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**Note:**

Appendices 10-12 and 14-21 are adapted from the submission of the Department of Primary Industries (DPI).

Appendix 6 contains key point summaries of each written submission received, prepared by the Review Secretariat. The summaries should be read in conjunction with the submissions' Recommendations listed in Appendices 22-25. Authors of the original submissions were not given the opportunity to comment on these summaries.
Appendix 1
The Mining Industry in New South Wales
1. The Mining Industry in New South Wales

New South Wales has a major minerals industry. In the 2003/2004, the value of mineral production reached an estimated $6.7 billion, of which the coal industry contributed $4.7 billion. NSW is the largest exporter of thermal coal in Australia, with exports valued at over $2.6 billion. The total value of coal exports was $3.7 billion and that of NSW mineral and metal exports $6.4 billion.

The value of NSW mineral production is forecast to improve significantly in 2004-05 on the back of higher mineral and coal prices.

The mining industry has a particularly significant economic contribution to regional areas. In 2003-04 the NSW minerals industry directly employed around 15,000 people, including almost 10,000 in the coal industry. Indirectly the mining industry employs at least twice this number in mine and non-mine related services.

In terms of royalty, the Government collected $250 million including coal royalty of $218 million in 2003-04 and correspondingly $233 million and $206 million in 2002-03.

The wealth generated by the State's mineral industry is based on 52 coal mines, about 10 major metalliferous mines, a similar number of large size industrial minerals operations, many smaller metallic and industrial mineral mines and numerous construction materials operations.

The health and safety of the workforce is fundamental to the success of the NSW mining industry and must continue to be of primary emphasis.
Appendix 2
Safety Performance in the NSW Mining Industry
2. Safety Performance in the NSW Mining Industry

The mining industry has traditionally been acknowledged as a dangerous industry due to the number of hazards involved in extracting minerals. In the past, death and injury were expected, and in some instances tolerated. However today, these perceptions and attitudes are no longer acceptable.

To illustrate the improvements in safety within the mining industry it is useful to compare three different decades. Given the relatively low levels of fatalities within the coal mining industry in any given year, a decade gives a better statistical view of the data. In the ten year period ending in 1904, on average 25.1 people were killed per annum, in the decade ending in 1954 on average 16.3 people were killed per annum. In the decade ending in 2004 on average 2.4 people were killed per annum. The graph below is a reflection of these statistics and shows the number of fatalities in the coal mining industry in NSW, from 1904 to 2004.

![Average number of fatalities in 10 year periods](image)

Reference: Annual reports from the then Department of Mineral Resources

More recently, over the last five years, analysis of the mining industry safety performance measures, highlights the following trends:

- The fatal injury frequency rate has decreased from a high of 0.31 in 1999/00 to a low of 0.04 in 2002/03. However in 2003/04 the fatal injury frequency rate has increased to 0.11 due to three fatalities in the coal mining sector. The following charts show this. The first fatality at Kayuga Colliery on the 20/11/2003 occurred when a contractor employed as a dogman was raising a load whilst delivering construction materials. Two fatalities occurred on the 28/5/2004. The first occurred at Mt Thorley Warkworth mine involving a contractor who was changing a tyre. The second occurred at Dartbrook Colliery where a contractor was involved in an incident that included a fall of roof. Over the last five years the main contributing factor to fatalities has been strata control.
It should be noted that out of the last 26 fatalities, nine have been contractors.

Fatal Injury Frequency Rate for the two main mining sectors within NSW – Coal and Metalliferous & Extractive. The fatal injury frequency rate takes into account the changing employment profile of the industry.
Data Source: DPI – Minerals and Minerals Council of Australia

Note: Fatal injury frequency rate is the number of fatal injuries per million hours worked.

The opal-mining sector has had no fatalities over the last six years. This is a marked contrast to the previous ten years where the fatalities occurred on average of one per year. This improvement is largely attributable to the safety awareness courses that have been conducted over recent years.

Serious injuries in the coal industry have progressively decreased from 61 in 1997/98 to 23 in 2003/04 whereas in the metalliferous and extractive sector there has been a decrease from 42 in 1997/98 to 7 in 2003/04 as shown in the chart below.
**Note:** Serious injuries are defined in the Coal Mines Regulation Act (1982) and the Mines Inspection Act (1901)

![Bar chart showing serious injuries between 1994 and 2004 for coal and metalliferous & extractive sectors](chart.png)

Serious Injuries for the coal and metalliferous and extractive sectors within NSW.

Data Source: Annual reports from the then Department of Mineral Resources
Lost time injury frequency rates in the coal industry has progressively decreased from 52 in 1997/98 to 19.8 in 2003/04 whereas the metalliferous and extractive sector has had a less dramatic decrease from 14.7 in 1997/98 to 11.5 in 2003/04.

**Note:** Lost time injuries are injuries where time lost from work is one day or shift or more. Lost time injury frequency rate is the number of lost time injuries per million hours worked.

The Executive summary of the *Report to the Mine Safety Council Analysis of Comet data 1 July 1999 to 30 June 2003* draws the following conclusion in relation to the safety performance of the NSW mining industry over the period from 1999 to 2003:

“This pattern of decreasing fatal and serious injuries but increasing or static numbers of dangerous occurrences and incidents may reflect an important shift to reporting and acting earlier before a major incident occurs. It is important that the industry maintains this trend.”

The Department of Primary Industries submission contains a more comprehensive analysis of the safety performance measures outlined above in the following attached reports:

- attachment 1 – detailed schedule of fatalities since July 1997.
measures provides a broad overview of the safety performance of the NSW mining industry.


This is a detailed analysis of all the reportable incidents under the legislation.
Appendix 3
Role of the Department of Primary Industries and Strategic Direction
3. Role of the Department of Primary Industries and Strategic Direction

The Minister for Mineral Resources has the responsibility through the Department of Primary Industries for the regulation of Mine Safety in New South Wales.

This is administered through the *Occupational Health and Safety Act 2000* and specific health and safety legislation for mining.

**Strategic Direction**

The broad strategic direction for Mine Safety has been developed working with the industry through the Mine Safety Advisory Council.

**Objective**

To ensure that mining and exploration industry satisfies community and Government expectations for safety, health and resource extraction.

**Outcomes**

Industry understands Government's expectation of safety, health and resource extraction performance.

Industry performance is evaluated against these expectations and achieves continuous improvement as a consequence.

Industry performance is improved as a result of evaluation and communication, and measures of performance are used to inform possible, continuous improvement to regulatory framework.

The Department is recognised as positively contributing to safety, health and resource extraction improvements.

**Broad Strategies**

Improve, through broad consultation, the legislative framework to provide clear, challenging, credible expectations of safety and health performance and resource recovery.

Evaluate industry performance through preventative structured site assessments and conduct responsive, effective investigations.

Enforce standards, encourage good performance, and analyse data and information to improve the safe extraction of a resource, communicate effectively needs for improvements, and consult with industry.

Recruit, train and develop effective Department employees supplemented by targeted project recruitment and improved Departmental processes.
Appendix 4
Structure and Function of the Mine Safety Branch within the Department of Primary Industries, and Role of Inspectors
4. Structure and Function of the Mine Safety Branch within the Department of Primary Industries and Role of Inspectors

The Mine Safety Branches report to the Director General, Department of Primary Industries through the Deputy Director General, Mineral Resources and the Executive Director, Biosecurity, Compliance and Mine Safety.

The Mine Safety function is split into two areas:

- Mine Safety Operations which covers field operations and the Mine Safety Technology Centre

- Mine Safety Performance, which covers industry standards and practice, performance measures, competency, consultation and communication and major investigations.

The Investigation Unit is an autonomous unit responsible to the Director General for the carrying out of investigations into fatalities and serious accidents and incidents.

This arrangement further cements the independence of the investigations unit, as recommended by the Gretley review.

Mine Safety Operations

Mine Safety Technology Centre

The Mine Safety Technology Centre staff provides critical services of testing coal industry equipment, substances and materials and advice to the Chief Inspector and inspectors.

The Subsidence Engineering group provides key technical advice to the Chief Inspector, Environmental Sustainability Branch and other government agencies for consideration in decisions about approvals to extract coal.

Field Operations


The major categories of activities are proactive assessments and authorisations, enforcement, investigations and standards improvement. From time to time special projects are undertaken to increase focus on particular safety issues in one or a combination of the major activity areas.
**Mine Safety Performance**
This branch is responsible for:

- the development and management of policies
- regulatory models
- development and implementation of systems
- the standards of major investigations
- prosecutions
- consulting systems
- communication to improve the safety performance for the mining industry of New South Wales.

The branch comprises two units:
- Performance Improvement
- Investigations.

**Performance Improvement**
Industry Standards and Practice
Responsible for the development and implementation of an appropriate regulatory environment for health and safety in the mining industry through the identification of issues, options and preferred directions, coordination and monitoring of industry groups to produce regulatory instruments consistent with Government, Departmental and Divisional policy.

**Performance Measures**
Responsible for managing and improving the process for the collection, analysis, interpretation and dissemination of data and information to advance safety performance in the NSW mining industry.

**Consultation and Communication**
Development and implementation of communication strategies to enable the mining industry to be informed and to adopt best practice in safety management. The activities are undertaken to promote and facilitate comprehensive communication between stakeholders on safety and thereby contribute to the development of a pervasive safety culture across the industry.

**Competencies and Process**
Responsible for the development of policy and management of systems to establish and operate the Competencies Boards and the operation of existing examination panels. The area also coordinates and delivers information and education programs and manages the various forms of authorisations for the conducting of mining operations.

**Investigations Unit**
The Unit investigates all fatalities and selected serious mine events by gathering quality information and evidence as to systems failures, inadequate management of risks, contributing human factors and potential non compliance with legislation. The Unit may investigate the role of the
Department leading up to a mine event. The Unit assists and gives evidence at coronial inquests and prosecutions commenced by the Department.

To maximise the benefits of investigations the Unit analyses mine events to derive key lessons learnt. This information is devolved to industry stakeholders to prevent recurrences and to improve safety cultures.

The Unit also develops and conducts specialist training, provides field support to investigating officers, sets standards for conducting investigations and participates in legal proceedings.

The Unit operates independently from the Mine Safety Operations Branch and reports to the Executive Director, Biosecurity, Compliance and Mine Safety.

**Mine Safety Budget**
Additional funds of $21.5 million has been provided to support improvements in mine safety since the 1997 Mine Safety Review.

Treasury has committed further funding of $3,200,000 for the 2005/06 period. No additional funding arrangements presently exist beyond 30 June 2006.

**Mission Statement**
To regulate mining operations to achieve safe and responsible mining, and optimal resource recovery.

**Objective: Safe Operations**
Mining and exploration industry satisfies community and Government expectations for safety, health and resource extraction.

**Outcomes**
- Industry understands Government's expectation of safety, health and resource extraction performance.
- Industry performance is evaluated against these expectations and achieves continuous improvements as a consequence.
- Industry performance is improved as a result of evaluation and communication, and measures of performance are used to inform possible, continuous improvements to the regulatory framework.
- The department is recognised as positively contributing to safety, health and resource extraction improvements.

**Strategies**
- Improve, through broad consultation, the legislative framework, to provide clear challenging, credible expectations of safety and health performance and resource recovery.
- Evaluate industry performance through preventative structured site assessments and conduct responsive, effective investigations.
- Enforce standards, encourage good performance, analyse data and information to improve the safe extraction of a resource, communicate effectively needs for improvement and consult with industry.
• Recruit, train and develop effective Department employees supplemented by targeted project recruitment and improved Departmental processes.

**Duties of Inspectors**

The General Rule and Regulations contain the legislative requirements for management systems to control major hazards (catastrophic events). Inspectors cover these in assessing mining activities and proposed mining.

Individual inspectors have an annual personal work plan. This is an attempt to prioritise activities based on risk profile of mines and strategic campaigns for that particular year. The percentage of time devoted to regular programmed inspections and campaigns compared to "reactive callouts" will vary, depending on inspectorate resourcing in particular mining areas and the nature of mines in that area.

Inspectors have a statutory responsibility to attend sites of specified incidents. The response time varies depending on severity, but this requirement normally has priority. Approvals and authorisations generally require a mine (visit)s to confirm arrangements and consult with management and employees. Complaints from employees and/or members of the public require discussion with mine management and occasionally site inspections.

Targeted assessments are generally conducted using a quality assured audit method. All safety operations personnel have been trained and accredited in audit preparation and conduct.

