標題

マーシャル諸島籍船舶における CAS 実施要領について

ClassNK
テクニカル
インフォメーション

No. TEC-0581
発行日 2004 年 5 月 14 日

各位

今般、マーシャル諸島政府より Condition Assessment Scheme （CAS)に関して通知（Marine Notice No. 2-013-6）がありましたのでお知らせいたします。

添付の通知は、CAS 実施のためのガイドラインおよびインストラクションであり MARPOL 付属書 I 第 13G 改正規則および第 13H 新規則（決議 MEPC. 111（50））および CAS 改正規則（決議 MEPC. 112（50））に沿ったものです。

MARPOL 付属書 I 関連規則の改正に関しましては、ClassNK テクニカル・インフォメーション No. TEC-0557（2003 年 12 月 12 日）を併せてご参照ください。

なお、TEC-0557 は http://www.classnk.or.jp/hp/tech_info/tech_sear_j.asp からダウンロードできます。

また、マーシャル諸島政府通達文書(Marine Notice No. 2-013-6)は http://www.register-iri.com/content.cfm?catid=43 からダウンロードできます。

本件に関してご不明な点は、以下の部署にお問い合わせください。

財団法人 日本海事協会 （ClassNK）
本部 管理センター 検査技術部
住所: 東京都千代田区紀尾井町 4-7（郵便番号 102-8567）
Tel.: 03-5226-2027 / 2028
Fax: 03-5226-2029
E-mail: svd@classnk.or.jp

添付：マーシャル諸島政府通達文書(Marine Notice No. 2-013-6)

REPUBLIC OF THE MARSHALL ISLANDS

Marine Notice

No. 2-013-6

OFFICE OF THE MARITIME ADMINISTRATOR

4/04

TO: **ALL SHIPOWNERS, OPERATORS, MASTERS AND OFFICERS OF MERCHANT SHIPS, AND AUTHORIZED CLASSIFICATION SOCIETIES**

SUBJECT: **Condition Assessment Scheme (CAS).**

Reference: **(a) MEPC.94(46), as amended and consolidated**
(b) Regulations 13G and 13H of Annex I of MARPOL 73/78, as amended

PURPOSE:

The Marshall Islands Flag Administration (the "Administration") desires to assure that the Condition Assessment Scheme, MEPC.94(46), as amended and consolidated (CAS) is properly conducted by providing guidance and instruction to Recognized Organizations and Shipowners.

APPLICABILITY:

The requirements of the CAS apply to:

.1 oil tankers of 5,000 tons deadweight and above and of 15 years and over after date of delivery of the ship, in accordance with regulation 13G(6);

.2 oil tankers subject to the provisions of regulation 13G(7), where authorization is requested for continued service beyond the anniversary of the date of delivery of the ship in 2010; and

.3 oil tankers of 5,000 tons deadweight and above and of 15 years and over after date of delivery of the ship, carrying crude oil having a density at 15°C higher than 900 kg/m^3 but lower than 945 kg/m^3, in accordance with regulation 13H(6)(a).

1.0 Background

1.1 The Condition Assessment Scheme, MEPC.94(46), as amended and consolidated, and regulations 13G and 13H of Annex I of MARPOL 73/78, as amended, are annexed to this Notice from which the Marshall Islands Flag Administration Recognized Organizations (an "RO") and Shipowners shall take guidance. All references to "sections" in this Notice are to those in the CAS.

1.2 Administration representation is essential in this process. It is the Administration that ultimately issues and warrants the validity of the required Statement of Compliance allowing a single hull oil tanker to operate beyond its phase-out date based on the work performed by an RO. The RO's Final Report, however, will not contain a recommendation as to what action the Administration should take toward acceptance or rejection of the CAS survey results. Direct participation in the CAS on the part of the Administration is the only way to allow this decision to be legitimately made.

1.3 Section 11.2 requires that there shall be a verification of the CAS by the Administration.

Inquiries concerning the subject of this Notice should be directed to the Office of the Maritime Administrator, Republic of the Marshall Islands, c/o Marshall Islands Maritime and Corporate Administrators, Inc., 11495 Commerce Park Drive, Reston, VA 20191-1507 USA.

Even though a classification society recognized by the Administration for the conduct of classification and statutory survey and certification on its behalf is involved, independent representation of the Administration acting in an oversight capacity over the work of the RO is deemed necessary. This is to include:

.1 Monitoring the CAS work an RO carries out on the Administration's behalf;

.2 Reviewing and commenting on an RO's CAS Final Report; and

.3 Reviewing cases of ships, which have been submitted for CAS re-assessment.

1.4 Section 11.3 further requires that the Administration shall record and document the findings and conclusions of the review and the decision to accept or reject an RO's CAS Final Report, producing a Review Record for the Administration and the ship.

1.5 Section 11.4 requires that any persons assigned to monitor the execution of the CAS or to review an RO's CAS Final Report shall be:

.1 Adequately qualified and experienced;

.2 Under the direct control of the Administration; and

.3 Have no connection whatsoever with the RO of a ship that carries out the CAS survey under review.

1.6 Considering the volume and scope of work involved, the Administration has identified a need for additional expert resources to assist in the monitoring of CAS work and in reviewing and making recommendations on the CAS Final Report. The Administration has chosen to appoint strategically located and qualified organizations to directly interface with the Shipowner and RO in the CAS as its Authorized Representative and Surveyor (ARS).

1.7 The Administration has authorized the following independent contractors to arrange and provide services as an ARS to monitor and oversee the work of an RO and to review and make recommendations on the CAS Final Report prepared by the RO:

.1 Dimitrios Thomas Marine Ltd. located at 106, Ag. Orous Street, 185 46 Piraeus, Greece, Tel: +30 210 4618.987, Fax: +30 210 4637.590, E-mail: dthomas@otenet.gr; Website: www.dthomasmarine.com.

.2 Martin, Ottaway, van Hemmen & Dolan, Inc. located at 172 Monmouth Street, Red Bank, New Jersey 07701, USA, Tel: +1-732-224-1133, Fax: +1-732-224-8631, E-mail: jdolan@martinottaway.com; Website: www.martinottaway.com.

.3 PacMarine Services (Singapore), International Marine Consultants and Surveyors, located at 17 Phillip St., Grand Building #09-00, Singapore 048695, Republic of Singapore, Tel: +65 6534 3456 (24 Hours), Fax: +65 6534 3088, E-mail: pac-marine@pac-marine.com; Website: www.pac-marine.com.

2.0 Instructions

After having received appropriate notification as required from the Shipowner in section 6.1.1.2, the Administration shall consider and, if appropriate, approve the commencement of the CAS for a subject oil tanker, issuing a set of instructions to the Shipowner and the RO.

3.0 Agreement

3.1 The instructions shall provide that the Shipowner retain the services of the ARS of its choice to provide monitoring and oversight services for CAS survey and certification on behalf of the Administration of a Marshall Islands registered oil tanker subject to the CAS requirements. These services shall include the provision of facilitation services to the Shipowner to assist it in meeting the requirements of the CAS and the survey of an oil tanker to verify its compliance with the CAS.

3.2 Details of the monitoring and oversight services are to be agreed in writing between the ARS and Shipowner for an oil tanker to which the CAS is being applied with the approval of the Administration prior to commencement.

3.3 The agreement shall provide information on how the ARS will provide appropriate staff to carry out this service and to provide additional support to the Shipowner and Administration to monitor and oversee the performance of an oil tanker's RO carrying out the CAS survey work when and where required.

3.4 The agreement shall make reference to this Notice and consider the following in monitoring and overseeing the CAS work of the RO.

4.0 Monitoring and Overseeing the CAS Work of the RO

4.1 The Shipowner shall authorize the ARS to communicate with the RO of the ship performing the CAS survey work and to identify itself as the ARS for CAS surveys and certification for the Shipowner's Marshall Islands registered oil tanker.

4.2 The RO shall acknowledge the ARS as the duly authorized representative and surveyor of the Administration and include the ARS's participation in the CAS work.

4.3 It shall be understood by the RO and the Shipowner that the monitoring, as described in MEPC.94(46), performed by the ARS shall include but not be limited to:

.1 Participation in Survey Plan development as deemed necessary in accordance with section 6.1.2;

.2 Review of the Survey Plan to confirm compliance with section 6.2 on Survey Plan documentation;

.3 Examination of documentation on board according to section 6.3;

.4 Confirmation that the CAS Survey Requirements as defined in section 7 are followed including:

- Holding pre-CAS survey meetings;
- Appropriate use of surveyors;
- Use of qualified surveyors who have completed the required training;
- Monitoring of surveyors by the RO;
- Suitable controls when the survey is split between survey stations;
- Clear identification of items to be repaired;
- Appropriate consultation by surveyors with the RO Headquarters with respect to deferred hull repair items;
- Completion of the survey only when all appropriate recommendations and conditions have been rectified;
- Completion of an overall survey of all appropriate spaces;
- Completion of a close-up survey in accordance with sections 7.2.2, 7.2.3 and 7.2.4; and
- The taking and recording of thickness measurements in accordance with section 7.3.

.5 Review of the CAS survey report to confirm compliance with section 9; and

.6 Review of the verification review of the CAS survey report carried out by the RO Headquarters.

5.0 Reviewing the CAS Final Report

5.1 The review of the CAS Final Report submitted by the Headquarters of the RO shall be conducted in accordance with section 11.3 and shall assure and verify that:

.1 The Final Report is submitted by the RO to the ARS of the Administration as required in section 10.2.2;

.2 The Final Report contains all the information required by section 10.2.3;

.3 The criteria required by sections 7.2 and 7.3 have been met; and

.4 Acceptance criteria for the CAS have met resolution A.744(18), as amended.

5.2 The ARS review shall recommend to the Administration the acceptance or rejection of the RO's CAS Final Report.

5.3 The extent of the review shall be documented, and the ARS shall complete a Review Record, concluded to be provided by the Administration.

