

## **Fatality of person inside cargo tank on board the Hong Kong registered chemical tanker “Bow Wind” at Sut Sakra, Singapore on 12 June 2004**

### 1. The Incident

- 1.1 On 12 June 2004 the Hong Kong registered chemical tanker arrived at Sut Sakra Terminal in Singapore to load a cargo of N-Butyl Alcohol. At 1510 the cargo tanks were purged with nitrogen and the first foot of cargo was loaded into the designated tanks. During the sampling process the helmet of the cargo surveyor dropped inside No. 10P cargo tank through the opened cargo dome cover.
- 1.2 The Pumpman, believed to have entered the tank to retrieve the helmet, was found collapsed inside the tank. The ship's emergency party was alerted of the incident and carried out the rescue operation. The Pumpman was evacuated from the cargo tank and the shore medical team took over and rushed him to hospital. At 1830 the master was informed that the Pumpman had passed away.

### 2. Findings

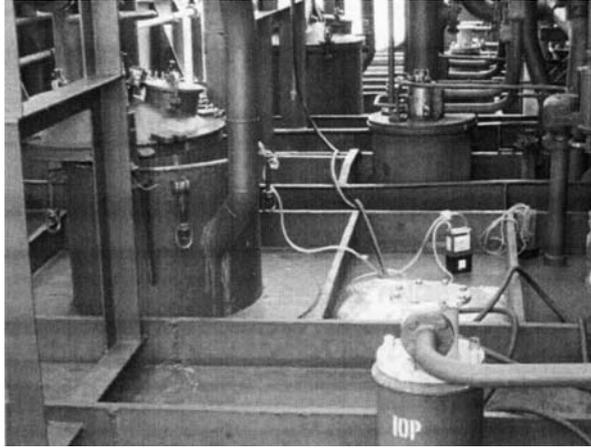
- 2.1 There was no witness of this incident. Shortly before the incident the cargo surveyor was taking sample with the Pumpman at the opened cargo dome of No. 10P tank. During the course the surveyor dropped his helmet into the tank. He however left the area after taking the sample. The surveyor stated that he had not seen the entry made by the Pumpman. The second officer and other crew were not staying in the vicinity.
- 2.2 The Pumpman was found collapsed at the upper ladder platform. According to the Company there was no evidence of any bleeding or signs from the body that he had fallen from height. Therefore it is reasonable to believe that the Pumpman had entered into the tank via the ladder. He was not wearing any safety apparatus.
- 2.3 Although the helmet was later found at the bottom of the cargo tank, it is believed that the helmet might have fallen first on the upper ladder platform which is located at a short distance immediately below the cargo dome. This might have prompted the Pumpman to enter the tank to retrieve it, believing that he would be able to return to deck by holding his breath. The helmet might have dropped to the tank bottom later on when the Pumpman collapsed at the

platform.

- 2.4 In this incident there is no evidence that the master had been informed about the open sampling operation. As such no authorization was granted by the master to carry out the operation in accordance with the company's cargo sampling procedures. There is also no evidence that the chief or the duty officer was aware of the open sampling process. Apparently the Pumpman had opened the No. 10P cargo dome himself upon instruction of the cargo surveyor without informing the duty officer.

### 3. The Lessons

- 3.1 Opening of cargo dome is regarded as a potentially dangerous operation. Thus it is set in the ship's safety procedures that the master's authorization should be obtained and such authorization should only be granted after ensuring a series of safety checks have been carried out. The safety procedures on board are established to ensure that the necessary safety measures have been taken against all possible risks in the Cargo Sampling Procedure.
- 3.2 In this case, there is also no evidence to show that the Chief Officer or the duty Officer (the Second Officer) had been informed of the Pumpman's intention to enter the cargo hold at any time before the accident. It is apparent that the Pumpman had made his own entry without observing the ship's safety procedure in entering the cargo tank.
- 3.3 It is believed that the Pumpman had taken a quick dash to the upper ladder platform in order to retrieve the helmet. In doing so he under-estimated the danger involved, resulting in the tragedy of this fatality. In entering the purged cargo tank the Pumpman had not followed the required shipboard safety procedure.



No. 10 P cargo tank dome