Indian Register of Shipping

# Report on the Surveys Concerning International Oil Pollution Prevention Certificate

Part 7

#### Survey of installation for discharges from cargo spaces

Initial Survey/Annual Survey/Intermediate Survey/Periodical Survey/Renewal Survey/ Change of Flag Survey/General Examination\*

Name of Ship: ..... IMO No.: I. R. No.: ..... Port of Survey: .....

NOTES	NOTES:	
1	Use "Y" for Yes/Satisfactory, "N" for Not Satisfactory, 'NO' for No, "NA" for Not Applicable, "P" for Remains outstanding.	
2	Where any repairs or any deficiencies pending comments to be included in the remarks section.	

Sr. No.	Item	Y/N/NO/ NA/P
	cumentation	
1	Confirming that subdivision and damage stability information in an approved form, where applicable, is on board.	
2	Where a stability instrument is fitted on board, Confirming that:	
а	Document of Approval (DOA) as required by MARPOL Annex I, Regulation 28(6) has been issued by/on behalf of the Administration.	•••••
b	An approved operation manual for stability instrument including test conditions are available on board.	
3	Where the Administration has waived the requirements of stability instrument (Regulation 28(6)), Confirming that necessary waiver issued by the Administration is available on board and the alternative means of verification for intact and damage stability applied effectively and recorded on FORM B.	
4	Checking that the ship is allowed continued operation according to the phase-out scheme of MARPOL 90/04/14 Annex I reg.20.	•••••
5	Confirming that the approved Dedicated Clean Ballast Tank Operation Manual and/or the approved Operations and Equipment Manual for the Crude Oil washing Systems, as appropriate, is/are on board.	
6	Confirming when appropriate, that a CAS Statement of Compliance together with the CAS Final Report are on board.	
7	Confirming that, if applicable, a Ship to Ship (STS) operations Plan approved by the Administration has been provided.	
8	Confirming that, if applicable, a Crude Oil Washing Operations and Equipment Manual has been provided.	
9	Confirming that the loading conditions and intact stability information in an approved form is on board (applicable for oil tankers of 5000dwt and above delivered on/after 1 February 2002).	
10	Confirming that, for oil tankers of 5,000 tonnes deadweight and above, that arrangements are in place to provide prompt access to shore-based damage stability and residual structural strength computerized calculation programs.	
	Access to shore based program provided by:Valid till:	

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11	Verifying whether any new equipment has been fitted and, if so, confirmation that it has been approved before installation and that any changes are reflected in the appropriate certificate.	
12	Confirming that certificate for the type approval of the oil discharge monitoring equipment, is available on board.	
	(Note: When carrying bio-fuel blends containing 75percent or more of petroleum oil, oil discharge monitoring equipment (ODME) shall be type approved in accordance with MEPC.108(49) as amended by MEPC.240(65) and approved for the mixture being transported)	
13	Confirming that the Operating and Maintenance manual for the oil discharge monitoring and control system, is on board.	
14	Confirming, for installations complying with resolution MEPC.108 (49), that the oil content meter has been calibrated by the manufacturer or a person authorized by the manufacturer and that a valid calibration certificate is available on board.	
15	Confirming that a valid calibration certificate for oil discharge monitoring equipment is available onboard including other records.	
16	Confirming that certificates for the type approval for the oil content meters, oil discharge monitoring and control system and oil/water interface detectors, are available on board.	
17 a	Checking that Oil Record Book Part II is provided and appropriate entries have been made.	
17 b	In case Electronic Record Book (ERB) is provided, confirming that ERB is approved and "Declaration of MARPOL Electronic Record Book" is available onboard. Provide details: Issued by: Date of issuance:	
DEar		
	nipment and arrangements	
1	Confirmation that an approved stability instrument, if fitted on board as required by Regulation 28(6), has been checked for accuracy at regular intervals by the ship's staff by applying test loading conditions.	
2	Examining externally the oil discharge monitoring and control system and its associated equipment and, if applicable, verifying that the instrument is properly sealed.	
3	Confirming, as far as practicable, the satisfactory operation of the oil discharge monitoring and control system including the oil content meter and, where applicable, the automatic and manual means provided to stop the discharge of effluent and the starting interlock.	
4	Observing that indicators and recording devices are operable and verifying that sufficient supply of consumables for the recorders are on board.	
5	Confirming the satisfactory testing, as far as practicable, of any audible or visual alarms fitted to the oil discharge monitoring and control system.	
6	Examining, as far as practicable, of the oil/water interface detectors.	
7	Confirming that no cross-connections have been fitted between the cargo and segregated ballast systems.	
8	Where a portable spool piece is provided for the emergency discharge of segregated ballast by connecting the segregated ballast system to a cargo pump, confirming that non-return valves are fitted on the segregated ballast connections and that the spool piece is mounted in a conspicuous position in the pump room with a permanent notice restricting its use.	
9	Confirming by sighting that there has been no contamination with oil in the segregated ballast tanks.	

