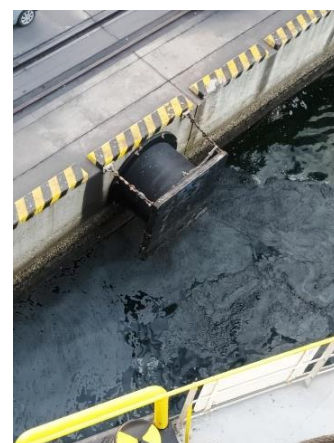


**Fuji Electric Exhaust Gas Cleaning System (EGCS)**  
**Bubbles or Films Generated Near the SOx Scrubber Outlet while Berthing** (FESN-2119  
Follow-up Report)

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

We occasionally receive reports that when a ship equipped with our EGCS is berthed with the EGCS running, a bubble-like or filmy substance appears on the sea surface near the SOx scrubber outlet. With regard to this issue, we have prepared the following report.



SOx scrubbers continuously monitor three specified wastewater qualities (pH, turbidity, PAH) in accordance with certified classification rules that comply with the EGCS guidelines established by the IMO. Japan's Ministry of Land, Infrastructure, Transport and Tourism (MLIT) has verified that the discharge of SOx scrubbers does not adversely impact the environment or ecosystem when these criteria are complied with.

EGCS Guidelines Established by the IMO

“2015 Guidelines for Exhaust Gas Cleaning Systems (Res. MEPC259 (68))”

[https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MEPCDocuments/MEPC.259\(68\).pdf](https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MEPCDocuments/MEPC.259(68).pdf)

“2021 Guidelines for Exhaust Gas Cleaning Systems (Res. MEPC340 (77))”

[https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MEPCDocuments/MEPC.340\(77\).pdf](https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MEPCDocuments/MEPC.340(77).pdf)

Japan's MLIT Report

“Report by the expert board for the environmental impact assessment of discharge water from Scrubbers (Japan)” July 2018

<https://www.mlit.go.jp/common/001327168.pdf>

The system detects abnormalities in wastewater components and issues an alarm when the three water qualities (pH, turbidity, PAH) exceed the criteria in the guidelines (Chapter 10 “Discharge Water”). Even when bubbles or films appeared on the sea surface thus far, the discharge water quality met the criteria.