

TIP OF THE MONTH – GAS DETECTOR’S SENSOR FAILURE



- HELMET ELEMENT 4 ‘Safety’ – Item 6 ‘Gas Analyzers and Atmosphere Monitoring’
- ISGOTT 2.4 ‘Testing and calibrating gas measurement instruments’
- SIRE 2.0 Questionnaire – 5.6 ‘Fixed and portable gas detecting systems’
- SIRE 2.0 Questionnaire – 8.3.16 ‘Inert gas system non-return devices’
- IMO: Resolution A.1050(27) ‘Revised recommendations for entering enclosed spaces aboard ships’.

INCIDENT

During a real-time cargo audit, the PAS Auditor requested from an Officer to demonstrate the gas detector instrument calibration. It was observed that the span gas bottle, which would be used for the calibration was not suitable for the specific sensors’ calibration. After further investigation, our Auditor verified that spare sensors for gas detector instruments were not available onboard.

WHY IS THIS IMPORTANT?

The use of gas detection portable instruments, to measure toxic gas and flammable vapor hazards, is a critical part of a comprehensive safety culture. However, lack of training, inability to correctly maintain the equipment, misapplication, poor installation and a lack of awareness can compromise the functionality of the equipment.

MOST COMMON CAUSES OF SENSOR FAILURE

- High levels of gas exposure can destroy the sensors without triggering a warning.
- Equipment poor handling and housekeeping.
- Improper setting of detector during gas measuring.
- Not suitable span gases for calibration.
- Incorrect replacement of sensors.
- Noncompliance with manufacturer’s instructions.
- Direct calibration through the span gas bottles (and not via sampling bag).

PREVENTION AT SEA

5 Artemidos Avenue, 6th Floor,
6020, Larnaca, Cyprus
Tel: +357 24819800

PREVESEA

91 Akti Miaouli Str., 3rd Floor,
185 38 Piraeus, Greece
Tel: +30 210 6437637

✉ sales@preventionatsea.com
🌐 www.preventionatsea.com