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10	Confirming, as far as practicable, that the dedicated clean ballast tank arrangement remains satisfactory.	
11	Confirming by sighting that there has been no contamination with oil in the dedicated clean ballast tanks.	
12	Confirming, as far as practicable, that the crude oil washing system remains satisfactory.	
13	Examining externally the crude oil washing piping, pumps, valves and deck mounted washing machines for any sign of leakage and checking that all anchoring devices for crude oil washing piping are intact and secure.	
14	Confirming, in those cases where drive units are not integral with the tank cleaning machines, that the number of operational drive units as specified in the Manual are on board.	
15	Checking 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.	
16	Checking that the prescribed means of communications between the deck watch keeper and the cargo control position is operational.	
17	Confirming that an overpressure relief device (or other approved arrangement) is fitted to the pumps supplying the crude oil washing systems.	•••••
18	Confirming that flexible hoses for supply of oil to the washing machines on combination carriers, are of an approved type, are properly stored and are in good condition.	
19	Confirming by checking, as far as practicable, that the crude oil washing machines are operable and, when the survey is carried out during crude oil washing operations, by observing the proper operation of the washing machines by means of the movement indicators and/or sound patterns or other approved methods	
20	Confirming by checking, as far as practicable, the effectiveness of the stripping system in appropriate cargo tanks by observing the monitoring equipment and by hand-dipping or other approved means.	
21	Confirming that on those existing tankers operating with special ballast arrangements, the arrangements are as approved and are satisfactory.	
22	Examining the piping systems associated with the discharge of dirty ballast or oil-contaminated water including the part flow system, if fitted.	
23	Verifying by testing that the communication system between the observation and discharge control positions is satisfactory.	
24	Examining the means of draining cargo pumps and cargo lines, including the stripping device and the connections for pumping to the slop or cargo tanks or ashore.	
25	Confirming that no unauthorized alteration/modification to system or arrangement has been done.	
C. Ad	ditional items for Intermediate Survey and Renewal Survey	
1	Examining the oil discharge monitoring and control system and the oil content meter for obvious defects, deterioration or damage, and checking the record of calibration of the meter when done in accordance with the manufacturer's operational and instruction manual.	
2	Confirming the satisfactory operation of the oil/water interface detectors.	•••••
3	Examining the crude oil washing piping outside the cargo tanks. If upon examination there is any doubt as to its condition, the piping may be required to be pressure tested, gauged or both. Particular attention should be paid to any repairs such as welded doublers.	

4	Confirming the satisfactory operation of the isolation values to steam heaters for washing water, when fitted.	
5	Verifying the continued effectiveness of the installed crude oil washing and stripping systems.(strike off not applicable)	
	1) By internal examining at least two selected cargo tanks when safe to enter. OR	
	2) By following <sup>\$</sup>	
	a) Checking tanks containing departure and/or arrival ballast water, as applicable, to confirm the effectiveness of the cleaning and stripping;	
	b) checking, as far as practicable, that the crude oil washing machines are operable and, when the survey is carried out during crude oil washing operations, observing the proper operation of the washing machines by means of the movement indicators and/or sound patterns or other approved methods;	
	c) Checking, as far as practicable, the effectiveness of the stripping system in appropriate cargo tanks by observing the monitoring equipment and by hand-dipping or other approved means.	
6	Examining the manual and/or remote operation of the individual tank valves (or other similar closing devices) to be kept closed at sea.	
D. Ad	ditional items for Renewal / Periodical Survey	
1	Confirmation that an approved stability instrument, if fitted on board as required by Regulation 28(6), has been checked for accuracy by applying test load conditions in presence of the Surveyor.	
2	Confirmation, if necessary, by simulated test or equivalent, of the satisfactory operation of the oil discharge monitoring and control system and its associated equipment, including the oil/water interface detectors.	
3	Confirming that the arrangements of pumps, pipes and valves are in accordance with the requirements for SBT systems and there are no cross-connections between the cargo and segregated ballast systems.	
4	Confirming the arrangements of pumps, pipes and valves are in accordance with the Revised Specifications for Oil Tankers with Dedicated Clean Ballast Tanks.	
5	Confirming that the crude oil washing system is in accordance with the requirements for such systems and in particular:	
5.1	Carrying out pressure testing of the crude oil washing system to at least the working pressure and confirming it is satisfactory.	
5.2	Examining the cargo tanks for the express purpose of verifying the continued effectiveness of the installed crude oil washing and stripping systems.	
5.3	Examining internally, when fitted, the isolation valves for any steam heaters.	••••
5.4	Verifying, by internal tank inspection or by another alternative method acceptable to the Administration, the effectiveness of the crude oil washing system. If the tank cannot be gas-freed for the safe entry of the surveyor, an internal inspection should not be conducted. An acceptable alternative would be verification of arrival/departure ballast, verification of operation of COW machines, verification of effectiveness of stripping system.	
6	Confirming that there is no leakage from those ballast pipelines passing through cargo tanks and those cargo pipelines passing through ballast tanks.	
7	Confirming that the pumping, piping and discharge arrangements are Satisfactory and in particular:	
7.1	Confirming that the piping system associated with the discharge of dirty ballast water or oil contaminated water are satisfactory.	

