Fleet Memorandum



Please print and post at your vessel/ facility for all employees to view

Fleet Memo #18: Oil Record Book Entries Procedures

During the Geoexplorer ISM renewal Safety Management Certificate audit, the referenced Non-Conformity was issued for Oil Record Book entries not in compliance with MEPC.1/Circ 7.36 (Rev 01). The corrective action is applicable to all vessels, and the Oil Transfer Procedures and Oil Record Book Entries "Helps" will be modified and re-issued accordingly.

Effective immediately incorporate the following changes to oil record book entries.

1. The Oil Record Book issued by the USCG was deemed to be wrong (not meeting international standards) by the auditor. We checked with the USCG and found it was the same content and format as the international one (and included other additional provisions for meeting US laws). It is the only oil record book recognized for US flag vessels by the Flag Administration.

Unless/until told by the USCG – CONTINUE TO USE THE ORB ISSUED BY THE USCG.

2. All date entries MUST be in the following format – dd/MONTH/yyyy

For Example – 06-MAR-2012. First number is day, and spell (abbreviate) the month

3. Volumes (in Codes C and D entries) used to be permissible in liters, gallons, barrels or cubic meters, as long as all the entries were in the same units. This is no longer permitted.

Oil residue and OWS discharges (Codes C and D) MUST be in cubic meters.

4. Similarly, bunkers and lubricating oil (Code H) must be recorded in TONNES (not gallons, or cubic meters)

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Fleet Memorandum



- 5. The circular also specifies that NO BLANK LINES remain between successive entries, and that erroneous entries be corrected by a single line thru the wrong entry and the SIGNATURE (not initials) of the person adjacent to that entry correction.
- 6. Note also that there are 4 numbered entries in Code C-11 that are applicable to us. The number 4 is used to designate how much was transferred and was formerly in line entry #1. Line #1 now just identifies the tank. This was not mentioned in the NC, but it needs to be corrected in new procedures and helps.

These changes came into force in January 2011. MEPC.1/Circ 7.63 (Rev 01) and some explanatory notes from Cayman Islands Maritime authority is attached to this email. The circular will be included in the next issue of the Ship Regs Pubs under the Oil Record Book folder.

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Ref. T5/1.01 MEPC.1/Circ.736 8 November 2010

GUIDANCE FOR THE RECORDING OF OPERATIONS IN THE OIL RECORD BOOK PART I – MACHINERY SPACE OPERATIONS (ALL SHIPS)

- 1 The Marine Environment Protection Committee, at its sixty-first session, (27 September to 1 October 2010), approved the Guidance for recording of operations in the Oil Record Book Part I Machinery space operations (all ships) (paragraph 7.38 of document MEPC 61/24), attached in the annex.
- The Guidance is intended to facilitate compliance with MARPOL requirements on board ships by providing advice to crews on how to record the various operations in the Oil Record Book by using the correct codes and item numbers in order to ensure a more uniform port State control procedure.
- 3 Governments Parties to MARPOL are invited to encourage implementation of the above Guidance for use aboard ships flying their flags and to disseminate it among all stakeholders including ship operators, surveyors and port State control officers.

ANNEX

GUIDANCE FOR RECORDING OF OPERATIONS IN THE OIL RECORD BOOK PART I – MACHINERY SPACE OPERATIONS (ALL SHIPS)

General Guidance

- This guidance only includes sections C to I.
- Operations should be recorded in chronological order as they have been executed on board.
- Dates should be entered in dd-MONTH-yyyy format, e.g., 16-MAR-2009.
- Incineration or landing ashore of oily garbage and used filters should be recorded in the Garbage Record Book only.
- All Entries are to be made and signed by the officer or officers in charge of the operations concerned and each completed page shall be signed by the master of the ship.
- Do not leave any full lines empty between successive entries.
- If a wrong entry has been recorded in the Oil Record Book (ORB), it should immediately be struck through with a single line in such a way that the wrong entry is still legible. The wrong entry should be signed and dated, with the new corrected entry following.
- Tank nomenclature should be recorded as per the format noted within the International Oil Pollution Prevention Certificate (IOPPC).
- Recording of quantities retained in bilge water holding tanks listed under section 3.3 of the IOPPC is voluntary and not required by the Convention.
- The recording of general maintenance of items pertaining to the OWS remains voluntary and is this is not required to be recorded in the ORB.