6.0 Reviewing Cases of Ships Submitted for CAS Re-Assessment

Where a CAS is submitted for re-assessment, the ARS shall provide an appropriately qualified and experienced individual to review the remedial actions taken and any new information submitted by the RO. The review shall recommend to the Administration the acceptance or rejection of the re-assessment. The extent of the review shall be documented and a new Review Record completed.

7.0 Persons Assigned to Monitor the Execution of the CAS or to Review a CAS Final Report

7.1 The ARS shall provide individuals whose qualifications and experience are acceptable to the Administration for the task required. The ARS shall provide appropriately qualified and experienced individual(s) to review the CAS Final Report submitted by the Headquarters of the RO.

7.2 The individuals, although being the staff of the ARS, shall be considered under the direct control of the Administration. Day-to-day liaison, however, shall be through the ARS.

7.3 The ARS shall warrant that any individual involved in the monitoring of the CAS or the review of a CAS Final Report has had no connection whatsoever with the RO that carried out the CAS survey under review.

8.0 Compensation for Services

8.1 The Shipowner shall compensate the ARS for its services on terms as agreed in the written agreement between the ARS and the Shipowner prior to each appointment.

8.2 The ARS shall submit invoices to the Shipowner at intervals as agreed with the Shipowner and on completion of the work carried out providing a copy or copies to the Administration.

8.3 The ARS shall not be authorized to incur expenses in the name of the Administration or the Shipowner; and the ARS shall be responsible, and not be reimbursed by the Administration or the Shipowner, for any out-of-pocket costs and expenses it incurs, including travel expenses, unless the ARS has received prior approval for such expenses from the Administration or the Shipowner. At such time as reimbursement is requested, the ARS shall provide the Administration or the Shipowner with an itemization of, and receipts for, any such authorized expenses.

9.0 Issue of Statement of Compliance

When the results of the CAS Final Report are deemed acceptable to the Administration, the Office of the Maritime Administrator shall issue the requisite Statement of Compliance with an expiry date of not more than five (5) years and six (6) months.

10.0 Acknowledgement

The RO and the Shipowner shall acknowledge to the Administration receipt of the authorization to proceed with the CAS and clear understanding of the instructions.

Annex 1
CONDITION ASSESSMENT SCHEME
(MEPC.94(46), as amended)

1 PREAMBLE

1.1 The Condition Assessment Scheme (CAS) is intended to complement the requirements of Annex B of the Guidelines on the enhanced programme of inspections during surveys of bulk carriers and oil tankers (hereinafter called Enhanced Survey Programme), adopted by the Assembly of the International Maritime Organization by resolution A.744(18), as amended. The CAS is to verify that the structural condition of single hull oil tankers at the time of survey is acceptable and, provided subsequent periodical surveys are satisfactorily completed and effective maintenance is carried out by the ship's operator, will continue to be acceptable for a continued period of operation, as indicated in the Statement of Compliance, or Interim Statement of Compliance, as applicable.**

1.2 The requirements of the CAS include enhanced and transparent verification of the reported structural condition and of the ship and verification that the documentary and survey procedures have been properly carried out and completed.

1.3 The Scheme requires that compliance with the CAS is assessed during the Enhanced Survey Programme of Inspections concurrent with intermediate or renewal surveys currently required by resolution A.744(18), as amended.

1.4 The CAS does not specify structural standards in excess of the provisions of other International Maritime Organization conventions, codes and recommendations.

1.5 The CAS has been developed on the basis of the requirements of resolution A.744(18), as amended, which were known* at the time of the adoption of the CAS. It is the intention to update the CAS as and when the need arises following amendments to resolution A.744(18), as amended.

2 PURPOSE

The purpose of the Condition Assessment Scheme is to provide an international standard to meet the requirements of regulations 13G(6) and (7) and 13H(6)(a)**of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended (see Appendix 6 and Appendix 7).

3 DEFINITIONS

For the purpose of the CAS, unless expressly provided otherwise:

3.1 **"MARPOL 73/78"** means the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, as amended.

3.2 **"Regulation"** means the regulations contained in Annex I of MARPOL 73/78.

3.3 **"Recognized Organization (RO)"** means an organization recognized by the Administration to perform the surveys in accordance with the provisions of regulation 4(3) of Annex I of MARPOL 73/78.*

** Incorporated from Resolution MEPC.112(50).

* Assembly resolution A.744(18) as amended by resolution 2 of the 1997 SOLAS Conference, by resolution MSC.49(66) and by resolution MSC.105(73).

* Under Regulation XI/1 of SOLAS 74, as amended, resolutions A.739(18) and A.789(19) are applicable to Recognized Organizations.

3.4 **"Administration"** means the Government of the State as defined in Article 2(5) of MARPOL 73/78.

3.5 **"Category 2 oil tanker"** means an oil tanker of 20,000 tons deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo, and of 30,000 tons deadweight and above carrying oil other than the above, which complies with the requirements for new oil tankers as defined in regulation 1(26) of Annex I of MARPOL 73/78.

3.6 **"Category 3 oil tanker"** means an oil tanker of 5,000 tons deadweight and above but less than that specified in regulation 13G(3)(a) or (b) of Annex I of MARPOL 73/78.**

3.7 **"Company"** means the owner of the ship or any other organization or person such as the manager or the bareboat charterer, who has assumed the responsibility for the operation of the ship from the owner of the ship and who, on assuming such responsibility, has agreed to take over all duties and responsibilities imposed by the International Safety Management (ISM) Code.

3.8 **"Substantial corrosion"** means an extent of corrosion such that the assessment of the corrosion pattern indicates wastage in excess of 75% of the allowable margins, but within acceptable limits.

3.9 **"GOOD condition"** means a coating condition with only minor spot rusting.

3.10 **"Thickness Measurement (TM) Firm"** means a qualified company certified by a RO in accordance with the principles stipulated in annex 7 to Annex B to resolution A.744(18), as amended.

3.11 **"Critical Structural Areas"** are locations which have been identified from calculations to require monitoring or from the service history of the subject ship or from similar or sister ships to be sensitive to cracking, buckling or corrosion which would impair the structural integrity of the ship.

3.12 **"Suspect Areas"** are locations showing substantial corrosion and/or are considered by the attending surveyor to be prone to rapid wastage.

3.13 **"Organization"** means the International Maritime Organization.

4 GENERAL PROVISIONS

4.1 The Administration shall issue, or cause to be issued, detailed instructions to the RO which shall ensure that the CAS surveys are carried out in accordance with the provisions of sections 5 through 10 of this Scheme.

4.2 Nothing in this Scheme shall prevent an Administration from carrying out the CAS surveys itself, provided that such surveys are at least as effective as those prescribed in sections 5 through 10 in this Scheme.

4.3 The Administration shall require Category 2 and Category 3 oil tankers flying its flag which are subject to the provisions of regulation 13G(7) to remain out of service during the periods referred to in paragraph 5.1.2, until these oil tankers are issued with a valid Statement of Compliance.**

5 APPLICATION, SCOPE AND TIMING

5.1 Application

The requirements of the CAS apply to:

.1 oil tankers of 5,000 tons deadweight and above and of 15 years and over after date of delivery of the ship, in accordance with regulation 13G(6);**

** Incorporated from Resolution MEPC.112(50).
** Incorporated from Resolution MEPC.112(50).

.2 oil tankers subject to the provisions of regulation 13G(7), where authorization is requested for continued service beyond the anniversary of the date of delivery of the ship in 2010; and

.3 oil tankers of 5,000 tons deadweight and above and of 15 years and over after date of delivery of the ship, carrying crude oil as cargo having a density at 15°C higher than 900 kg/m^3 but lower than 945 kg/m^3, in accordance with regulation 13H(6)(a).**

5.2 Scope of the CAS

The CAS shall apply to surveys of the hull structure in way of cargo tanks, pump rooms, cofferdams, pipe tunnels, void spaces within the cargo area and all ballast tanks.

5.3 Timing

5.3.1 The CAS survey shall be aligned to the Enhanced Programme of Inspection.**

5.3.2 The first CAS survey in accordance with regulation 13G(6) shall be carried out concurrent with the first scheduled intermediate or renewal survey after 5 April 2005, or when the ship reaches the 15 years of age, whichever occurs later.**

5.3.3 The first CAS survey in accordance with regulation 13G(7) shall be carried out concurrent with the scheduled intermediate or renewal survey due prior to the anniversary of the date of delivery of the ship in 2010.**

5.3.4 The first CAS survey in accordance with regulation 13H(6)(a) shall be carried out concurrent with the first scheduled intermediate or renewal survey after 5 April 2005.**

5.3.5 In the case where the Statement of Compliance issued following the first CAS survey under 5.3.2 is valid beyond the anniversary of the date of delivery of the ship in 2010, that CAS may be treated as the first CAS carried out in compliance with regulation 13G(7).**

5.3.6 Any subsequent CAS survey, required for the renewal of the Statement of Compliance, shall be carried out at intervals not exceeding 5 years and 6 months.**

5.3.7 Notwithstanding the above, the Company may, with the agreement of the Administration, opt to carry out the CAS survey at a date earlier than the due date of the survey referred to above, provided that all the requirements of the CAS are complied with.**

6 SURVEY PLANNING REQUIREMENTS

6.1 Preparations for the CAS survey

6.1.1 General procedures

6.1.1.1 Early and detailed planning to identify areas of potential risk is a prerequisite for the successful and timely completion of the CAS. The following sequence of events shall be observed. For the sole purpose of aid to the Companies and Recognized Organizations in the preparation of the CAS Survey, a flowchart of activities and milestones is provided in Appendix 5.

6.1.1.2 Notification from the Company to the Administration and to the RO of its intention to proceed with the CAS shall be submitted not less than 8 months prior to the planned commencement of the CAS survey.

6.1.1.3 Upon receipt of such notification the RO shall:

.1 issue to the Company the Survey Planning Questionnaire (see Appendix 2) not later than 7 months prior to the planned commencement of the CAS survey; and

.2 advise the Company whether there have been any changes to the maximum acceptable structural corrosion diminution levels applicable to the ship.