Standard inspections are based on inspector and mine safety officers' experience and judgement. In these cases the work place or process is observed under normal conditions. This also allows a greater involvement with employees on the job. The inspector/mine safety officer is looking for statutory compliance but also using experience and judgement to assess that safe and appropriate methods are employed.

Inspectors have a role as both advisor and enforcer. Individual inspectors vary the mix of application depending on their own personality and philosophy. Also the strategies used for multinational companies may be quite different than for small mines.

Incident investigations require a combination of assessment and inspection. In the first instance the inspector/mine safety officer is looking for compliance or deviation with safe job procedures or conditions of approval. Secondly experience and judgement is brought to bear in forming an opinion regarding the cause of the incident and potential remedies.

The traditional role of mine safety inspectors has been to check for compliance with specific requirements in the legislation and regulations. With the advent of the safety management systems approach, there has been a need for inspectors to change their emphasis to auditing these systems, which essentially means checking for compliance with the requirements of these systems.
**Officers and Staffing**

- There are nine offices and the Mine Safety Technology Centre throughout NSW.
- There are 67 full time positions including administrative support.
- Of these 51 are inspectors and mine safety officers.
- 30 are inspectors, 21 are mine safety officers, and 14 administrative staff.
- Two established coal inspectors positions previously funded cannot be filled due to unfunded salary increases and incremental salary rises since the financial year ending June 2000.
- Of the 30 inspectors, 1 is both Coal & Metalliferous/Extractive (1 CICM & CIM), 11 are coal (2 SICM-AM, 2 SICM-SD, 7 ICM), 9 metalliferous & extractive (1 SRIM-AM, 7 RIM, 1 RIM-Support), 4 mechanical (1 SIME, 3 IME) and 5 electrical (1 SIEE, 4 IEE).
- Of the 21 mine safety officers, 5 are coal, 11 metalliferous & extractive, 1 is electrical and 4 are mechanical.
- This results in 42 inspectors and mine safety officers with primary field duties, two senior inspectors with technical and partial field duties and the chief inspector, five senior inspectors and one regional inspector with management, technical, industry engagement and as required field duties.

**Inspections of mines is scheduled for a minimum of**

- 6 visits per year for continuously worked underground mines,
- 3 visits per year for continuously worked open cut mines, and
- 1 visit per year for intermittently worked open cut mines.

**In addition to these planned visits, inspectors and mine safety officers visit mines as required by regulation to investigate prescribed types of incidents and accidents.**

**The target for planned inspections this year is 800.**

**MSTC includes the Thornton Laboratory (12), and Subsidence Engineering for a total of 16 positions.**
Appendix 5
“Call for Submissions”
Advertisement
The New South Wales Minister for Mineral Resources, Kerry Hickey MP, has recently announced a Mine Safety Review, convened by the Hon Neville Wran AC QC, who will be assisted by Ms Jan McClelland. The Review will be advised by a panel of three experts.

The Review plans to make recommendations to the Minister in late December 2004.

Terms of Reference for the Review are as follows:
(1) Review the progress with the implementation of the recommendations of the Mine Safety Review and the Gretley Report.

(2) Consider whether any change in the implementation of these recommendations is required.

(3) Review the operation of the Mine Safety Advisory Council and the supporting consultative process.

(4) Review and make recommendations in relation to:
   a) the safety performance of contractors
   b) the broad practice of hours of work and fatigue management; in the New South Wales mining industry.

(5) Review the enforcement policy and the processes used by the Department to implement the policy.

(6) Consider ways and make recommendations as to how the New South Wales mining industry safety culture could be improved.

Submissions to the Review (in both hard copy and e-mail) are being sought from interested parties, by close of business on 5 November 2004, addressed to:

Mine Safety Review
Attention: Mr Jon Hawke
Department of Primary Industries, Mineral Resources
PO Box 536
ST LEONARDS NSW 1590
e-mail: jon.hawke@minerals.nsw.gov.au

The Review also proposes to meet with major parties during the week commencing 15 November 2004.

Inquiries may be made to Mr Jon Hawke on 02 9901 8508 or 0407 921 462.
Appendix 6
Key Point Summaries of Written Submissions Received for Mine Safety Review
6. **Key Point Summaries of Written Submissions Received for Mine Safety Review**

1. Department of Primary Industries
2. DPI Inspectors of Coal Mines
3. CFMEU National Office
   - CFMEU – Northern District Branch
   - CFMEU – South Western Districts
4. The Australian Workers’ Union
5. The Colliery Officials Association
6. Mine Managers Association of Australia
7. Thiess Pty Ltd
8. Roche Mining
9. Association of Professional Engineers, Scientists and Managers, Australia Collieries Staff Division (APESMA)
10. NSW Minerals Council
11. Minerals Council of Australia
12. Australian Mines & Metals Association
13. Hanson Construction Materials Pty Ltd
14. Illawarra Coal – Carbon Steel Materials
15. Centennial Coal
16. Xstrata Coal
17. Rio Tinto Coal Australia
18. Anglo Coal (Drayton Management) Pty Ltd
19. Newcrest Mining Ltd (NML)
20. Mr Bruce Ham (Consulting Mining Engineer/Health and Safety Adviser)
21. J M Galvin, Professor of Mining Engineering, University of NSW

**Note:**

These “key point summaries” of each written submission received were prepared by the Review Secretariat. The summaries should be read in conjunction with the submissions’ Recommendations listed in Appendices 22-25. Authors of the original submissions were not given the opportunity to comment on these summaries. The “key point summaries” were prepared to assist in the Review process; any omission of particular key points in submissions, misinterpretation of key points, or errors is unintentional.
1. DEPARTMENT OF PRIMARY INDUSTRIES

A comprehensive reform program for mine safety has run since 1997. The initial program flowed from the implementation of the recommendations of the Mine Safety Review 1997 and the Gretley Inquiry 1998. The purpose of the program is to improve the safety performance of the mining industry by changing the regulatory model, systems, processes and the culture through a wide range of complementary strategies. These strategies are being rolled out progressively and have already resulted in significant improvements in terms of safety performance.


The change agenda for Mine Safety since 1997 has been heavily influenced by the recommendations of the Mine Safety Review and the Gretley Inquiry.

The Mine Safety Review and Gretley recommendations have been dealt with but some of the issues contained in those recommendations are ongoing matters for continuous improvement. The implementation has been done through a tripartite process involving consultation with industry, unions and government and has been overseen by the Mine Safety Advisory Council.

Mine Safety Advisory Council

The Mine Safety Advisory Council has been recently established in legislation which had the support of the major stakeholders. The Council is a tripartite body, consisting of representatives from industry, unions and government. It is considered that the function constitution and terms of reference are appropriate and workable. It is important that the members of the Mine Safety Advisory Council fully contribute and support the strategic directions and strategies submitted to and approved by the Minister.

To assist the operation of the Mine Safety Advisory Council, it is suggested that a major forum of the parties be convened to develop, for the Minister's consideration, a five-year plan.

The industry advisory committees should support the Mine Safety Advisory Council but they should focus on the identification of risks and development and implementation of prevention strategies for their industry sectors. It is considered that they should be more proactive in dealing with their sector issues.
Contractors
A project to survey large mines to obtain further information on the safety performance of contractors that was planned and agreed, has now been brought forward. The Department will undertake to examine this matter and hours of work and provide the review with appropriate data and analysis in December 2004.

The new legislation, when implemented, will bring into force a rigorous regime to manage contractors safety and health in the mining industry. This system should be implemented, supported and given the opportunity to be effective. It is proposed that some 18 to 24 months following the implementation of this legislation that a major audit be carried out by the Department of the practice, performance and compliance under the new requirements.

Working Hours
Limitations on hours already exist and research into the practice elsewhere is provided in the submission. The Department has put a great deal of resources into the development of guidelines for fatigue management and an appropriate audit tool. Unfortunately, agreement in the industry on the guidelines and the inclusion of a limit on hours worked could not be reached. Certainly it is the Department’s position that hours worked, ought to be a major factor taken into account in fatigue management. However, whether it should be an absolute limit applying to all operators under all circumstances is a matter for the Government to consider, in light of the risks in this industry and the possible ramifications for industry generally.

Enforcement
The Department’s current enforcement policy allows for a range of enforcement responses, depending on the circumstances of the breach, from warning to prosecution. When appropriate, prosecution is pursued vigorously. It is important to have the right balance between improvement strategies and prosecution to have the most positive impact upon improved safety performance.

It is considered that the existing enforcement policy is sufficiently broad and robust to remain appropriate. The policy is clear and has not itself been a cause of criticism. However, there has been a divergence of views amongst key stakeholders as to the implementation of the policy. It is anticipated that this aspect will be subject to submissions from the parties.

To improve the operation of the policy in practice, the Department has prepared an assessment/decision-making tool to determine which matters should be identified for more thorough investigation. The process is transparent and provides for review by those not directly involved in the investigation.
Although the process must be fair, consistent and credible to all stakeholders, it must be recognised that:

- it is important to focus resources on those matters where a full investigation is most appropriate
- differences of opinions from stakeholders as to which of these matters are fully processed will occur from time to time.

**Safety Culture**
A great deal of research has been undertaken into culture and its impact upon safety performance. Some of the research is reviewed and an outline provided of the activities being undertaken to positively influence the culture of the mining industry.

The major projects initiated in this area by the Department have been: lessons learnt from major investigation; analysis of electric shock incidents; and analysis of unplanned movements of mechanical equipment.

The Mine Safety Advisory Council should address safety culture as a major ongoing agenda item.

To obtain a more informed view, it is proposed that a survey of the safety culture in the New South Wales mining industry be undertaken 12 months after the new legislation comes into force.

**Proposals**

**Mine Safety Advisory Council**
In assessing the effectiveness of the Council, it is considered that the establishment, make-up and function of the Council are appropriate and the revised Terms of Reference are applicable for an advisory body such as this.

To be effective, Council representatives should be in agreement with strategic direction and support the priority of strategies to be pursued. It is proposed that:

(i) the Council arrange a planning day to workshop the strategic direction and priorities of the Council and produce a five-year plan for the consideration of the Minister, which can then be reported against on a quarterly basis.
**Contractors**  
It is proposed that:

(i) a survey of large mines be conducted to collect data on safety performance and contractors and be completed by December 2004

(ii) the new legislative requirements in relation to contractors be introduced as soon as possible

(iii) the Department undertake a major audit of the practice performance and compliance under the new legislative requirement, some 18 to 24 months following the introduction of the legislation.

**Hours of Work**

(i) It is considered that hours worked should be a major factor taken into account in the management of fatigue. Whether it should be an absolute limit applying to all operators under all circumstances should be considered by the Government in light of the risks in the industry and any possible ramifications for industry generally.

(ii) To assist in any deliberation on hours, a survey of hours worked at large mines is to be undertaken with the intention of providing the review with appropriate data and analysis in December, 2004.

(iii) In relation to the lack of knowledge of the hours worked elsewhere before arriving on a mine site and people’s fitness for work, computer swipe card systems have been suggested to manage this problem.

**Enforcement**

It is considered that the existing enforcement policy is sufficiently broad and robust to remain appropriate. The policy is clear and has not itself been a cause of criticism. Accordingly, it is considered that no change to the enforcement policy is required.

It is proposed that an assessment and decision making tool, which has been prepared by the Department to determine which matters should be identified for more thorough investigation:

(i) be provided to the industry for their information

(ii) have a trial implementation by the Department.
Culture
It is proposed that:

(i) the range of activities that the Department is pursuing to positively influence the safety culture of the mining industry continue,

(ii) the Mine Safety Advisory Council address safety culture as a major ongoing agenda item, and

(iii) a survey of the safety culture in the New South Wales mining industry be undertaken 12 months after the new legislation comes into force.
2. DPI INSPECTORS OF COAL MINES

The main points of the inspectors’ submission are:

• that coal mine safety administration must be the domain of people competent in coal mine safety.

• that there is a need to align the responsibility for resource allocation with the responsibility for achieving safety results.

• that Risk Identification Management Systems (RIMS) is an impediment to safety in coal mines. It is simply a distraction from real safety in coal mines.

• that the issues outlined in our submission are so serious that the DPI “COMET” data base should be discontinued forthwith.

• that diversion of approved monies to meet unfunded Award provisions results in a failure to supply Inspectors with essential safety equipment and permits critical safety positions to remain vacant.

• that safety effectiveness of inspectors is being greatly diminished by poor decision making processes employed in the development of safety policy within DPI.

• that teaming Mine Safety Officers (MSO’s) with Inspector supervisors is essential to ensuring the Inspectorates’ ability to be pro-active over a sustained period.

