



Ship Type: All Trade Area: Worldwide

Bulletin 236 - 03/02 - Personal Injury Claims - Hydrogen Sulphide (H₂S) Alert - Oil Cargoes/Bunkers

The Club has been made aware, from several sources, of rising safety concerns in respect of high levels of H₂S in some crude oils. Bearing in mind the serious risk of damage or fatality to crew and shore personnel we reproduce below an alert notice issued by the OCIMF.

“While the dangers relating to Hydrogen Sulphide (H₂S) are not new there is a growing body of evidence suggesting that H₂S levels in some crude oils is on the increase. The reason for this apparent increase is unclear.

H₂S is known to be present in crude oil exported from a number of countries including Iran, Qatar, South America, Mexico, Poland, Latvia, Russia and Turkey. Recently higher than normal amounts have been detected in Brent crude and within the last few days very significant amounts of H₂S have been found in the ullage spaces of two tankers loading fuel oil cargo at Jubail in the Arabian Gulf.

Terminal operators should remain alert to the dangers posed by the presence of H₂S, either within cargoes being delivered or remaining within the residues from a previous cargo. The precautions and procedures described within ISGOTT must be strictly adhered to.

The advent of Inert Gas and Closed Loading systems has largely negated the need to open tanks except for non-routine purposes, although reducing tank pressures to near zero for sampling is a relatively common practice.

Purging for cargo preparation is also common, thus the planned release of the entire tank atmosphere, particularly where unexpectedly high levels of H₂S are involved, poses a significant danger to individuals in the immediate and, in some cases, the not so immediate, area.

Some countries, particularly in Europe, have already stipulated maximum H₂S levels in tanks prior to loading and some terminal operators, most recently BP, have reduced their acceptable arrival levels from 10ppm to 5ppm.

In view of the above, we believe that it is sensible to encourage all crude vessels to monitor tank atmospheres and to advise of H₂S levels in order that terminal operators may gauge the magnitude of what is clearly a growing problem. In addition, it may be prudent to encourage the monitoring of fuel oil vessels from areas which historically are known to pose a problem, such as, Jubail. Regarding measurement, please be aware that while Draeger type tubes provide an accurate indication of H₂S levels regardless of whether the tank atmosphere is inerted or not, H₂S readings taken with an electronic meter in an inerted atmosphere do not.

Readers are asked to take note of the above and to advise operational staff, surveyors and other relevant personnel accordingly.”

The Club has also been advised that in some cases shore installations have been turning away fuel oil stock with H₂S. It is believed these stocks could be finding their way into the bunker stream thereby affecting **ALL** members not just tanker operators.”

Most people know H₂S by its rotten egg smell, however crew should be reminded that it could be fatal to rely on this method of detection as H₂S deadens the sense of smell very quickly. A more reliable method of determining concentrations of H₂S is by the use of Draeger type tubes or by the use of personal warning monitors.

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