Usage of code C.11: Collection of oil residues (sludge).

Example #1

Weekly inventory of oil residues (sludge) tanks (tank listed under item 3.1 in the Supplement to the IOPPC)

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|-----------|------|----------|--|
| dd-MONTH- | | | |
| уууу | С | 11.1 | [Name of sec 3.1 Tank & Designation] |
| | | 11.2 | $xx m^3$ |
| | | 11.3 | xx m ³ |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |
| dd-MONTH- | | | |
| уууу | С | 11.1 | [Name of sec 3.1 Tank & Designation] |
| | | 11.2 | $xx m^3$ |
| | | 11.3 | xx m ³ |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Recording of oil residue (sludge) collected by manual operation in oil residue (sludge) tank (tank listed under item 3.1 in the Supplement to the IOPPC)*

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|-----------|------|----------|--|
| dd-MONTH- | | | |
| уууу | С | 11.1 | [Name of sec 3.1 Tank & Designation] |
| | | 11.2 | $xx m^3$ |
| | | 11.3 | $xx m^3$ |
| | | 11.4 | xx m³ collected from [identification of source] |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Note: Operator initiated manual collection where oil residue (sludge) is transferred (transfer with a pump) into the oil residue (sludge) tank(s). Examples of such operations could be:

- 1. Collection of oil residue (sludge) from fuel oil separator drain tanks.
- 2. Collection of oil residue (sludge) by draining engine sump tanks.
- 3. Adding fuel oil to an oil residue (sludge) tank (all content of a sludge tank is considered sludge).
- 4. Collection of sludge from bilge water holding tanks in this case a disposal entry for bilge water is also needed.

Usage of code C.12: Disposal or Transfer of oil residues (sludge).

Example #3

Disposal of oil residue (sludge) via shore connection

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|-----------------------|------|----------|--|
| dd- MONTH- yyyy | С | 12.1 | xx m³ sludge from [Name of sec 3.1 Tank & Designation], xx m³ retained, |
| | | | to "identity or name of sludge receiver, i.e. barge, tank truck or shore facility" during port stay (Name of Port) |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Note: Ships' masters should obtain from the operator of the reception facilities, which includes barges and tank trucks, a receipt or certificate detailing the quantity of oil residue (sludge) transferred, together with the time and date of the transfer. This receipt or certificate, if attached to the Oil Record Book Part I, may aid the master of the ship in proving that his ship was not involved in an alleged pollution incident. The receipt or certificate should be kept together with the Oil Record Book Part I.

Use of Code Item Number C 11.4 only becomes applicable in accordance with MARPOL Annex I amendments which enter into force on 1 January 2011 (resolution MEPC.187(59)).

Draining of water (disposal) from an oil residue (sludge) tank listed under item 3.1 in the Supplement to the IOPPC, to a bilge water holding tank listed under item 3.3 in the Supplement to the IOPPC

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|---|
| dd- | | | |
| MONTH- | | | xx m ³ water drained from [Name of sec 3.1 Tank & Designation] |
| УУУУ | С | 12.2 | xx m³ retained, |
| | | | to [Name of sec 3.3 Tank & Designation] retained in tank(s) xx m ³ |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Note: Collection of bilge water need not to be accounted for, so only one entry is required. Capacity of sludge tanks should not be recorded for C.12.x entries.

Example #5

Transfer from one oil residue (sludge) tank to another oil residue (sludge) tank, both listed under item 3.1 in the Supplement to the IOPPC

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|-----------------------|------|----------|---|
| dd- MONTH- yyyy | С | 12.2 | xx m ³ sludge transferred from [Name of sec 3.1 Tank & Designation], xx m ³ retained, |
| | | | to [Name of sec 3.1 Tank & Designation] retained in tank(s) xx m ³ |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Example #6

Incineration of oil residue (sludge) in Incinerator

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|-----------------------|------|----------|--|
| dd- MONTH- yyyy | С | 12.3 | xx m ³ sludge from [Name of sec 3.1 or 3.2.3 Tank & Designation], xx m ³ retained, |
| | | | Burned in Incinerator for xx hours |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Example #7