• that application of enforcement policy should be extended, by the initiation of low to mid range prosecutions. The predominant forum for such prosecutions could be the Industrial Magistrates Court.
3. CFMEU – NATIONAL OFFICE

• The CFMEU believes that the Committee should report to the Minister that safety in the industry remains in a similarly parlous state as it was when the Mine Safety Review and the Gretley Inquiry reports were made. The safety culture in the industry has not changed and new challenges have not been addressed. The industry is failing to manage crucial factors such as contractors, hours of work, risk assessment and consultative processes. The Department is failing to effectively enforce the regulations.

• The industry continues to have a poor safety record compared with other sectors.

• The Committee should report to the Minister that more resources must be allocated to safety.

The Terms of reference

1 & 2. The implementation of earlier recommendations

So far as the material contained in this submission demonstrates that there has been a failure to implement those recommendations, the CFMEU says that those responsible should be censured. (Note that alleged items that may be documented in the report have not been itemised yet.)

3. The Operation of the Mine Safety Advisory Council

The CFMEU believes that there is a need for the strengthening of consultative processes throughout the industry.

4. Contractors and Hours of Work

The CFMEU believes these two issues to be critical and that a Board of Inquiry should be convened under s94A of the CMRA to investigate the failures of the industry and the Department to address these important issues. The Committee should recommend to the Minister that such a Board be established.

5. Review the enforcement policy of the Department

The CFMEU believes that the Department’s enforcement record has improved little since the Gretley report and that its record in and attitude towards prosecutions when considered against the accident statistics remains appalling. The Committee should recommend that a specific review of the prosecutions policy and practices should occur. Such review should be conducted by an independent expert with experience in prosecution work. The aim of the review being to advise the Minister specifically on means
addressing the problem of a lack of effective prosecutions by the Department and means of improving this record.

6. **Consider ways of improving mining safety culture**

The Committee should advise the Minister that there is much work to be done. The safety culture of the industry must be inadequate as it is failing to address the needs of workers. There are worrying trends: there is a culture developing among one third of the industry, the contract workers, which is fearful of raising safety concerns. There is a culture of working longer hours. There is a culture of top down safety management and a failure to properly consult. There is a culture of using risk assessment to justify unsafe practices.
The Northern District Branch of the Construction, Forestry, Mining and Energy Union, Mining and energy Union, Mining and energy Division, is the principle Union that represents the industrial and safety interests of persons working in the coal industry in the Northern District coalfields of New South Wales. The district has approximately 5,000 members and has significant membership representation at underground, open cut and coal preparation plants that are located in the Northern district coalfields. The Northern district coalfields can generally be described as the coalfields that fall within the boundaries of Gunnedah to the west, the bottom end of Lake Macquarie to the south, and Gloucester to the east.

Between 1998 and 2001 the number of workplace accidents in the New South Wales black coal mining industry recorded by WorkCover has fallen gradually, however the severity of workplace accidents has increased. In 1998/99, 84.7% of accidents involved disability for less than six months, and 14.5% involved permanent disability or disability over 6 months. In 2000/-1, 80% of accidents led to disability for less than 6 months, and 19.5% involved permanent disability or disability over 6 months. The more frequent injured area is the trunk, followed by the upper, then lower limbs. Injuries are most likely to involve either mobile plant and equipment, or environmental factors, and are caused primarily by falls, trips and slips, being struck by moving objects or body stressing. In contrast the most common cause of injury in all industries is through the use on non-powered hand tools, appliances and equipment, in front of environmental factors. (Source: www.workcover.nsw.gov.au)

In performing its industrial and occupational health and safety representative functions for its members, the CFMEU Mining and energy Division, Northern district Branch observes on a recurring and regular basis the same sub-stratum of occupational health and safety failures in many of the examinations and inspections and other assessments concerning health and safety matters that arise. A number of these pandemic recurring failures are addressed below.

a) Contractors

There are a number of factors that contribute to unsafe work practices among contractors:

• Predominant contractors that are employed to operate heavy plant and equipment commence working at the operation after limited induction.

• There exists a failure for short term contractors to identify occupational health and safety concerns.
• Contractors may be inducted to work at one, two, up to ten different mining operations, with each mining operation having its own management systems, rules and schemes.

• The Union has experienced asking contracting companies that work between different sites for their policies and procedures and were informed that they don’t really have any and that they rely upon the mines.

• Contractors regularly exceed safe hours of work.

• Many contracting companies have either inadequate consultative mechanisms or no formal OH&S consultative mechanisms in place. Many operate without an Occupational Health and Safety Committee.

• Of the three most recent fatal accidents (one occurring during November 2003 and two occurring during May 2004), all involved the deaths of contractors. It is clear that in at least one of these fatalities fatigue appeared to have contributed to the accident, taking into account the time and hours spent on the job. In two of the fatalities, safe operating procedures were inadequate and in one of them, fit for purpose equipment was not used, correct documentation and appropriate support rules were not in place and, in all three, a weakness in the management systems is apparent.

b) Hours of work

• There has been an increase in the number of hours worked by employees. Most open cut operations now work an average of 42 hours per week with shift lengths up to 12 hours and 20 minutes. Employees who work these rosters often work on a rotating day/night basis, and a significant number travel up to an hour and a half commuting to and from work. Fatigue from working extended shifts is a major hazard.

Lengthy and intermittent hours of work may contribute to unsafe work practices in the follow ways:

• There has been a significant increase in hours of work, particularly involving extended shifts, contributing to prolonged exposure to health hazards ie. dust, increased levels in fatigue and vibration related injuries.

• Hot seat changeovers do not allow employees enough time to perform adequate inspections before their shift.

• Contract employees are required to work on-call. For example, if called in during the afternoon to work night-shift, they will be fatigued if they have not slept during the day.
c) Risk Assessments

In the District Check Inspectors performing their role as required by the CMRA, a failure to have performed an adequate risk assessment is evident in almost every examination and inspection of a notifiable incident that occurs.

d) Failure of Employers to Conduct Appropriate Investigations into Incidents and Implement Actions

e) Failure to Adequately Consult

f) The Department of Primary Industries, Mineral Resources

It is the assessment of the Northern District Branch of the CFMEU that the department and its Inspectorate have failed to fulfil their functions and obligations mandated to them under the Coal Mines Regulation Act, its associated regulations and other occupational health and safety legislation. The Department has failed to conduct site assessments in a manner that would facilitate identifying employers' failures to comply with the legislation, rules and schemes, and have in place appropriate systems of work.

g) Failure to Have Implemented appropriate systems of work – review of District Check Inspector Files

The Union’s recommendations to the Mine Safety Review

The Northern District Branch of the Mining and Energy Division of the CFMEU suggest that as a minimum the following recommendations should be made by the Committee.

• Investigate and review the way in which contractors (for labour) are administered and the management structure that controls the job requirements, structure and environment for the safety of workers.

• Funding to the department of Primary Industries, Mineral Resources must be increased to an adequate level to provide for more inspectors at the ground level.

• Unannounced inspections must be unannounced with regular site assessment to occur.

• Information dissemination from assessments to be in accordance with department’s stated objectives. With detailed records of outcome of assessments made available to workforce and public as well as a requirement that every action be acted upon, records be kept by the mine, employers and the Department verifying they have occurred. With this information required to be made available to workforce and public.
• That the NSW Government, in light of the revenue generated by the coal industry, adequately fund the Minerals Division of the Department of Primary Industries to ensure:-

1. That enough mine inspectors and safety officers are employed to allow for routine inspection at mines to be carried out, as these are currently not occurring.

2. Inspectors with an appropriate range of skills must be employed in order to comply with the above. The removal of the requirement that Department Inspectors have mine manager qualification. The current requirement which means that the only real career path for Inspectors, if they leave the Department, is to obtain employment with the mining companies they were meant to regulate.

3. Manning within the Investigation Unit is maintained at all times to facilitate the timely prosecution of companies who fail in their duty of care to contractors and employees.

• The Department should ensure that all guidelines that are still in draft format, ie. inrush prevention, reclaim tunnels, sealing of abandoned mines and shafts etc. be brought to completion then gazetted by the chief Inspector of Coal Mines.

• Contractor management within the industry needs to ensure that contractors are afforded the same protection in relation to safety as full time employees. This is currently not the fact.

• All recommendations from the Mine safety review and the Gretley Inquiry must be fully implemented in line with the previous commitment of the NSW Government.

• The use of safety incentive schemes, and their effectiveness, should be reviewed and eliminated.

• An industry-wide training scheme should be developed for all new entrants to the industry, regardless of their employment status.

• Implement systems to ensure employers are required to perform adequate risk assessments.

• The Department to enforce adequate systems of work and take action where employers fail to do so.
The implementation of a complaint mechanism that can be accessed by employees and the Union, in which failings of the Department and its inspectors in taking appropriate actions can be examined on an ongoing basis.
CFMEU – SOUTH WESTERN DISTRICTS

1. The South Western District of the Union

The South Western District branch of the Construction, Forestry, Mining and Energy Union, Mining and energy Division, is the principle Union that represents persons working in the coal industry in the South western district coalfields of New South Wales. This district covers the coal mining fields of the Illawarra, Lithgow, Kandos and Mudgee areas and metalliferous mining field of Broken Hill, Cobar and the Central West in the state of NSW. The mining operations within the Southern region of the district are all underground with only one major Open cut operation and a further two Open Cuts on a much smaller scale. There are coal preparation plants in both regions of the district.

A little more than two thirds of our membership work in the industry on a permanent basis, with the other third predominantly non-permanent, contractors or fixed term or defined period employment. Our district, along with other sections of the coal industry, has witnessed a rapid increase in contract and non-standard employment over the last four years, a situation which has created many challenges for safety in the industry and for the union.

The South Western District of the union is faced with a myriad of safety challenges known to be associated with underground coal mining including but not limited to high levels of methane gas in some (eg. Appin), particularly difficult strata control challenges (eg. Springvale), as well as the known hazards that confront workers in underground environments including (but not limited to): dust and ventilation, risk of underground fires, strata control, inrush, explosions, outbursts, pillar collapse, working in confined and difficult environment, manual handling and unplanned movement of equipment. The still onerous and dangerous conditions to be found in underground coal mines in particular cannot be underestimated.

The Illawarra area is particularly renowned for its difficult and dangerous mining conditions and it has a long history of mining disasters. This was further emphasised in the NSW Mines Advisory Council analysis of Comet data for the reporting period July 1999-June 2003. The authors of this report stated (page 23) that: a significant number of mines had comparatively higher number of reportable incidents over the four reporting years. In particular, Westcliff (6.6%) Appin (6.1%) and Tahmoor (5.3%) had higher number of reportable incidents than other mines. The report further notes that:more importantly, some mines have shown an increase in the number of reported incidents over the past two years even though the overall numbers of reports may not have been high”.

However, the South western disztricr has become alarmed at what it believes to be a serious deterioration in safety practices over the past eighteen months to two years in particular.
2004 has seen in the south/West an increase in reported accidents over previous years with fewer than a month of this remaining 19 injuries classified by the Coal Mines Underground Regulations as “Serious Bodily Injuries” have occurred.

Probable reasons for this increase, are a continual push for increased productivity, increased hours of work and shift lengths, inadequate training, and contract workforce moving from site to site, lack of job security, performance based assessments.

Moreover, serious bodily injuries have increased markedly over the past 12 months. There were 13 serious bodily injuries reported in the SW District in 2003 and 2004 for the period up to end November 2004. This figure excludes injuries which are not classified as “serious”, and also excludes first aid and medically treated injuries and dangerous occurrences which could have resulted in injury or even death.

**Contract Workers**

A full one third of workers in the NSW Coal industry are now contractors. The district believes that the increase in contractors is being driven by cost, by increased flexibility and by the desire to avoid, if possible, working through the union. Management believes that contractors are more compliant and are willing to do things other workers are not. Contracting companies are placed under pressure by larger companies to cut corners and reduce costs.

**Employment status of statutory mining officials**

There is a current trend of companies seeking an exemption from having to directly employ statutory mining officials. These statutory officials have safety responsibilities under Regulation. We now see these officials (deputies and undermanagers, production managers) being employed for a fixed term, may swing between roles.

**New Starters**

With the upturn in the coal market we are seeing a major increase in inexperienced miners starting in the industry. The poor supervisions and management of these workers is creating a real risk of a catastrophic accident or incident, we must make it a major objective to ensure the safety of these workers.

Documented competency based training schemes that also take into account experience must be put in place at all mines sites to cater for the inexperienced permanent and contractor workforce.
Workforce Performance Based Assessments

We believe and have reports from our membership that the increasing use of open-ended and highly discretionary work performance measures are being used to silence and place pressure on workers. Management, particularly Human Resources Managers are using this tool to obtain a compliant workforce.