6.1.1.4 The Company shall complete and return the Survey Planning Questionnaire to the RO not less than 5 months prior to the planned commencement of the CAS survey. A copy of the completed questionnaire shall be forwarded by the Company to the Administration.

6.1.1.5 The Survey Plan for the CAS shall be completed and submitted in signed order by the Company to the RO not less than 2 months prior to the planned commencement of the CAS survey. A copy of the Survey Plan for the CAS shall be forwarded by the Company to the Administration.

6.1.1.6 In special circumstances, such as re-activation from lay-up or unexpected events such as an extended stoppage period for hull or machinery damage, the Administration may, on a case by case basis, relax the time frame, outlined in 6.1.1.2 to 6.1.1.5, for commencement of CAS procedures.

6.1.1.7 Such relaxation shall, at all times, be subject to the RO having sufficient time to complete the CAS survey and issue the Interim Statement of Compliance under regulation 13G(6) or 13H(6)(a), or the Administration to review the CAS Final Report and issue the Statement of Compliance under regulation 13G(7), as applicable, prior to re-entry of the ship to service.**

6.1.2 Survey Plan for the CAS

6.1.2.1 The Survey Plan for the CAS shall be developed by the Company in cooperation with the RO. The Administration may participate in the development of the Survey Plan, if it deems necessary. The RO shall be fully satisfied that the Survey Plan complies with the requirements of 6.2.2 prior to the CAS survey being commenced. The CAS survey shall not commence unless and until the Survey Plan has been agreed.

6.1.2.2 The Survey Planning Questionnaire shall be drawn up based on the format set out in Appendix 2.

6.2 Survey Plan documentation

6.2.1 In developing the Survey Plan, the following documentation shall be collected and reviewed with a view to identifying tanks, areas and structural elements to be examined:

1 basic ship information and survey status;

.2 main structural plans of cargo and ballast tanks (scantling drawings), including information regarding use of high tensile steels (HTS);

.3 Condition Evaluation Report, according to Annex 9 of Annex B of resolution A.744(18), as amended, and, where relevant, any previous CAS Final Reports;

.4 thickness measurement reports;

.5 relevant previous damage and repair history;

.6 relevant previous survey and inspection reports from both the RO and the Company;

.7 cargo and ballast history for the last 3 years, including carriage of cargo under heated conditions;

.8 details of the inert gas plant and tank cleaning procedures as indicated in the Survey Planning Questionnaire;

.9 information and other relevant data regarding conversion or modification of the ship's cargo

** Incorporated from Resolution MEPC.112(50).

and ballast tanks since the time of construction;

.10 description and history of the coating and corrosion protection system (including anodes and previous class notations), if any;

.11 inspections by the Company's personnel during the last 3 years with reference to:

.1 structural deterioration in general;

.2 leakages in tank boundaries and piping;

.3 condition of the coating and corrosion protection system (including anodes), if any;

.12 information regarding the relevant maintenance level during operation including:

.1 port State control reports of inspection containing hull related deficiencies;

.2 Safety Management System non-conformities relating to hull maintenance, including the associated corrective action(s); and

.13 any other information that will help identify Suspect Areas and Critical Structural Areas.

6.2.2 The Survey Plan shall include relevant information so as to enable the successful and efficient execution of the CAS survey and shall set out the requirements with respect to close-up surveys and thickness measurements. The Survey Plan shall include:

.1 basic ship information and particulars;

.2 main structural plans of cargo and ballast tanks (scantling drawings), including information regarding use of high tensile steels (HTS);

.3 arrangement of tanks;

.4 list of tanks with information on their use, extent of coatings and corrosion protection systems;

.5 conditions for survey (e.g. information regarding tank cleaning, gas freeing, ventilation, lighting, etc.);

.6 provisions and methods for access to structures;

.7 equipment for surveys;

.8 identification of tanks and areas for the close-up survey;

.9 identification of tanks for tank testing, as per Annex 3 of Annex B of resolution A.744(18), as amended;

.10 identification of areas and sections for thickness measurement;

.11 identification of the Thickness Measurement (TM) firm;

.12 damage experience related to the ship in question; and

.13 Critical Structural Areas and Suspect Areas, where relevant.

6.2.3 The Survey Plan shall be developed using the Model Survey Plan for CAS set out in Appendix 3.***

*** Incorporated from Resolution MEPC.99(48).

6.3 Documentation on board

6.3.1 The Company shall ensure that, in addition to the agreed Survey Plan, all other documents used in the development of the Survey Plan referred to in 6.2.1 are available on board at the time of the CAS survey.

6.3.2 Prior to the commencement of any part of the CAS survey, the attending surveyor(s) shall examine and ascertain the completeness of the on board documentation and shall review its contents with a view to ensuring that the Survey Plan remains relevant.

6.4 Conduct of CAS Surveys

6.4.1 The conditions for CAS Survey, the conditions and method of access to the structures, the equipment for CAS Survey and the communication arrangements implemented during the CAS Survey shall meet the Mandatory Requirements for the Safe Conduct of CAS Surveys set out in Appendix 4.***

7 CAS SURVEY REQUIREMENTS

7.1 General

7.1.1 Prior to the commencement of any part of the CAS survey a meeting shall be held between the attending surveyor(s), the Company's representative(s) in attendance, the TM Firm Operator (as applicable) and the master of the ship for the purpose of ascertaining that all the arrangements envisaged in the Survey Plan are in place, so as to ensure the safe and efficient execution of the survey work to be carried out.

7.1.2 The CAS survey shall be carried out by not less than two qualified exclusive surveyors of the RO. A qualified surveyor of the RO shall attend on board during the taking of the thickness measurements for the purpose of controlling the process.

7.1.3 The RO shall designate the surveyor(s) and any other personnel who will be engaged in the CAS of each vessel and shall keep records to this end. A qualified surveyor(s) shall have documented experience in carrying out intermediate or renewal surveys in accordance with the Enhanced Survey Programme of Inspection for tankers. In addition, all RO personnel to be assigned duties in connection with the CAS shall complete, prior to the assignment of such duties, an appropriate training and familiarization programme to enable the RO to ensure the consistent and uniform application of the CAS. The Administration shall require the RO to keep records of the qualifications and experience of the surveyors and of other personnel assigned to carry out work for the CAS. The Administration shall require the RO to monitor the performance of the personnel who have carried out or have been engaged in any CAS work and to keep records to this end.

7.1.4 When the CAS survey is split between survey stations, a list of the items examined and an indication of whether the CAS survey has been completed shall be made available to the attending surveyors at the next survey station prior to continuing the CAS survey.

*** Incorporated from Resolution MEPC.99(48).

7.1.5 Whenever the attending surveyors are of the opinion that repairs are required, each item to be repaired shall be identified in a numbered list. Whenever repairs are carried out, details of the repairs effected shall be reported by making specific reference to relevant items in the numbered list.

7.1.6 Whenever the attending surveyors are of the opinion that it is acceptable to defer hull repairs beyond the due date previously assigned, such a decision shall not be left to the sole discretion of the attending surveyors. The RO Headquarters shall be consulted in such circumstances and shall give specific approval to the recommended action.

7.1.7 The CAS survey is not complete unless all recommendations/conditions of class which relate to hull structures under review by the CAS survey have been rectified to the satisfaction of the RO.

7.2 Extent of overall and close-up surveys

7.2.1 Overall survey

An overall survey of all spaces set out in 5.2 shall be carried out at the CAS survey.

7.2.2 Close-up survey

The requirements for close-up surveys at the CAS survey are set out in the table below.

Table 7.2.2

Close-up Survey Requirements
All web frame rings, in all ballast tanks (see note 1)
All web frame rings, in a cargo wing tank (see note 1)
A minimum of 30% of all web frame rings, in each remaining cargo wing tank (see notes 1 and 3)***
All transverse bulkheads, in all cargo and ballast tanks (see note 2)
A minimum of 30% of deck and bottom transverses including adjacent structural members, in each cargo center tank (see note 3)***
Additional complete transverse web frame rings or deck and bottom transverse including adjacent structural members as considered necessary by the attending surveyor

Notes:
1 Complete transverse web frame ring including adjacent structural members.
2 Complete transverse bulkhead, including girder and stiffener systems and adjacent members.
*3 The 30% shall be rounded up to the next whole integer.****

7.2.3 The attending surveyors may extend the scope of the close-up survey as considered necessary, taking into account the Survey Plan, the condition of the spaces under survey, the condition of the corrosion prevention system and also the following:

.1 any information that may be available on Critical Structural Areas;

.2 tanks which have structures with reduced scantlings in association with a corrosion prevention system approved by the RO.

7.2.4 For areas in tanks where coatings are found to be in GOOD condition, the extent of close-up surveys according to 7.2.2 may be specially considered by the RO. However, sufficient close-up surveys shall be

*** Incorporated from Resolution MEPC.99(48).

carried out, in all cases, to confirm the actual average condition of the structure and to note the maximum observed diminution of the structure.

7.3 Extent of thickness measurements

7.3.1 The thickness measurements shall be recorded using the tables contained in Appendix 2 of Annex 10 of Annex B of resolution A.744(18), as amended. It is recommended that these records be kept in an electronic medium.

7.3.2 The thickness measurements shall be carried out either prior to or, to the maximum extent possible, concurrently with the close-up survey.

7.3.3 The minimum requirements for thickness measurements for the CAS surveys shall be those set out in the table below:

Table 7.3.3

Thickness Measurements Requirements
1. Within the cargo area: .1 Each deck plate .2 Three transverse sections .3 Each bottom plate
2. Measurements of structural members subject to close-up survey according to 7.2.2, for general assessment and recording of corrosion pattern
3. Suspect areas
4. Selected wind and water strakes outside the cargo area.
5. All wind and water strakes within the cargo area.
6. Internal structure in the fore and aft peak tanks.
7. All exposed main deck plates outside the cargo area and all exposed first tier superstructure deck plates.

