



Ship: All

Trade Area: Worldwide

Bulletin 91 - 04/99 - Bunker Tank Explosions

We have recently been made aware of a casualty where welding operations on a tanktop surface resulted in an explosion and fatalities.

It would appear that owners were unaware that bunkers which have a flashpoint above the minimum of 60C degrees can still generate an explosive atmosphere in the storage tank ullage space, even when unheated. The industry has been aware of this property of heavy fuel oil for a number of years and the presumption must always be that heavy fuel oil tanks are in such condition at **ALL** times.

Flash point is **NOT** a reliable indicator as to whether a particular fuel will generate a potentially explosive atmosphere whilst in storage. To assess this risk the vessel's crew must carry out explosion meter readings. Readings of 50% LEL (lower explosive limit) must be considered as being potentially in the explosive range and precautions taken accordingly.

Certainly **NO** "hot work" should be carried out on any tank or its ancillaries without first being cleared, isolated and checked for being "gas free".

Bearing in mind incidents such as this are still occurring, we would strongly recommend owners remind their crews of the 1989 OCIMF publication "**The Flammability Hazards Associated with the Handling, Storage, and Carriage of Residual Fuel Oils**".

Source : External Through Karl Lumbers Loss Prevention Dept