Hydraulic Drilling Rig incidents

The SW district has very serious concerns about the design of hydraulic rigs. The department of Primary Industry has failed to detect the increasing incidence of these kinds of injuries and it has taken proactive action on the part of the union to raise these issues.

Hazardous Substances

The use of hazardous materials in the mining industry must be better controlled. Check Inspectors have constantly raised concerns over the use and controls in place with the use of P.U.R., Silent seat etc. the DPI, with the exception of the guidelines for the use of PUR do not seem to be across the increasing number and nature of chemicals and other hazardous substances used in the sector, especially underground.

Other issues

- Vibration
- Excessive working hours
- Re-emergence of negative safety incentives
- Risk assessments
4. THE AUSTRALIAN WORKERS’ UNION

The Australian Workers’ Union (AWU) is Australia’s oldest and third largest trade union, founded in 1886 and since its inception has represented miners in the metalliferous mining industry.

Safety Risks in NSW Mining
The AWU believes that some of the major factors currently compromising worker safety on mine sites in NSW include, but are not limited to:

- the use of contractors;
- poor worker training in safety issues;
- the failure of mining companies to pay more than lip service to safety issues, especially were there is a conflict between safe work practices and meeting production or profitability targets;
- long work hours and irregular work patterns; and
- the lack of genuine consultation and engagement by mining companies with workers and unions on safety issues.

These factors must be addressed in the interests of improving mine safety in NSW.

Vigorous Enforcement
It is the AWU’s view that aggressive enforcement action by the government may be the best hope for improving safety standards in the mining industry.

T of R2, Consider whether any change in the implementation of the Reviews’ recommendations is required.

Without placing various levels of importance on each of the 87 recommendations, there are some that the AWU would like to highlight, not least being recommendations 7, 12 and 14 of the Mine Safety Review.

T of R3, Review the operation of the Mine Safety Advisory Council and the supporting consultative process.

An incalculable void currently exists between the Mine Safety Advisory Council (MSAC) and the WorkCover Mining Industry Reference Group. Currently this division is counterproductive and has the potential to result in duplication of effort. One body needs to be chosen to bring together stakeholders across the industry. The current representation of stakeholders on WorkCover’s Mining IRG is insufficient, irregular and inconsistent. The MSAC is the more appropriately structured and positioned of the two bodies, however it does not utilise the process of coordinating its efforts sufficiently with sector-specific committees and related bodies (e.g. Resources and Infrastructure Industry Skills Council).
Recommendations

• Review the chains of communication between the MSAC and sector specific Committees.
• Identify equivalent bodies in other states and ensure process of reporting to a national body is established.
• Ensure representation of all relevant mining sectors on MSAC.

T of R4(a), Review and make recommendations in relation to the safety performance of contractors

Recommendations

• Explore administrative arrangements that will prevent the contracting out of statutory positions
• Regulations to permit implementation of contractor passport system
• Provide clear guidance material to clarify jurisdictional boundaries between OHS Regulation 2001 and Mines-specific legislation.

T of R4(b), Review and make recommendations in relation to the broad practice of hours of work and fatigue management in the New South Wales mining industry.

Recommendations

• Revise current regulatory provisions on hours of work in preparation for the introduction of a specific set of clauses for introduction as part of the new Regulation under the Mines Health and Safety Bill 2004.
• Clarify the role of the Department and any protocols that are available for assessing hours of work regimes and whether any process of “approval” exists where hours of work exceed current legislative requirements.
• Evaluation direction, scope and style of legislation dealing with hours of work that is in place for industries such as transport.

T of R5, Review the enforcement policy and the processes used by the Department to implement the policy.

The Department’s enforcement policy is in need of review. While it appears to have a comprehensive approach to enforcement, it omits some crucial considerations. These primarily relate to:

• Approach to systems auditing by Inspectors
• Confidentiality agreements
• Enforcement strategy (e.g. blitzes, focused inspections, snap inspections, small mines campaign).
• Use of prosecutions to deal with offences comprising prolonged non-compliance i.e. not necessarily severe injuries or fatalities.

T of R6, Consider ways and make recommendations as to how the New South Wales mining industry safety culture could be improved.

The notion of “culture” in the occupational health and safety context is made up of a multiplicity of factors. From a regulatory point of view, there should exist a culture of fear among corporations. Instead, there are repeated examples where companies show no respect for the role of the Department, while Departmental officers often maintain insufficient distance between themselves and corporate relationships.

The importance of objectivity on the part of the Department in the implementation of policies and legislative requirements cannot be underestimated. The Inspectorate needs to be seen as a having an impartial government focus, with a vigorous enforcement regime, not as a body that is subject to corporate influences. Prosecutions are generally ever only carried out following incidents, not in any proactive sense for long-standing breaches of the Act. If such action were taken, it would promote a culture of proactively maintaining a preventative focus.

Currently overriding efforts to improve OHS outcomes and associated notions of “culture” are efforts on the part of the federal government and business to introduce AWAs. The elimination of AWAs will help develop a culture whereby participation in consultative efforts to improve health and safety can occur unhindered and unrestricted. The elimination of AWAs will help to restore and revitalise our culture where participation in free democratic unions gives workers a greater voice and the ability to vigorously advocate and restore workers interests in OHS above that of individual company profits.
5. THE COLLIERY OFFICIALS ASSOCIATION

As representatives of the first level of accountability within the underground coal industry, the Association feels that the increased focus on safety management plans and hazard analysis is a step in the right direction, real time training within the supervisory ranks at many mining operations, has not been delivered to the employees most directly affected by mining activities.

Comments on Terms of Reference

1. The Mine Safety Review and Gretley Report:
The progress of the Mines Safety Review is travelling as swiftly as the Gretley Report is being implemented.

2. Changes in Implementation:
The speed of implementation needs to be measured and implemented by the people within the industry through consultation with all interest groups who have the most ability to influence and develop a measurable outcome of improvement in Occupational Health & Safety.

3. Mines Safety Advisory Council:
The Mines Safety Advisory Council is vital to the development and modification of the safety culture in the mining industry as it gives all parties an opportunity to project their views and most importantly, hear the views and concerns of other interest groups. It is indeed the only truly representative forum in the mining industry that has the power to develop and implement change in future direction regarding work safety.

4(a) The safety performance of contractors
Contractors now form at least 30% of the mining industry work force and are subject to pressures and influences not generally experienced by full time workers. The Association believes the industry has become too reliant on contractors to meet their production targets and must sooner or later realise that this part of the work force needs to be given the same respect and treatment as full time workers.

4(b) Hours of work and fatigue
The current industry trend to pursue increased hours of work and rostered shifts has not improved occupational health and safety in the coal mining industry.

5. The Enforcement Policy
The Enforcement Policy in the Association’s experience has not yet delivered an improvement in occupational health and safety.

The Association believes the Minerals Resources Department should conduct more regular safety audits in order to give the industry guidance and knowledge and develop trust and respect instead of fear of complicated work systems and personal litigation.
6. Improvements to safety

1. Safety in the industry could be improved by promoting more competency-based training.

2. The industry must find ways to encourage and assist more employees to study for Certificates of Competency and promote the acceptance of responsibility for health and safety across all employees in order to develop a greater degree of self accountability and responsibility within the mining culture.

3. Supervisors, tradesman and operators must be given the opportunity to truly consult and develop safe operating procedures that will be accepted and embraced by the very people whose health and safety is directly impacted by mining operations.

4. Companies must factor into their budgets the cost to production of the consultative process and must make available the facilities and opportunity for a diverse cross section of their employees to become involved in the development and implementation of safety management plans and safe operating procedures.

5. Mining companies, unions and other organisations representing various levels of the management structure must commit to co-operation and work together with the Mineral Resources Department to satisfy the public expectation that people who gain employment in the coal mining industry, will have permanency of employment and enjoy a life free of injury and incapacitation through mining activities.

6. The Coal Mine Safety Advisory Council should be re-convened as soon as possible to carry on with the current development of the new Coal Mine Safety Regulations in consultation with the Mineral Resources Department and all other interest groups represented.

7. The Colliery Officials Association firmly believe the Mineral Resources Department should continue to have ownership and oversee the basic standard of achievement for examinations of the three classes of mining competencies in order for the public expectation of accountability to be satisfied.
6. MINE MANAGERS ASSOCIATION OF AUSTRALIA

- Employers and other industry parties have responded in a positive way to the recommendations of the 1997 Mine Safety Review and the Gretley Inquiry. Most have been implemented.

- Legislation should be enacted to regulate the Departments responsibility in the control and keeping of mine plans and other vital information.

- Many in the industry see the Mine Safety Council as remote and not responsive to the needs of coal industry stakeholders. Underground coal mining has unique mining systems and hazards. Those in the industry look to the Coal Safety Advisory Committee (coal consultative committee) for guidance. In its present form it is a “toothless tiger” If issues with it's functions and role can be addressed, there is an opportunity for this committee to fulfil a highly useful and informative role.

- The completion and implementation of the Regulations supporting the Coal Mine Health & Safety 2002 could be expedited if the Government allocated sufficient resources to drafting the regulations and issues with the functions of the Coal Safety Advisory Committee were resolved.

- The continuing and frequent restructuring of the Department of Mineral Resources (now Department of Primary Industry) is cause for concern within the industry as well as officers within those Departments.

- It is not constructive to target all contractors as having a poor safety record. Some Contractors have an excellent safety record. They are a diverse group ranging from individuals to large organisations working part time or full time on mine sites. There is an anomaly with Contractors having a record of lost time injuries better than the industry and fatality rates in recent times apparently worse than the industry. Research is required to clarify exposure rate and identify poor performance.

- Fatigue is a complex matter and a difficult issue to manage. Legislating to control hours of work will not solve the problem. Controls on hours of work are already in place. There are many other factors such as home environment & stress, alcohol & drugs, medication, travel distance to work, activity outside of working hours etc. that affect a person’s performance at work. Our Association is of the view that fatigue is best managed through site-based consultation with employees.
• We believe the approach taken by the Department to prosecution and the impossibly high standard set by the application of the duty of care is negatively impacting on safety in the coal industry. This is causing an exodus of the more experienced and capable coal mine managers, together with other supervisory personnel from statutory positions. It is time the department recognised the improvement and maturity of the industry in regard to safety and moved to work with it in a more co-operative, rather than a heavy-handed, punitive and adversarial, manner.

• Accident investigation by the Department is focused on finding evidence for prosecution rather than on quickly determining causal factors. The process often takes up to 2 years. Safety Alerts issued by the Department in recent times are meaningless because of a lack of information on the accident.

• We are of the view that sustainable improvements in safety performance can be realised by focusing on unsafe workplace attitude and behavioural non-compliance factors and make the following comments;

• The rate of improvement in recent years is unlikely to be sustained by improvements in safety systems alone

• It is said that many accidents are due to unsafe workplace attitude and behavioural non-compliance factors, rather than the systems in place. A significant number of incidents in recent times exhibit these causal factors

• If the workplace attitude and behaviour of all employees is to improve, employers, managers, regulators and employee representatives all need to play a part.

• A culture and enforcement policy that assumes always a management failure, whilst ignoring the attitudes and behaviour of individuals (supervisors and employees) will inevitably fail.

• There has been significant success in reducing the fatality rate on the road system penalising operators of vehicles rather than the custodian and operator of the road system. The coal industry and department can learn lessons from this.

• Instead of focussing purely on the gathering of evidence for prosecution purposes aimed exclusively at management, it is important that the Department determine the range of failures following an accident, communicate this quickly to industry and acknowledge where appropriate the contribution of management and individual failures.
• The most effective solutions to improving safety performance are often generated on mine sites by managers consulting and working with employees. A major benefit is ownership and commitment by those contributing to the process.

• The Coal Mines Qualification Board is to be replaced by the Coal Competence Board. There is no requirement for any member of the Board to have coal mining qualifications or experience. This compares poorly with the Queensland system. We have a concern that technical expertise of mine management may be eroded if a Board without coal mining expertise administers the system.

• Details of accidents and causal factors, guidelines and other safety related information should be free of charge and readily available for downloading on the Department’s website. The current user pay system is time consuming, onerous to access for individuals and sends the wrong message to stakeholders.
7. THIESS PTY LTD

Thiess a major contractor. Thiess have limited their response to two key issues:

1. Contractor safety
2. Fatigue and Hours of Work.

Thiess supports the NSWMC submission and its comments that there is little or no evidence that contractors and subcontractor’s safety performance is less than that of owner-operated mines.

