring a prewash must submit a request to the local COTP by November 1, 2006, or 30 days prior to commencement of handling the material after January 1, 2007.

b. Ports and terminals will be allowed to continue operating with their current COA, until it expires, unless one of the following occurs as a result of the re-classification of NLS chemicals;

i. The facility receives an NLS that is classified as a solidifying/high-viscosity category X when the chemical was not a solidifying/high-viscosity category A in the old classification system. The facility must apply for a COA endorsed to meet the higher capacity requirement; or

ii. The facility receives an NLS that now requires prewashing where none was previously required under the old classification system. The facility may need to

apply for a COA to meet the capacity requirements and the operations manual may need to be updated in accordance with 33 CFR 154 Subpart B.

6. Facility Operations Manuals. Facility owners/operators shall update their facility operations manuals, as required by 33 CFR 154 Subpart B, if existing prewash/stripping operations changes are needed as a result of the reclassification of any chemicals. Any changes shall be submitted to the cognizant COTP for examination in accordance with the amendment procedures found in 33 CFR 154.300(b).

7. Inadequate Reception Facilities. Vessel owner/operators are encouraged to report inadequate reception facilities to:

Commandant (G-3PCP-2)
2100 Second Street SW
Washington, DC 20593