

Technical Talk on Risk Based Process Safety and Safety Culture

By: Mr. William M. Bradshaw

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SLP invited Mr. Bradshaw to give a technical talk on Risk Based Process Safety (RBPS) and Safety Culture. The talk was held on 25-Nov-2010 afternoon at Singapore Polytechnic Graduates' Guild. It was an interactive talk, and question and answer session was fruitful.

RBPS was developed by the American Institute of Chemical Engineers' (AIChE's) Center for Chemical Process Safety (CCPS) and has been described by the AIChE as the framework for the next generation of process safety management systems. It is based on the simple premise that process safety excellence is supported by four key pillars:

- Commit to process safety
- Understand hazards and risk
- Manage risk
- Learn from experience

These pillars are supported by a total of 20 RBPS elements, many of which are applicable to all facilities in the process industries. This new framework for process safety builds upon the original ideas published by the CCPS in the late 1980s; integrates industry lessons learned over the intervening years; applies the management system principles of plan, do, check, act; and organizes them in a way that will be useful to all organizations - even those with relatively lower hazard activities - throughout the facility's life cycle. It also expands the CCPS's original focus on management accountability to include the broader topic of safety culture, which based on analysis of several major process safety incidents that have occurred



Mr CS Teng welcoming participants to the Technical Talk.

over the past 5 years, has been termed by many to be the "root cause of the decade."

Mr. Bradshaw also shared a research that ABS Consulting has done over the past several years to identify cultural aspects that are common to a number of companies/facilities that (1) have a track record of exemplary process safety performance and (2) focus on establishing a common culture as a key part of promoting process safety performance. This research, which was spawned from a paper written by ABS Consulting titled *Essential Elements of a Sound Safety Culture*, identified 12 essential features of a sound process safety culture.

Written by CS Teng



Section of participants listened intently to Mr Bradshaw.