

# Statement of Compliance

This is to confirm that the undernoted product has been tested in accordance with the relevant requirements of MEPC.259(68) in respect of washwater monitoring.

## Chelsea Technologies Group Ltd

**Company** Chelsea Technologies Group Ltd  
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Surrey  
KT8 2QZ  
United Kingdom

**Product Description** Exhaust Gas Cleaning System Wash Water Monitor

**Type** Sea Sentry

**Range of Application:** Sea Sentry is intended for installation on-board vessels operating an exhaust gas cleaning system (EGCS).  
Sea Sentry is found to be in compliance with the requirements of Resolution MEPC.259(68) - 2015 Guidelines for exhaust gas cleaning adopted on 15. May 2015, Chapter 10 "Washwater"

Sea Sentry meets the following requirements:

- Principle of detection for PAH<sub>PHE Eq</sub> (MEPC.259(68), 10.1.3.3)
- Measurement range for PAH<sub>PHE Eq</sub> (MEPC.259(68), 10.1.3.3)
- Turbidity influences on PAH<sub>PHE Eq</sub> (MEPC.259(68), 10.2.3)
- Principle of detection for pH (MEPC.259(68), 10.2.2)
- Resolution for pH (MEPC.259(68), 10.2.2)
- Temperature compensation for pH (MEPC.259(68), 10.2.2)
- Principle of detection for Turbidity (MEPC.259(68), 10.2.5)

General requirements regarding calibration range, drift, accuracy, precision and noise as well as the influence of turbidity, UV absorbance, temperature and salinity have been demonstrated under surveillance and to the satisfaction of DNVGL.

The effectiveness of the mitigation method against air bubbles and the use of the supplied test kit to validate the optical sensors have been demonstrated under surveillance and to the satisfaction of DNVGL.

**Documents:** Test report:  
"SEA SENTRY PERFORMANCE TEST REPORT (MEPC 259(68)), Trials Report, 2374-002-TR, Issue: B, dated 2016-04-04

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## Technical Data

Component	Sensor type	Range
PAH <sub>PHE Eq</sub>	Combined UV Fluorescence and UV Absorbance System reports PAH <sub>PHE Eq</sub> corrected for turbidity UV absorbance and temperature	0 – 4500 µg/L
Turbidity	Scattered IR light	0 – 1000 FNU
pH	Combined pH and Temperature sensor	0 – 12
Temperature		0 – 65°C

Sea Sentry is configured with the following three main assemblies:

- Sensor flow-line
- Electronics enclosure
- Air purge anti-fouling system

The sensor flow-line incorporates a strainer, pump, flow meter, isolation valves, de-aerator module, non-return valve, pressure relieving valve, pressure gauge and the following sequentially connected measurement sensors:

- PAH+ sensor providing PAH<sub>PHE Eq</sub> and UV absorbance
- Turbidity sensor
- Combined pH and Temperature Sensor
- Flow Meter

### This is to Note

1. In case ambient temperature is above 50°C Sea Sentry may only be operated with the addition of external cooling.
2. Sea Sentry shall be installed, calibrated and operated in accordance with the Sea Sentry handbook.
3. The calibration interval for PAH+ and Turbidity sensors is one year. Drift will not exceed 5% over this period provided the optical windows remain clean.
4. The Turbidity correction provides PAH<sub>PHE Eq</sub> with an accuracy of better than 5% across the range 0 - 1000 FNU.

### Remark

The discharge concentration limit for PAH<sub>PHE Eq</sub> is dependent on the washwater flow rate in accordance with the requirements of Resolution MEPC.259(68).

Sea Sentry has been demonstrated to cover all ranges of PAH<sub>PHE Eq</sub> concentration under surveillance and to the satisfaction of DNVGL.