

Process safety risks

PAUL FELTOE anticipates the new requirements for managing major hazard facilities and says they will require close attention to process safety risks.



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New Zealand's hazardous operating facilities will be subject to a new regulatory regime with a significant focus on risk by the end of 2015. This change will require a step change in thinking for many organisations.

Large industrial accidents occur because of poorly designed or operated facilities. Many New Zealand companies have historically focused on occupational safety typified by slips, trips and falls. They have paid less attention to the much less common but high consequence events such as fires, explosions or toxic releases that can affect many employees or the public. This second type of safety management is known as process safety.

Managing the risks associated with occupational safety is more straightforward because these hazards can be observed (eg working at height, sharp corners etc) and the events occur frequently.

Managing the risks associated with process safety requires engineering and management know-how to understand when the holes in the Swiss Cheese are lining up. One cannot wait for a process

safety event to occur before action is taken to improve safety.

Managing risk at a hazardous industrial facility requires a facility operator to know what can go wrong, what can cause it, and what equipment or systems are in place to ensure the events are unlikely to happen – and that they are bulletproof.

If this is not done within a robust framework, then risk is not being managed. Recent accidents such as the Tamahere coolstore incident or Pike River have demonstrated that those companies managed risk poorly, if at all.

Design, operational and cultural issues contributed to these incidents and are common threads in many major accident reports worldwide.

Managing risk is good business practice. It is about putting measures in place to ensure you are unlikely to experience a significant harmful or fatal event. The historic focus on hazard identification has led to blind spots. An increased emphasis on managing the systems and plant to ensure events do not happen is a positive move forward. ■