

## **CIRCULAR LETTER**

Piraeus, 3 September 2013

To: All Operators / Vessels operating in the Caribbean Sea

**Subject: CMoU on Port State Control launches its first CIC**

The **Caribbean Memorandum of Understanding (CMoU)** on Port State Control has launched its first Concentrated Inspection Campaign (CIC), from 1 September to 30 November 2013, in order to assess compliance with MARPOL Annex I, Regulation 14.

The CIC will investigate the operability of Oil Filtering Equipment (OFE) and the arrangements for handling sludge (i.e., whether sludge has been discharged into port reception facilities, burnt in an incinerator or in an auxiliary boiler suitable for burning oil residues, mixed with fuel or handled using other alternative arrangements).

During a regular PSC inspection carried out within the CMoU region, the vessel's OFE, IOPP certificate, Oil Record Book Part 1, maintenance records and other applicable documentation will be verified in more detail for compliance with MARPOL Annex I.

Port State Control Officers (PSCOs) will use the attached questionnaire which contains 12 questions relating to documentation, equipment and crew familiarization.

When deficiencies are found, actions by the Port State may vary from recording a deficiency and instructing the Master to rectify it within a certain period to detaining the ship until serious deficiencies have been rectified.

**Explanations / useful information regarding each of the questions of the PSC questionnaire are provided for guidance of crews in the Annex.**



**MARPOL ANNEX I  
CIC QUESTIONNAIRE**

1. Does the vessel have Oil Filtering Equipment (OFE) on board?  
 Yes                       No                       NA                       NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_
  
2. Does the vessel's OFE system have an alarm and an automatic stopping device?  
 Yes                       No                       NA                       NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_
  
3. Is the OFE equipment type approved according to the IOPP certificate?  
 Yes                       No                       NA                       NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_
  
4. Is the 15 ppm alarm correctly adjusted and operable?  
 Yes                       No                       NA                       NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_
  
5. Is the 3-way-valve or stopping device functioning?  
 Yes                       No                       NA                       NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_
  
6. Is the OFE-system free of illegal by-passes?  
 Yes                       No                       NA                       NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_



7. Is the incinerator suitable for burning oil residues been marked in the IOPP certificate?  
 Yes  No  NA  NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_
8. Is the auxiliary boiler suitable for burning oil residues been marked in the IOPP certificate?  
 Yes  No  NA  NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_
9. Are the sludge tanks free of illegal direct connections overboard?  
 Yes  No  NA  NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_
10. Has the sludge pipeline a standard discharge connection to enable pipes of reception facilities?  
 Yes  No  NA  NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_
11. If sludge has not been discharged into port reception facilities, has the incinerator or the auxiliary boiler been used for burning sludge on board?  
 Yes  No  NA  NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_
12. Is the remaining sludge and/or bilge water tank capacity sufficient for the intended voyage?  
 Yes  No  NA  NI  
Remark(s):  
\_\_\_\_\_  
\_\_\_\_\_

Was this ship detained due to this CIC:  Yes  No

Key:

NA: Not applicable

NI: Not inspected (Please state why in the remarks section)

## ANNEX

### EXPLANATIONS – GUIDANCE FOR CREW

#### I. GLOSSARY

- GRB** : Garbage Record Book  
**OCM** : Oil Content Meter  
**ORB** : Oil Record Book  
**OFE** : Oil Filtering Equipment (or Oily Water Separator – OWS)

