

## NATIONAL MINE SAFETY CULTURE SURVEY

The Minerals Council of Australia has undertaken a National Mine Safety Culture Survey to assess the attitudes and values of the mining work force. The data from the survey can be used to identify and prioritise strategies which may be aimed at improving a range of outcomes such as: job satisfaction, communications, productivity and safety.

### Who participated in the survey?

6718 people from 42 participating mines, plants and refineries completed the survey, making it the largest survey of its kind in Australia. At many sites the entire work force completed the survey.

The sample proportionally represented each State and Territory, industry sectors (ie, coal, gold and other mining), mining methods (ie, underground or surface) and mine size (based on the number of employees).

Different employee groups were also proportionally represented in the sample, including managers, specialist staff, supervisors, operators and contractors.

### What did the survey measure?

In general terms the survey measured "safety culture". This refers to the set of shared values, beliefs and assumptions which guide and influence actions and behaviour at work, which in turn influence safety performance.

Participants were asked to agree or disagree with 41 statements on aspects of safety culture, grouped under eight broad factors, as outlined below.

- Organisation – perceptions of their company's overall attitude and commitment to safety (eg, "this company is very serious about safety").
- Management – perceptions of the attitudes and commitment of their senior managers to safety (eg, "management listens to our views on safety").
- Supervision - perceptions of the attitudes and commitment of their direct supervisor to safety (eg, "my supervisor always puts safety first").
- Management Processes – perceptions of the effectiveness of management processes that affect safety such as consultation, feedback and decision-making (eg, "if you raise a safety concern, someone follows up very quickly").
- Safety Systems – perceptions of the effectiveness and quality of safety manage-

ment processes such as safety standards, systems and training (eg, "Safety training in this company is of a high quality").

- Job Factors – perceptions about their own jobs and work activities (eg, "my tool and equipment are generally safe and well maintained").
- Team Factors – perceptions about the team in which they work (eg, "people around me generally comply with safety rules").
- Individual factors – their personal attitudes to safety at work (eg, "it is possible to achieve zero accidents").

An electronic survey method was used. This method allowed respondents to participate regardless of their literacy skills. It also made true confidentiality possible.

### WHAT DID THE SURVEY FIND?

Some of the observations arising from the national survey results include:-

- The industry's success in communicating its commitment to improving mine safety may be undermined by perceptions that management does not sufficiently value or care about their workforce in a broader sense.
- Perceptions that the emphasis on safety is a reaction to external pressures, rather than a genuine desire to achieve improved safety outcomes. This further outlined the need for strategies to address the lack of credibility of management groups.
- Widespread job insecurity in the industry may hamper well-intentioned interventions and efforts to achieve improved safety.
- All employee groups indicated high levels of dissatisfaction with the quality and relevance of safety management systems and safety training.
- Safety committees received relatively low levels of support from management groups, which may reduce their effectiveness.
- There were very high levels of positive regard for the work of on-site safety professionals especially among management groups.
- There is a need to improve formal and informal processes for recognising and acknowledging safe work.
- In contrast to managers, a significant proportion of employees were skeptical about whether the goal of "zero accidents" is achievable.

- Beliefs in the inevitability of accidents, pressures to expedite work, deficiencies in processes for recognising safe work and inaccurate perceptions of risk levels, may combine to influence levels of risk-taking behaviour.
- Relationships within work teams and relationships with direct supervisors were consistently viewed as positive and may provide opportunities to develop and improve safety initiatives.
- In contrast with common perceptions, the responses of contractors were generally more positive than employees, and there was little difference between the response of underground and open cut groups.
- Smaller mines consistently showed more positive responses than larger mines across all employee groups, perhaps due to their ability to achieve closer contact between levels of the workforce.
- Employee perceptions of company and management credibility and commitment to safety, were significantly lower in coal mines compared to metalliferous mines, perhaps reflecting recent coal industry restructuring and its turbulent industrial relations history.

### Where to next?

The survey is a rich source of data which can be used by mine safety and human resource professionals to develop and review their improvement strategies. The results highlight specific areas of concern which individual companies, industry groups and inspectorates may wish to direct further attention and research.

The Minerals Council of Australia is developing strategies to promote discussion and understanding of the survey results across the Australian mining industry. Strategies to date will include special seminars, conference sessions and further research into priority areas.

In addition, the NSW Mine Safety Council will formally consider the survey report and identify strategies to foster the development of a positive safety culture across the NSW mining industry.

Article written by - Robert Oliver, Manager, Health and Safety, NSW Minerals Council.

***The Safety Culture Survey Report can be ordered or downloaded from the Minerals Council of Australia at [www.minerals.org.au](http://www.minerals.org.au).***