

## Oily water separator – maintenance/operational recommendations

In the last three years, the Club has had 17 incidents in the USA (including the US Virgin Islands) where the authorities have alleged irregularities in both the set up and use of the ship's 15 ppm oily water separator (OWS) system. Only 4 of these incidents have resulted in a fine and none in a criminal conviction. However, the expenditure of investigating these incidents and defending the crew is in excess of US\$ 1,600,000, which is an average of around US\$94,000 per allegation.

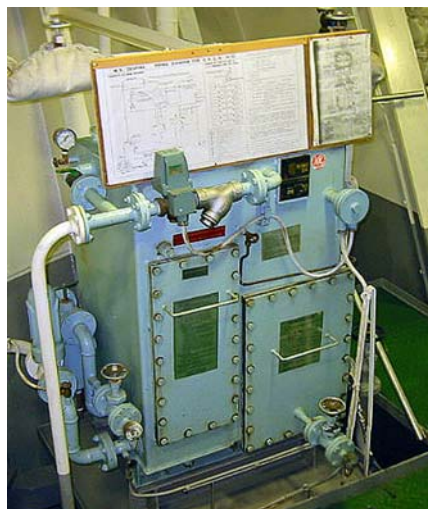
To help Members avoid incurring such costs the Club's ship inspectors offer the following advice.

It is recommended that the vessel's planned maintenance system (PMS), and company's standing instructions, include inspection and cleaning of the OWS unit and all associated piping at least every six months. It has been suggested that the equipment filters should be cleaned monthly where possible, especially prior to a prolonged period of coastal voyages. We advise that this work should not be carried out immediately prior to entering port, as it may be construed as suspicious by PSC or MARPOL inspectors. The oil content meter should also be tested annually and calibrated by a factory technician at least once every five years (this is now a requirement in Canada and will possibly be adopted by other countries).

Manager's instructions and service manuals concerning the OWS and related equipment should be maintained on the ship. It is mandatory that proper



Clear to read



Full instructions posted

operating instructions and an operating diagram are posted on the OWS unit. These should be as clear and simple as possible. It is a STCW convention requirement that engineering officers receive the mandatory minimum training required by the provisions of Annex 1 of MARPOL 73/78.

It is illegal under MARPOL to sail from a port without a functioning OWS unit and it is a requirement that sufficient spares for the OWS must be maintained onboard.

All work performed on or around the OWS and oil content meter should be carefully logged in the PMS and in the oil record book (ORB), entries in the ORB being made under code letter 'I' (general remarks). A log entry could read as follows:

*"Opened and inspected OWS unit, filters cleaned/renewed as required. Valves and piping on discharge side of OWS opened, inspected and cleaned as required. After maintenance OWS and oil content meter checked for proper operation."*

All log entries should be checked as accurate and countersigned by the chief engineer and the master. Consecutive logs should be kept onboard so that the full history of the equipment can be verified if required. It may also be beneficial to have a company wide instruction that the entries in the ORB are only made by the chief engineer after cross referencing the engine log book, PMS records and sounding records of all relevant tanks.

The OWS should be operated during normal engine room working hours. Engineers should not operate the OWS at night apart from during their regular watches. Units of measurement of volumes, rates and capacities used  
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in the engine room should be consistent. For example the units of measurement used in tank sounding tables should be the same as those used in recording volumes processed in the OWS. Care must be taken to ensure that the quantity of water discharged overboard in any logged period does not exceed the certificated capacity of the OWS unit. If any such discrepancy should occur, a full explanation should be recorded in the oil record book (ORB).

Tank and equipment titles used in the ORB and in logbooks should match those of the

tanks and equipment identified in the ship's international oil pollution prevention certificate (IOPP). On one ship a tank was variously described in log entries as "bilge holding tank", "bilge collecting tank", and "BCT". Bilge tanks should also be identified by their location (frame number) and capacity as well as their correct title.

Capacities of equipment and serial numbers noted on the IOPP certificate should be verified. It was found on one ship that the rated capacity of an incinerator on the ship's IOPP Certificate was different from the

capacity stamped on the incinerator's identification plate. It is suggested that the certificates issued by flag state or class are checked to ensure they match the capacities stated in the vessel's manuals and if there is a discrepancy a request be made for the certificates to be amended accordingly.

Ship's personnel should be instructed that if they are asked questions by PSC or MARPOL investigators they must give honest answers.

If a ship is boarded by government investigators and it becomes apparent that the inspection has been extended because of problems arising from the training of ship's personnel, documentation or equipment, the Club should be notified immediately. The crew should **never** be instructed to withhold information from investigators. In the USA however they may be told that the law does not require them to speak to investigators if they choose not to and that they are entitled to the presence of a lawyer during questioning.

A recent development in the USA is for officials to scrutinise the E/R alarm book and compare the times recorded for bilge / sludge tank alarms and subsequent pumping out with the ORB times of pumping bilges overboard, checking for any discrepancies.

Sources of Information:

UK P&I Ship Inspection / Loss Prevention Department  
John Giffin, Keesal Young & Logan



OWS opened for maintenance