APPROVAL OF SERVICE SUPPLIERS

Certificate No:
AOSS0000JAD
Revision No:
1

This is to certify that

Norsk Institutt for Vannforskning

OSLO, Norway

is granted acceptance for
Commissioning testing of ballast water management systems (BWMS) , in accordance with Class Programme DNV-CP-0484 and IACS UR Z17 Annex 1 [18].

This service supplier certificate will be accepted for use with all rule sets published by DNV.
See the following page(s) for details regarding application.

This Certificate is valid from **2024-10-05** to (inclusive) **2027-10-04**.

This Certificate is issued on **2024-09-25**.

for **DNV**

This document has been digitally signed and will therefore not have handwritten signatures

Lehmann, Michael
Surveyor

This Certificate may be withdrawn if:
1. The service provided has been improperly carried out or the results improperly reported.
2. The surveyor has found any deficiencies in the accepted operating systems of the service supplier.
3. The firm has failed to inform of any major changes having effect on the quality of the service rendered.
4. The conditions listed in the certificate are changed and/or are not fulfilled.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Application:

Sampling and analysis as per the 2020 Guidance for commissioning testing of ballast water management systems (BWM.2/Circ.70/Rev.1) using the following analysis method(s) and compliance monitoring device(s):

Organism size class	Indicative analysis	Detailed analysis
≥50 µm	N/A	Microscopy
10-50 µm	N/A	Microscopy (CMFDA/FDA)

Remarks:

The Service Supplier shall carry out sampling and analysis as per the Service Supplier's documented standard operating procedures and QA/QC procedures.
The Service Supplier shall also be familiar with the BWMS operation, its limitations and self-monitoring parameters.
This approval is conditional upon the Service Supplier maintaining the documents as audited by DNV and hereby approved.
The Service Supplier shall notify DNV in writing of any changes in equipment or procedures.