High Standards of Technical Safety Awareness in Oil and Gas

by Ms. Tan Bee Hong

CHRISTINA Phang stands up as I walk in, a warm smile lighting up her fair face. Her handshake is firm, reflective perhaps of her passion for increasing awareness of technical safety practice. The Managing Partner of Asia Pacific Risk Practice at Environmental Resources Management in Kuala Lumpur, Christina is an expert on safety and loss prevention. When she started some 20 years ago, she was one of the very few Malaysians, and probably the only woman here, who were qualified PhD holders in that field.

Technical safety discipline (oil and gas) is a relatively new engineering discipline, she said. Awareness rose only after a few major incidents, such as the Piper Alpha disaster. (Piper Alpha was a large oil platform in the North Sea. On 6 July 1988, a massive explosion resulted in a fireball that engulfed the platform, killing 167 people. Piper Alpha was operated by Occidental Petroleum, a wholly owned subsidiary of Occidental Petroleum Corporation).

"From that time, safety awareness has grown and continues to grow here," said Christina. But, she conceded, there's still plenty of room for improvement as there is a lack of experienced people in the field.

"Though there are many more (safety experts) today compared with when I started out, the level is not yet ideal. At ERM we constantly train people and we have presently, 20 safety engineers working here," she said.

There are different levels of safety awareness. Occupational awareness is not good enough, she felt, as local workers often tolerate having to work with limited safety measures.

As for technical safety in the lifecycle of Malaysia's oil and gas assets, Christina said Petronas, for instance, has international standards in this regard. But safety can be compromised. When on the fast track, safety issues are highlighted only later and this can prove costly. She said safety measures should, in fact, be included earlier. For instance, she said, safety measures such as the structural weight of a platform, must be considered earlier as at later stages, this can prove not just costly but it can also result in project delay and the danger of not being able to meet deliveries.

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After all, she added, Malaysia has shown we are capable of executing world-class technical safety work. Her team of engineers, for instance, has worked on projects the world over, including in Canada, Vietnam, Indonesia, Ghana, China, Thailand, South America and is presently doing a project in West Australia.

There is as yet, no professional accreditation for technical safety discipline in the country, apart from the newly available Professional Process Safety Engineering registration by IChemE. To improve Malaysia's technical safety records, Christina suggests making accessible incident reports made to DOSH, a government department under the Ministry of Human Resources Malaysia.

In Malaysia, The Occupational Safety And Health Act (OSHA) 1994 provides the legislative framework to promote, stimulate and encourage high standards of safety and health at work. The aim is to promote safety and health awareness, and establish effective safety organisation and performance through self-regulation schemes designed to suit the particular industry or organisation. OSHA is enforced by DOSH. ■