Burning of oil residue (sludge) in Boiler

| Date | Code | Item No. | Record of operation and signature of officer in charge |
|-----------------------|------|----------|---|
| dd- MONTH- yyyy | С | 12.4 | xx m ³ sludge from [Name of sec 3.1 Tank & Designation], xx m ³ retained, |
| | | | Burned in Boiler for xx hours |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Evaporation of water (disposal) from an oil residue (sludge) tank listed under items 3.1 in the Supplement to the IOPPC

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|-----------------------|------|----------|---|
| dd- MONTH- vvvv | С | 12.4 | xx m ³ water evaporated from [Name of sec 3.1 Tank & Designation], xx m ³ retained. |
| 7777 | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Example #9

Regeneration of fuel oil from oil residue (sludge)*

| Date | Code | Item No. | Record of operation and signature of officer in charge |
|-----------------------|------|----------|---|
| dd- MONTH- yyyy | С | 12.4 | xx m ³ sludge disposed by regeneration of x m ³ fuel in [Fuel Tank & Designation] and x m ³ of water in [Name of sec 3.3 Tank & Designation] |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Only permitted if mentioned as an approved means of disposal in the IOPPC Supplement.

Usage of code D: Non-automatic discharge overboard or disposal otherwise of bilge water which has accumulated in machinery spaces.

Example #10

Pumping of bilge water from engine-room bilge wells to a tank listed under item 3.3 in the Supplement to the IOPPC

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|--|
| dd- | | | |
| MONTH- | | | |
| уууу | D | 13 | xx m³ bilge water from engine-room bilge wells, |
| | | 14 | Start: hh:mm, stop: hh:mm |
| | | 15.3 | To [Name of sec 3.3 Tank & Designation], retained in tank(s) xx m ³ |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Example #11

Transfer of bilge water between tanks listed in item 3.3 in the Supplement to the IOPPC

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|-----------------------|------|----------|--|
| dd- MONTH- yyyy | D | 13 | xx m³ bilge water from, [Name of sec 3.3 Tank & Designation], xx m³ retained, |
| | | 14 | Start: hh:mm, stop: hh:mm |
| | | 15.3 | To [Name of sec 3.3 Tank & Designation], retained in tank(s) xx m ³ |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Pumping of bilge water overboard from tank listed in item 3.3 in the Supplement to the IOPPC

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|---------------|------|----------|---|
| dd- MONTH- | | | |
| УУУУ | D | 13 | xx m ³ bilge water from [Name of sec 3.3 Tank & Designation] |
| | | | Capacity xx m³, xx m³ retained |
| | | 14 | Start: hh:mm, stop: hh:mm |
| | | 15.1 | Through 15 ppm equipment overboard |
| | | | Position start: xx deg xx min N/S, xx deg xx min E/W |
| | | | Position stop: xx deg xx min N/S, xx deg xx min E/W |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Example #13

Disposal of bilge water from tank listed in item 3.3 in the Supplement to the IOPPC to oil residue (sludge) tank listed in item 3.1 in the Supplement to the IOPPC

| Date | Code | Item No. | Record of operation and signature of officer in charge |
|--------|------|----------|---|
| dd- | | | |
| MONTH- | | | x m ³ bilge water from [Name of sec 3.3 Tank & Designation], |
| УУУУ | D | 13 | now xx m ³ |
| | | 14 | Start: hh:mm stop:, hh:mm |
| | | | Collected in [Name of sec 3.1 Tank & Designation] retained in |
| | | 15.3 | tank(s) xx m³ |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Note: A code C.11.4 recording may be required if this operation is a manual operator initiated operation.

Usage of code E: Automatic discharge overboard or disposal otherwise of bilge water which has accumulated in machinery spaces.

Example #14

Pumping of bilge water overboard via 15 ppm equipment from tank listed in item 3.3 in the Supplement to the IOPPC or from engine-room bilge wells

| <u> </u> | supplement to the ferrior origine reem enge were | | | | |
|----------|--|----------|---|--|--|
| Date | Code | Item No. | Record of operations/signature of officer in charge | | |
| dd- | | | | | |
| MONTH- | | | | | |
| уууу | E | 16 | Pump start hh:mm at xx deg xx min N/S, xx deg xx min E/W from | | |
| | | | [Name of sec 3.3 Tank & Designation] | | |
| | | 18 | Stop hh:mm | | |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy | | |

Transfer of bilge water from engine-room bilge wells to a tank listed under item 3.3 in the Supplement to the IOPPC

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|--|
| dd- | | | |
| MONTH- | | | |
| уууу | E | 17 | Transfer start hh:mm to |
| | | | [Name of sec 3.3 Tank & Designation] |
| | | 18 | Stop hh:mm |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Usage of code F: Condition of oil filtering equipment.