Thiess adopts strict subcontractor management practices particularly with regard to selection, risk management, systems auditing and supervision.

All employers, contractors and subcontractors have duties under the OHS Act 2000 to ensure the safety of their employees and others and provide safe systems of work. A risk management approach to subcontractor management using appropriate guidelines (eg NSWMC guidelines) promotes a proactive approach and allows subcontractor management systems and practices to be tailored to the specific contractor, the relationship and risk control requirements.

Thiess strongly believes that fatigue should be managed using a risk management approach.

Thiess supports adoption of a Code of Practice for Fatigue and Hours of Work (similar to that for Manual Handling) that promotes the use of a risk management approach.
8. ROCHE MINING

Roche Mining is a leading mining contractor currently providing mining services to twenty-six mine sites throughout Australia and overseas.

The Roche Safety System is mature and robust and is fully integrated in the planning and management of its project.

THE OBJECTIVE OF THEIR SUBMISSION IS TO ACHIEVE GOVERNMENT REGULATION AND POLICY:

• THAT POSITIVELY SUPPORTS EVERY INDIVIDUAL AND ORGANISATION IN THE RELENTLESS PURSUIT OF ZERO ACCIDENTS, ZERO HARM AND A DEEPLY INGRAINED CULTURE OF SAFETY IN NSW MINES.

• that encourages the use of best safety practice to suit every individual situation no matter how often conditions change by promoting a culture of continuous improvement in the management of all risks in all mines.

• that encourages every opportunity to fit the best safety solution to the circumstance by avoiding generic prescriptive regulation.

• that encourages both corporate and individual responsibility for every action, every day by recognising the responsibility of the individual as well as the corporate.

• that helps to achieve the expectation and the reality of ZERO HARM through a regulatory environment that will encourage a culture of support and consultation between regulators, the workforce and industry.

• that in the terrible event of a tragedy, allows the mining industry to immediately and freely share any gained knowledge and insight among the whole industry for the benefit of all workers. This is not possible in the current prosecutorial climate in NSW.

The Broad practice of work hours and fatigue management

• Roche Mining has identified fatigue as an issue requiring management.

• Roche have found that factors affecting individuals and the individual difference in lifestyle, fitness levels, diet and exercise and the ability to adjust to shiftwork need to be taken into account in the management of fatigue.
• Roche Mining designs its rosters based on the assessment of the individual characteristics of each mine, its workforce and proximity to mine worker’s residences.

Roche Mining recommendations to the NSW Department of Primary Industries and Mineral Resources are to:-

• provide regulations and policy that support Risk assessment based safety management strategies;

• recognise the positive contribution of contractors to safety in the mining industry and to support the Contractor Management initiatives of NSW Minerals council including ‘Information for Contractors working in the NSW Mining Industry’;

• shift from the policy and practice of closed investigation with intent to prosecute to that of open, collaborative investigation and a rapid sharing of knowledge.
APESMA recommends that;

• **the recommendations of the 1998 Mine Safety Review, the Gretley Report and the Moura No 2 Inquiry reviews should be categorised into three groups - Mandatory (immediate and high priority) - Necessary (important) - Desirable (mainly applying to mines with larger workforces), and**

• implementation responsibility and timelines be attached to each category of recommendation.

• that staff contracts should contain maximum or standard hours clauses or, at the very least, recognition that staff should only be required to work “reasonable” overtime.

• that employers be required to implement fatigue policies and these policies and practices must be subject to audit by the inspectorate.

• that consideration be given to enhanced accreditation and re-accreditation arrangements for all mine officials.

• that all mines should be required to have written procedures for effective communication.

• that there be strict auditing and enforcement of these communication requirements.

• that there be clearly defined audit and inspection responsibilities for both mine management and the Inspectorate.
The minerals industry in NSW has a simple approach to safety: it is our number one priority. The industry is committed to zero fatalities and injuries. It has demonstrated this commitment through the substantial and sustained improvement in the level of safety throughout the operations of all companies across the State.

The rate of workplace injuries and fatalities in the NSW minerals industry has been steadily falling since the mid 1980s. These improvements are the result of significant contributions from all major stakeholders – the mining companies, their contractors and suppliers, the trade unions, governments, industry associations and others involved in and with the industry. Where historically, the industry prided itself on its capacity to handle any problem which arose, it now focuses on its ability to stop problems arising.

The industry’s safety culture has also matured significantly over the last seven years. Since the inception of the OHS Act and Regulations, the duty of care has been widely embraced as has the accountability for safety by all mining personnel - from company chairman to people working underground and in the field.

This culture change in part evolved in response to two important reports – the 1997 Mine Safety Review and the Gretley Report on the inquiry into the Gretley coal mine disaster of November 1996.

The NSW Minerals Council (NSWMC) believes it is time to renew our thinking. Much has been achieved as a result of the reports mentioned above, but we believe the industry, in concert with government and the unions, should use the opportunity provided by this review to develop a new strategy which takes the lessons learned from those previous reviews and builds on subsequent achievements. Such a strategy would accelerate NSW mining beyond current industry best practice.

Priority Issues

NSWMC has identified three priority areas to deliver this accelerated change:

- The safety of contractors
- Hours of work and fatigue management
- Processes for tripartite discussion and resolution of safety issues and safety innovation delivery.

Contractor safety and fatigue are two priority risk areas. The NSWMC and Mineral Resources NSW (DMR) have already developed contractor management guidelines and fatigue management guidelines. The DMR has acknowledged these provide a strong base from which to develop a code of
practice. NSWMC believes the guidelines are an effective response to the priority risks.

Whilst significant work has been conducted by industry on fatigue and working hours, NSWMC strongly supports the development of future fatigue management strategies which target the issue from a “fitness for work” perspective.

The union proposition that hours of work should be fixed, implies that hours worked up to a statutory limit are inherently safe and without associated fatigue risks, and that hours worked above a specified number are inherently unsafe. Such a proposition is analogous to stating that it is acceptable to drive at the speed limit regardless of road conditions.

Research is unequivocal that fatigue is not solely a function of hours of work averaged over a week. NSWMC convinced that it is most appropriate for fatigue to be managed within an holistic approach to fitness for work and that all risks associated with fitness for work should be included in an organisation’s fatigue management plan. NSWMC also recognises that failure to agree on this issue will delay safety improvement in the industry.

To succeed in these and other endeavours, the industry, trade unions and government must work together. Adversarial approaches to safety and health are counter-productive. They belong to an earlier and uglier industrial era.

That is not to deny that there will be differences of opinion and differences of approach. Industry, trade unions and government must deal with these by improving the way we communicate: building trust is a key element in achieving that improvement.

The interests of people who work in the minerals industry will be best served by consultative mechanisms which:

• Ensure that contested matters are decided quickly and equitably.

• Ensure that all tripartite bodies – industry, government and trade unions – are committed to solutions to safety and health issues.

NSWMC believes that establishment of this new consultative framework should include independent mediation.

Enforcement
Since the DMR introduced its enforcement policy in 1999, several enforcement actions have disappointed NSWMC. These responses demonstrate that the measures were both poorly delivered by the DMR and poorly understood by the industry. Policies and processes that achieve voluntary compliance and a sense of trust in the regulator are needed if DMR enforcement actions are to have a beneficial long-term impact on safety.
Recommendations

This submission makes 76 recommendations. In summary the key messages are:

- Companies need to develop a more focussed collaboration with their contractors to improve contractor safety.

- Government should actively intervene to enable the industry and trade unions to reach agreement on fatigue, fatigue management, fitness for work concepts and on hours of work where the parties cannot agree. The industry proposes what it sees as progressive risk-based management. It believes union refusal to participate in identifying and managing risks and the ongoing insistence on a uni-dimensional ‘hours of work’ response is both regressive and simplistic.

- All parties must work to both earn and give trust.

- DMR should provide better leadership to the industry. To do this, it should be given adequate resources. It should improve its administrative processes and communications. It should lead rather than react. Its regulation should be risk-based rather than prescriptive.

- The DMR Investigation Unit and the Mines Inspectorate should apply legislation and regulations uniformly and severely curtail their predilection to prosecute rather than assist and promote improvement.

- Industry forums such as the Mine Safety Advisory Council and Safety Advisory Committee’s should develop health and safety strategies for the industry, and disciplines to ensure their implementation.

A New Direction

This Mine Safety Review (2004) presents the NSW minerals industry and its stakeholders with an opportunity to start a new era, one that the NSWMC hopes will be characterised by growing trust, excellence in communication and effective risk management.

Safety requires strong leadership. The goals are zero injuries, safe jobs and community prosperity. Everyone in the industry must agree on the route to safety, and on the process for achieving the structural, systems, skills and cultural changes it will entail.

The NSW Government will play a pivotal role in achieving these goals.

The 1997 Review indicated the need for a transformational change in the way this industry addressed safety. It achieved this. The NSWMC believes this new review provides a valuable opportunity to deliver the next step change in mine safety in NSW. This step change should focus on fostering a culture of industry leadership and institutionalised safety consciousness and communication.
All injuries are preventable. Every task, however hazardous or urgent, can and should be done safely. Every person on our sites has a personal responsibility for the safety and health of themselves and others. In the NSW minerals industry, continuous safety improvement is not an objective, it is a requirement.
11. MINERALS COUNCIL OF AUSTRALIA

The Minerals Council of Australia (MCA) is the peak, national organisation representing the exploration, mining and minerals processing industry in Australia. The membership of the Council accounts for some 85 per cent of Australian minerals production and a slightly higher percentage of Australia’s mineral exports.

• The MCA took a decision in the mid-1990s to make safety and health its highest priority.

• The MCA’s safety and health strategy is founded on four key elements:
  • leadership;
  • risk management;
  • performance recognition; and
  • learning and continuous improvement

• The MCA’s integrated approach to risk management has targeted:
  • improving the quality of risk assessment across the industry;
  • eliminating fatalities from rockfall, roof fall and rib fall in the metalliferous and coal sectors;
  • improving communication between management and front line supervisors;
  • seeking to identify the most appropriate guidelines for minimising the impact of priority health issues

• The MCA’s position in relation to the key policy issues identified in the terms of reference is as follows:

Safety performance of contractors
• There should be no differentiation between employees and contractors in relation to safety and health issues;
• There is no correlation between safety and health performance and the proportion of contractors in the workforce.

Hours of work and fatigue management

• A holistic approach to fatigue management is required, to ensure adequate opportunities are available for sleep and recovery, and that employers and employees build a work roster to their mutual satisfaction;
• Individual companies should be responsible for developing their own fatigue management policies and programs, based on the sound scientific evidence and that are specific to the unique circumstances of their operations.

*Enforcement*

• There is no correlation between enforcement policies which emphasise prosecution and improved safety and health performance;

• There should be national consistency in the enforcement of OHS policies, with an emphasis on sharing lessons learned from fatalities, injuries and near misses.

*Improving safety culture*

• There should be focus on leadership at all levels, and a commitment from all stakeholders to improved safety and health performance;

• The building of trust through open and honest communication will be critical to improving the safety culture.
12. AUSTRALIAN MINES & METALS ASSOCIATION

The Australian Mines and Metals Association (AMMA) is a national employer association established in 1918 to represent members’ interests in the resource sector. AMMA is the only national employer association for the resource sector in Australia, and has a branch in every State. AMMA membership is comprised of almost all major national and trans-national resource and related service companies.

AMMA’s submission is made on behalf of AMMA members in the metalliferous mining sector in NSW and relates only to Term of Reference 4b of the scope of the Mine Safety Review which provides:

4(b) Review and make recommendations in relation to the broad practice of hours of work and fatigue management in the New South Wales Mining Industry

AMMA otherwise supports the full submission of the NSW Minerals Council.

Fatigue is a multifactorial issue and AMMA has been disappointed with the uncooperative behaviour of other stakeholders who tend to limit the issue to hours alone. On the face of it, longer working hours would logically appear to lead to increased fatigue levels for industry employees which would in turn lead to more accidents. However, the reality is very different. As will be demonstrated later in this submission, the introduction of 12-hour shifts to the industry in the mid-1990s has coincided with a marked increase in the industry’s safety performance.

In reality, there is no clear causal connection between hours of work/shift patterns and safety. Further, there are no consistent links between employee fatigue and time lost from serious injury and accidents. Nor is there any evidence that working hours are the single contributor to fatigue.

