

INCLAMAR

CHECK LIST ON MARPOL ANNEX I, IOPP SURVEYS FOR CARGO SHIPS

VESSEL _____ DATE _____

MANDATORY ANNUAL SURVEY FOR COMPLIANCE WITH MARPOL 73/78, ANNEX I

INTERMEDIATE SURVEY FOR COMPLIANCE WITH MARPOL 73/78, ANNEX I

RENEWAL SURVEY FOR COMPLIANCE WITH MARPOL 73/78, ANNEX I

"X" Appropriate Survey

REQUIREMENTS FOR MANDATORY ANNUAL SURVEYS

I. Documentation:	YES	NO	N/A
1. Are certificates for type approval of oil pollution equipment, such as oily water separating equipment, oil filtering equipment, process units, oil content meters, oil/water interface detectors on board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the vessel have valid class certificates?	<input type="checkbox"/>	<input type="checkbox"/>	
3. Are all statutory certificates valid?	<input type="checkbox"/>	<input type="checkbox"/>	
4. Is the IOPP Certificate valid and have all required surveys been carried out within their required windows?	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the Supplement (Form A or B) to the IOPP Certificate on board, and was it reviewed to ensure it has been properly completed to reflect the vessel's equipment and arrangements?	<input type="checkbox"/>	<input type="checkbox"/>	
6. Is an oil record book (Part I) of the required format on board and being properly completed (i.e., proper entries being made)?	<input type="checkbox"/>	<input type="checkbox"/>	
a. Cargo/Ballast Operations (Part II) including proper entries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are the following manuals and instructions on board:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. approved Operation and Equipment Manual (COW)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. approved Dedicated Clean Ballast Tank Manual (CBT)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. approved loading and stability information per Regulation 25(5)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. instructions for the operation of the part flow system if fitted, included in the cargo and ballast handling manuals and COW/CBT Manuals, where applicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. approved oil discharge monitoring and control system manual?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. oily-water separating equipment or filtering system manual?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. approved shipboard oil pollution emergency plan (SOPEP)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
II. Equipment for the control of oil discharge from machinery space bilges			
1. Were the following systems and arrangements examined and tested ¹ , including pumps, piping, and fittings, and found to be properly installed and operating in satisfactory condition.	<input type="checkbox"/>	<input type="checkbox"/>	
a. oil filtering equipment:			
1. oil filtering equipment (15 ppm) for vessels less than 10,000 GRT? (for vessels 400-9999 GRT)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹ Confirmation of satisfactory operation may be achieved by simulation test or equivalent. At mandatory annual Surveys and intermediate surveys, simulation tests shall be carried out as far as practicable. If tests are unable to be carried out, state the reason in the Remarks Section. At Renewal Surveys, confirmation of satisfactory operation shall be carried out by simulation tests (For intermediate/Renewal surveys, also complete items 2-4 of Intermediate Survey part of this check list).

	YES	NO	N/A
2. oil filtering equipment (15 ppm) with alarm and automatic stopping device? (for vessels 10,000 GRT and above)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. arrangements of sludge tank:			
1. arrangement of sludge tank(s) and discharge piping arrangement, including confirmation that piping to and from sludge tank(s) has no direct connection over board other than the standard discharge connection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. is standard discharge connection of the required standard dimensions, including 6 bolts and nuts (20mm in diameter) and its gasket of oil-proof material, on board and in satisfactory condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. was a connection made with the standard discharge connection and the piping and found satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. any recognized homogenizers, incinerators, etc. for the control of sludge when the size of the sludge tank is approved on the basis of such installation (include test of the equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the arrangements of the fuel oil and water ballast systems examined and found to be physically separated and in satisfactory condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was it confirmed that oil is not carried in a forepeak tank or a tank forward of the collision bulkhead?			<input type="checkbox"/>
III. Requirements for cargo spaces of oil tankers			<input type="checkbox"/>
1. Was it verified as far as practicable that there was no leakage from those ballast lines passing through cargo tanks and those cargo lines passing through ballast tanks (Applies to SBT and CBT)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the CBT pump, pipe, and valve arrangements found in accordance with the approved CBT Operations Manual?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were the CBT examined by sighting and found to contain no oil contamination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were SBT pump, pipe, and valve arrangements found in accordance with requirements for SBT systems and having no interconnection with the cargo oil system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Where a portable spool piece is provided for emergency discharge of SBT by 17) cargo pumps, were non-return valves fitted on the SBT connections examined and considered satisfactory, and is the spool piece in satisfactory condition mounted in a conspicuous position in the pump room with a permanent notice restricting its use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the SBT examined by sighting and found to contain no oil contamination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. If the vessel is operating with special ballasting arrangements, are the approved arrangements and operational procedures being complied with?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. ¹ Were the oil discharge monitoring and control system, including piping, and its associated equipment examined and tested in operation in accordance with the guidelines developed by IMO and found in satisfactory working condition, including the following:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. the manual and automatic means to stop the discharge of effluent?	<input type="checkbox"/>	<input type="checkbox"/>	

