Review of all fatal accidents in Queensland mines and quarries from 2000 to 2019

– Dr Sean Brady (Brady Review)

This is an extract from the Full Report which can be found at
www.parliament.qld.gov.au/work-of-assembly/tabled-papers/online-tabled-papers (Ref 197)

BACKGROUND TO THE REVIEW
On the 8 July 2019 the Honourable Dr Anthony Lynham, Minister for Natural Resources, Mines and Energy, announced an expert review would be undertaken to identify changes needed to improve health and safety in Queensland mines and quarries. The announcement was made following a fatality on the 7 July 2019, which followed a total of five fatalities in the 2018/19 financial year.

PURPOSE OF THE REVIEW
The Minister’s requirements were to examine all fatal incidents in Queensland mines and quarries from 2000 to 2019, and based on this examination look at:
(a) Why mine workers have died over the past 20 years
(b) How industry can improve and
(c) How the mines inspectorate can work better.

CONDUCT OF THE REVIEW
The review was led by Dr Sean Brady based on information provided by the Queensland Government Department of Natural Resources, Mines and Energy (DNRME). In the report the terms Queensland mining industry or the mining industry shall be taken to include both mines and quarries.

RECOMMENDATIONS
Recommendation 1: The industry should recognise that it has a fatality cycle. Unless it makes significant changes to how it operates, the rate of fatalities is likely to continue at current levels. This pattern has been evident over the past 19 ½ years and is characterised by periods where a significant number of fatalities occur, followed by periods where there are few to none. This suggests that the industry goes through periods of increasing and decreasing vigilance. Past behaviour suggests that in the order of 12 fatalities are likely to occur over any five year period.

Recommendation 2: The industry should recognise that the causes of fatalities are typically a combination of banal, everyday, straightforward factors, such as a failure of controls, a lack of training, and/or absent or inadequate supervision. Internal incident investigations in mining companies must strive to capture these combinations of causal factors, and avoid simplifying them to a single cause, such as human error, bad luck or freak accidents, which has the potential to mask the underlying system failures. Recommendations 3 to 5 cover the key causal factors identified in this review.

Recommendation 3: The industry needs to focus on ensuring workers are appropriately trained for the specific tasks they are undertaking.

Recommendation 4: The industry needs to focus on ensuring workers are appropriately supervised for the tasks they are undertaking.

Recommendation 5: The industry needs to focus on ensuring the effectiveness and enforcement of controls to manage hazards. Given the increasing Serious Accident Frequency Rate, industry should implement more effective controls (such as elimination, substitution, isolation, or engineering controls). A significant number of the controls reported put in place in the aftermath of an incident were administrative in nature.

Recommendation 6: The industry should adopt the principles of High Reliability Organisational theory in order to reduce the rate of Serious Accidents and fatalities. At its most fundamental level, High Reliability Organisational theory focuses on identifying the incidents that are the precursors to larger failures and uses this information to prevent these failures occurring. Adopting a High Reliability Organisation approach will require the refinement or addition of specific competencies to both the mining industry and the Regulator.

Recommendation 7: In order to proactively assist the mining industry to operate more like High Reliability Organisations, the Regulator should play a key role in collating, analysing, identifying, and proactively disseminating the lessons learned from the incident and fatality data it collects from the industry.

Recommendation 8: The Regulator should develop a new and greatly simplified incident reporting system that is easy to use by those in the field, that is unambiguous, and that aims to encourage open reporting, rather than be an administrative burden to reporting.

Recommendation 9: The industry should shift its focus from Lost Time Injuries (LTIs) and the Lost Time Injury Frequency Rate (LTIFR) as a safety indicator.

Recommendation 10: The Regulator should adopt the Serious Accident Frequency Rate as a measure of safety in the industry.

Recommendation 11: The Regulator should adopt the High Potential Incident Frequency Rate as a measure of reporting culture in the industry.
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