The issues of hours of work and fatigue management in the mining industry have received significant attention over the last four years. There have been several recent developments by the Australian Industrial Relations Commission (AIRC) and other State Governments, in which AMMA has been involved. An overview of the following developments will be provided:

• Reasonable Hours Test Case;

• The Tasmanian notification of a ‘hazard’ and notice under section 39;

• The Western Australian government’s Review into Extended Working Hours; and

The NSW metalliferous mining companies have been actively collaborating on the issue of hours of work and fatigue management strategies for some time. Information is freely shared amongst the operators to enable each other to implement initiatives to drive the industry forward and continuously improve safety.

In December 2003, to further facilitate this information sharing and movement towards best practice in the industry, AMMA in conjunction with the NSW Minerals Council conducted a survey of NSW metalliferous mines in relation to their approaches to hours of work and fatigue management. AMMA then did a follow up survey of the same mines nearly twelve months later in October 2004 in order to highlight any improvements. A summary of the results of these surveys is included in the submission.

Following the formulation of the Mines Inspection General Rule, which imposed an obligation on a general manager of a mine to design and implement a fitness for work policy including specific reference to workers affected by fatigue (clause 31), the Department of Primary Industries convened a tripartite working group to develop fatigue management guidelines for the industry. This group operated from 2000 to July 2003 and included representatives from union parties, companies (through the NSW Minerals Council, AMMA and the Crushed Stone and Sands Association (CSSA)) and the department.

Although the tripartite nature of the exercise was thwarted by unions’ insistence on the use of prescriptive hours of work to manage fatigue and their decision to avoid further participation in the working group, the guidelines continued to be developed by company representative bodies and a document titled “Guidelines: Fatigue Management in NSW Mines” was released by the NSW Minerals Council in conjunction with AMMA and CSSA in August 2003. These guidelines have been incorporated into the safety systems of the majority of the industry.

In 2004, the Department of Primary Industries developed an ‘audit-type’ assessment tool for evaluating how fatigue is managed on mines, in particular, on metalliferous and extractive industries sites (given the existing provisions in relation to fatigue management procedures in the Mines Inspection General Rule 2000). The audit tool was based on a systems approach and adopted the Australian Standard 4801 for health and safety systems. The major document used in the content of the audit tool was the NSW Fatigue Management Guidelines. Representatives of the metalliferous and extractive companies, as well as representatives from AMMA, the NSW Minerals Council and union parties were invited to participate in the development of the audit tool. The participating companies determined the fatigue management audit tool to be suitable and effective.

AMMA’s submission provides an outline of several possible regulatory/non-regulatory options to deal with the issue. The following five options are likely to be put forward to the Mine Safety Review Panel:
AMMA’s recommended outcome in dealing with the fatigue management and hours of work issue is a continuation of the resources industry’s self-regulation. This approach provides the discretion to each operation to implement rosters to suit the interests of business, safety and employees. Such an approach is appropriate given the NSW metalliferous mining sector’s demonstrated ability to address the issue of fitness for work including rostering arrangements in a mature and proactive fashion. A prescriptive “one size fits all” approach is not only unnecessary and overly restrictive, but it fails to address the fundamental objective which is the effective management of fatigue to ensure employee safety in the workplace.

However, if a Mining Industry Code of Practice is to be developed, or the Mine Safety Review Panel prefers a multi-regime approach, or the Panel is persuaded that a limitation on working hours adequately addresses the complex issue of fatigue, AMMA urges the Mine Safety Review Panel to move forward in a cautious approach with full industry consultation and the engagement of fatigue experts.
In relation to the Terms of reference, Hanson made the following points;

The operation of the Mine Safety Advisory Council (MSAC) and the supporting consultative process

- Despite the politics of a tripartite committee, several actions have come from constructive discussion.

- However, there some issues that MSAC were unable to reach consensus on, in particular, fatigue guidelines.

The safety performance of contractors

- Hanson do not have permanent daily contractors. Nevertheless, they do have a programme of induction and risk assessment for project contract work.

- Hanson have had very few contractor significant injuries.

The broad practice of hours of work and fatigue management in the NSW mining industry

- Whilst Hanson support the concept that excessive hours of work cause fatigue, they believe that there is not a “one size fits all” solution.

- Hanson used the “fatigue initiative” to change some long held work practices and encourage job rotation on mobile plant.

- Hanson have also implemented a fitness for Work (FFW) programme that encourages medical assessments in addition to drugs and alcohol management.

- Hanson believes that a limit on hours of work does not manage what that employee does at home.

Review the enforcement policy and the processes used by the department to implement the policy

- From an employer’s perspective, the Department representatives are enforcing the legislation and safety standards. Enforcement fortunately may not result in prosecution because Hanson are extremely
responsive to audit findings or the lessons learned from the safety alerts issued from the Department.

- Of concern to our industry is the possibility that Workcover inspectors may replace DPI inspectors. As Hanson operates in both jurisdictions, they state that there is no comparison between the standards by which the DPI operate and Workcover. The DPI do provide qualified advice and training, they understand our processes and the risks control options.

**Consider ways and make recommendations as to how the NSW Mining Industry safety culture could be improved.**

- The safety culture in quarrying is improving.

- Through consultation Hanson have a willing workforce interested in training and personal development.

- Hanson will only continue to reduce the incidence of serious injury or fatalities with a better equipped employee who can make informed decisions.

- Further, Hanson needs to continue to improve the accessibility of workshops and training opportunities for managers and employees.

- Hanson wants to allow “enforceable actions” as a prosecution alternative. (Clarification is being sought from Ms Parker on this issue).
14. **ILLAWARRA COAL – CARBON STEEL MATERIALS**

- Illawarra Coal is a wholly-owned BHP Billiton operation, consisting of five underground coal mines, two coal wash plants and a logistics operation within the Illawarra region. Currently our workforce consists of 840 employees and 400 contractors, producing 7 million tonnes of premium coking coal, primarily for local markets with some 3.4 million tonnes being exported overseas.

**Safety Culture Improvement in the NSW Mining Industry:**

- The safety culture in the NSW mining industry is similar in all mining companies, with Illawarra Coal being a ‘representative’ of such cultural changes over the last decade. The industry has moved from a culture where safety was initially seen as an ‘add on’ to production with very prescriptive regulations and little individual responsibility taken; to a current state, where everyone is responsible for ‘duty of care’ and it is commonly believed that all injuries can be prevented.

- Initially, safety improvement for Illawarra Coal was achieved by the introduction of safety management systems/processes, assessment of critical risks and implementation of legislative requirements. Further significant improvements were subsequently achieved through a consistent risk management approach for all processes within the business, from a task analysis/risk assessment process through to Qualitative Risk assessments for high risk operations.

- However, the greatest challenge to Illawarra Coal and indeed the coal industry is now occurring, where the optimum of having all employees and contractors working safely at all times and achieving zero harm needs to occur.

- Since implementing the zero harm strategy, Illawarra Coal has achieved significant improvement in terms of Injury rates over the past few years, however, the safety performance has ‘plateaued’ slightly requiring a ‘step change’ to ensure that all of the good work is not lost, but rather further embedded in the organisation to achieve the optimum ‘Total Safety Culture’.

- Now that the ‘prescriptive’ and risk management phases of the safety strategy are embedded, the next phase of safety improvement for Illawarra Coal is the introduction of a behavioural safety program with the aim of achieving a further safety improvement and to move from the ‘plateau’. As reflected by many Australian and international companies, the big ‘step change’ required is a cultural change, where all
personnel take an active role in safety management, to ensure that harm is prevented and unsafe behaviours are reduced.

There appears to be overwhelming evidence that the majority of workplace accidents are due to unsafe behaviours and that the current levels of ‘enforcement and prescriptive processes’ will not change behaviour.

**Recommendation:**

To assist in taking the mining industry culture to ‘the next level’, that organisations be encouraged to implement a Behavioural Safety Program, which continues to drive people making safe decisions.

**Impacts of OH&S Enforcement Policies and Process**

The enforcement of OH&S policies (via litigatious means) has had a detrimental effect on the coal industry by increasing the reluctance of younger persons to join the industry due to a fear of prosecution for issues that are ‘seen as not completely controllable’ by them as an individual.

**Recommendation:**

Given the above status, it is recommended that a review occurs on the enforcement policy and the processes used by the Department to implement this policy.

**Hours of Work and Fatigue Management**

Illawarra Coal has introduced a Fatigue Management System.

**Recommendation:**

As can be seen from the above information, the regulation of fatigue and fitness for work is being handled effectively at Illawarra Coal sites, therefore, the management/control of such issues be kept at this level and not managed through legislation. The imposition of legislation does not allow for individual site needs and risks to be managed according to the level of risk, and through ‘generalised legislation’ may actually impede the best efforts of organisations to manage this issue.

Fatigue Management Plans (incorporating hours of work) be developed by all sites in consultation with employees and not through legislation.

**Contractor Management:**

Contractor management has been for many years an area of huge risk to the industry generally, however, due to the high reliability of contract workers to
supplement our current workforce, Illawarra Coal has in place many processes and systems to effectively minimise such risk.

Recommendation:

In regard to the information above, the Mine Safety Review needs to ensure that Contractors are an integrated part of any organisation and not managed as a separate entity.
15. **CENTENNIAL COAL**

Centennial supplies around 40% of NSW’s coal-fired electricity with 70% of the Company’s sales to the domestic energy market.

The Industry is becoming complex both from an operational and technological perspective. The Industry’s approach to safety has changed dramatically since the last Mine Safety Review (1996/7) and its capabilities in risk management have grown considerably. Centennial believes the mining industry leads Australian industry in its application of risk assessment and risk management.

Centennial would prefer to have an overarching partnership with regulators and unions for widespread reforms encompassing new standards of performance, regulatory responses and targeted campaigns. Such a partnership requires all parties to have shared goals so help may be desirable to overcome a certain lack of trust between parties.

Regulatory reforms need to allow movement along this path and not hold industry back through archaic and overly prescriptive regulatory provisions that do not foster innovation or do not embrace risk management principles.

Regulation must have an appropriate mix of encouragement and punitive responses. Our concern is that there is an emerging shift towards reliance on punitive regulation. We are alarmed at the potential for this to turn into a single-minded focus on punishment by prosecution of companies and individuals. We argue that a focus on prosecution is simply inappropriate inmost circumstances as it is based on the assumption that all companies are deliberately negligent.

Centennial remains to be convinced that the new ‘case management’ approach by the DMR will make the Investigations Unit any more responsive in their investigations. That is to say, will they be able to distinguish between a matter for prosecution and one where it is vital to gain as much information as possible to prevent reoccurrence?

All DMR safety personnel need to be consolidated under the Chief Inspector for unified direction. This means that communication, regulatory development and data personnel should be transferred to the Chief Inspector’s staff.

**Contractors (TOR 4a)**

Centennial supports the NSW Minerals Council’s submission, and maintains that contractors are essential in today’s increasingly complex industry. Their specialised equipment, specialised skills and tasks, combined with wide experience are vital contributions to an efficient industry. Many concerns are commonly expressed about the greater use of contractors in the mining industry.
These same arguments apply to all industries.

Two key concerns have been expressed. The nature of the contractor employment, being of a temporary nature, is likely to have a detrimental effect on contractor employee safety and health.

A considerable amount of research has been carried out in this respect since 1997 and Centennial feels that in the NSW coal industry context this can be addressed by formalised arrangements and long-term relationships. These are embodied in the new legislation. The second expression of concern appears to focus on the controls that ensure that contractor employees do not work prolonged hours. A key component in addressing this issue lies in the establishment of a culture that Centennial desires for the whole industry, including our own employees.

**Hours of Work and Fatigue Management (TOR 4b)**

Efforts aimed at sharing a common approach to fatigue management have to date been in vain.

The withdrawal of the unions at the meeting called to sign-off on the 11th version of the fatigue management guideline frustrated genuine participants.

The NSW Minerals Council’s response was to publish essentially the 11th (final) draft of the guidelines. The DMR proceeded to develop an audit tool based on that draft; that audit tool is a document for regulators to make a consistent evaluation of site systems for managing fatigue related risk. The audit document is based on Australian Standards 4801, 4804 for OHS Systems and OHS System Audits. To the DMR’s credit they attempted to, and partially succeeded in getting tripartite involvement in an understanding of their audit tool.

**Ongoing Improvement in Safety Culture in the NSW Mining Industry (TOR 6)**

Current legislative styles, especially in the coal sector, do not encourage employee involvement.

Centennial is convinced that behavioural safety is a strong factor in making significant gains in safety performance. Behavioural-based safety programs are currently being progressed at all Centennial’s sites.