¹ Operation may be simulated. At mandatory annual/intermediate surveys, simulation tests shall be carried out as far as practicable. If simulation tests are unable to be completed, state reason in the Remarks Section. At Renewal Surveys, confirmation of satisfactory operation shall be carried out by simulation test. Refer to Appendix I, the last page of this check list, for guidelines on functional test of oil discharge monitoring and control system.

	YES	NO	N/A
b. the oil discharge monitor, including tests of audible and visual alarms, indicators/meters, recorders, and verifying that spare consumables for the recorders are provided?	<input type="checkbox"/>	<input type="checkbox"/>	
c. were records for recording devices sighted on board?	<input type="checkbox"/>	<input type="checkbox"/>	
d. the starting interlock?	<input type="checkbox"/>	<input type="checkbox"/>	
8. Was the slop tank(s) arrangement, including associated piping, externally examined and found satisfactory, including verification that no unauthorized discharge bypass is fitted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Were the oil/water interface detectors of approved type and in satisfactory condition?	<input type="checkbox"/>	<input type="checkbox"/>	
10. Were the following pumping, piping, and discharge arrangements examined and found satisfactory:	<input type="checkbox"/>	<input type="checkbox"/>	
a. dirty ballast discharge piping?	<input type="checkbox"/>	<input type="checkbox"/>	
b. oil contaminated water discharge piping?	<input type="checkbox"/>	<input type="checkbox"/>	
c. means of draining cargo pumps and lines?	<input type="checkbox"/>	<input type="checkbox"/>	
d. the stripping device and the connections for pumping to the slop tanks, cargo tanks, or ashore?	<input type="checkbox"/>	<input type="checkbox"/>	
e. the communication system between the contaminated water observation position and discharge control position (including a test of the system), or the means to stop the discharge from a position on the upper deck if a communication system is not provided?	<input type="checkbox"/>	<input type="checkbox"/>	
f. the part flow system, where fitted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. ² Was the COW system as far as could be seen, arranged as outlined in the Operations and Equipment Manual ³ , and in particular, were the following verified:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. were Inert Gas System Surveys up-to-date?	<input type="checkbox"/>	<input type="checkbox"/>	
b. ⁴ were the piping, pumps, valves, and deck machines examined for signs of leakage and found satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	
c. were COW branch lines, anchoring devices and flexible connections examined and found intact and secure?	<input type="checkbox"/>	<input type="checkbox"/>	
d. when the drive units are not integral with the tank cleaning machines, are there sufficient operational drive units on board as specified in the Operational and Equipment Manual?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. was it checked that, when fitted, steam heaters for water washing can be properly isolated during crude oil washing operations, either by double shut-off valves or clearly identifiable blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. were the prescribed means of communication between the deck watchkeeper and the cargo control position checked to ensure it is operational and in satisfactory condition?	<input type="checkbox"/>	<input type="checkbox"/>	
g. was it confirmed that an over pressure relief device (or other approved arrangement) is fitted to the pumps supplying the crude oil washing system and that this device is in satisfactory condition?	<input type="checkbox"/>	<input type="checkbox"/>	

² For IOPP Renewal surveys, complete item 3 of the renewal survey instead of item III.11 of the Mandatory Annual Surveys.

³ If an alteration has been made that affects the COW system, the Operations and Equipment Manual shall be revised accordingly.