#### II. GUIDANCE

- 1. Does the vessel have Oil Filtering Equipment (OFE) on board?**  
According to MARPOL Annex I, any vessel above 400 gross tonnage must be fitted with OFE, also known as Oil Water Separator (OWS) or 15 ppm equipment, in order to filter the oily bilge water to a concentration of less than 15 ppm (parts per million) in oil. The only legal way to discharge oily bilge water into the sea is through the OFE.
- 2. Does the vessel's OFE system have an alarm and an automatic stopping device?**  
After the OFE and before the bilge discharge outlet, the OCM is provided in order to check if the effluent from the OFE fulfils the 15 ppm requirement. In case the concentration of oil exceeds the 15 ppm threshold, the OCM gives an alarm and automatically either stops the operation of the OFE or re-circulates the effluent, preventing its discharge into the sea. The OCM is sensitive equipment and should be maintained and calibrated in accordance with maker's instructions and Flag Administration requirements. The crew should ensure that the OCM's alarm and automatic stopping device are always maintained in good condition.
- 3. Is the OFE equipment type approved according to the IOPP certificate?**  
The standards under which the OFE is approved (A.393(X), MEPC.60(33), MEPC.107(49) or A.233(VII)) can be found in paragraph 2.3 of the Supplement to the IOPP Certificate and in the OFE Type Approval. The standards in the OFE Type Approval must be identical to the standards referred to in the IOPP Supplement. If the approved standards are different the Company and the issuing Authority (Flag Administration or Class Society) should be immediately informed.
- 4. Is the 15 ppm alarm correctly adjusted and operable?**  
The OCM is sensitive equipment and should always be operated and maintained in accordance with maker's instructions. The OCM calibration intervals are defined by the maker but certain Flag Administrations have their own requirements. The OCM calibration records should be available.
- 5. Is the 3-way-valve or stopping device functioning?**  
The 3-way valve is used for the automatic re-circulation of the effluent from the OFE when the concentration of oil in the bilge water, after the OFE, was found by the OCM to be in excess of 15 ppm. This equipment should always be in good operational condition.

**6. Is the OFE-system free of illegal by-passes?**

In a number of cases it was discovered that the OFE was illegally by-passed and the bilge water was discharged into the sea unfiltered. This is a very serious MARPOL Annex I violation and is strictly punished by the PSC. **The crew should ensure that no illegal by-passes are present in the OFE system.**

**7. Is the incinerator suitable for burning oil residues been marked in the IOPP certificate?**

Oil residues (sludge) created during filtering or purification of Fuel Oil or Lube Oil should be kept in the sludge tanks and either discharged to shore facilities through the standard shore connection, or burned in the Incinerator or the Auxiliary Boiler, if available. In order for the ship to be allowed to burn oil residues in the Incinerator, the latter, along with its capacity, should be mentioned in the supplement to the IOPP Certificate under paragraph 3.2.1. Any discharge of sludge into the sea is strictly prohibited and punished. Whenever sludge is burned or delivered to shore facilities, a relevant entry in the ORB is required.

**8. Is the auxiliary boiler suitable for burning oil residues been marked in the IOPP certificate?**

Oil residues can also be burned in the Auxiliary Boiler, if the boiler is of the appropriate type. The vessel is allowed to burn oil residues in the Auxiliary Boiler, only if a relevant entry in the Supplement to the IOPP Certificate exists under paragraph 3.2.2. Whenever sludge is burned in the Auxiliary Boiler, an appropriate entry into the ORB is required.

**9. Are the sludge tanks free of illegal direct connections overboard?**

Sludge should only be kept in the appropriate sludge tanks, as designated in the Supplement to the IOPP Certificate under paragraph 3.1. The only legal discharge of sludge is to shore facilities through the standard overboard discharge connection mentioned in paragraph 4 of the Supplement to the IOPP Certificate. Any other connection of any sludge tank to direct overboard discharge is illegal and constitutes a serious MARPOL violation.

**10. Has the sludge pipeline a standard discharge connection to enable pipes of reception facilities?**

The standard discharge connection is a standardized flange used for the disposal of sludge to shore facilities; configuration is described in Reg. 13 of MARPOL Annex I. Disposal of sludge through any other means is prohibited. The existence of the standard discharge connection is mentioned in the Supplement to the IOPP Certificate under paragraph 4.

**11. If sludge has not been discharged into port reception facilities, has the incinerator or the auxiliary boiler been used for burning sludge on board?**

The only alternative to disposing sludge to shore facilities is to burn them in the Incinerator or the Auxiliary Boiler, if the latter is suitable for this. Whenever sludge is burned in the Incinerator or the Auxiliary Boiler, this should be clearly stated in the ORB. The quantities of burned sludge entered into the ORB should be compatible with the capacity of the Incinerator or Auxiliary Boiler.

**12. Is the remaining sludge and/or bilge water tank capacity sufficient for the intended voyage?**

The quantities of sludge and bilge water in the sludge and bilge water holding tanks should be measured and recorded regularly (daily measurements are recommended). In any case, before the departure of the vessel, the crew should examine if the available (remaining) tank capacities for sludge and bilge water are sufficient for holding the sludge and bilge water that will be produced during the intended voyage. The Chief Engineer shall calculate the daily production of sludge and the daily bilge production and check the availability to keep those quantities onboard without the use of the applicable equipment for disposal for the upcoming voyage. The daily sludge production can be calculated approximately as 0.8-1.2% of the daily Main Engine consumption.