7.3.4 Where substantial corrosion is found, the extent of the thickness measurements shall be increased in accordance with Annex 4 of Annex B of resolution A.744(18), as amended.

7.3.5 In addition, the thickness measurements may be extended as considered necessary by the attending surveyors.

7.3.6 For areas in tanks where coatings are found to be in GOOD condition, the extent of thickness measurements, according to paragraph 7.3.3, may be specially considered by the RO. However, sufficient thickness measurements shall be taken, in all cases, to confirm the actual average condition and the maximum observed diminution of the structure.

7.3.7 The thickness measurement to be taken shall be sufficient to enable the reserve strength calculations in accordance with Annex 12 of Annex B of resolution A.744(18), as amended.

7.3.8 Transverse sections shall be chosen where the maximum diminutions are expected to occur or are revealed from deck plating thickness measurements. At least one transverse section shall include a ballast tank within 0.5L amidships.

8 ACCEPTANCE CRITERIA

The acceptance criteria for the CAS shall be those set out in resolution A.744(18), as amended.

9 CAS SURVEY REPORTS

9.1 A survey report shall be completed for the CAS survey. The report shall indicate the date, location (place), and where relevant, whether or not the CAS survey was carried out in dry-dock afloat or at sea. When the CAS survey is split between different survey stations, a report shall be made for each portion of the CAS survey.

9.2 Survey records relating to the CAS survey, including actions taken, shall form an auditable documentary trail, which shall be made available to the Administration, if requested.

9.3 In addition, the following shall be included in each CAS survey report:

.1 Extent of the Survey:

.1 identification of the spaces where an overall survey has been carried out;

.2 identification of location, in each space, where a close-up survey has been carried out, together with the means of access used; and

.3 identification of the spaces, and locations in each space, where thickness measurements have been carried out; and

.2 Results of the Survey:

.1 extent and condition of coating in each space. Identification of spaces fitted with anodes and the overall condition of the anodes;

.2 structural condition reporting for each space, which shall include information on the following, as applicable:

.1 corrosion (location and type of corrosion such as grooving, pitting, etc.);

.2 cracks (location, description and extent);

.3 buckling (location, description and extent);

.4 indents (location, description and extent); and

.5 areas of substantial corrosion; and

.3 Actions taken with respect to findings:

.1 details of repairs completed on structural members in identified spaces, including the repair method and extent; and

.2 list of items to be kept under observation for planning future inspections and surveys including any thickness measurements.

9.4 Where no defects are found, this shall be stated in the report for each space.

9.5 The narrative report shall be supplemented by photographs showing the general condition of each space, including representative photographs or sketches of any of the above reported items.

9.6 The thickness measurement report shall be verified and endorsed by the attending surveyor.

9.7 The attending surveyors shall sign the CAS survey report.

10 CAS FINAL REPORT TO THE ADMINISTRATION

10.1 Review of the CAS by the RO

10.1.1 The RO Headquarters shall carry out a verification review of the CAS survey reports, the documents, photographs and other records relating to the CAS, as specified in section 9, for the purpose of ascertaining and confirming that the requirements of the CAS have been met.

10.1.2 The RO reviewing personnel shall not be engaged in any way whatsoever with the CAS survey under review.

10.2 CAS Final Report to the Administration

10.2.1 The RO shall prepare a CAS Final Report to the Administration upon completion of the CAS survey and following the review of the CAS survey reports by the RO's Headquarters, as specified in paragraph 10.1.1.

10.2.2 The CAS Final Report shall be submitted by the RO to the Administration without delay and:

.1 in the case of the CAS survey in accordance with regulation 13G(6) or 13H(6)(a), not later than 3 months after the completion of the CAS survey; or

.2 in the case of the CAS survey in accordance with regulation 13G(7), not later than 3 months after the completion of the CAS survey, or 2 months prior to the date the ship is required to be issued with a Statement of Compliance, whichever occurs earlier."**

** Incorporated from Resolution MEPC.112(50).

10.2.3 The CAS Final Report shall, at least, include:

.1 the following general particulars:

Ship's name
IMO number
Flag State
Port of registry
Gross tonnage
Deadweight (metric tons)
Summer load line draught
Date of delivery
Category of ship
Date for compliance with regulation 13F
Company
Report identification reference

.2 a summary as to where, when, by whom and how the CAS survey was carried out;

.3 a statement identifying all survey documentation, including the Survey Plan;

.4 a statement as to the condition of the corrosion prevention system(s) applied to the spaces;

.5 a statement identifying all thickness measurement reports;

.6 a summary of the findings of the overall surveys;

.7 a summary of the findings of the close-up surveys;

.8 a summary of the hull repairs carried out;

.9 an identification, together with the location, the extent and the condition, of all areas with substantial corrosion;

.10 a summary of the results of the evaluation of the thickness measurements, including identification of the areas and sections where thickness measurements were carried out;

.11 an evaluation of the structural strength of the vessel and an assessment of compliance with the acceptance criteria set out in section 8;

.12 a statement as to whether all the applicable requirements of the CAS have been met;

.13 a recommendation to the Administration as to whether the ship should be allowed to continue operating until the date envisaged in regulation 13G for compliance with the requirements of regulation 13F or for the period of validity of the CAS, if earlier; and

.14 conclusions.

11 VERIFICATION OF THE CAS BY THE ADMINISTRATION

11.1 In addition to any instructions the Administration may have issued to the RO authorized to carry out surveys under the Enhance Survey Programme on its behalf, the Administration shall issue instructions to the

RO and to Companies operating Category 2 and Category 3** oil tankers flying its flag, so that the Administration is able to monitor the performance of and verify compliance with the CAS.

11.2 The Administration, for the purpose of ensuring uniform and consistent implementation of the CAS, shall establish, at least, procedures through which it will:

.1 give effect to the requirements of the CAS;

.2 monitor the CAS work the RO is carrying out on its behalf;

.3 review the CAS Final Report;

.4 review cases of ships which have been submitted for the CAS re-assessment; and

.5 issue the Statement of Compliance.

11.3 The Administration shall review the CAS Final Report prior to the issue of the Statement of Compliance, shall record and document the findings and conclusions of the review and its decision as to the acceptance or rejection of the CAS Final Report and shall produce a Review Record.

11.4 The Administration shall ensure that any persons assigned to monitor the execution of the CAS or to review a CAS Final Report:

.1 are adequately qualified and experienced to the satisfaction of the Administration;

.2 are under the direct control of the Administration; and

.3 have no connection whatsoever with the RO which carried out the CAS survey under review.

12 RE-ASSESSMENT OF SHIPS FOLLOWING FAILURE TO MEET THE REQUIREMENTS OF THE CAS

12.1 A ship which, in the opinion of the Administration, has failed to meet the requirements of the CAS, may be submitted for the CAS re-assessment. In such a case the grounds on which Administration declined the issue of a Statement of Compliance to the ship shall be addressed and dealt with and the remedial actions shall, thereafter, be reviewed for the purpose of ascertaining whether the requirements of the CAS have been complied with.

12.2 Such re-assessment, as a rule, shall be carried out by the RO and by the Administration who carried out the previous CAS.

** Incorporated from Resolution MEPC.112(50).

12.3 If a ship which has failed to obtain a Statement of Compliance changes flag, the new Administration shall, in accordance with the provisions of regulation 8(3), request the previous Administration to transmit to them copies of the CAS documentation relating to that ship for the purpose of ascertaining whether the grounds on the basis of which the previous Administration declined the issue to the ship of a Statement of Compliance are dealt with and that the CAS is implemented in a consistent and uniform manner.

12.4 As a rule, the CAS re-assessment shall be carried out as soon as possible and in any case, subject to the provisions of paragraph 5.3, not later than 6 months following the date on which the Administration has made the decision to decline the issue of a Statement of Compliance to the ship.

13 STATEMENT OF COMPLIANCE

13.1 The Administration shall, in accordance with its procedures, issue to each ship which completes the CAS to the satisfaction of the Administration, the Statement of Compliance.

Such Statement shall be issued:

.1 in the case of the CAS in accordance with regulation 13G(6) or 13H(6)(a), not later than 5 months after the completion of the CAS survey; or

.2 in the case of the CAS in accordance with regulation 13G(7), not later than 5 months after the completion of the CAS survey, or the anniversary of the date of delivery of the ship in 2010, whichever occurs earlier, for the first CAS survey, and not later than the expiry date of the Statement of Compliance for any subsequent CAS survey.**

13.2 The Statement of Compliance shall be drawn up in the official language of the issuing Administration in a form corresponding to the model given in Appendix 1. If the language used is neither English, French nor Spanish, the text shall include a translation into one of these languages.

13.3 The original of the Statement of Compliance shall be placed on board the ship as a supplement to the ship's International Oil Pollution Prevention Certificate.

13.4 In addition, a copy of the CAS Final Report which was reviewed by the Administration for the issue of the Statement of Compliance and a copy of the Review Record, specified in paragraph 11.3, shall be placed on board to accompany the Statement of Compliance.

13.5 A certified copy of the Statement of Compliance and a copy of the Review Record, specified in paragraph 11.3, shall be forwarded by the Administration to the RO and shall be kept together with the CAS Final Report.

13.6 The validity of the Statement of Compliance shall not exceed 5 years and 6 months from the date of completion of the CAS survey.

13.7 The RO which has carried out the CAS survey in accordance with regulation 13G(6) or 13H(6)(a), upon satisfactory completion of the survey, shall issue an Interim Statement of Compliance in a form corresponding the model given in appendix 1, for a period not exceeding 5 months. It shall remain valid until its expiry date or the date of issue of a Statement of Compliance, whichever is the earlier date, and shall be accepted by other Parties to MARPOL 73/78.**

13.8 The Administration may consider and declare that the Statement of Compliance of a ship remains valid and in full force and effect if:

.1 the ship is transferred to a RO other than the one that submitted the CAS Final Report that

** Incorporated from Resolution MEPC.112(50).
** Incorporated from Resolution MEPC.112(50).

was reviewed and accepted for the issue of the Statement of Compliance; or

.2 the ship is operated by a Company other than the one that was operating the ship at the time of the completion of the CAS survey;

provided the period of validity and the terms and conditions for the issue of the Statement of Compliance in question remain those adopted by the Administration at the time of the issue of the Statement of Compliance.

