

# Service Bulletin

no. 23, 2024-05-23

## Oily Water Separator - Clarification of requirements of sampling points and recirculation facility

*System applicability: Marinfloc Oily Water Separator systems, Marinfloc CD and Marinfloc TD models*

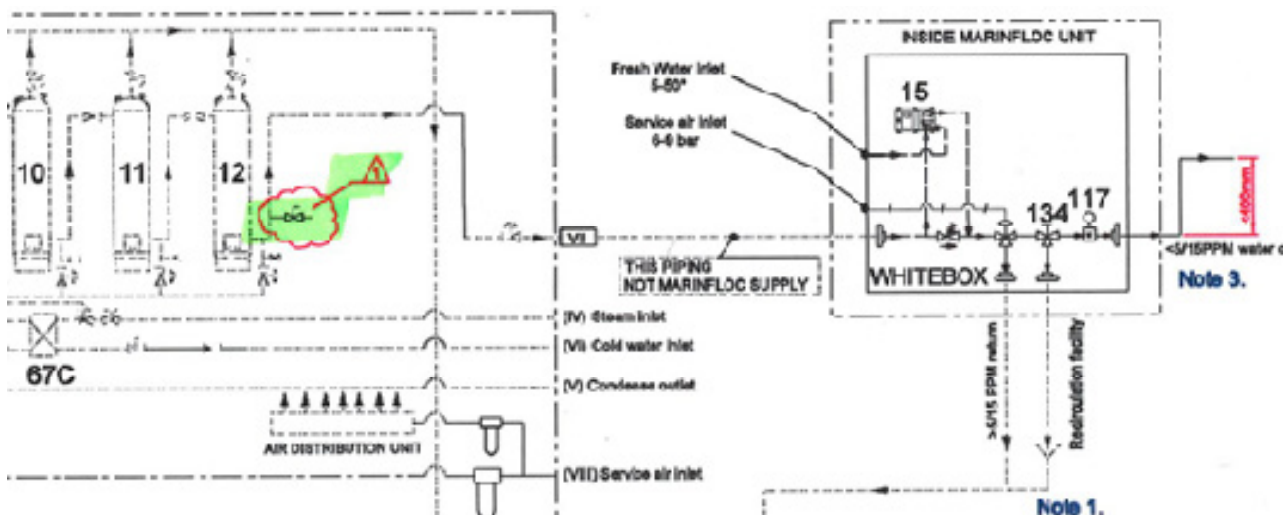
### Background

Since the summer of 2023 there have been a few cases worldwide questioning the location and position of the sampling point for further inspections and the sampling point for the bilge alarm. There have also been discussions about the recirculation facility. This service bulletin highlights these topics and explains how Marinfloc complies with the regulations.

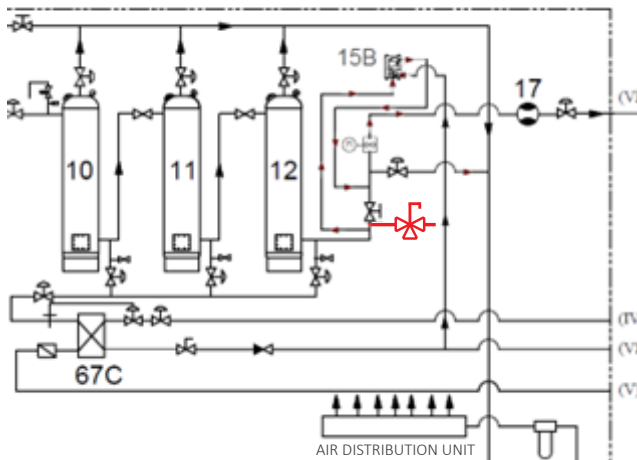
### Sampling point for further inspections according to MEPC.107(49) §6.1.1

*“For future inspection purposes on board ship, a sampling point should be provided in a vertical section of the water effluent piping as close as is practicable to the 15 ppm Bilge Separator outlet.”*

On Marinfloc separators the sampling point for further inspections is located on a vertical section of the pipe as follows.



CD and TD units connected directly to a Whitebox. The Oil Content Monitor is located inside of the Whitebox.



CD and TD units with installed Oil Content Monitor

#### Re-circulation facilities according to MEPC.107(49) §6.1.1

*“Re-circulating facilities should be provided, after and adjacent to the overboard outlet of the stopping device to enable the 15 ppm Bilge Separator system, including the 15 ppm Bilge Alarm and the automatic stopping device, to be tested with the overboard discharge closed. The re-circulating facility should be so configured as to prevent under all operating conditions any by-pass of the oily-water-separator.”*

The purpose of the re-circulation facility is to be able to get water through the Oily Water Separator when the overboard valve is closed. The Recirculation facility can either be a drain hopper or a sight glass. The facility must be configured as to prevent a by-pass of the separator. The recirculation facility is either provided by the yard or by Marinfloc. See examples below.



#### The sampling point for bilge alarms MEPC.107(49) §6.2.2

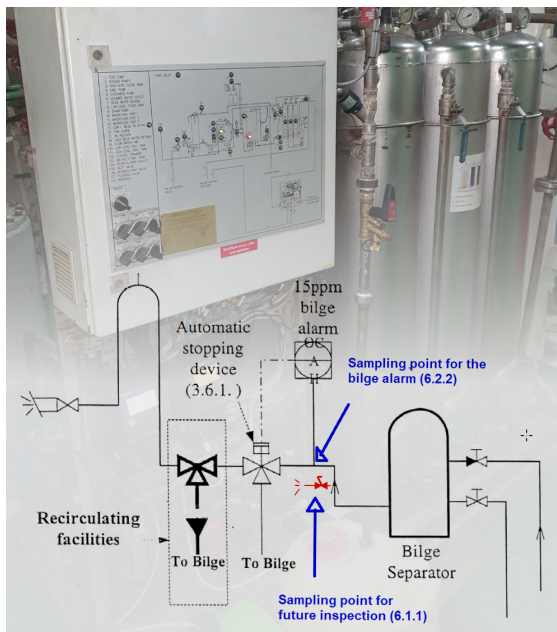
*“The arrangement on board ship for the extraction of samples from the 15 ppm Bilge Separator discharge line to the 15 ppm Bilge Alarm should give a truly representative sample of the effluent with an adequate pressure and flow.”*

Marinfloc's sampling points have been approved by classification societies and are designed to take a representative sample of the water.