Example #16

Failure of Oily Filtering Equipment, Oil Content Meter or stopping device

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|--|
| dd- | | | |
| MONTH- | | | |
| уууу | F | 19 | hh:mm |
| | | 20 | hh:mm (might be unknown – if spare parts has been ordered) |
| | | 21 | [Reason for Failure, if known] |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Note: The condition of the oil filtering equipment also covers the alarm and automatic stopping devices, if applicable.

A code 'I' entry should also be made indicating that the overboard valve was sealed shut due to non working Oil Filtering Equipment or Oil Content Meter.

On the date where the system is functional again, a new entry, using code F 19 / 20 / 21 should be made where F 19 is the date and time of the initial failure and F 20 is the time the system is functional again.

Example #16bis

When proper operation of the Oily Filtering Equipment, Oil Content Meter or stopping device is restored

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|--|
| dd- | | | - |
| MONTH- | | | |
| уууу | F | 19 | hh:mm (the same time as in example 16) |
| | | 20 | hh:mm (the time the system is functional) |
| | | 21 | [Reason for Failure, if known] |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Note: The condition of the oil filtering equipment also covers the alarm and automatic stopping devices, if applicable.

A code 'I' entry should also be made indicating that the overboard valve was sealed shut due to non working Oil Filtering Equipment or Oil Content Meter.

Usage of code G: Accidental or other exceptional discharges of oil.

Example #17

Accidental Pollution

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|--|
| dd- | | | |
| MONTH- | | | |
| уууу | G | 22 | hh:mm |
| | | 23 | Position: xx deg xx min |
| | | 24 | Quantity of oily residue (if known) |
| | | 25 | Circumstances of the discharge |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Note: If failure of Oil Filtering Equipment or Oil Content Meter related equipment is involved, appropriate (F) entry is to be made in ORB.

Relevant sections of the SOPEP (SMPEP) are to be used to combat oil spills at sea. Examples of Circumstances of discharge include, but are not limited to:

- 1. Oil Content Meter failure.
- 2. Fuel tank overflow.
- 3. Ruptured bunkering hose/flange.
- 4. Fuel tank leakage (due to collision or grounding).

Usage of code H: Bunkering of fuel or bulk lubricating oil.

Example #18

Bunkering of Fuel oil

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|---|
| dd- | | | |
| MONTH- | | | |
| УУУУ | Н | 26.1 | [Name of Port] |
| | | 26.2 | Start dd-mm-yyyy Stop dd-mm-yyyy |
| | | 26.3 | xxxx MT of ISO-xxxxx HFO x.x % S bunkered in tanks: |
| | | | aaaa MT added to [Tank Name & Designation] now containing bbbb MT |
| | | | cccc MT added to [Tank Name & Designation] now containing dddd MT |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Example #19

Bunkering of Bulk Lubricating oil

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|---|
| dd- | | | |
| MONTH- | | | |
| уууу | Н | 26.1 | [Name of Port] |
| | | 26.2 | Start dd-mm-yyyy Stop dd-mm-yyyy |
| | | 26.4 | xx MT [Type of Oil] bunkered in tanks: |
| | | | xx MT added to [Tank Name & Designation] now containing xx MT |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Note:

Separate entries required for each grade of fuel oils and lubricating oils respectively to ensure transparency.

This entry is not required if lubricating oils are delivered onboard in packaged form (55 gallon drum, etc.).

Usage of code I: Additional operational procedures and general remarks.