13.9 If a ship with a valid Statement of Compliance is transferred to the flag of another Party, the new Administration may issue to that ship a new Statement of Compliance on the basis of the Statement of Compliance issued by the previous Administration, provided that the new Administration:

.1 requests and receives from the previous Administration, in accordance with regulation 8(3), copies of all the CAS documentation relating to that ship which the previous Administration has used for the issue or renewal and the maintenance of the validity of the Statement of Compliance the ship was issued with at the time of the transfer;

.2 establishes that the RO which submitted the CAS Final Reports to the previous Administration is an RO authorized to act on its behalf;

.3 reviews the documentation referred to in subparagraph .1 and is satisfied that the requirements of the CAS are met; and

.4 limits the period and the terms and conditions of validity of the Statement of Compliance to be issued to those established by the previous Administration.

13.10 The Administration shall:

.1 suspend and/or withdraw the Statement of Compliance of a ship if it no longer complies with the requirements of the CAS; and

.2 withdraw the Statement of Compliance of a ship if it is no longer entitled to fly its flag.

14 COMMUNICATION OF INFORMATION TO THE ORGANIZATION

14.1 The Administration shall communicate to the Organization:

.1 particulars of the Statements of Compliance issued;

.2 details of the suspension or withdrawal of the Statements of Compliance issued; and

.3 particulars of the ships to which it has declined the issue of a Statement of Compliance and reasons thereof.

14.2 The Organization shall circulate the aforementioned information to all Parties to MARPOL 73/78 and shall maintain an electronic database containing the aforesaid information, accessible only to Parties to MARPOL 73/78.

Appendix 1

FORM OF STATEMENT OF COMPLIANCE

Issued under the provisions of the Condition Assessment Scheme (CAS) adopted by the Organization by resolution MEPC.94(46), as amended** under the authority of the Government of:

……
(full designation of the country)

Particulars of ship

Name of ship .....

Distinctive number or letters

Port of registry

Gross tonnage

Deadweight of ship (metric tons)

IMO number

Category of tanker

THIS IS TO CERTIFY:

1 That the ship has been surveyed in accordance with the requirements of CAS (resolution MEPC.94(46), as amended;**

2 That the survey showed that the structural condition of the ship is in all respects satisfactory and the ship complied with the requirements of the CAS. Date of completion of the CAS survey: dd/mm/yyyy.**

This Statement of Compliance is valid until

Issued at

(Place of issue)

…… .....
(Date of issue) *(Signature of duly authorized official issuing the Statement)*

(Seal or stamp of the authority, as appropriate)

** Incorporated from Resolution MEPC.112(50).

FORM OF INTERIM STATEMENT OF COMPLIANCE**
INTERIM STATEMENT OF COMPLIANCE

Issued under the provisions of the Condition Assessment Scheme (resolution MEPC.94(46), as amended) by:

.....

(full name of the Recognized Organization)

Particulars of ship:
Name of ship .....
Distinctive number or letters .....
Port of registry .....
Gross tonnage .....
Deadweight of ship (metric tons) .....
IMO number .....
Category of tanker .....

THIS IS TO CERTIFY:

1 That the ship has been surveyed in accordance with the requirements of the Condition Assessment Scheme (CAS) (resolution MEPC.94(46), as amended);

2 That the survey showed that the structural conditions of the ship covered by CAS are in all respects satisfactory and the ship complies with the survey requirements of CAS.

Date of completion of the CAS survey: dd/mm/yyyy.

This Statement is valid until ..... or the date of issue of the Statement of Compliance, whichever is the earlier date.

Issued at .....

(Place of issue of the Statement)

....

(Date of issue) *(Signature of duly authorized official issuing the Statement)*

(Seal or stamp of the Recognized Organization, as appropriate)

***

** Incorporated from Resolution MEPC.112(50).

Appendix 2

SURVEY PLANNING QUESTIONNAIRE

The following information will enable the Company in co-operation with the RO to develop a Survey Plan complying with the requirements of the CAS.

It is essential that the Company provides, when completing the present questionnaire, up-to-date information.

The present questionnaire, when completed, shall provide all information and material required by the CAS.

Particulars

Ship's name:
IMO number:
Flag State:
Port of registry:
Gross tonnage:
Deadweight (metric tons):
Summer load line draught:
Date of delivery:
Category of ship:
Date for compliance with regulation 13F:
Company:
Report identification reference:

Information on access provision for close-up surveys and thickness measurement:

The Company is requested to indicate, in the table below, the means of access to the structures subject to close-up survey and thickness measurement.

A Close-up survey is an examination where the details of structural components are within the close visual inspection range of the attending surveyor, i.e. preferably within reach of hand.

Space		Temporary Staging	Rafts	Ladders	Direct Access	Other means (please specify)
Fore Peak						
Wing Tanks	Under deck					
	Side shell					
	Bottom transverse					
	Longitudinal					
	Transverse					
Centre Tanks	Under deck					
	Bottom transverse					
	Transverse					

Tank Cleaning Procedures:
Indicate the frequency of the tank washing especially in way of uncoated tanks:

Washing medium used: Crude oil:		Yes/No
	Heated seawater:	Yes/No
	Other medium (specify):	

Inert Gas System installed:	Yes/No
Indicate average oxygen content during inerting:	
Details of use of the inert case plant:	

Cargo history for the last 3 years together with indication as to whether cargo was heated

Ballast history for the last 3 years

Inspections by the Company

Using a format similar to that of the table below (which is given as an example), the Company should provide details of the results of their inspections, for the last 3 years - in accordance with the requirements of resolution A.744(18), as amended, and of the CAS - on all CARGO and BALLAST tanks and VOID spaces within the cargo area.

Spaces (include frame numbers and p or s)	Corrosion protection (1)	Coating Extent (2)	Coating Condition (3)	Structural deterioration (4)	Tank History (5)
Cargo Centre Tanks					
Cargo Wing Tanks					

Slop					
Ballast tanks					
Aft peak					
Fore peak					
Miscellaneous spaces:					

* Indicate tanks which are used for oil/ballast

1) HC=hard coating; SC=soft coating; A=anodes; NP=no protection
2) U=upper part; M=middle part; L=lower part; C=complete
3) G=good; F=fair; P=poor, RC=recoated
4) N= no findings recorded
   Y= findings recorded, description of findings is to be attached to the questionnaire
5) D R= Damage & Repair
   L= Leakages
   CV= Conversion
   CPS= Corrosion protection system
   (reports to be attached)

Company: .....

Name/Signature: .....

Date: .....

Reports of port State control inspections

List the reports of port State control of inspection containing hull related deficiencies and relevant information on the deficiencies:

Safety Management System

List non-conformities related to hull maintenance, including the associated corrective actions:

Name of the Thickness Measurement (TM) firm

***

Appendix 3***

Model Survey Plan for CAS

Basic Information and Particulars

Name of Ship:
IMO Number:
Flag State:
Port of Registry:
Gross Tonnage:
Deadweight (metric tonnes):
Length Between Perpendiculars (m):
Breadth (m):
Depth:
Summer load line draught (m):
Builder:
Hull Number:
Recognized Organization (RO):
RO Identity:
Class Notation:
Date of delivery:
Category of Ship (1 or 2):
Date for compliance with Regulation 13F:
Company:
Thickness Measurement Firm:

1 Preamble

1.1 Scope

1.1.1 The present CAS Survey Plan covers the minimum extent of overall surveys, close-up surveys, thickness measurements and pressure testing within the cargo area, ballast tanks, including fore and aft peak tanks, required by the CAS adopted by resolution MEPC.94(46) for this ship.

1.1.2 The practical aspects of any part of the CAS survey shall be acceptable to the attending surveyor(s).

1.2 Documentation

All documents used in the development of the CAS survey plan shall be available onboard during the CAS survey as required by paragraph 6.3.1 of the CAS.

2 Arrangement of Tanks

This section of the Plan shall provide information (either in the form of plans or text) on the arrangement of tanks that fall within the scope of the CAS survey.

*** Incorporated from Resolution MEPC.99(48).

3 List of tanks with information on their use, extent of coatings and corrosion protection system

This section of the Plan shall indicate any changes relating to (and shall update) the information on the use of the tanks of the ship, the extent of coatings and the corrosion protective system provided in the Survey Planning Questionnaire.

4 Conditions for survey (e.g. information regarding tank cleaning, gas freeing, ventilation, lighting etc.)

This section of the Plan shall indicate any changes relating to (and shall update) the information on the conditions for survey provided in the Survey Planning Questionnaire.

5 Provisions and method of access to structures

This section of the Plan shall indicate any changes relating to (and shall update) the information on the provisions and methods of access to structures provided in the Survey Planning Questionnaire.

The Mandatory Requirements for the Safe Conduct of CAS Surveys are contained in Appendix 3 to this Plan.

6 List of equipment for survey (to be provided by the Company and supplemented by the Recognized Organization, as necessary)

This section of the Plan shall identify and list the equipment that will be made available for carrying out the CAS survey and the required thickness measurements.

7 Survey requirements

7.1 Overall survey

The CAS requirements

Paragraph 7.2.1 (and 5.2) of the CAS require that the hull structures in way of cargo tanks, pump rooms, cofferdams, pipe tunnels, void spaces within the cargo area and all ballast tanks shall undergo an overall survey.

The Plan

This section of the Plan shall identify and list the spaces that shall undergo an overall survey for this ship.

