

TIP OF THE MONTH – IG DECK SEAL NORMAL LEVEL



- HELMET ELEMENT 8 'Cargo Operations' – Item 3 'Cargo Handling Gear'
- ISGOTT 11.1.5.2 'Inert Gas System Maintenance'
- VIQ 7– Section 8.27 – 'Inert Gas System'
- SIRE 2.0 Questionnaire – 8.3.16 'Inert gas system non-return devices'
- IMO FSS Code Ch.15 – 'Inert Gas Systems'

INCIDENT

During a real-time cargo audit, our Auditor observed that the water level in the deck seal was below normal. At the same time, no indication of low-level alarm in CCR and ECR was identified and it was evidenced that both sea water pumps dedicated for the Deck Seal were not running as necessary. When our Auditor discussed the case with the Master, Chief Officer and Chief Engineer, they confirmed that this is a common practice as long as the IG supply main isolation valve remains fully closed.

WHY IS THIS IMPORTANT?

Deck seal allows inert gas to be fed to the main deck, while preventing cargo gas backflow, even when the IG system is shut off. If the water level inside the deck seal is below the normal operating level, hydrocarbon vapors will backflow into the Engine Room.

SUGGESTIONS

Inspect deck seal valve at the time intervals specified in the Company's PMS, and ensure proper operation.

Ensure that as per IMO FSS Code Ch.15 – 2.2.3.1.4, the water seal is supplied by two separate pumps and each pump provides an adequate amount of water at all times.

Verify that the audible and visual water seal low level alarm is in good working condition.