**III. ADDITIONAL GUIDANCE**

**1. Preparation for PSC Inspections**

A deeper investigation will be triggered if any of the following “red flags” are discovered during a PSC inspection, without a bona-fide explanation for them:

- Flange nuts & bolts around OFE or overboard discharge valve that show recent use.
- Freshly painted piping flanges, nuts and/or bolts in the vicinity of OFE or overboard discharge valve.
- Flexible hoses in and around the OFE or overboard discharge valve.
- Oil on valve stems of the discharge side of the OFE.
- Excessive oil in the overboard discharge valve.
- Inoperable or malfunctioning OFE or Incinerator.
- Improper and/or missing entries in the ORB, Incinerator Log or GRB.
- Entries in ORB and/or Incinerator Log that exceed the capacity of machinery or tanks.
- Bilge soundings that do not conform to the ORB entries.
- Existing piping / valve arrangement that does not match original piping diagrams.

**2. Pre-Arrival Checklist**

The officers and crew should ensure that the following steps are taken to avoid any suspicion that the vessel is violating MARPOL or U.S. law:

- .1 All flexible hoses and any other material that could be utilized to bypass the OFE should be removed from the vicinity of the OFE and stored in their designated area.
- .2 All flanges should be removed from any flexible hoses.
- .3 The OFE and Incinerator should be tested to ensure that they are fully operational.
- .4 If the OFE or Incinerator is not operational, there should be an explanation for why the machinery is not operating and what steps have been taken, (i.e., ordering spares, scheduling technical support, etc.), in the appropriate log book.
- .5 Maintenance records for OFE and Incinerator should be up-to-date and complete.
- .6 There should be sufficient spares on board for the OFE and Incinerator.
- .7 Crewmembers that are responsible for operating the OFE and Incinerator should review the necessary procedures to operate the machinery in accordance with maker's instructions.

- .8 Crewmembers should be familiar with the vessel's environmental policies & procedures.
- .9 The bilges should be sounded to ensure that the ORB is accurate.
- .10 The ORB, Incinerator Log, and GRB should be reviewed to ensure that all entries are truthful and in compliance with MARPOL requirements.

### **3. Pollution Prevention Program**

The Company's PMS shall incorporate maker's instructions so that the equipment used for processing the waste releases such as OFE, Bilge Pumps, Incinerators, OCM, etc. are tested and their maintenance effected at regular intervals.

### **4. Oil Record Book Entries**

Entries made in the ORB shall be made and signed by the officer responsible for the operation and countersigned by the Chief Engineer. Each completed page shall also be signed by the Master. The Chief Engineer is responsible for the proper recording of relevant activities.

- .1 Details of all E/R bilge & sludge handling shall be recorded in the ORB.
- .2 All entries shall be made in English language and in ink, immediately after the job takes place.
- .3 Operations should be recorded in chronological order as they have been executed on board.
- .4 Dates should be entered in dd-MONTH-yyyy format, e.g. 16-MAR-2013.
- .5 Operational tests, maintenance / Calibration of the OFE & OCM must be recorded in the ORB.
- .6 The Code "C" refers to the management of oil residues (sludge and other residues) such as transfer, collection, disposal, evaporation and incineration.
- .7 The Code "H" (Bunkering of FO or bulk LO) must be completed in every case of bunkering. Quantity of bunkers or lubricants should be entered in metric tons.
- .8 The Code "F" refers to the failure and restoration of operation of OFE, OCM or stopping device.
- .9 The Code "I" refers to additional operational procedures, general remarks, de-bunkering of FO or entries pertaining to earlier operational entries.
- .10 For the overboard discharge of bilge water accumulated in machinery spaces, Code "D" (non-automated discharge) shall be used. It means that the overboard discharge takes place through the OFE which is equipped with automatic stopping device and the operation is carried out under the supervision of the responsible Engineer. All items concerning code "D" must be filled in correctly by entering the quantity, start and stop time and the method of discharge or disposal.

.11 The ORB shall not have any wrong entry codes, erasures, tipex use, or missing pages. If a wrong entry has been recorded in ORB, it shall be immediately stricken through with a single line in such a way that the wrong entry is still legible and not by overwriting the entry. The wrong entry shall be signed and dated, with the new entry following. Each correction shall be signed by the person responsible for the correction and countersigned by the C/E.

