Fditorial

The Buncefield legacy — are we safer today?

During the night of Saturday to Sunday, 10-11 December 2005 a storage tank overflowed releasing over 250 000 litres of petrol. A vapour cloud formed then ignited causing a massive explosion and a fire that burned for five days. Pollutants from fuel and firefighting liquids leaked from the tank bund, flowed off site and entered the groundwater. Over 40 people were injured.

Failures of design and maintenance in both overfill protection and liquid containment systems were the technical causes of the incident. Keeping the process operating was the primary focus and process safety did not get the attention, resources or priority that it required.

The final HSE report is clear and hard-hitting and should be required reading for all senior managers of high hazards installations: https://www.icheme.org/media/10706/ buncefield-report.pdf

In this Buncefield 20th Anniversary Special Issue of LPB, we revisit some of the key issues relating to the incident:

- Roy Wilsher, His Majesty's Inspector of Fire & Rescue Services, talks about the emergency response.
- Ken Rivers discusses process safety leadership and regulatory collaboration
- Ramin Abhari's short graphic novel re-tells the story of the Buncefield explosion.
- Mark Hailwood describes Germany's reaction to Buncefield.
- Ken Patterson outlines the evolution of CDOIF and environmental risk assessment
- Wayne Vernon describes the HSE operation.

You don't have to work in fuel distribution to find value in this issue of LPB. Ask yourself these seven questions:

1. Do you have a clear understanding of your major accident risks and the safety critical elements designed to control them? What about your procurement department, suppliers and contractors? What about board-level senior management?

- 2. What is your safety critical equipment? How do you detect problems? How effectively do you respond to them? How do you prevent temporary fixes masking the danger signals?
- 3. How effective is your auditing in identifying the gaps between management intent and custom and practice?
- 4. If you supply equipment do you understand your responsibilities? TAV were prosecuted and fined by the HSE.
- 5. If you maintain equipment do you understand your responsibilities? Motherwell were prosecuted and fined by the HSE.
- 6. How robust is your management of change process?
- 7. Do your staff have capacity, time and resources for safe operation?

So, are we safer today, twenty years on? In his barnstorming Trevor Kletz memorial lecture at Hazards 35, Ken Rivers warned against being fooled by appearances (the sky is blue, the grass is green...) and urged leaders to maintain a sense of chronic unease - a mindset that goes beyond compliance. At the same conference, Gus Carroll reminded us how fast the landscape is changing, with traditional industries in decline and new sectors emerging (hydrogen, carbon capture, modular nuclear reactors, batteries, biofuels).

The fundamentals remain unchanged — process safety depends on a realistic assessment of hazard, a vigilant approach to controls and an honest assessment of risk.



Leadership is not about what you say; it's all about what you do. People care about what their leaders care about. Read the HSE report. Ask some open questions. Set an example today.

Fiona Macleod Chair, LPB **Editorial Panel**

