



TECHNICAL CIRCULAR No. 755 of 7th November 2022

To	All Surveyors/Auditors. All flags
Title	Failure of Oil Water Separator
Reference	MARPOL Annex I

Failure of OWS Three-Way Valve

While testing the oily water separator, or OWS, during the annual “Oil Pollution Prevention”, or IOPP, survey as part of MARPOL Annex I, the oily mixture was found not diverted to the oily water bilge tank when it exceeded 15 parts per million (ppm) as detected by the oil content meter, or OCM.

The diverter valve is a pneumatic three-way valve activated by an electromagnetic solenoid. During the investigation, the solenoid was energized to open the valve; however, the three-way valve did not cycle open.

The failure of the three-way diverter valve could contribute to direct discharge overboard of pollutants in violation of MARPOL Annex I.

The uncontrolled accumulation of hydrocarbons in bilges increases the potential risk of fire.

The crew opened out the pneumatic diverter valve, examined it, and found it heavily gummed with dirt and scale deposits inhibiting free movement.

The valve stem was cleaned, lubricated, and the valve reassembled, operationally tested, and found satisfactory.

Faulty MARPOL equipment places the owner, operator, and class at risk of Port State Control or flag State inspections, interventions, or detentions.

Statutory-related deficiencies could increase vessel delays, re-inspections, flag State involvement, and negative charter perceptions.

The surveyor should request the crew to demonstrate proper operation of all functions of the OWS, including OCMs and associated diverter valves.

Three-way valves are susceptible to failure if not properly maintained.

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Maintenance programs should include inspection and proper operation of the entire system's functionality.

REFERENCES:

- MARPOL Annex I

ATTACHMENTS: No

Kindest Regards,
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