

KISH P & I LOSS PREVENTION CIRCULAR KPI-LP-74-2012

(A Fatal Accident in a slop tank & Lessons to be Learnt)

► Brief description of the accident:

The C/O of a tanker in port was planning to carry out maintenance of valves inside an empty slop tank.

The day before the planned maintenance, he instructed the Bosun to open the access hatch of the tank and to start ventilating with air so that it would be gas-free before tank entry the next morning. As this task needed no man entry, no enclosed space entry procedures were followed. Shortly afterwards, the C/O and deck crew working nearby on deck heard a noise as if an object had fallen into the tank. They rushed to the open manhole and saw the Bosun lying motionless on the top platform of the vertical ladder, about 5 metres below the main deck. Sending the crew to raise the alarm and to bring the necessary rescue gear and stationing a lone seaman outside the tank entrance, the C/O entered the tank with the intention of helping the Bosun. The watching crewmember observed the C/O descending the ladder and then trying to rouse the Bosun. Immediately, he saw the C/O collapsing next to the Bosun. In panic, the seaman also entered the tank to help the C/O and Bosun. All three persons became unconscious in the tank.

Soon after, the emergency team led by the 2/O arrived at the entrance. The portable gas analyser that he used to sample the tank atmosphere instantly sounded the H₂S alarm and showed values of O₂: 20%, CO: 0%, H₂S: 60 ppm and LEL: 0%. Quickly donning a breathing apparatus (CABA / SCBA), he entered the tank, and soon all three casualties were lifted out of the tank. They were immediately transported to a shore hospital by helicopter (Medevac), where the C/O and seaman made a full recovery, but unfortunately, the Bosun could not be revived and died.

► Result of investigation & Lessons to be Learnt:

1-As there was no witness, it could not be ascertained why the Bosun had entered the tank and how he fell off the vertical ladder;

2-The C/O entered the tank impulsively to rescue the Bosun, ignoring the hazards and safety procedures;

3-The crewman stationed at the tank entrance also reacted emotionally rather than logically, and entered the tank to assist the two casualties;

4-The emergency team responded correctly, identifying the presence of toxic gas, before mounting the recovery operation in accordance with company procedures;

5-It could not be adequately deduced how a lethal concentration of H₂S gas had developed in the slop tank. This may let us think that, in an intrinsically dangerous environment (like a slop tank) we can not account for all the dangers present & need to ascertain our assumptions by proper instrumental checks ;

6-The emergency procedures should be practiced frequently to avoid emotional response;

7- The borderline between being brave or careless is very fine & in the professional job, many requirements can be crossed & induce accidents;

8-As a general & governing remark; any attempt to save a life should not involve putting other life or lives at risk. The sentimental response should not be allowed.