
AMSA Notice on Port State Control testing of Oily Water Separators

1. Purpose

- 1.1. The purpose of this Technical Alert is to raise awareness of a recently published Marine Notice issued by the Australian Maritime Safety Authority (AMSA).
- 1.2. This Technical Alert should be read in conjunction with:
 - Regulations 11 & 14 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as amended (MARPOL Annex I)
 - International Maritime Organization (IMO) Resolution [A.1185\(33\) Procedures for Port State Control, 2023](#)
 - IMO Resolution [MEPC.107\(49\) Revised Guidelines and Specifications for Pollution Prevention Equipment for Machinery Space Bilges of Ships](#)
 - [AMSA Marine Notice 2024/03](#)

2. Introduction

- 2.1. Oil filtering equipment installed on a ship on or after 1 January 2005 shall be approved in accordance with Regulation 14 of MARPOL Annex I using the guidelines in MEPC.107(49).
- 2.2. AMSA has recently published its "*Marine Notice 2024/03 - Testing and inspection of oil filtering equipment approved to meet Resolution MEPC.107(49)*" which provides their interpretation of the installation and testing requirements for oil filtering equipment aboard ships.
- 2.3. In accordance with Regulation 11 of MARPOL Annex I Appendix 3 Part 3 item 2.6.5 of Resolution A.1185(33), Port State Control Officers (PSCOs) will inspect the condition and operation of the oily water separator filtering equipment and relevant alarm, stopping device or monitoring arrangements.
- 2.4. AMSA Marine Notice 2024/03 describes the inspection process that will be used by PSCOs in Australia.

3. AMSA PSC procedure for testing of OWS

- 3.1. Operational testing of oil filtering equipment will require the equipment to be configured to circulate liquid from bilge tank to bilge tank (recirculating facility) and provide an effluent sample to the 15ppm bilge alarm – simulating the discharge of 15ppm bilge separator effluent overboard. When a simulation of effluent sample greater than 15ppm is applied, the PSCO will confirm that the alarm is activated, and that the automatic stopping device (3-way valve) stops effluent discharge overboard. This indicates compliant operation of the system.
- 3.2. The PSCO will confirm that there is a flow of effluent sample from the 15ppm bilge separator that is truly representative, with adequate pressure and flow, to the 15ppm bilge alarm while effluent is being simulated to flow overboard.
- 3.3. In cases where the flow of effluent sample is not a representative sample, including blockage of the sample line or incorrect operation of valves, it is expected that, in accordance with MEPC.107(49) requirements, the fail-safe arrangement will activate the automatic stopping device (3-way valve) and stop effluent discharge overboard.
- 3.4. AMSA also noted that various classification societies advocate for the installation of “flow sensors” in the 15ppm bilge alarm sample line. The flow sensors activate an alarm and operate the automatic stopping arrangements when a truly representative sample, with adequate pressure and flow, is not present at the 15ppm bilge alarm. It was also noted however that the installation of pressure or flow sensors in the effluent sampling line **is not** specifically required by MEPC107(49).

4. AMSA PSC interpretation

- 4.1. AMSA’s interpretation is that the failure of the 15ppm bilge alarm to activate the automatic stopping device in the absence of a representative sample of the effluent represents non-compliance with Resolution MEPC.107(49), in that there is no fail-safe arrangement required by technical specification 4.1.3.

5. AMSA Considerations during testing of OWS

- 5.1. The following sets out AMSA’s considerations when testing oily water separators during port state control inspection with respect to two types of systems approved under MEPC 107(49):

5.2. **MEPC 107(49) approved system that is fitted with an effluent sample flow sensor to 15ppm bilge alarm.**

5.2.1. Operational testing of the equipment is performed by stopping the sample water flow to the 15ppm bilge alarm. If the 15ppm bilge alarm does not alarm when effluent sample flow is stopped for more than 5 seconds, and the automatic stopping device is not activated within 20 seconds, this is considered a failure of the oily discharge monitoring and control system and the 15ppm alarm arrangements. The ship is likely to be detained until the system complies with MARPOL requirements.

5.3. **MEPC 107(49) approved system that is not fitted with an effluent sample flow sensor to the 15ppm bilge alarm.**

5.3.1. The sample water flow through 15ppm bilge alarm should be unobstructed. All valve(s) fitted for sampling line to the 15ppm bilge alarm should be in the normal operating position when testing is performed during port state control inspections. During the test, the following will be considered:

- i. If operational testing of the equipment commences with effluent sample valves open, this is evidence of the system being used correctly in service. If there is no 15ppm bilge alarm and automatic stopping device activation after shutting the effluent sample valve, then the equipment is non-compliant. The equipment must be made compliant. As a temporary measure, valves to and from 15ppm bilge alarm can be secured and sealed open to ensure the flow of effluent sample cannot be stopped or manipulated whilst the equipment is operating, as required by MEPC 107(49) 4.2.10.1.
- ii. If operational testing of the equipment commences with the effluent sample valve shut or no flow of effluent sample possible through the 15ppm bilge alarm and the automatic stopping device does not activate, this is viewed as evidence that wilful manipulation of the equipment is possible. As pollution of the environment may occur, the ship is likely to be detained until the equipment complies and crew are sufficiently familiar with the operation of the system.
- iii. If operational testing of the equipment commences with the effluent sample valve closed and with clean water, used for cleaning or calibration, flowing through the 15ppm bilge alarm and the automatic stopping device does not activate, then the equipment is non-compliant to MEPC 107(49) 4.2.10.2. The ship may be considered for detention until the equipment complies and crew are sufficiently familiar with the operation of the system.

6. Recommendation of the BMA

- 6.1. It is highly recommended that companies require engineering officers with responsibility for operating the oil-filtering equipment to verify adequate flow and pressure through the effluent sampling line as a part of their regular planned inspections and tests of the oil-filtering equipment.
- 6.2. If not already fitted, the company should consider the installation of the flow sensor and/or pressure sensor in the effluent sampling line as this would aid officers in verifying that a representative sample is flowing through the line. **It should be noted, however, that the ship's Classification Society should be consulted before making any changes to the approved arrangements.**

7. Validity

- 7.1. This Technical Alert is valid until further notice.