7.2	Confirming that the means of draining cargo pumps and cargo lines, including the stripping device and the connections for pumping to the slop or cargo tanks or ashore are satisfactory.	
7.3	Confirming that the arrangements for the part flow system, where fitted, are satisfactory.	
8	Confirming that closing devices installed in the cargo transfer system and cargo piping as appropriate are satisfactory.	
E. Add	ditional items for Initial Survey	
1	In respect of installation of stability instrument as required by MARPOL Annex I, Regulation 28(6), confirmation that:-	
а	Documents pertaining to approval of software, test conditions and user manuals are available on board.	
b	Installation testing of the stability instrument has been done and found to be satisfactory.	
c	Document of Approval (DOA) has been issued by/on behalf of the Administration.	•••••
2	Confirming the satisfactory installation and operation of the oil discharge monitoring and control system as per the approved plan/technical installation specification and in accordance with the manufacturer's equipment specification/ installation instructions including any audible or visual alarms, the automatic and manual means to stop the discharge of effluent the starting interlock, the accuracy of the flow meter . Operational outlets are located in the positions indicated on the drawing of the pumping and piping arrangement. The piping and probes are of a material resistant to fire, corrosion, and oil and are of adequate strength, properly jointed and supported.	
3	Confirming that the arrangements of slop tanks or cargo tanks designated as slop tanks and associated piping systems are satisfactory.	
4	Confirming that if installed in a hazardous area, the electrical components of the monitoring system meet the appropriate safety requirements laid down for these areas. Any bulkhead penetration between a hazardous and a non-hazardous area is of a design approved by the Administration.	
5	Confirming that each main component of the oil content monitoring system is fitted with a name-plate, properly identifying the component by assembly drawing number, type or model number and serial number, as appropriate.	
6	Confirming that on-board functional test of the oil discharge monitoring and control system carried out satisfactorily. Verification of absence of leakage in the sample pumping and piping system, correct functioning of remote controlled sampling valves, system operation under correct flow conditions, correct functioning of alarms when a malfunction occurs external to the monitoring system, manual override control, automatic recording(print out) function.	
7	Verifying that the overboard discharge control is able to stop the discharge of the effluent into the sea automatically by either closing all relevant overboard discharge valves or stopping all relevant pumps. The discharge control arrangement is fail-safe so that all effluent discharge is stopped when the monitoring system is not in operation, at alarm conditions, or when the monitoring system fails to function. In the event of power failure the processor is capable of retaining its memory in respect to computation of the total quantity of oil discharged, time and date.	
8	Testing ballast pipelines that pass through cargo tanks and those cargo pipelines that pass through ballast tanks to ensure there is no cross contamination.	
9	Confirming that the crude oil washing system is installed in accordance with the approved plans.	
10	Carrying out pressure testing of the crude oil washing system to 1.5 times the working pressure.	

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11	Confirming that, where there is a crude oil washing system, an inert gas system has been installed and tested in accordance with the requirements of SOLAS.	
12	Confirming that closing devices installed in the cargo transfer system and cargo piping, as appropriate, are satisfactory.	
13	Confirming that the subdivision and stability arrangements to prevent progressive flooding are satisfactory.	•••••
14	Confirming that the arrangements for cargo pump-room bottom protection (double bottom where required) are satisfactory.	
15	Confirmation that the arrangements for the prevention of oil pollution in the event of collision or stranding are in accordance with the approved plans.	
	ditional requirements for ships operating in Polar Waters (Applicable for surve l Survey)	ys other than
1	Confirmation that the Polar Ship Certificate is available on board and valid.	
	Confirmation that operation in polar waters have been taken into account, as appropriate, in the Oil Record Book Part II.	
	Confirmation that Polar Ship Certificate has been issued/ endorsed* based on satisfactory survey.	
G. Ad	ditional requirements for ships operating in Polar Waters (Initial Survey)	
1	<ul><li>Confirmation that the arrangements for the prevention of oil pollution in the event of collision or stranding are in accordance with the approved plans.</li><li>(Note: For category A and B ships other than oil tankers constructed on or after 1 January 2017, all cargo tanks constructed and utilized to carry oil shall be separated from the outer shell by a distance of not less than 0.76 m.)</li></ul>	
2	<ul> <li>Confirmation that the arrangements for the prevention of oil pollution in the event of collision or stranding are in accordance with the approved plans.</li> <li>(Note: For category A and B oil tankers of less than 5,000 tonnes deadweight constructed on or after 1 January 2017, the entire cargo tank length shall be protected with: <ul> <li>1 double bottom tanks or spaces complying with the applicable requirements of regulation 19.6.1 of MARPOL Annex I; and</li> <li>2 wing tanks or spaces arranged in accordance with regulation 19.3.1 of MARPOL Annex I and complying with the applicable requirements for distance referred to in regulation 19.6.2 of MARPOL Annex I.)</li> </ul> </li> </ul>	
3	Confirmation that Polar Ship Certificate has been issued based on satisfactory	
5	survey.	

## Surveyor(s) to Indian Register of Shipping

Date: ..... Place: ....