7.2 Close-up survey

The CAS requirements

Paragraph 7.2.2 (and Table 7.2.2) of the CAS state the hull structures that shall undergo a close-up survey. These are:

Close-up survey requirements
All web frame rings, in all ballast tanks (see note 1)
All web frame rings, in a cargo wing tank, (see note 1)
A minimum of 30% of all web frame rings, in each remaining cargo wing tank (see notes 1 and 3)
All transverse bulkheads, in all cargo and ballast tanks (see note 2)
A minimum of 30% of the deck and bottom transverses, including adjacent structural members, in each cargo centre tank (see note 3)
Additional complete transverse web frame rings or deck and bottom transverse including adjacent structural members as considered necessary by the surveyor

Notes:
1 Complete transverse web frame ring including adjacent structural member.
2 Complete transverse bulkhead, including girder and stiffener systems and adjacent members
3 The 30% shall be rounded up to the next whole integer.

In addition paragraphs 7.2.3 and 7.2.4 of the CAS provide further guidance as far as the extent and scope of the close-up survey.

The Plan

This section of the Plan shall identify and list, using paragraph 7.2.2 (and Table 7.2.2) of the CAS, the hull structures that shall undergo a close-up survey for this ship. In particular it shall:

.1 identify the cargo wing tank in which all web frame rings will undergo close-up survey and indicate the number of web frame rings involved;

.2 identify the remaining cargo wing tanks in which a minimum of 30% of the web frame rings will undergo a close-up survey and indicate, for each tank, the number of web frame rings involved; and

.3 identify the cargo centre tanks in which a minimum of 30% of the deck and bottom transverses, including adjacent structural members, in each cargo centre tank will undergo close-up survey and indicate, for each tank, the number of the deck and bottom transverses, including adjacent structural members, involved.

8 Identifications of tanks for tank testing

The CAS requirements

Paragraph 6.2.2.9 of the CAS states that the tank testing shall be as per annex 3 of Annex B of resolution A.744(18) as amended.

The Plan

This section of the Plan shall identify and list the tanks that shall undergo tank testing for this ship.

9 Identification of areas and sections for thickness measurements

The CAS requirements

Paragraph 7.3.3 (and Table 7.3.3) of the CAS specify the minimum requirements for thickness measurements for CAS survey. These are as follows:

Thickness measurement requirements
1. Within the cargo area: .1 Each deck plate .2 Three transverse sections .3 Each bottom plate
2. Measurements of structural members subject to close-up survey according to the table above (for close-up survey) for general assessment and recording of corrosion pattern
3. Suspect areas
4. Selected wind and water strakes outside the cargo area
5. All wind and water strakes within the cargo area
6. Internal structure in the fore and aft peak tanks
7. All exposed main deck plates outside the cargo area and all exposed first tier superstructure deck plates

Guidance Notes:

1 The attending surveyor(s) may increase the extent of thickness measurements as deemed necessary (see paragraph 7.3.5 of the CAS).

2 Transverse sections for thickness measurements shall be chosen where the largest material reductions are expected to occur or are revealed from deck plating measurements (see section 7.3.8 of the CAS).

3 Where substantial corrosion is found, the extent of thickness measurements shall be increased accordingly (see paragraph 7.3.4 of the CAS).

In addition paragraphs 7.3.4 to 7.3.8 of the CAS provide further guidance on the extent and increase of the thickness measurements to be taken.

The Plan

This section of the Plan shall identify and list, using paragraph 7.3.3 (and Table 7.3.3) of the CAS, the areas and sections where thickness measurements shall be taken.

10 Hull Materials (to be specified by the Recognized Organization)

This section of the Plan shall identify, using a format similar to that of the table below, the materials used in the hull structures that fall within the scope of the CAS for the purpose of providing a concise reference.

Location	Plating	Longitudinals and Stiffeners	Longitudinal Girders / Stringers	Transverse Girders / Web Frames / Stringers / Floors
Deck				
Bottom				
Inner bottom				
Side shell				
Longitudinal bulkhead				
Transverse bulkheads				
Fore Peak				
Aft Peak				

Guidance Notes:
1 Material grade is Mild Steel (MS) where not shown otherwise.
2 Material grade HTS indicates High Tensile Steel; SS indicates Stainless Steel; and CS indicates Clad Steel.
3 In case of repairs material, grade, type and the extent shall be verified from drawings.

11 Minimum thickness of hull structures (to be specified by the Recognized Organization)

This section of the Plan shall specify the minimum thickness* for hull structures of this ship that are subject to the CAS (indicate either (a) or preferably (b), if such information are available):

(a) ❑ Determined from the attached* wastage allowance table and the original thickness according to the hull structure plans of the ship;

(b) ❑ Given in the following table(s)

Area or Location	Original Thickness (mm)	Minimum Thickness (mm)	Substantial Corrosion Thickness (mm)
Deck			
Plating			
Longitudinals			
Longitudinal girders			
Bottom			
Plating			
Longitudinals			
Longitudinal girders			
Ship side			
Plating			
Longitudinals			
Longitudinal girders			
Longitudinal bulkhead			
Plating			

* The wastage allowance tables shall be attached to the CAS Survey Plan.

Area or Location	Original Thickness (mm)	Minimum Thickness (mm)	Substantial Corrosion Thickness (mm)
Longitudinals			
Longitudinal girders			
Inner bottom			
Plating			
Longitudinals			
Longitudinal girders			
Transverse bulkheads			
Plating			
Stiffeners			
Transverse web frames, floors and stringers			
Plating			
Flanges			
Stiffeners			
Cross ties			
Flanges			
Webs			

12 Thickness Measurement (TM) Firm

This section of the Plan shall identify changes, if any, relating to the information on the Thickness Measurement (TM) Firm provided in the Survey Planning Questionnaire.

13 Damage experience related to the ship

This section of the Plan shall, using the tables provided below, provide details of the hull damages for at least the last three years in way of the cargo and ballast tanks areas and void spaces within the cargo area. These damages are subject to CAS survey.

Hull damages sorted by location for this ship
(to be provided by the Company and supplemented by the Recognized Organization, as necessary)

Tank Number or Area	Possible cause, if known	Description of the damages	Location	Repair	Date of repair

Hull damages for sister or similar ships (if available) in the case of design related damage
(to be provided by the Company and supplemented by the Recognized Organization, as necessary)

Tank Number or Area	Possible cause, if known	Description of the damages	Location	Repair	Date of repair

14 Areas identified with substantial corrosion from previous surveys (to be provided by the Recognized Organization)

This section of the Plan shall identify and list the areas of substantial corrosion from previous surveys.

15 Critical structural areas and suspect areas (to be provided by Company and supplemented by the Recognized Organization, as necessary)

This section of the Plan shall identify and list the critical structural areas and the suspect areas, when such information is available.

16 Other relevant comments and information (to be provided by the Company and supplemented by the Recognized Organization)

This section of the Plan shall provide any other relevant, to the CAS survey, comments and information.

Appendices

Appendix 1 - List of Plans

Paragraph 6.2.2.2 of CAS requires that main structural plans of cargo and ballast tanks (scantling drawings), including information on regarding use of high tensile steel (HTS) to be provided.

This Appendix of the Plan shall identify and list the main structural plans which form part of the Plan and which are attached to the Plan.

Appendix 2 - Survey Planning Questionnaire

The Survey Planning Questionnaire, which has been submitted by the Company, shall be appended to the Plan.

Appendix 3 - Mandatory Requirements for the Safe Conduct of CAS Surveys

The Mandatory Requirement for the Safe Conduct of CAS Surveys, which is contained in Appendix 4 shall be appended to the Plan.

Appendix 4 - CAS Schedule

The CAS Schedule, which is contained in Annex 3 to MEPC/Circ.390 shall be appended to the Plan.

Appendix 5 - Other documentation

This part of the Plan shall identify and list any other documentation that forms part of the Plan.

Prepared on behalf of the Company by

Date: ....

(name and signature of authorized representative)

Reviewed by the Recognized Organization for compliance with paragraph 6.2.2 of the CAS.

Date: ....

(name and signature of authorized representative)

APPENDIX 4***

Mandatory Requirements for the Safe Conduct of CAS Surveys

1 General

1.1 The present mandatory requirements have been developed for the safe conduct of CAS Surveys. Although the mandatory requirements make explicit reference to the CAS survey and to attending surveyor(s) it shall be used also in connection with any thickness measurement work required by the CAS.

2 Conditions for survey

2.1 The Company shall provide the necessary facilities for a safe conduct of the CAS survey.

2.2 In cases where the provisions of safety and required access are judged by the attending surveyors not to be adequate, the CAS survey of the spaces involved shall not proceed.

2.3 In order to enable the attending surveyors to carry out the CAS survey, provisions for proper and safe access, shall be agreed between Company and Recognized Organization.

2.4 Details of the means of access are provided in the Survey Planning Questionnaire.

2.5 Tanks and spaces shall be safe for access.* Tanks and spaces shall be gas free and shall be ventilated. Prior to entering a tank, void or enclosed space, it shall be verified that the atmosphere in the tank is free from hazardous gas and contains sufficient oxygen.

2.6 Tanks and spaces shall be sufficiently clean and free from water, scale, dirt, oil residues, corrosion scale, sediments etc., to reveal significant corrosion, deformation, fractures, damages or other

---

*** Incorporated from Resolution MEPC.99(48).

* Reference is made to chapter 10 of the International Safety Guide for Oil Tankers and Terminals (ISGOTT) - Entry into and working in enclosed spaces.

structural deterioration as well as the condition of the coating.

2.7 Sufficient illumination shall be provided to reveal significant corrosion, deformation, fractures, damages or other structural deterioration as well as the condition of the coating.

2.8 Where soft coatings have been applied, safe access shall be provided for the attending surveyor(s) to verify the effectiveness of the coating and to carry out an assessment of the conditions of internal structures, which may include spot removal of the coating. Where the presence of soft coating inhibits safe access, the soft coating shall be removed.

2.9 The attending surveyor(s) shall always be accompanied by at least one responsible person assigned by the Company experienced in tank and enclosed spaces inspection. In addition a backup team of at least two experienced persons shall be stationed at the hatch opening of the tank or space that is being surveyed. The back-up team shall continuously observe the work in the tank or space and shall keep lifesaving and evacuation equipment ready for use.

