



CASE STUDY

Increasing safe behaviours at a coal mining business

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Situation

The client in this case study is a long established Australian Underground Coal Mining Operation with over 1,000 employees. The business is part of a region where 99 miners have lost their lives since the 1970's.

The organisation is deeply committed to the safety of its workforce. However, with an aging population and an entrenched culture among employees and contractors that 'injuries are bound to happen in underground mining because it is inherently dangerous', the extraction of coal has become increasingly hazardous.

With a commitment to continuously improving safety performance, our client sought an initiative that would promote safety ownership at a Frontline Worker level and enhance the safety leadership skills of their Supervisors, Superintendents and Managers. There was also a need to improve the organisational safety culture in a way that enabled them to measure that improvement over time.

The Solution

DEKRA implemented a business wide behavioural based peer-on-peer safety process known as Behavioural Accident Prevention Process™ (BAPP®) from DEKRA Insight.

Undertaking a Organisational Cultural Diagnostic Instrument analysis prior to the implementation of the Behavioural Accident Prevention Process can provide a comprehensive cultural basis to build from.

The implementation occurred in 2004 and 2005 and was tailored to the unique requirements of coal mining and coal preparation environments.

The four key elements to the initiative were (see Figure 1):

- Identify Critical safety Behaviours for each business unit
- Gather Data by observing the work being performed in a non-threatening way
- Provide on the spot Feedback to behaviours
- Remove Barriers to safe behaviour.

To optimise impact, the following activities were implemented at the same time as BAPP:

- The Organisational Cultural Diagnostic Instrument (OCDI) was conducted at each business unit to provide a comprehensive cultural measure from which to build a successful BAPP implementation. This was followed by a renewal survey each year to provide an accurate measure of culture change

Figure 1

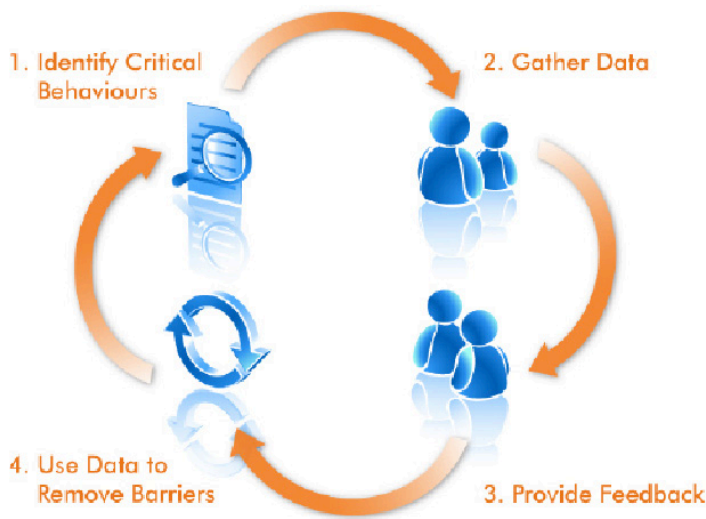
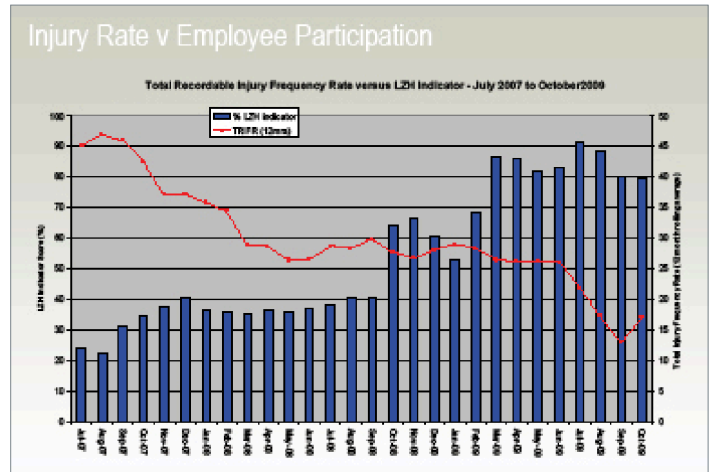


Figure 2



- Managers, Superintendents and Supervisors attended specially designed leadership workshops to gain a better understanding of BAPP and how best to support it
- A Process Dashboard was adopted to maintain the health of the various implementations and promote sustainability. Employees attended DEKRA's national conferences and business network sessions to share best practice and keep up-to-date with the latest innovations from DEKRA Insight.

Results

The organisation has seen their Total Recordable Injury Frequency Rate (TRIFR) drop from 50 in 2004 to 17 in 2010. This continues to trend towards further improvement.

BAPP has become deeply embedded and is fully integrated into the current safety strategy. Since 2004, the various business units have completed over 60,000 peer-on-peer observations. That equates to over 60,000 worker-to-worker discussions about safety in the workplace with each of those discussions further reducing the exposure to risk in the workplace. Over 75% of the miners at each mine site have been trained as observers.

BAPP has had a positive influence on more than just the reduction of injuries within the business. Regular cultural measurements using the OCDI tool have seen business

unit improvement in areas such as management credibility, workgroup relations and incident reporting.

Using data from their BAPP database one coal mine has also identified:

- 92% of employees and contractors who were not injured during the past five years had performed six or more BAPP observations per year
- 93% of employees and contractors who had three or more injuries over the past five years were not trained or had not conducted six BAPP observations per year
- 100% of those having seven, eight or more injuries were not trained or had not conducted six BAPP observations in a year
- There is a strong correlation between increased observations decreasing the number of injuries at the mine.

BAPP has not only increased safe behaviour within this business, it has also had significant impact on improving equipment and streamlining safety systems. More specifically, the leadership team implemented a user-friendly, safe operating procedure database to store and analyse data gathered by BAPP. This system is now embraced by the business globally.

BAPP has triggered many other safety initiatives within the business. Some of the exceptional solutions developed have been finalists at Minerals Council Safety Awards.