

Operational Alert's inform Signal Mutual Members of serious incidents within the Mutual which resulted in permanent disability, death or a significant near miss. If you have similar operations, please share this Operational Alert with operation managers, supervisors, equipment operators, and all affected employees. It is imperative that management, at all levels review their operations for similar hazardous conditions, or acts and their controls.

INCIDENT: POTENTIAL BARGE EXPLOSION NEAR MISS

SUMMARY

Workers opened hatches on cargo tanks of a barge and installed electrically powered ventilation prior to an assessment by a Shipyard Competent Person (SCP) or Certified Marine Chemist (CMC), resulting in an explosion hazard.

Prior work had been completed on tug. SCP was called and began inspections.



Crew opened cargo hatches and installed ventilation on barge with no SCP present.

Cargo tanks had been sealed for extended period with residual flammable product (Naptha).

RECENT INCIDENT

A barge was present at facility with no active work. Previous work had been conducted on the tug only. Work was to commence on the barge and the Superintendent called for the SCP. The SCP assumed he was to clear the tug where work had previously been in progress and did not inspect the barge.

Workers proceeded with removing hatch covers and installing ventilation on the barge. The Foreman noticed a strong smell and contacted the SCP.

The SCP inspected the barge and found Lower Explosive Limit (LEL) readings at extremely high levels. He stopped all work and pulled back workers immediately.

The incident could have resulted in multiple fatalities. Fortunately, even though the atmosphere was enriched and above the LEL, no explosion occurred as the result of the Foreman and SCP's training and teamwork.



CONSIDERATIONS

Although neither entry nor hot work were being contemplated at the time, a possible ignition source was introduced when electrically powered ventilation methods were used.

Consider sources of static electricity such as use of poly-sock/lay-flat. Utilize grounded compressed air-driven reaction fan type ventilators (coppus blowers) or similar that are not electrically powered in order to reduce the risk of explosion.

Lack of advance planning and miscommunication between the Project Manager, Superintendent, and SCP played a major role. A SCP must be present during hatch openings to conduct monitoring promptly and apply appropriate tags or signage accordingly.



Remember, the next person harmed could be you or someone's Mother, **Father, Daughter or Son.**

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