⁴ If upon examination there is any doubt as to the condition of the COW piping, hydrostatic testing at working pressure shall be required. Particular attention shall be paid to any repairs such as welded doublers.

	YES	NO	N/A
h. were flexible hoses for use in COW on combination carriers an approved type, properly stored, and in good condition/properly marked?	<input type="checkbox"/>	<input type="checkbox"/>	
12. ⁵ Was the effectiveness of the COW system verified, as far as practicable, and in particular were the following verified:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. were tanks containing departure and/or arrival ballast checked, as far as practicable, to confirm the effectiveness of the cleaning and stripping?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. were crude oil washing machines checked, as far as practicable, to ensure they are operable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. when the survey is carried out during crude oil washing operations, was the proper operation of the washing machines observed by means of the movement indicators and/or sound patterns or other approved methods?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. was the effectiveness of the stripping system in appropriate cargo tanks checked, as far as practicable by observing the monitoring equipment and by hand-dipping or other approved means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was the IOPP Certificate endorsed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where any changes noted to have been made on board that would affect the IOPP Certificate Supplement since its initial issuance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. If yes, was the supplement reissued if necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. If no, was the following proviso listed on the reissued certificate: "Certificate is only valid when Supplement Form A(B) issued at _____ on _____ is attached"?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Was Master advised to retain new or previous Supplement and to keep it attached to the new certificate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was it confirmed that no unproved modifications have been made to the ship or its equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Surveyor

⁵ For Intermediate Surveys, also complete item 5 of the Intermediate Survey part of this check List. For IOPP Renewal surveys, complete item 3 of the Renewal Survey instead of item III.12 of the mandatory annual survey.

⁶ If any items cannot be examined or tested, the surveyor shall indicate the reason why in the remarks section.

	YES	NO	N/A
ADDITIONAL REQUIREMENTS FOR INTERMEDIATE SURVEY			
1. Were the requirements for the IOPP mandatory annual survey satisfactorily completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Was the oily-water separating equipment or oil filtering equipment or process unit, where fitted, including associated pumps, piping, and fittings examined for wear and corrosion and found satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the oil content meter (15 ppm alarm and bilge monitor) checked for obvious defects, deterioration or damage and found satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. For the oil content meter, was the record of calibration checked against the manufacturer's operation and instruction manual?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. ⁷ For crude oil washing systems, did the survey also include the following (In addition to items III.11 and 12 of the mandatory annual survey):			<input type="checkbox"/>
a. was crude oil washing piping outside the cargo tanks examined and found satisfactory? ⁸	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. were the isolation valves for steam heaters for water washing, when fitted, tested to ensure they are operating satisfactorily?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. were at least two selected cargo tanks examined for the express purpose of verifying the continued effectiveness of the COW and stripping systems and found satisfactory? ⁹	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. In addition to item III.7 of the mandatory annual survey, was the oil discharge monitoring and control system and oil content meter for cargo spaces examined for obvious defects, deterioration, or damage and found satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Was the record of calibration of for the oil content meter checked against the manufacturer's operation and instruction manual?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Was the manual and/or remote operation of the individual tank valves (or other similar devices) that are required to be kept closed at sea in accordance with Regulation 24 tested and found satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the satisfactory operation of the oil/water interface detectors confirmed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was the IOPP Certificate endorsed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was it confirmed that no unproved modifications have been made to the ship or its equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Surveyor

⁷ For IOPP Renewal Surveys, complete item 3 of the Renewal survey instead of item 5 of the Intermediate Survey.

⁸ If there is any doubt as to the condition of the COW piping, hydrostatic testing at working pressure shall be required. Particular attention shall be paid to any repairs such as welded doublers.

⁹ The scope or particulars of this examination need not be in accordance with paragraph 4.2.10(a) of the Revised COW Specifications (resolution A.446(XI)).

