

# 1997 Mine Safety Review

## Executive Summary

This Review of Mine Safety in New South Wales was commissioned by the State Government against a backdrop of continuing death and serious injuries in the state's mining industry.

Accordingly, the Review was asked to identify key safety issues, which needed to be addressed in order to achieve a significant improvement in industry safety performance.

Our terms of reference were broad, as was the possible scope of the Review, given that we were asked to consider safety management as it applies to operations ranging in size from one person opal mines, to large mines employing many hundreds of people in both the metalliferous and coal sectors throughout New South Wales. In order to do so in the time available, we determined that we would concentrate on the identification of generic problems and issues within each sector. It was also decided that the focus would be on the prevention of serious injury and death in the industry. In brief, the Review found that, despite commitment to safety improvement by many individuals, there is, across much of the industry, an unintended, but systemic bias against rapid and effective improvements in safety, other than those induced by changing technologies.

This can be largely attributed to the combined impact of the traditions, incentives, awareness, financial pressures, institutional arrangements and knowledge of risk mitigation strategies which have largely determined the industry's "safety culture" - and how individuals in the industry, at all levels, approach their daily work. Some of these factors are so deeply rooted in normal custom and practice that they can pass almost unnoticed by those in the industry.

Underlying pressures to take a chance to get a job done, reward systems that favour production ahead of safe working, a history of defensiveness and isolation between industry groups, poor communication and information sharing between the parties, scepticism about the extent of safety improvements which are achievable, and a lack of appreciation of the value to be had in increasing individual safety awareness and skills, are all part of the mix of factors influencing individual behaviour.

On another level, the roles played by the holders of key positions; the existence and effectiveness of safety management systems; and the adequacy of measures for reviewing what is in place and for making any necessary changes; are also significant matters influencing industry safety performance.

However, notwithstanding the complexity involved, our investigations indicate that substantial and sustained improvements in mine safety in New South Wales can and should be made.

The Review found heartening evidence of key individuals taking on greater responsibility for pushing safety management within their respective organisations, and of more systematic approaches being introduced to identify and address major safety hazards. However these efforts could accurately be described as patchy, and not indicative of the industry as a whole.

We also found a disturbing readiness, at all levels, to accept that while a significant improvement in industry safety performance was clearly desirable, it was unlikely to take place in the short term. The industry in the broad still seems to lack a strong sense of urgency in this regard.

For one thing, the industry has not yet adequately dealt with the question of how best to measure safety performance. The Review believes that this must be a priority. Honest use of indicators which accurately reflect what is occurring on site is a first step in making well founded judgements about whether or not significant improvement is actually taking place. Without this knowledge base, safety management efforts run the risk of being significantly misdirected.

It is possible, perhaps even likely, that the present narrow focus on measures which do not correlate well with serious injuries and fatalities, is actively constraining improvements in safety performance. This could stem both from the above misdirection of resources and from a falsely based sense of complacency which might flow from improvements in these measures.

As well, there are indications of a widespread lack of commitment to stated safety requirements - industry players at all levels believed that it was acceptable to adjust their response to those requirements to suit what they considered to be appropriate. From the mineworker who removed his personal protective equipment when the supervisors were not present; to the middle manager who failed to follow up a safety issue because he saw the worker who raised it as being a "bit of a nuisance"; to the mine manager who introduced head office safety schemes without sending clear signals that those schemes needed to be complied with; to the senior departmental officer who chose not to require compliance with his own legislation because he did not want to be "heavy handed".

Greater involvement by interested parties in setting safety standards, as well as a stronger commitment from those with the responsibility for enforcement of standards, is clearly a priority.

Generally speaking, safety-related training throughout the industry, and including the Inspectorates, is poor, and not adequately tied to management of major mine hazards. Nevertheless individuals who admit to very little training in relation to safety issues still considered themselves to be well placed to make judgements about levels of risk, and acceptable behaviour. The Review sees this as an area which needs to be urgently addressed.

As well, the safety impact of a potentially key player, namely the Department of Mineral Resources, is significantly adversely affected by internal confusion about its role, poor priority setting, inconsistencies, low morale, and inadequate resourcing. This is another area requiring immediate attention if significant safety gains are to be made.

Addressing these and other issues will take considerable time, effort, and commitment. Not addressing them will be the clearest possible indication that players in all quarters are simply not taking safety seriously enough.

Our Review has made a range of specific recommendations in response to the individual issues raised. These recommendations appear in full in Section 8. The recommendations address specific symptoms of the safety problem, but, as we indicate in our conclusions, significant and sustainable improvements in the industry's safety performance will also require fundamental changes in those aspects of the industry's "culture" that work against these improvements.

Stakeholders throughout the mining industry have been very supportive of this Review and have provided a wealth of material on safety issues and innovations.

That same spirit of cooperation and openness will need to apply if all parties in the industry are to effectively respond to the issues raised in this Review.