Statement of Compliance

This is to confirm that the undernoted product has been tested in accordance with the relevant requirements of MEPC.259(68) and MEPC.340(77) in respect of washwater/discharge water.

SIGRIST-PHOTOMETER AG

Company

SIGRIST-PHOTOMETER AG
Hofurlistrasse 1
6373 Ennetbürgen
Switzerland

Product Description Scrubber Wash Water Monitoring System

Type ScrubberGuard

Range of Application:

ScrubberGuard is intended for installation on-board vessels operating an exhaust gas cleaning system (EGCS).

ScrubberGuard is found to be in compliance with the requirements of

- Resolution MEPC.259(68) adopted on 15 May 2015 "2015 Guidelines for exhaust gas cleaning systems", Chapter 10 "Washwater"
- Resolution MEPC.340(77) adopted on 26 November 2021 "2021 Guidelines for exhaust gas cleaning systems", Chapter 10 "Discharge Water"

ScrubberGuard meets the following requirements:

- Definition of Phenanthrene equivalent (MEPC.340(77), 2.3.1, Table 3)
- Principle of detection for PAHPHE Eq (MEPC.259(68) and MEPC.340(77), 10.1.3.3)
- Measurement range for PAHPHE Eq (MEPC.259(68) and MEPC.340(77), 10.1.3.3)
- Turbidity influences on PAHPHE Eq (MEPC.259(68), 10.2.3 and MEPC.340(77), 10.2.4)
- Principle of detection for pH (MEPC.259(68), 10.2.2 and MEPC.340(77), 10.2.4)
- Resolution for pH (MEPC.259(68), 10.2.2 and MEPC.340(77), 10.2.3)
- Temperature compensation for pH (MEPC.259(68), 10.2.2 and MEPC.340(77), 10.2.3)
- Principle of detection for Turbidity (MEPC.259(68), 10.2.5 and MEPC.340(77), 10.2.6)
- Sampling frequency (MEPC.340(77), 10.4.1)

General requirements regarding the influence on measurements by vibration, voltage fluctuations, inclination (up to 20°), turbidity and UV absorption have been demonstrated under surveillance and to the satisfaction of DNV.

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Statement of Compliance

The effectiveness of the countermeasures to prevent incorrect readings due to air bubbles, the use of the alternative secondary turbidity standard and the secondary fluorescence standard have been demonstrated under surveillance and to the satisfaction of DNV.

Documents:

Test report:
"ScrubberGuard – Scrubber Wash Water Monitoring System – Test Report for Statement MEPC.259(68)"
Version 4.1, dated 2021-01-11

Test report:
"ScrubberGuard – Scrubber Wash Water Monitoring System – Test Report response Time T90 for Statement MEPC.340(77)"
Version 2.0, dated 2022-03-14

Technical Data

ScrubberGuard			
Component	Type(s)	Sensor type	Range
$PAH_{PHE\ Eq}$	OilGuard	Fluorescence	0 –1000 µg/l
Turbidity	AquaScat	Scattered IR light	0 – 1000 FNU
pH	External sensor	pH potential combination electrode with NTC thermistor	0 – 14
Temperature			0 – 130°C

This is to Note

1. The ScrubberGuard shall be installed, calibrated and operated in accordance with the ScrubberGuard operating manual.

2. The measurements as well as the alarm and fault signals can be transmitted to a higher-level control system.

3. The recommended on-site calibration interval for the OilGuard, the AquaScat and the pH sensor is 3 months.

4. The on-site calibration for $PAH_{PHE\ Eq}$ can be done with the alternative secondary standard, labelled with the same serial number as the OilGuard.

5. The on-site calibration for turbidity can be done with the alternative secondary standard, labelled with the same serial number as the AquaScat.

Remark The compliance with relevant requirements of the DNV GL Type Approval System has not been tested.

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