3 Access to structures

3.1 For overall survey, means shall be provided to enable the attending surveyors to examine the structure in a safe and practical way.

3.2 For close-up survey, one or more of the following means for access, acceptable to the attending surveyors, shall be provided:

- permanent staging and passages through structures
- temporary staging and passages through structures
- lifts and moveable platforms
- rafts or boats
- other equivalent means.

3.3 Surveys of tanks or spaces by means of rafts or boats may only be undertaken with the agreement of the attending surveyors, who shall take into account the safety arrangements provided, including weather forecasting and ship response in reasonable sea

conditions.

3.4 When rafts or boats will be used for close-up survey the following conditions shall be observed:

.1 Only rough duty, inflatable rafts or boats, having satisfactory residual buoyancy and stability even if one chamber is ruptured, shall be used;

.2 The boat or raft shall be tethered to the access ladder and an additional person shall be stationed down the access ladder with a clear view of the boat or raft;

.3 Appropriate lifejackets shall be available for all participants;

.4 The surface of water in the tank shall be calm (under all foreseeable conditions the expected rise of water within the tank shall not exceed 0.25 m) and the water level either stationary or falling. On no account shall the level of the water be rising while the boat or raft is in use;

.5 The tank or space must contain clean ballast water only. Even a thin sheen of oil on the water is not acceptable;

.6 At no time shall the water level be allowed to be within 1 m of the deepest under deck web face flat so that the survey team is not isolated from a direct escape route to the tank hatch. Filling to levels above the deck transverses shall only be contemplated if a deck access manhole is fitted and open in the bay being examined, so that an escape route for the survey party is available at all times;

7 If the tanks (or spaces) are connected by a common venting system, or Inert Gas system, the tank in which the boat or raft is to be used shall be isolated to prevent a transfer of gas from other tanks (or spaces).

3.5 In addition to the above rafts or boats alone may be allowed for inspection of the under deck areas for tanks or spaces, if the depth of the webs are 1.5 m or less.

3.6 If the depth of the webs is more than 1.5 m, rafts or boats alone may be allowed only:

.1 when the coating of the under deck structure is in GOOD condition and there no evidence of wastage; or

.2 if a permanent means of access is provided in each bay to allow safe entry and exit. This means of access is to be direct from the deck via a vertical ladder and a small platform shall be fitted approximately 2 m below the deck.

If neither of the above conditions are met then staging shall be provided for the survey of the under deck area.

4 Equipment for survey

4.1 Thickness measurement shall normally be carried out by means of ultrasonic test equipment. The accuracy of the equipment shall be proven to the attending surveyor(s) as required.

4.2 One or more of the following fracture detection procedures may be required if deemed necessary by the attending surveyor(s):

- radiographic equipment
- ultrasonic equipment
- magnetic particle equipment
- dye penetrant
- other equivalent means

4.3 Explosimeter, oxygen-meter, breathing apparatus, lifelines, riding belts with rope and hook and whistles together with instructions and guidance on their use shall be made available during the CAS survey. A safety checklist shall be provided.

4.4 Adequate and safe lighting shall be provided for the safe and efficient conduct of the CAS survey.

4.5 Adequate protective clothing shall be made available and used (e.g. safety helmet, gloves, safety shoes, etc) during the CAS survey.

5 Meetings and Communication Arrangements

5.1 The establishment of proper preparation and the close co-operation between the attending surveyors and the Company's representatives on board prior to and during the CAS survey are an essential part in the safe and efficient conduct of the CAS survey. During the CAS survey on board safety meetings shall be held regularly.

5.2 Prior to commencement of the CAS survey a survey meeting shall be held between the attending surveyors the Company's representative(s) in attendance, the TM Firm Operator (as applicable) and the Master of the ship for the purpose to ascertain that all the arrangements envisaged in the Survey Plan are in place, so as to ensure the safe and efficient conduct of the survey work to be carried out.

5.3 The following is an indicative list of items that shall be addressed in the meeting:

.1 schedule of the vessel (i.e. the voyage, docking and undocking manoeuvres, periods alongside, cargo and ballast operations, etc.);

.2 provisions and arrangements for thickness measurements (i.e. access, cleaning/de-scaling, illumination, ventilation, personal safety);

.3 extent of the thickness measurements;

.4 acceptance criteria (refer to the list of minimum thicknesses);

.5 extent of close-up survey and thickness measurement considering the coating condition and suspect areas/areas of substantial corrosion;

.6 execution of thickness measurements;

.7 taking representative readings in general and where uneven corrosion/pitting is found;

.8 mapping of areas of substantial corrosion;

.9 communication between attending surveyor(s) the TM operator(s) and Company representative(s) concerning findings.

5.4 A communication system shall be arranged between the survey party in the tank or space being examined, the responsible officer on deck and, as the case may be, the navigation bridge. This system shall also include the personnel in charge of handling the ballast pump(s) if rafts or boats are

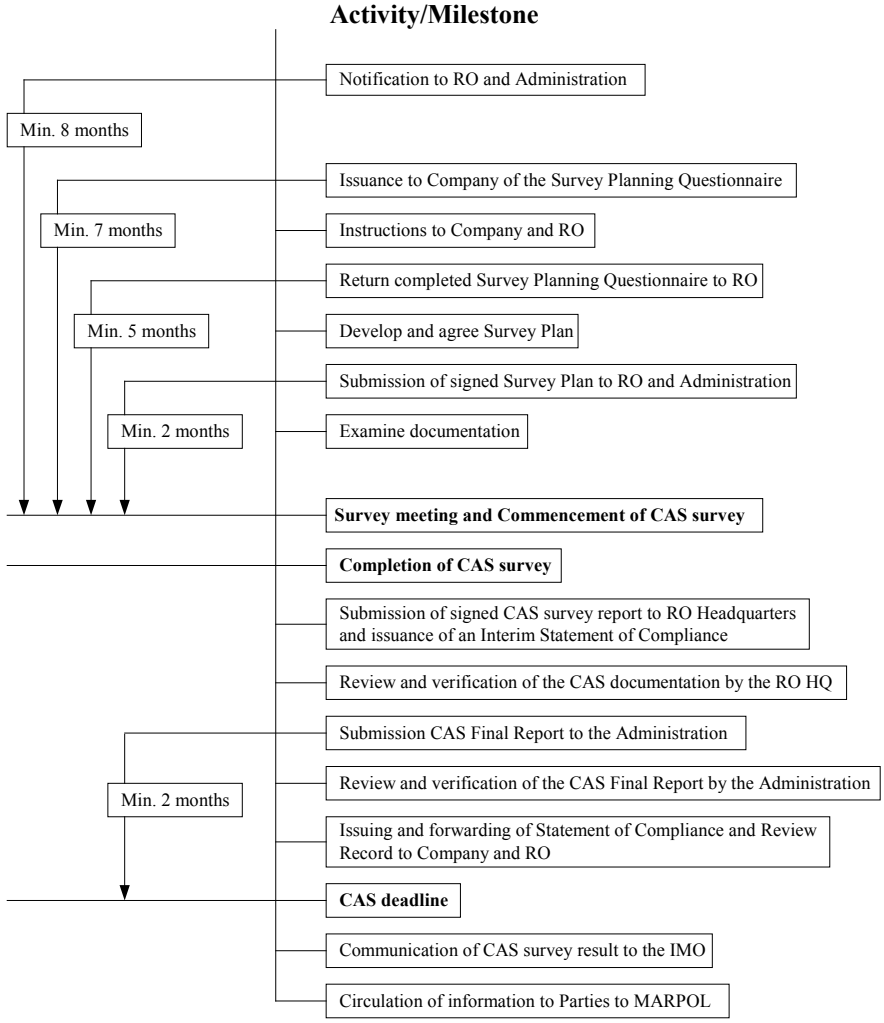
used. The communication arrangements shall be maintained throughout the CAS survey.

***

APPENDIX 5****

CAS Schedule

For the sole purpose of aid to the Companies and Recognized Organizations in the preparation of the CAS Survey and shall be read and used for this purpose only.



Activity/Milestone	Responsible Party	CAS Reference
Notification to RO and Administration	Co	6.1.1.2
Issuance to Company of the Survey Planning Questionnaire	RO	6.1.1.3.1
Instructions to Company and RO	Adm	11.1-2 & -4
Return completed Survey Planning Questionnaire to RO	Co	6.1.1.4
Develop and agree Survey Plan	RO/Co/Adm	6.1.2.1
Submission of signed Survey Plan to RO and Administration	Co	6.1.1.5
Examine documentation	RO/Adm	6.3.2
Survey meeting and Commencement of CAS survey	Co/RO/TM/Adm	7.1.1
Completion of CAS survey	RO/Co	7.1.7 & 9.2
Submission of signed CAS survey report to RO Headquarters and issuance of an Interim Statement of Compliance	RO surveyor	9.7 & 13.7
Review and verification of the CAS documentation by the RO HQ	RO HQ	10.1.1
Submission CAS Final Report to the Administration	RO HQ	10.2.2
Review and verification of the CAS Final Report by the Administration	Adm	11.3
Issuing and forwarding of Statement of Compliance and Review Record to Company and RO	Adm	13
CAS deadline		5.3 & 13.6
Communication of CAS survey result to the IMO	Adm	14.1
Circulation of information to Parties to MARPOL	IMO	14.2

**** Incorporated from MEPC/Circ.390.

Annex 2*****

AMENDMENTS TO ANNEX 1 OF MARPOL 73/78

The existing regulation 13G is replaced by the following:

"Regulation 13G

Prevention of accidental oil pollution - Measures for existing oil tankers

(1) Unless expressly provided otherwise this regulation shall:

(a) apply to oil tankers of 5,000 tons deadweight and above, which are contracted, the keels of which are laid, or which are delivered before the dates specified in regulation 13F(1) of this Annex; and

(b) not apply to oil tankers complying with regulation 13F of this Annex, which are contracted, the keels of which are laid, or are delivered before the dates specified in regulation 13F(1) of this Annex; and

(c) not apply to oil tankers covered by subparagraph (a) above which comply with regulation 13F(3)(a) and (b) or 13F(4) or 13F(5) of this Annex, except that the requirement for minimum distances between the cargo tank boundaries and the ship side and bottom plating need not be met in all respects. In that event, the side protection distances shall not be less than those specified in the International Bulk Chemical Code for type 2 cargo tank location and the bottom protection distances at centreline shall comply with regulation 13E(4)(b) of this Annex.