Example #20

Pumping oily bilge water from a Cargo Hold bilge holding tank to a tank listed under item 3.3

in the Supplement to the IOPPC

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|---|
| dd- | | | |
| MONTH- | | | |
| уууу | 1 | | xx m ³ oily bilge water from Cargo Hold bilge holding tank |
| | | | to [Name of sec 3.3 Tank & Designation] |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Any collection and transfer of oily bilge water into the engine-room bilge holding Note: tank(s) from a cargo hold bilge holding tank(s) should be recorded using code (I)

Example #21

Entry pertaining to an earlier missed operational entry

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|----------|------|----------|--|
| dd- | | | |
| MONTH- | ١, | | |
| уууу (1) | 1 | | Entry pertaining to an earlier missed operational entry |
| dd- | | | No mag alvides transferred from Manag of and 24 Tonk and |
| MONTH- | | 40.0 | xx m ³ sludge transferred from [Name of sec. 3.1 Tank and |
| уууу (2) | C | 12.2 | Designation], xx m³ retained |
| | | | to [Name of sec 3.1 Tank & Designation], retained in tank(s) xx m ³ |
| | | | signed (1): (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |
| | | | signed (2): (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Note: Date (1) to be the date of the original operation.

Date (2) to be the current date i.e. the date the entry is made.

Signed (1) Signature of Officer making I entry

Signed (2) Signature of Officer making missed entry

Example #22

De-bunkering of Fuel oil

| <u> </u> | 9 | | |
|----------|------|----------|--|
| Date | Code | Item No. | Record of operations/signature of officer in charge |
| dd- | | | |
| MONTH- | | | |
| уууу | 1 | | xxxx MT of ISO-xxxxx HFO x.x % S de-bunkered from tanks: |
| | | | xxxx MT removed from [Tank Name & Designation] now containing |
| | | | xxx MT |
| | | | De-bunkered to "identity or name of receiver i.e. barge, tank truck or shore facility" in "Name of Port" |
| | | | Start dd-mm-yyyy Stop dd-mm-yyyy |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Note: Include receipt & certificate from receiver for amount & type of fuel oil de-bunkered.

Tankers with slop tanks

Example #23

Transfer of sludge from engine-room oil residue (sludge) tank to deck/cargo slop tank

| Data | 0-1- | 14 14- | December of a manufacture of affice with a bound |
|--------|------|-----------|---|
| Date | Code | item ivo. | Record of operations/signature of officer in charge |
| dd- | | | |
| | | | |
| MONTH- | | | xx m ³ sludge from [Name of sec 3.1 Tank & Designation], |
| уууу | С | 12.4 | xx m³ retained, |
| | | | Transferred to Deck Slop Tank [designation] |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Example #24

Transfer of bilge water from tank listed in item 3.3 in the Supplement to the IOPPC to deck/cargo slop tank

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|---|
| dd- | | | |
| MONTH- | | | |
| уууу | D | 13 | xx m³ bilge water from [Name of sec 3.3 Tank & Designation] |
| | | | Capacity xx m ³ , xx m ³ retained |
| | | 14 | Start: hh:mm, stop: hh:mm |
| | | 15.3 | Transferred to Deck Slop Tank [designation] |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Note: Requires this method listed in the IOPP Supplement under item 3.2.4.

If non-oil-cargo related oily residues are transferred to slop tanks of oil tankers, the discharge of such residues should be in compliance with Regulation 34. (UI 22.1.1 for Regulation 15).

Requires an entry in the Oil Record Book – Part II using code (O).

If sludge or bilge water is transferred from multiple tanks in engine-room a separate entry must be made in ORB Parts I & II for each transfer.

General Guidance – Additional Voluntary Recordings

Example #25

Voluntary declaration of quantities retained in bilge water holding tanks ref. MEPC.1/Circ.640 – record weekly

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|---|
| dd- | | | |
| MONTH- | | | |
| уууу | 1 | | Weekly Inventory of Bilge Water Tanks (listed under item 3.3) |
| | | | [Name of sec 3.3 Tank & Designation] |
| | | | capacity xx m³, xx m³ retained |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Optional sealing of MARPOL Annex I related valve and/or equipment

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|-----------------------|------|----------|--|
| dd- MONTH- yyyy | 1 | | Overboard valve [Valve Number] from 15 ppm bilge water separator unit sealed |
| | | | seal no.: xxxxxxx, |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |

Example #27

Breaking of optional seal on MARPOL Annex I related valve and/or equipment

| Date | Code | Item No. | Record of operations/signature of officer in charge |
|--------|------|----------|--|
| dd- | | | |
| MONTH- | | | Overboard valve [Valve Number] from 15 ppm bilge water separator |
| УУУУ | 1 | | unit unsealed |
| | | | for normal operation of 15 ppm unit |
| | | | seal no.: xxxxxxx |
| | | | signed: (Officer-in-charge, Name & Rank) dd-MONTH-yyyy |