ADDITIONAL REQUIREMENTS FOR RENEWAL SURVEY

	YES	NO	N/A
<input type="checkbox"/>			
1. Were the applicable requirements for the mandatory annual survey satisfactorily completed?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Were the applicable requirements for the Intermediate Survey satisfactorily completed?	<input type="checkbox"/>	<input type="checkbox"/>	
3. Instead of items III. 11 and 12 of the Mandatory annual survey and item 5 of the Intermediate Survey for COW : systems, were the following verified			<input type="checkbox"/>
a. were the COW piping, pumps, valves, and deck mounted washing machines examined for signs of leakage and found satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	
b. were all anchoring devices for COW piping examined to ensure they are intact and secure?	<input type="checkbox"/>	<input type="checkbox"/>	
c. was COW piping pressure tested to at least the working pressure and found satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	
d. was it confirmed in those cases where drive units are not integral with the tank washing machines, that the number of operational drive units as specified in the COW Manual are on board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. was it confirmed, by completing internal tank inspection, that the internal equipment and arrangements remain satisfactory? ¹⁰	<input type="checkbox"/>	<input type="checkbox"/>	
f. were steam heaters for water washing, when fitted, checked to ensure they can be properly isolated during COW operations, either by double shut-off valves or by clearly identifiable blanks and found satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. when isolation valves are fitted, were they disassembled, internally examined, and found satisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. was the prescribed means of communications between the deck watch keeper and the cargo control position checked to confirm it is operational?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. was it confirmed that an overpressure relief device is fitted to the pumps supplying the COW system and in satisfactory condition?	<input type="checkbox"/>	<input type="checkbox"/>	
j. was it confirmed that the flexible hoses for supply of oil to the washing machines on combination carriers are of an approved type, are properly stored, and are in satisfactory condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. was it confirmed that the COW system is installed in accordance with the Revised Specifications for the Design, Operation and Control of COW and was it verified that no unapproved modifications have been made?	<input type="checkbox"/>	<input type="checkbox"/>	
l. was the effectiveness of the COW system verified in accordance with paragraph 4.2.10 of the Revised COW Specifications and found satisfactory. In particular, were the following verified if possible and practicable ¹¹ :	<input type="checkbox"/>	<input type="checkbox"/>	
1. checked the system to confirm the COW machines are operable and to observe the proper operation of the washing machines by means of the movement indicators and/or sound patterns or other approved means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. was the efficiency of the stripping system confirmed by:			
a. observing the monitoring equipment; and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. observing the hand dipping of the tanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹⁰ This inspection may be made in conjunction with the internal examination of cargo tanks for class purposes or for SLC surveys completed within 6 months prior to or after the date of the renewal survey.

¹¹ The discharge of ballast through an ODMC, which has been surveyed to confirm its satisfactory operation, or analysis of ballast water samples are acceptable alternatives to the internal examination of cargo tanks.

Appendix I¹³

GUIDELINES FOR FUNCTIONAL TEST OF THE OIL DISCHARGE MONITORING AND CONTROL (ODMC) SYSTEM

The functional test referred to in paragraphs 8.1.8 and 11 of IMO Resolution A.586 (14) as amended by MEPC 24(22) should include all the following tests when the **monitoring system is operating on water** (indicate **YES, NO, N/A**)

1.	Checking correct running of the pumps, absence of leakage in the sample pumping and piping system, correct functioning of remote controlled sampling valves, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Checking, by flow rates or pressure drops, that the system operates under correct flow conditions. This test should be repeated separately for each sampling point	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Checking that alarms function correctly when a malfunction occurs external to the monitoring system such as no sample flow, no flow meter signal, power failure, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Checking the recordings for correct values and timing by varying the simulated input signals manually; checking proper recordings by varying the manual input signals until alarm conditions are obtained; and for category A monitoring system, ascertain that the overboard discharge control is activating, and check that the action is being recorded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Checking that normal operating condition can be reset when the value of instantaneous rate of discharge is reduced below 30 liters per nautical mile.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Checking that a recording is made when the manual override control is activated; and that for a category A monitoring system, the overboard discharge control can be operated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Turning off the system, and for a category A monitoring system, checking that the overboard discharge control cannot be operated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Starting up the system, and checking the zero gain setting for the oil content meter in accordance with the manufacturer's operations and technical manual.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Checking the accuracy of any installed flow meter, for example, by pumping water in a loop where the flow rate may be calculated from the level change in a tank. The check should be made at a flow rate of about 50% of the rated flow of the flow meter.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹³ This appendix may be used when completing functional tests of ODMC systems.