(2) For the purpose of this regulation:

(a) "Heavy diesel oil" means diesel oil other than those distillates of which more than 50 percent by volume distils at a temperature not exceeding 340°C when tested by the method acceptable to the Organization[1].

***** Incorporated from Resolution MEPC.111(50).

1 Refer to the American Society for Testing and Material's Standard Test Method (Designation D86).

(b) "Fuel oil" means heavy distillates or residues from crude oil or blends of such materials intended for use as a fuel for the production of heat or power of a quality equivalent to the specification acceptable to the Organization[2].

(3) For the purpose of this regulation, oil tankers are divided into the following categories:

(a) "Category 1 oil tanker" means an oil tanker of 20,000 tons deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo, and of 30,000 tons deadweight and above carrying oil other than the above, which does not comply with the requirements for new oil tankers as defined in regulation 1(26) of this Annex;

(b) "Category 2 oil tanker" means an oil tanker of 20,000 tons deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo, and of 30,000 tons deadweight and above carrying oil other than the above, which complies with the requirements for new oil tankers as defined in regulation 1(26) of this Annex; and

(c) "Category 3 oil tanker" means an oil tanker of 5,000 tons deadweight and above but less than that specified in subparagraph (a) or (b) of this paragraph.

(4) An oil tanker to which this regulation applies shall comply with the requirements of regulation 13F of this Annex not later than 5 April 2005 or the anniversary of the date of delivery of the ship on the date or in the year specified in the following table:

Category of oil tanker	Date or year
Category 1	5 April 2005 for ships delivered on 5 April 1982 or earlier 2005 for ships delivered after 5 April 1982
Category 2 and Category 3	5 April 2005 for ships delivered on 5 April 1977 or earlier 2005 for ships delivered after 5 April 1977 but before 1 January 1978 2006 for ships delivered in 1978 and 1979 2007 for ships delivered in 1980 and 1981 2008 for ships delivered in 1982 2009 for ships delivered in 1983 2010 for ships delivered in 1984 or later

(5) Notwithstanding the provisions of paragraph (4) of this regulation, in the case of a

2 Refer to the American Society for Testing and Material's Specification for Number Four Fuel Oil (Designation D396) or heavier.

Category 2 or 3 oil tanker fitted with only double bottoms or double sides not used for the carriage of oil and extending to the entire cargo tank length or double hull spaces which are not used for the carriage of oil and extend to the entire cargo tank length, but does not fulfill conditions for being exempted from the provisions of paragraph (1)(c) of this regulation, the Administration may allow continued operation of such a ship beyond the date specified in paragraph (4) of this regulation, provided that:

(a) the ship was in service on 1 July 2001;

(b) the Administration is satisfied by verification of the official records that the ship complied with the conditions specified above;

(c) the conditions of the ship specified above remain unchanged; and

(d) such continued operation does not go beyond the date on which the ship reaches 25 years after the date of its delivery.

(6) A Category 2 or 3 oil tanker of 15 years and over after the date of its delivery shall comply with the Condition Assessment Scheme adopted by the Marine Environment Protection Committee by resolution MEPC.94(46), as may be amended, provided that such amendments shall be adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention relating to amendment procedures applicable to an appendix to an Annex.

(7) The Administration may allow continued operation of a Category 2 or 3 oil tanker beyond the date specified in paragraph (4) of this regulation, if satisfactory results of the Condition Assessment Scheme warrant that, in the opinion of the Administration, the ship is fit to continue such operation, provided that the operation shall not go beyond the anniversary of the date of delivery of the ship in 2015 or the date on which the ship reaches 25 years after the date of its delivery, whichever is the earlier date.

(8) (a) The Administration of a Party to the present Convention which allows the application of paragraph (5) of this regulation, or allows, suspends, withdraws or declines the application of paragraph (7) of this regulation, to a ship entitled to fly its flag shall forthwith communicate to the Organization for circulation to the Parties to the present

Convention particulars thereof, for their information and appropriate action, if any.

(b) A Party to the present Convention shall be entitled to deny entry into the ports or offshore terminals under its jurisdiction of oil tankers operating in accordance with the provisions of:

(i) paragraph (5) of this regulation beyond the anniversary of the date of delivery of the ship in 2015; or

(ii) paragraph (7) of this regulation.

In such cases, that Party shall communicate to the Organization for circulation to the Parties to the present Convention particulars thereof for their information."

***

Annex 3***

AMENDMENTS TO ANNEX I OF MARPOL 73/78

The following new regulation is added after regulation 13G:

"Regulation 13H

Prevention of oil pollution from oil tankers carrying heavy grade oil as cargo

(1) This regulation shall:

(a) apply to oil tankers of 600 tons deadweight and above carrying heavy grade oil as cargo regardless of the date of delivery; and

(b) not apply to oil tankers covered by subparagraph (a) above which comply with regulation 13F(3)(a) and (b) or 13F(4) or 13F(5) of this Annex, except that the requirement for minimum distances between the cargo tank boundaries and the ship side and bottom plating need not be met in all respects. In that event, the side protection distances shall not be less than those specified in the International Bulk Chemical Code for type 2 cargo tank location and the bottom protection distances at centreline shall comply with regulation 13E(4)(b) of this Annex.

(2) For the purpose of this regulation "heavy grade oil" means any of the following:

(a) crude oils having a density at 15°C higher than 900 kg/m^3;

(b) fuel oils having either a density at 15° C higher than 900 kg/ m^3 or a kinematic viscosity at 50° C higher than 180 mm^2/s;

(c) bitumen, tar and their emulsions.

(3) An oil tanker to which this regulation applies shall comply with the provisions of paragraphs (4) to (8) of this regulation in addition to complying with the applicable provisions of regulation

***** Incorporated from Resolution MEPC.111(50).

13G.

(4) Subject to the provisions of paragraphs (5), (6) and (7) of this regulation, an oil tanker to which this regulation applies shall:

(a) if 5,000 tons deadweight and above, comply with the requirements of regulation 13F of this Annex not later than 5 April 2005; or

(b) if 600 tons deadweight and above but less than 5,000 tons deadweight, be fitted with both double bottom tanks or spaces complying with the provisions of regulation 13F(7)(a) of this Annex, and wing tanks or spaces arranged in accordance with regulation 13F(3)(a) and complying with the requirement for distance was referred to in regulation 13F(7)(b), not later than the anniversary of the date of delivery of the ship in the year 2008.

(5) In the case of an oil tanker of 5,000 tons deadweight and above, carrying heavy grade oil as cargo fitted with only double bottoms or double sides not used for the carriage of oil and extending to the entire cargo tank length or double hull spaces which are not used for the carriage of oil and extend to the entire cargo tank length, but does not fulfil conditions for being exempted from the provisions of paragraph (1)(b) of this regulation, the Administration may allow continued operation of such a ship beyond the date specified in paragraph (4) of this regulation, provided that:

(a) the ship was in service on 4 December 2003;

(b) the Administration is satisfied by verification of the official records that the ship complied with the conditions specified above;

(c) the conditions of the ship specified above remain unchanged; and

(d) such continued operation does not go beyond the date on which the ship reaches 25 years after the date of its delivery.

(6) (a) The Administration may allow continued operation of an oil tanker of 5,000 tons deadweight and above, carrying crude oil having a density at 15°C higher than 900 kg/m^3 but lower than 945 kg/m^3, beyond the date specified in paragraph (4)(a) of this regulation, if satisfactory results of the Condition Assessment Scheme referred to in regulation 13G(6) warrant that, in the opinion of the Administration, the ship is fit to continue such operation, having regard to the size, age, operational area and structural

conditions of the ship and provided that the operation shall not go beyond the date on which the ship reaches 25 years after the date of its delivery.

(b) The Administration may allow continued operation of an oil tanker of 600 tons deadweight and above but less than 5,000 tons deadweight, carrying heavy grade oil as cargo, beyond the date specified in paragraph (4)(b) of this regulation, if, in the opinion of the Administration, the ship is fit to continue such operation, having regard to the size, age, operational area and structural conditions of the ship, provided that the operation shall not go beyond the date on which the ship reaches 25 years after the date of its delivery.

(7) The Administration of a Party to the present Convention may exempt an oil tanker of 600 tons deadweight and above carrying heavy grade oil as cargo from the provisions of this regulation if the oil tanker:

(a) either is engaged in voyages exclusively within an area under its jurisdiction, or operates as a floating storage unit of heavy grade oil located within an area under its jurisdiction; or

(b) either is engaged in voyages exclusively within an area under the jurisdiction of another Party, or operates as a floating storage unit of heavy grade oil located within an area under the jurisdiction of another Party, provided that the Party within whose jurisdiction the oil tanker will be operating agrees to the operation of the oil tanker within an area under its jurisdiction.

(8) (a) The Administration of a Party to the present Convention which allows, suspends, withdraws or declines the application of paragraphs (5), (6) or (7) of this regulation to a ship entitled to fly its flag shall forthwith communicate to the Organization for circulation to the Parties to the present Convention particulars thereof, for their information and appropriate action, if any.

(b) Subject to the provisions of international law, a Party to the present Convention shall be entitled to deny entry of oil tankers operating in accordance with the provisions of paragraph (5) or (6) of this regulation into the ports or offshore terminals under its jurisdiction, or deny ship-to-ship transfer of heavy grade oil in areas under its jurisdiction, except when this is necessary for the purpose of securing the safety of a ship or saving life at sea. In such cases, that Party shall communicate to the Organization for circulation to the Parties to the present Convention particulars thereof for their information."

***