

To: Customers

Ref: FESN-2102 Mar 2021 Fuji Electric Co., Ltd

Fuji Electric Exhaust Gas Cleaning System (EGCS)

Flushing method for muddy water contamination in HORIBA Water

Quality Meter (EG100)

We would like to express our deepest appreciation to you for your continued support for our ship exhaust gas cleaning systems (EGCS).

We received the report from vessel that a phenomenon in which the turbidity water quality meter on the intake and discharge sides temporarily exceeds the alarm value due to the influence of mud and sand, etc. due to water containing mud and sand being taken into the water supply system during EGCS operation.

Possible operating cases:

- River navigation with shallow draft
- Sea areas and rivers containing muddy water
- · Long-time astern operation in shallow water (during anchoring work)

1. Necessary Action

- 1) Stopping the operation of the scrubber system (stopping the operation of the seawater pump)
- 2) Closing the sample water inlet valve of the water quality meter

2. Countermeasure for alarms

A. Flushing method without removing the sensor

- SV1, SV2, and SV3 solenoid valves are manually opened to flush each system Implemented individually.
- Flushing by opening only SV1 and draining water from the deforming. (Refer to the attached manual excerpt PDF)



B. Flushing method by removing the sensor

- Fully close the sample intake side and discharge side of the water quality meter.
- Pull out the turbidity sensor from the chamber and let fresh water flow into the chamber from the drain valve.

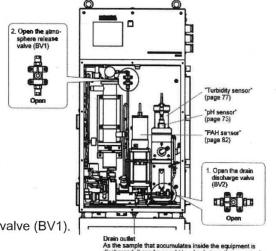
(Refer to the attached manual excerpt PDF)

Draining water (page 71 of the EG-100 manual)

Method to drain water inside the base is described here.

Make sure to drain water prior to mounting and removing the pH, turbidity and PAH sensors. Water could burst out if they are not properly mounted.

- 1. Close the valves of the fresh water line, sample inlet line and Sample outlet line which are installed externally to this equipment.
- 2. Open drain discharge valve(BV2).
- 3. Open the atmosphere release valve(BV1).
- 4. Check that water has stopped draining from the drain outlet and then remove the pH holder bolts (three locations).
- 5. Open the gap between the pH holder and the measurement tank to atmosphere air (atmosphere release).
- 6. Wait until draining water from the base is completed.
- 7. Close the drain discharge valve (BV2) and the atmosphere release valve (BV1).



Removal of turbidity sensor (page 77 of the manual)

Lid of

tank

Preparation

Hexagonal wrench (opposite side dimension: 4mm) Avoid moistening the connector section.

- 1. Remove the cable holing clip.
- 2. Remove the bolts (four locations) on the lid of the measurement tank.
- 3. Pull up the turbidity sensor.

