



Technical Circular

No.: 009/2019

Date: 4th March 2019

To whomsoever it may concern

Subject: RMI Marine Safety Advisory on Gas Carriers Operating in The United States.

- Considering the deficiencies related to calibration and/or testing of fixed gas detection and deck water spray system of liquified gas carrier that resulted in detention of vessels by USCG, Republic of Marshall Islands (RMI) has issued Marine Safety Advisory no. 06-19 highlighting adequate preparation and testing need for these systems of liquified gas carrier, prior entering and during operation in US territorial waters.
- Administration's requirements for these systems are provided in Marine Notice 2-011-14 – "Maintenance and Inspection of Fire Protection Systems and Appliances"
- For liquified gas carriers, the US code of Federal Regulations 46 CFR 154.1345 and 46 CFR 154.1105 provides requirements for Gas Detection Systems and Deck Water Sprays respectively.
- Salient points of the advisory are as follows:

A. For Gas Detection System

Some of the typical locations checked by USCG may include but not limited to cargo pump/compressor motor rooms, cargo control rooms unless designated as gas safe, enclosed areas in the cargo area where gas may accumulate including cargo hold spaces and interbarrier spaces, ventilation hoods and gas ducts and airlocks, if installed.

Administration emphasizes the necessity for following:

1. Officers and crews to be proficient in the use of and familiar with the calibration requirements for both fixed and portable gas detection systems;
2. Designated qualified individuals to be able to perform calibration procedures found in the manufacturer's instructions;
3. Testing and calibration to be carried out at regular intervals in accordance with the vessel's Planned Maintenance System (PMS);
4. Vessels to verify that the span gas provided onboard is of the exact specifications, including concentration, required by the manufacturer when conducting such tests; and



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5. Sample points for fixed gas detectors to be verified as provided by the PMS and the approved installation plans. This should include checking the integrity of all sample piping leading back to the central unit.

B. For Deck Water Sprays

Some of the typical locations checked by USCG may include but not limited to exposed tank domes and deck tanks; cargo manifolds and control valves at least, equal to the area of their spill drip trays; boundaries of superstructure and deckhouses; cargo control rooms; and store rooms in the cargo area with contents having a fire risk.

Administration emphasizes the necessity for following:

1. Routine testing and maintenance of the deck water-spray system according to the PMS and the maker's instructions. This will verify that the system provides adequate, uniform coverage to all areas as designed;
 2. The system to deliver sufficient water to all areas simultaneously. Where the system is divided into sections, the arrangements and capacity should be able to supply water to one section;
 3. Focusing attention to the water-spray systems' in-line filters, orifice plates, and spray nozzles to ensure they are free from all foreign matter, including salt accumulation, and rust or scale;
 4. Flushing the piping with fresh water after each spray system test with sea water to prevent scale build-up;
 5. Maintaining verifiable documentation of required servicing and maintenance; and
 6. Keeping documented digital photos or video recordings of tests as evidence that they have been carried out.
- Ship owners/ operators and masters are advised to be guided by above and encouraged to include fleet wide operation training on above best practices identified.

Enclosure:

1. RMI Marine Safety Advisory no. 06-19

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