

# TECHNICAL TALK

## Overfilling and the associated PSM Elements

The SLP invited Mr. John Lockwood, Senior Risk Consultant with GL Noble Denton, USA to give a technical talk on the topic "Overfilling and the associated PSM Elements".

Mr. Lockwood who is currently based in the United States was a Founder Member and Fellow of SLP. He was in Singapore to carry out a safety audit and also to catch up with some old friends.

The event was held on 24 Jan 2012 at the Jurong Country Club. It was well attended by 35 corporate and ordinary members from the oil, petrochemical, pharmaceutical industries, etc.

*Picture on the left:  
Section of the audience listened attentively to Mr. Lockwood.*

*Picture on the right:  
Mr. CP Tay presented Mr. Lockwood with a token of appreciation.*



*Mr. Lockwood delivered his talk to a packed audience at Jurong Country Club.*

The talk highlighted the likely equipment involved in overfilling. He cited Buncefield, Texas City and Thai Oil Refinery incidents to illustrate how the overfilling would occur. The lessons learnt and specific message in his talk focused on ensuring the continuing integrity of overfill protection. This includes

- Calculation to estimate when a vessel is full
- Automatic gauging systems
- Independent high, high level alarms
- Independent emergency shutdown devices to close inlet valves and to stop pumps
- Constant monitoring of vessel levels and level trends.

Towards the end of his talk, he touched on how some key PSM Elements (PHA, Mechanical Integrity, Operating Procedures, Training, Management of Change and PSSR) and the independent layers of protection could reduce the risks of overfilling.

The enthusiastic response from the attendees during the Q&A session indicated that it was an activity worth repeating.

All attendees were treated to a lovely buffet spread dinner after the talk. The relaxed atmosphere provided a great opportunity for follow up discussion on the topic of the night and networking.

*Written by: Jacob Soh*

