

# The benefit of hindsight now

**B**P's long awaited report into the causes of its oil rig explosion and the worst oil spill in US history is finally out (page 8). The Deepwater Horizon saga makes grim reading, providing, as it does, a detailed study of the sequence of events BP believes led to the disaster – and the engineering, training and human inadequacies behind them.

Setting aside the furore around its implications of corporate blame-sharing – and the accusation that it predates technical analysis by other independent experts of recovered componentry, in the wake of the well's 'static kill' (which might yet shed additional, and perhaps contradictory, light on the tragedy) – this report is important.

Like previous studies from other major industrial accidents, it should become recommended reading for all plant managers, operators, supervisors, engineers and technicians working on high hazard plant anywhere. Arguably on any plant anywhere.

Why? Because the events described and BP's resulting recommendations – while mostly specific to the design of this rig, and the oil and gas sector in which it was due to operate – carry key lessons for us all. Quite simply, reading between the lines and transferring its findings to our own industries and plant could save lives. At the very least, it could avoid serious injury, pollution, downtime and, of course, cost.

Perhaps the most salutary points for us to ponder are threefold. First, the sheer scale of a disaster when a high hazard plant runs out of control (all the more so offshore). Secondly, just how easily, unpredictably and swiftly routine plant operations can transform into chaos. And thirdly, since none of us is prescient, the importance of strict adherence to each and every aspect of process and protocol. And that absolutely includes risk assessment, awareness and management – as well as the training, testing, and plant and system maintenance that underpin prevention.

For example, BP talks specifically of raising its game around HAZOP (hazard and operability) reviews and extending that thinking throughout its corporate culture. Those aren't idle words and we all need to comprehend their value, in terms of helping the whole plant hierarchy to understand any new or emerging potential for failure modes, the consequences, and mitigating investments and actions required.

There is an abundance of technologies for predicting and preventing plant problems (pages 10 and 25), but these invariably concern themselves with specific plant risks. The value of HAZOP reviews lies in their holistic examination.

Remember: the benefit of hindsight is too little, too late.

Brian Tinham BSc CEng MInstMC FSOE FIPlantE FIRTE, Editor