**Communication**

If sites develop risk management into safety systems and safety management plans, it is logical to allocate real accountability for strategic actions. Centennial expect to see better, two-way communication on accountabilities at this stage, which explains our concern at the negative impact of the punitive style of regulation.
Technical Issues
Centennial have identified at least four critical topics for discussion in the review of new regulations to support the Coal Mine Health and Safety Act. They are:

• The introduction of non-flameproof diesel use underground.
• Use of aluminium underground.
• The definition of ‘hazardous zones’.
• The registration of plant.

Employee Participation In Achieving A Safe And Healthy Workplace

Employee observation is aimed squarely at the sharing of experiences across individuals and teams so that individuals’ experiences are tapped to the utmost. Centennial are aiming for safe behaviour to be taken almost for granted, with no (employee) tolerance for taking short cuts. Centennial research has shown that sites that are achieving the best OHS results consistently report that peer-to-peer observations and communications provide the platform for a step change in safety performance.

This Review Must Support Centennial Endeavours

The most destructive outcome of this Mine Safety Review would be for the outcome to avoid being inspirational with respect to the regulatory framework. The industry must have standards that encourage sound risk management and a regulator relationship that is positive, open and credible in its application of enforcement.

• We must satisfy the regulator that we can truly manage risks.
• There must also be support for our behaviour-based campaign.
• There must be resolution of technical issues to improve safety culture

Centennial stress that they are not seeking a ‘Hands-Off’ approach we are seeking more of a partnering approach with the regulator, consistent with our drive for employee involvement.
Xstrata Coal is the world’s largest exporter of thermal coal. Its NSW operations constitute 44% of its total 70Mt of global coal production, coming from operations through the Hunter Valley and the Western Coalfields. Xstrata Coal is also the largest coal producer in NSW, producing 30% of 34Mt of the State’s coal from five underground and eight open cut mines.

Xstrata Coal NSW has implemented a comprehensive Safety Management Framework which provides the guiding requirements for each of its 13 operations. Included within this framework are standards for a safety management system, contractor management and fatigue management. Such development is in advance of the new legislation which is still to be finalised, although being a recommendation of the 1997 Mine Safety Review.

Xstrata Coal considers the existing NSW regulation of health and safety in coal mines to be outdated and views the Government’s 2004 review as an opportunity for an independent assessment of the status of safety legislation in the NSW mining industry, ultimately leading to further improvements in safety performance.

Xstrata Coal endorses the view expressed in the NSW Minerals Council submission that most of the recommendations of the 1997 Mine Safety Review have been substantially delivered. These include enhanced safety performance measures and broadly based incentive schemes. However the government’s failure to implement new legislation has been disappointing, particularly given the need for a risk based safety approach.

Xstrata coal is convinced that the establishment of a deeply ingrained safety culture, with appropriate regulation underpinning both corporate and individual responsibility, is critical for the maintenance and further improvement of safe mining operations across the NSW mining industry.

Xstrata Coal considers a holistic approach to managing fatigue and working hours within a “fitness for work” framework, together with a safe and healthy working environment, to be a more responsible, appropriate and safe approach than prescriptive applications, such as restricted working hours. This is especially relevant for managing a complex range of tasks, individuals and environments, which is characteristic of the industry.

Xstrata Coal has experienced significant difficulties in obtaining support at both the regulatory and union levels to drive essential cultural and behavioural changes to support further stepped improvements in safety performance. Xstrata Coal considers the Union’s philosophic opposition to behavioural and risk based systems for fatigue management to be counterproductive to the gains that can be made in this important area. Xstrata Coal would appreciate working with the Union in a cooperative fashion on the implementation of such systems and training, which are ultimately designed to ensure the safety of all workers – union and otherwise.
Xstrata coal considers there is something fundamentally wrong with the current approach to prosecution and the resultant outcomes in NSW. Every fatality and serious incident is usually brought to prosecution. The industry considers this approach to be endorsed by the government’s belief that a punitive approach will guarantee safety improvement, a belief that is not shared by industry. As a result of this bent towards prosecution, lessons that can be learnt from fatalities suffer extraordinary delay, often for over two years. There is a resultant growing reluctance of statutory qualified personnel to take on statutory roles. Recent decisions by the Industrial relations commission, namely Awaba and Wallerah, indicate that their interpretation of the OH&S legislation makes it virtually impossible for mining operations in NSW to be conducted in compliance with the legislation.

**Recommendations**

1. The Mine Safety Review should encourage the development of a risk-based approach to mine safety regulation and operation in NSW, consistent with:
   - the government’s 2000 Green Paper and 2002 white Paper; and
   - the principles of the OH&S Act

   It must also place urgent priority on the completion of the new regulations attached to the 2002 coal Mine Health and safety act, which are designed to address outstanding recommendations from the 1997 Mine Safety Review and specific terms of reference of the 2004 Mine Safety Review.

2. The Mine Safety Review should call for an investigation to establish why it has taken an unsatisfactory length of time to progress the new legislation, which was a key recommendation of the 1997 Mine safety Review.

3. The Mine Safety Review should ensure that industry committees such as the Mines safety council and coal Mine safety advisory Committee should adopt a strategic approach with defined and agreed objectives, roles, processes including a mechanism for resolving strong differences of opinion and appropriate support.

4. The Mine Safety Review should ensure a holistic and flexible approach is taken to enhance safe mining operations in NSW, rejecting a simplistic prescriptive measure. In particular, current proposals to introduce a risk based systems approach for contractor and fatigue management should be supported.

5. The Mine Safety Review should recognise the positive role safety incentive schemes can play in shaping culture and raising awareness of risk.
6. The Mine Safety Review should recognise the failings in the DMR’s current approach to enforcement and prosecution, with its resultant negative impact on safety and the industry’s ability to source future managers.

7. The Mine Safety Review should review or request a review by government of existing and proposed safety legislation (industrial manslaughter or workplace death) to ensure that individual rights to natural justice are applied and that the mining industry is not being legislated out of operation in NSW.

8. The Mine Safety Review should give strong consideration to the NSWMC’s submission, which reflects the broader industry’s views, with particular attention to be given to suggested recommendations for future action.
17. RIO TINTO COAL AUSTRALIA

Rio Tinto Coal Australia on behalf of Coal & Allied Industries Limited (Coal & Allied) manages the following operating mines in the Hunter Valley of New South Wales:

- Hunter Valley Operations,
- Mount Thorley Warkworth Operations, and
- Bengalla Operations.

- Combined these mines produce approximately 26 million tonnes of coal per annum predominately for export. Coal & Allied employs approximately 1450 regular full time employees at these operations in addition to contract labour engaged to undertake specialist tasks.

- Over the last five years health safety at the operations has been given considerable focus resulting in significant improvement in injury levels as measured by Lost Time Injury Frequency Rate (LTIFR). Year to date Coal & Allied has an LTIFR of 0.79, this compares to an LTIFR of 5.12 in 2000.

- In summary, this improvement has been achieved through the rigorous application of, and continuous improvements in:
  - Safety management systems incorporating standards and procedures,
  - Adopting a risk management approach,
  - Involvement of our employees and contractors in decision making on health and safety issues,
  - Auditing, and
  - The adoption of behavioural based safety methodologies and tools.

Terms of Reference 1 and 2

Implementation of the 1997 Mine Safety Review and Gretley Report

The 1997 Mine Safety Review made many recommendations a number of which had long time frames. Other recommendations related only to underground mines. Although some of these recommendations have not been specifically agreed between the government, industry and the unions, Coal & Allied through its health and safety programmes moved to meeting the intent of the applicable recommendations. The result has seen a dramatic improvement in safety performance and the meeting of the intent of the 1997 review.
Terms of Reference 3

Operation of the Mine Safety Advisory Council

- Coal & Allied supports the position of the NSWMC with respect to the operation of the Mine Safety Advisory Council.

Terms of Reference 4

The Safety Performance of Contractors

- Contractors have become and will remain into the future an important part of Coal & Allied’s workforce. Contractors provide the ability to utilise specialist skills and knowledge to carry out certain activities and/or tasks within the operations, which mine staff simply do not have.

- Coal & Allied through it’s own experience recommends to the review panel that the continued improvement in contractor’s performance will only be achieved through:
  - Developing strong working partnerships,
  - Effective communication,
  - The use of contractor management plans in accordance with the NSWMC guidelines, and
  - The use of risk based and behavioural safety tools.

Hours of Work and Fatigue Management

- Fatigue cannot be successfully managing by mandating an arbitrary set of hours of work. Fatigue management strategies will only be successful if they address the issue in a holistic manner, are risk based and form part of an overarching fitness for work policy.

Terms of Reference 5

Review the Enforcement Policy and Processes of the DMR

- Coal & Allied supports the position and recommendations outlined by the NSWMC in regards to this ToR.

Terms of Reference 6

Improving Safety Culture

- Coal & Allied holds safety as a core operating value. The operations are constantly striving to achieve the goal of zero fatalities, injuries and illnesses. It is recognised that to achieve
this goal, a fundamental change in the way safety is managed is required.

Coal & Allied recognises that it can no longer solely rely on systems maintaining the conditions of a workplace.

- Without compromising previous achievements, greater emphasis needs to be and is being placed on:
  - Hazard identification,
  - Human behaviours,
  - Leadership and
  - Employee and contractor participation.

These key areas will enable Coal & Allied to continue towards the next step change and achieve the goal of ‘zero’. It is these areas, which should form the basis of the recommendations from the review into health and safety in the NSW mining industry.
18. ANGLO COAL (DRAYTON MANAGEMENT) PTY LTD

Anglo Coal (Drayton Management) Pty Ltd (“Anglo Coal Drayton Mine”) runs the Drayton mine, a large open-cut coal mine located in the Hunter Valley south east of Muswellbrook. The mine commenced in 1983 and currently produces around five million tonnes of mostly steaming coal per annum for export and domestic markets.

With regards to the Terms of reference they submit the following:

Term of reference 1)
“Review the progress with the implementation of the recommendations of Mine safety Review and the Gretley report”

Since 1997 and the Gretley Report, Anglo Coal Drayton Mine has continued to implement measures to improve OHS systems, behaviours and OHS outcomes.

Terms of reference 2)
“Consider whether any change in the implementation of these recommendations is required”

They do not consider that changes to this are necessary. They have implemented comprehensive OHS procedures and processes and adding additional bureaucratic requirements will not contribute to improving OHS outcomes, but may in fact redirect employers and employees’ efforts away from sound risk management.

The most effective way to move forward is via the opportunity that currently exists in progressing the Coal Mines Safety Bill into law. This offers an opportunity to ensure clear progressive OHS legislation exists for the industry.

Terms of reference 3)
“Review the operation of the Mine safety Advisory Council and the supporting consultative process”

Anglo Coal Drayton Mine has reservations about how effective this process has been. They believe the operation of this has been compromised because the agenda becomes politically compromised.

They do support a consultation process but believe this would be best addressed if an objective process for risk based solutions were promoted. This could be achieved by the development of specific consultation groups for specific issues following principles based on national conformity, sound risk management processes and with the inclusion of an adequate mechanism for mediation (to prevent issues being dragged out or compromised for other agendas).
Terms of Reference 4a)
“The safety performance of contractors”

It is the experience of Anglo Coal Drayton Mine that the safety performance of contractors is generally better than that of their own employees.

Anglo Coal Drayton Mine uses contractors for specialist work, supplementary labour (for annual. Long service and extended sick leave coverage), construction projects and selected maintenance.

Terms of Reference 4b)
“The broad practice of hours of work and fatigue management”

Anglo Coal Drayton Mine has processes in place for the management of work and fatigue.

These processes limit hours of work on site, the amount of overtime to be worked, rest breaks and the maximum number of overtime shifts to be worked on a weekend.

When considering changes to work hours a risk review is conducted. Whilst the same standards apply for contractors the following additional issues are also considered:

• Consideration of hours of work, shift patterns and travelling times are made during the tendering, risk assessment and planning processes.

• At the tendering stage outcomes from consideration of proposed hours of work and fatigue management will affect whether the contract company is successful in getting business from Anglo Coal Drayton Mine.

They are also in the process of further improving our fatigue management, through the development of a new procedure. This is being done by a consultative process with the workforce and will support current processes and add additional tools for fatigue management. This includes proforma to help guide assessments and management of fatigue.

Terms of Reference 5)
“Review the enforcement policy and the processes used by the Department to implement the policy”

Their concerns are:

• There is a high risk of individual prosecution.

• The burden of proof necessary to bring a prosecution against a company for an OHS failure appears to be quite low.
• This causes an escalation quickly into legal protection mode for employees.

• Rather than encouraging better safety performance, the policy is in fact scaring skilled and talented persons away from roles with more responsibility where they may run the risk of being personally prosecuted.

