
ESTABLISHING 'BARRIERS' TO MAJOR ACCIDENTS IN AN OIL COMPANY

THE CHALLENGE

Upstream petroleum operations have the potential for rare but catastrophic incidents, such as blowouts, fires and explosions. The majority of such incidents are associated with a failure to effectively implement well known barriers or risk controls. The usual approach to managing barriers is to draft procedures describing what has to be done. This can lead to voluminous procedural documentation both difficult to understand and manage in its entirety. This is exacerbated by the varying quality of communications – invariably written from the perspective of the technical expert and not the person tasked with implementation. Asked to assist a Tier 2 oil production company, Peter was challenged to devise a different way to manage the barriers to major accidents.

WHAT PETER DID

Peter examined the risk control barriers, drawing on our experience with other companies. We found that the barriers were relatively easy to identify. However, their description was invariably too long-winded for the procedures to ensure the barriers were effectively implemented as designed. We also found that the responsibilities documented for monitoring the implementation of the procedures varied widely.

Based on the analysis Peter was able to show that lengthy procedural documents could be shortened by succinctly summarising the key elements of the barriers. Peter devised a new way to describe these key elements, link these to the accountabilities and document them in an easy to use format using tables, diagrams and layout to concisely communicate critical information. Peter refers to this as the Case for Safety. Importantly, the Case for Safety also included an example of an incident directly relevant to each barrier.

THE BENEFIT

The new Case for Safety has made it much easier for the Tier 2 company's front line workers to implement the barriers, supervisors to monitor their implementation and senior managers to have better governance over process safety. By providing an example of an incident, Peter made it easier for front line workers to understand why the barriers need to be implemented as described.