



Technical Circular

No.: 011/2020

Date: 28th February 2020

Subject: Guidance on Fixed Gas Detection System for Liquefied Gas Carriers

- International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) requires the activation of alarm of fixed gas detection system when specified gas vapor concentrations are detected.
- During port state control inspections, USCG had found issues in fixed gas detection systems on some of the liquefied gas carriers and issued a marine safety alert 02-20.
- The deficiencies were raised for following items dealing with the fixed gas detection systems:
 1. Multiple sensors measured outside the tolerances established by the manufacturer and subsequent calibration checks failed. Crew members were not following established procedures as specified in their Safety Management System (SMS).
 2. The span gas used to test sensors or complete calibration checks was not appropriate for the type of sensor being tested.
- Sensors operating outside of established tolerances is considered as a significant safety threat and may be grounds for vessel control actions, such as delayed departure from port, delayed cargo operations, or detention.
- In view of above deficiencies, Liberia Maritime Authority has issued a Marine advisory 06/2020 (copy attached) highlighting the shortcomings and recommendations to liquefied gas carrier owners.
- Administration has recommended owners/operators and masters of Liquefied Gas Carriers to ensure following in maintaining operation of Fixed Gas Detection Systems:
 1. Testing and calibration of fixed gas detection systems are completed per the vessel's SMS and manufacturer's instructions.
 2. Sensors are operating within established parameters as required by a vessel's procedures and manufacturer's instructions.
 3. The appropriate span gas for the type of sensor is correctly applied to the sensor, as established by the manufacturer and vessel's SMS.

4. The crewmembers responsible for maintaining the gas detection system have adequate training, are fully knowledgeable of the system, and are proficient in conducting system tests.
- Owners/operators and masters are advised to take note of above and ensure adherence to the recommendations in order to avoid potential departure delays that could arise from PSC.

Encl.:

- Liberia Marine Advisory:06/2020
- USCG Safety Alert 02-20

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