***“No correction fluid shall be used on vessel documentation under any circumstances”***

- .12 Plenty of space shall be used for entries; where required, several lines shall be used; do not try to cram every entry into one line. Do not leave full lines empty between successive entries.
- .13 Tank nomenclature (tank name, frame identification, position) should be recorded as per the format noted within the Supplement of the IOPP Certificate.
- .14 Attention should be paid to the recorded quantities of bilge water managed through the OFE, the duration of operation and the OFE capacity as per maker's specification.
- .15 Attention should be also paid to the recorded quantities of sludge managed through the Incinerator, the duration of operation and the Incinerator's capacity as per makers' specification.
- .16 Records of sludge / bilges pumped to a shore facility or barges shall be maintained with the ORB.
- .17 No inconsistencies are allowed between the ORB and the OCM's Memory Card (if applicable).
- .18 In the event of an accidental or other extraordinary discharge of oil, a statement shall be made in the ORB of the circumstances and the reasons for the discharge.
- .19 In the event that the ORB entries are found by ship personnel to be in error at a later date or which require to be clarified, the Company should be notified.
- .20 Draining of any tank included in the IOPP Supplement is a transfer operation. Any such movement of liquid from one location to another shall be recorded in ORB under Code C12.2.
- .21 In the event that water is vaporized during the heating up of the waste oil tank, the quantity shall be recorded in the ORB under Code C.12.4.
- .22 Masters signing the bottom of each page are attesting to the accuracy and correctness of the entries. The rule is ALWAYS: **“Read carefully before you sign anything”**.

Examples for the completion of the ORB can be found in MEPC.1/Circ.736/Rev.2.

**Important: Falsification of entries in the ORB is a violation of law.**



## 5. Operating Procedure for the OFE

- .1 The Chief Engineer is to be personally responsible for the operation of the OFE. On each occasion this equipment is used, relevant entries must be made in the ORB immediately thereafter.
- .2 Recorded rate of actual discharge cannot be greater than the maker's OFE capacity.
- .3 OFE must be maintained in good order at all times. Maintenance should be carried out on a regular basis and recorded in accordance with maker's recommendations.
- .4 Entry for maintenance of OFE should be made in the ORB under Code I.
- .5 OFE filter cleaning / renewal shall be carried out as recommended by makers. Relevant entries must always be made in ORB under the Code I.
- .6 No additional connections or tees of any kind are attached to the sample line from the OFE to OCM.
- .7 Operating procedures and piping diagram of the OFE must be posted in the vicinity of the equipment. The maker's manual shall be available for reference.
- .8 Ship staff shall report any malfunction of OFE or OCM as top priority and immediate steps shall be taken for rectification. Malfunction of the OFE and OCM must be entered in the ORB under section F. In the event of a failure of the OFE, all E/R bilges must be retained onboard and disposed ashore to reception facilities, and relevant entries should be made in the ORB. In the event the OFE or OCM cannot be repaired on board, proper notices must be placed next to the malfunctioning equipment prohibiting its use. The Class Society must be informed regarding the malfunctioning of the OFE.
- .9 No one operates the OFE and OCM, unless:
  - a. He has received permission from the Chief Engineer.
  - b. He has received appropriate training in the operation of the OFE and OCM.
  - c. He has reviewed and understands the posted operating instructions and the Company's requirements for the operation of the OFE and OCM.
  - d. He opens and closes the overboard discharge valve only after Chief Engineer's supervision, who shall ensure that it is logged in the **E/R Log** by the individual performing the action.
  - e. He understands that the discharge of oil or of untreated bilge water into the sea in excess of legal limits is against Company's policy and against the law. Also, he understands the civil and criminal liabilities and penalties of such actions.
- .10 When ordering chemicals for cleaning the OFE, air cooler, purifiers, etc. preference shall be given to environmentally friendly products as per maker's instructions.
- .11 Any discharge into the sea of oil or oily mixtures shall be prohibited, except:
  - a. when the ship is proceeding en route;
  - b. the oily mixture is processed through the OFE which has an OCM and the oil content does not exceed 15 ppm without dilution;

Such discharges can be anywhere in the world except the Antarctic and port limits. Any stricter local regulations shall supersede the above-mentioned requirements. When the vessel is closer than 12 miles from U.S. shore, the overboard discharging of any treated bilge water is prohibited.