# OILY WATER SEPARATOR – FURTHER CLARIFICATIONS ON REQUIREMENTS FOR SAMPLING POINTS

Relevant for shipyards, suppliers, ship owners and managers, flag states as well as design offices.

This technical news provides further clarifications regarding the oily water separator sampling point referred to in Technical and Regulatory News No. 15/2023.



An oily water separator (OWS), bilge separator or oil filtering equipment is required by MARPOL Annex I, Regulation 14 to be installed on any ship above 400 GT. The equipment shall be of a design approved by the administration and tested and installed according to guidelines in MEPC.107(49) as amended by MEPC.285(70).

Technical and Regulatory News No. 15/2023, published in June 2023, informed about the requirement in MEPC.107(49) to install the sampling point on a vertical section of the effluent pipe, as this requirement has recently been the focus of port state control. The June news resulted in some uncertainty concerning the sampling point to which the above-mentioned requirement applies, and this news thus provides further clarifications.

There are two different sampling points mentioned in MEPC.107(49):

- For future inspections (paragraph 6.1.1)
- For the bilge alarm (paragraph 6.2.2)

## Sampling points for future inspection (paragraph 6.1.1):

As mentioned in Technical and Regulatory News No. 15/2023, paragraph 6.1.1 of MEPC.107(49) requires that "for future inspection purposes on board ship, a sampling point should be provided in a vertical section of the water effluent piping as close as is practicable to the 15ppm Bilge Separator outlet".

## Sampling points for the bilge alarm (paragraph 6.2.2):

For the sampling point for extracting samples to the bilge alarm, paragraph 6.2.2 of MEPC.107(49) requires that "the arrangement on board ship for the extraction of samples from the 15 ppm Bilge Separator discharge line to the 15 ppm Bilge Alarm should give a truly representative sample of the effluent with an adequate pressure and flow".

Hence, the requirement to install the sampling point in a vertical section of the effluent pipe applies to the sampling point for inspection only and does not apply to the sampling point for extracting samples to the bilge alarm. For the latter sampling point, the applicable installation requirements by the manufacturer of the oily water separator / bilge separator shall be followed to ensure a representative sample of the effluent with adequate pressure and flow.

Possible locations of these two sampling points are shown below as adapted from Figure 1 of MEPC.107(49). A loop may be installed at the bilge separator outlet to comply with the requirement stating that the sampling point for inspection purposes should be a vertical section of the effluent pipe.

## Recommendations

DNV recommends that shipowners or operators review the insights provided in this news and ensure that the OWS sampling points are correctly installed.

## References

- [DNV Technical and Regulatory News No. 15/2023](#), June 2023: Focus for PSC: Oily water separator sampling point
- [MARPOL Annex I: Prevention of Pollution by Oil](#)
- [MEPC.107\(49\)](#)

## Contact

### For customers:

DATE - Direct Access to Technical Experts via [My Services](#) on Veracity.

### Otherwise:

Use our [office locator](#) to find the nearest office.

## Appendix 2. DNV Letter clarifying on the oily water separator sampling point



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<b>Date:</b>	<b>Our reference:</b>	<b>Your reference:</b>	<b>Job ID:</b>
2023-08-01	M-SA-ES/OLOF/ 262.1-012674-J-32		262.1-012674-7

### Clarification on the oily water separator sampling point

Reference to video meeting 1 August 2023 with Benny Carlson and Peter Lanzén from Marinfloc, regarding the DNV newsletter "Focus for PSC: Oily Water Separator Sampling Point" published in June 2023.

DNV would like to clarify that the purpose of the newsletter was to highlight the explicit requirement in MEPC.107(49) that *"a sampling point should be provided in a vertical section of the water effluent piping as close as is practicable to the 15 ppm Bilge Separator outlet"*. Such sampling cock valve is often the shipyard delivery, arranged on the effluent piping after the oily water separator. The sampling cock valve gives e.g. a PSC officer the possibility to take an oily water sample for analysis.

The arrangement for an Oil Content Meter to automatically confirm an oil content of less than 15 ppm, is not subject to the above referred paragraph but is instead regulated by clause 6.2.2 in MEPC.107(49) where it is stated, *"extraction of samples ... to the 15 ppm Bilge Alarm should give a truly representative sample of the effluent"*.

It is DNV's understanding that extraction from vertical piping in this case is not required.

Regarding Marinfloc's Bilge Water Separator and the arrangement of the optional White Box, this is then subject to *"truly representative sample"* and not to *"vertical piping"*.

DNV finds (and has also concluded in the past, with MED-B and DNV TA certificates) that the arrangement with the Marinfloc's White Box gives *"a truly representative sample"* and complies with MEPC.107(49).

As confirmed by Marinfloc in the meeting, the Marinfloc's Bilge Water Separator is delivered with a sampling cock valve, mounted on a vertical section of the effluent pipe, close to the separator outlet. This sampling cock valve is to be used to take samples (if desired) by the PSC officer and complies with MEPC.107(49).

Sincerely  
for DNV AS



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DNV letter to Marinfloc 2023-08-01.docx