

YET AGAIN, ANOTHER ENGINEERING ACCIDENT!

25th June 2012

THE fire at the PETRONAS Carigali's Tukau B Platform offshore Miri on Monday, 11 June 2012 highlights yet another accident at an oil and gas facility. The alarming numbers of accidents that have occurred deserve attention from both the industry and authorities. There could be some serious underlying issues pertaining to safety procedures or their enforcement in the industry.

Whilst technical reasons are often cited as a common culprit that causes accidents, human factors could well be an important element in the safety process. The lack of understanding and appreciation of safety concepts amongst engineering personnel who simply follow procedures by rote, are some of the possible causes.

For example, while various standard operating procedures exist for safe operations of skids and package equipment, the procedures need to be applied with some thought. A pre-job safety analysis and an understanding of the actual job condition and limitations of the specific equipment need to be incorporated into the work plan. If there is any deviation from the initial plan, a review needs to be carried out to ensure that any new risks are identified and adequately managed.

Many things are often taken for granted as well. Engineering documentation may be a standard requirement, but are they properly reviewed prior to operation? Equipment of similar utility may not have the same configuration, with possible subtle differences. Have alerts and safety warnings for known problems by equipment manufacturers ever been monitored? Procedures applicable to one type of equipment cannot be assumed to be automatically applicable to another. Work which affects systems outside its designated area must be checked, so that they do not result in a compromise of overall integrity and safety. Safety does require a little more understanding, effort and care, which extends beyond the safety manuals.

It is important that lessons learnt from previous accidents are disseminated quickly throughout the organisation and to the industry as a whole. For instance, the accidents which had happened at PETRONAS GPP Plants (explosion, May 2012), Esso Refinery (fire, Sept 2011), Bekok C (fire, Dec 2010) and at other facilities should be documented and made available to authorised personnel. A widespread, timely alert of the causes and suggested preventive measures will reduce the probability of a similar accident to happen again.

In fact, a systematic refresh of the industry's collective experience on a periodic basis may be beneficial to the industry as a whole. These may be coordinated through an impartial body, for example, the National Institute of Occupational Safety and Health (NIOSH), or the Institution of Engineers, Malaysia (IEM). ■

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