- .12 The Chief Engineer shall verify that the following requirements are always met:
- a. No illegal discharge of oil or untreated bilge water into the sea ever occurs.
  - b. No unauthorized tampering of the OFE or OCM or the associated piping occurs.
  - c. Accurate and complete reports for the condition of OFE and OCM are sent to the Company.
  - d. Prior to the operation of the OFE, permission is requested from the bridge in order to ensure that discharges take place in authorized geographical areas.
  - e. The OCM is tested, depending on the maker, either:
    - through a function that simulates a value higher than 15 ppm; or
    - by the use of an object or liquid that activates the optical sensor.When this simulation is taking place and the value of the OCM exceeds 15 ppm, then the discharge of the OFE should be redirected to the bilge tank, or the bilge pump feeding the OFE should be automatically stopped.
  - f. The Chief Engineer shall perform testing that ensures the OCM requires a sample flow for normal operation and control. Any OCM that allows the OFE to function normally without sample flow is prohibited, unless all valves from the OFE discharge to the sample / flush line control valve shall be removed.
  - g. The Chief Engineer shall also ensure that the OCM will sample the OFE discharge after entire discharge stream is filtered and before control action of the main discharge 3-way valve. Placement of filters in the sample line leading to the OCM is prohibited.
  - h. Each time a test is conducted, filter is replaced or cleaning / maintenance is performed, then the OFE Maintenance Log is to be completed. Any malfunction / discrepancy must be reported immediately to the DPA.
  - i. The OFE power supply must remain off when not in operation. Only when an operation / discharge must take place the power supply should be switched on.
  - j. Before and after an OFE operation, the Memory Log must be checked for any false readings. In this case the Company should be immediately informed.

#### **OFE – OCM Calibration Records**

The calibration dates of the OCM must be recorded by the Chief Engineer in the E/R Logbook and the ORB. A file must be maintained on board and ashore, in which the calibration certificates, if calibration is carried out by the manufacturer or an external contractor, will be kept.

## **6. Operating Procedure for the Incinerator**

The Incinerator is used to minimize the quantity of waste oil residues (sludge) to be disposed ashore, and for burning of oily rags, cooking oil and non-plastic garbage. Plastics shall not be burned in the Incinerator. The Chief Engineer shall ensure that the following requirements are always met:

- .1 The Incinerator is maintained in good order at all times as per maker's instructions.
- .2 Incinerator's operation must follow makers' procedures.
- .3 The Incinerator is used only outside any areas restricted by the local requirements.
- .4 A report is immediately submitted to the Company in case of defect of the Incinerator.
- .5 Quantities of sludge incinerated are recorded in the Incinerator Logbook and the ORB, while quantities of other waste burned (garbage, oily rags, etc.) are recorded in the GRB.
- .6 Every day operation of the Incinerator, cleaning of filters and other maintenance shall be recorded in the Incinerator Logbook. Additionally, the combustion flue gas outlet temperature of the Incinerator shall also be monitored and recorded together with the amount and type of waste incinerated.
- .7 No one operates the Incinerator unless he has received appropriate training and understands the operating instructions posted and Company's policies.
- .8 Incineration of the following substances is strictly prohibited to avoid air pollution:
  - Cargo residues of substances subject to MARPOL Annexes I, II and III or related contaminated packing material.
  - Chemical substances included in Chapter 17 of the IBC Code and presenting an environmental pollution threat according to Annex II, as well as harmful substances identified as marine pollutants in the IMDG Code.
  - Polychlorinated biphenyls (PCBs) which are mainly liquid substances used as coolants and lubricators in electrical apparatus like transformers.
  - Garbage when containing more than mere traces of heavy metals.
  - Refined petroleum products containing halogen compounds.
  - Polyvinyl Chlorides (PVCs) unless the Incinerator is IMO-type approved for burning this category of substances. Check that the Incinerator Certificate states approval as per MEPC 59(33) or MEPC 76(40) prior to processing PVCs.
- .9 Incineration of sewage and oil sludge is permitted, but shall not take place in ports, harbors and estuaries.
- .10 Incineration is only allowed in Class approved Incinerators specially built for the type(s) of waste intended to be incinerated.
- .11 The following shall be recorded in the GRB: Incineration operations, date and time of starting / stopping of the operation, position of vessel, type & amount of garbage in cubic meters.
- .12 The Incinerator Logbook shall be filled in with all details of the incineration. The exhaust gas temperature of the Incinerator shall also be monitored and recorded together with the amount of garbage. Flue gas temperature shall be between 850 deg C and 1200 deg C.
- .13 Entries related to evaporation of water from Incinerator waste oil tank must be made in the ORB, under Code C 12.4.