• Behaviours of individuals are a major contributor to all incidents. Behaviours of individuals regardless of what processes and systems that surround them do not appear to be considered in this policy.

• They believe that serious incident is the indication of a systemic failure and hence a company failure, it is not necessarily the indication of a failure of particular individuals. Good OHS practice focuses on system development so should an effective enforcement policy.

Terms of Reference 6)
“Consider ways and make recommendations as to how the New South Wales mining industry safety culture could be improved”

The history of the NSW coal industry has contributed to its current safety culture. To improve this culture a clear cut must be made from its past. A number of recommendations to achieve this are made.
19. NEWCREST MINING LTD (NML)

Newcrest's Cadia Valley Operations

The Cadia open pit and processing plant commenced operations in 1998 while the Ridgeway underground mine, which is located just 3km to the northwest of Cadia, commenced operations in July 2002. Both gold mines are situated approximately 25km to the south of Orange in the NSW Central Tablelands, and mines have recently been combined into one operation, collectively Newcrest's Cadia Valley Operations.

A workforce of 945 people is currently working in Cadia Valley, comprising 489 Newcrest employees and 456 contract employees. The bulk of the mining workforce operated on extended continuous shift rosters.

Mines Safety Advisory Council

In our own right and through the NSW Minerals Council, various NML personnel have participated in both the Mine Safety Advisory Council (MSAC) and the Metalliferous Safety Advisory Committee. These committees have achieved some good outcomes in the past but have in recent times had their effectiveness stifled by pursuit of industrial-political agendas by the trade unions represented. As a result, “real” advancement of safety matters in these forums is far less than it could or should have been.

NML believe strongly that an improved facilitation process is required to resolve some of the more vexatious issues such as hours of work and the control and management of contractors. The establishment of a facilitated resolution process around contentious issues, the availability of data which is unbiased and a transparent honest decision making process involving the Department of Mineral Resources and the Minister is essential to ensure that these consultative committees function in an effective way.

The MSAC was created to advise the Minister on ways to improve safety within the NSW Mining Industry. The MSAC must develop a strategy and process to achieve this end. NML strongly supports the formulation of a strategic plan and yearly business plans and the appointment of an appropriate facilitator to guide the work of this committee.

Hours of Work and Contractor Management

NML fully supports the NSW Minerals Council position that a process firmly based on risk management principles is appropriate to manage the issues of hours of work (Fitness for Work) and the use of contractors. NML has made significant improvements to the way it manages fitness for work and contractors in its operations over the last 3 years and has responded to the release of NSW Minerals Council guidelines on these issues. There is a real need for unbiased data to be considered when reviewing these issues. We do not believe there is a need for an increased level of regulation in these areas and fully support the NSW MC recommendation that the guidelines that
have been prepared by the NSW MC be adopted by the regulator as guidance material.

**Enforcement Policy and Processes**

NML believes that the introduction of the department’s enforcement policy in 1999 and the subsequent prosecutions have resulted in a reduction in the ability of the industry to learn from its mistakes. This has come about due to a lack of communication on lessons learned from incidents that have or may result in prosecutions. Operators are not as willing to communicate the findings from incident investigations due to fear of prosecution and the Department has not always clearly communicated the lessons learned from prosecutions that it has undertaken.

**Improving Safety culture in the Industry**

Fitness for work and contractor management are both important risk areas that require industry focus from all participants in the industry however they are not the only important areas. Other important issues include;

- Training
- Leadership
- Behavioural Safety
- Major Hazard Standards
- Involvement and Consultation
- Safety Improvement Incentives
- Forward Looking Measures
20. Bruce Hams  
Consulting Mining Engineer/Health and Safety Adviser

Notes that:

- Numerous reports indicate that the burden of occupational disease is grossly underreported.

- He has been a strong advocate of the need to develop safety management systems for occupational exposures

- neither the coal mining industry nor Coal Services have a clear idea (let alone agreed guidelines) of what a health and safety system for occupational exposures is or how it might work

- ‘What is an unacceptable risk of an adverse health outcome?’

- ‘How can such a risk be avoided through a safety management system?’

- Whatever the outcomes to the above issues are found to be, he recommends that the necessary health and safety management systems be cast as “competencies”, which need to be inculcated to senior management by specific training, and monitored by regular auditing of senior management compliance with the systems.
The main points of Professor Galvin are:

- It is contended that the focus now needs to move onto behavioural science in order to continue to improve safety culture and, therefore, OH&S performance. There is a limit to the effectiveness of risk management and management plans unless persons behave in a manner consistent with the processes outlined in these plans. The degree to which persons innately and automatically behave in a safe manner is a measure of safety culture. Behavioural change takes time to achieve and cannot be achieved through process alone.

- Process alone is not sufficient for addressing these types of issues. Successful fatigue management is also dependent on the attitude, or culture, of employees to OH&S. This requires the safety culture to mature to a point where persons take responsibility for their health and safety both on and off the job. Fatigue management is just one of many examples where this shift in mindset and, therefore, behaviour underpins moving off the current plateau in OH&S performance. In the interim, there are many rapidly evolving technologies which offer the potential to monitor fatigue and proactively intervene to prevent it resulting in adverse outcomes.

- The focus on process over the past decade has delivered a significant improvement in OH&S performance.

- Processes, including enforcement processes, are limited in their effectiveness at changing behaviour. They are only one element in behavioural science. Enforcement processes are insensitive to the role of ‘reward’ in changing behaviour or to the time frame and limitations associated with changing the ‘inbred’ behaviour of an aging workforce.

- Having put effective risk management processes in place, those organisations that are most advanced in moving along the OH&S maturity curve are now focussing heavily on behavioural science. Strong visible leadership, the involvement of the workforce at all levels in decision making, safe behavioural observations and reward feature highly in these organisations. Rigorous compliance management of OH&S standards/practices is at the forefront. However, as trust develops and the process matures and percolates down, all levels of the workforce start to enforce OH&S standards.
• Behavioural change is occurring in these organisations in a climate that is characterised by openness and frankness and a willingness to report all near misses and to share positive and negative learnings arising from them. This contrasts with the ‘closed shop’ situation that has developed in the NSW mining sector since the advent of prosecutions. Learnings are no longer being shared or discussed in a timely and effective manner due to legal implications and other factors related to prosecutions.
Appendix 7
Mine Safety Review (1997)
Recommendations

Measuring Safety
- NSW mining industry safety performance be measured on a mix of indicators. This mix might include LTIFR, FIFR, Disabling injury and progress in managing core risks.
- The exact mix of measures be determined on a tripartite basis as a matter of urgency.
- The NSW DMR adopt this mix of measures and use it in the targeting of the Inspectorates’ safety related activities.
- The NSWMC develop guidelines for use by mine operators in determining how individual site safety performance is to be measured.

Safety Aims
- Companies give greater attention to involving those on site in the formation of safety targets.

Safety Incentives
- The industry commission a more detailed study of the safety impact of production bonuses and of possible measures available to address any negative effects.
- Companies re-evaluate their existing safety incentive schemes with a view to establishing their actual safety impact as distinct from their effect on LTIFR.

Roles played by Key Individuals
- Company boards take a more active role in requiring reporting on a mix of safety indicators which more accurately reflect site safety performance.
- The NSWMC convene a CEO level safety forum to allow greater exchange of information on safety approaches.
- Mine operators give high priority to promoting middle management commitment to and ownership of safety initiatives through the effective involvement of middle managers in the development and implementation of all such activities.
- Mine operators provide training and support to enable middle managers to effectively carry out their role in communicating safety requirements to work groups under their control and ensuring compliance with safe operating procedures.

Workforce Involvement
- Companies re-evaluate their approaches to involving workers in safety management with a view to achieving greater worker participation particularly in terms of the assessment and management of core risks.

Contractor Safety Involvement
- The NSWMC take an active role in promoting the use of the Guidelines for Contractor Occupational Health and Safety Management by its members.
• Companies devote greater effort to the safety aspects of contractor selection and management, given that contractor safety performance in the broad remains a problem area.

**Engineering and Equipment**
• There be a tripartite examination of safety issues associated with the introduction of remote controlled equipment underground.

**Risk Management**
• The NSWMC and Inspectorates continue to promote risk assessment and management approaches as a valuable safety management tool.
• Companies review their approaches to core risk assessment and management in the light of the identified concerns.

**Collation, Analysis and Use of Accident Information**
• A tripartite group be asked to develop proposals for stakeholder consideration on how information sharing on accident cause can be improved. The group should in particular focus on the following areas: provision of information on serious incidents, and accidents across the industry, (that is between operators); and more effective means of communicating this information to mine middle managers and the mine workforce.

**Training**
• Companies introduce structured safety and communications related training for Mine Managers, and mining professionals.
• The levels of hazard awareness training provided to mine workers in both the coal and metalliferous sectors be increased.
• Each operation review its emergency procedures training.
• Test evacuations of all or parts of sites should be an integral aspect of operations’ approaches to emergency preparedness.

**The Inspectorates**
• The Department of Mineral Resources devolve environmental responsibilities to other officers with specific environmental expertise, and require the Inspectorate to focus wholly on matters related to mine site safety and health.
• The Department move to create support positions of Mines Safety Officer with the detailed job description for such officers to be determined within the Department.
• The Department give consideration to the introduction of cross-inspection as a mechanism for maximising the best use of the Inspectorate resources.
• Inspectorate policies and procedures on investigation and enforcement be developed and published.
• The creation of a discrete Accident Investigation and Analysis Unit within the Inspectorate.
• The Department of Mineral Resources determine the number of additional Inspectors required in the light of approaches taken to the redistribution of
environmental responsibilities and the creation of Mine Safety Officer positions.

- The Department introduce a more systematic approach to the prioritisation of Inspectorate activities.
- Physical examinations of site operations continue to be a major aspect of the role played by Inspectors in both the coal and metalliferous sectors.
- All Inspectors conduct both pre-announced and unannounced mine site visits, and that there be a requirement for sufficient unannounced visits to create a perception of a significant likelihood of an unannounced visit at any time.
- The Department act without delay to resolve outstanding salary issues by bringing Inspectorate salaries into closer parity with those paid by other Inspectorates and by industry.
- In the event that a significant increase in Inspectors remuneration levels is proposed, all affected positions be declared vacant and advertised.

**Legislation and Regulation**

- The Inspectorate adopt a more active approach to enforcement of the metalliferous General Rule.
- A database on the status of implementation of requirements under the General Rule be developed and maintained by the Inspectorate.
- The Department act immediately to establish the status of the implementation of the General Rule among smaller operators with a view to determining what particular assistance may be required.
- Timeframes for the implementation of provisions under the General Rule be established and promulgated.
- Companies, unions, and Government, devote further effort to informing mine workers about the General Rule and its implications.
- There be an immediate tripartite re-examination of legislative options for the coal sector, particularly as regards the practicality, and likely impact of, a two-tiered regulatory approach.
- Further consideration be given to the priority presently being given to the development of a single piece of mining legislation in NSW.

**Moura Inquiry Implementation**

- NSW coal operators be required to prepare Mine Safety Management Plans to identify and manage all core risks.

- As a first step, the Metalliferous Inspectorate be required to report to the Minister in detail on the possible application of MSMPs, and of other Moura Inquiry recommendations, to the metalliferous sector.

- The Moura Inquiry training and communications recommendations be implemented by NSW coal industry stakeholders including the Inspectorate.

- The DMR chair a NSW stakeholder group charged with determining the applicability of the Moura Taskgroup recommendations in NSW.
Appendix 8
Gretley Inquiry Report
Recommendations
8. Gretley Inquiry Report Recommendations

Mine Surveying
Views emerged on aspects of mine surveying which were disturbing and wrong. They were views said to be widely held by both mine surveyors and mine managers. The following assumptions were made in respect of certain plans:

First, that any record tracing obtained from the Department could be relied upon as being accurate.

Secondly, that whatever appeared on a certified plan could be relied upon as being accurate.

Thirdly, that old plans were generally accurate, except perhaps for a “handful of metres”.

None of these assumptions is warranted. Each plan must be taken at face value, and its reliability determined rather than assumed.

RECOMMENDATION 1
That steps be taken by the Department and the Coal Mining Qualifications Board to correct these views. Consideration should be given to the means by which the industry can be re-educated on these matters (whether by alteration of syllabuses, alerting teaching institutions, seminars, safety alerts, amendment to the Surveying and Drafting Instructions for Coal Mine Surveyors (Underground) 1984, or other such means.

Plans Open to Doubt
The Surveying and Drafting Instructions for Coal Mine Surveyors (Underground) 1984, Clause 2.6 (dealing with certification) makes provision for a surveyor to endorse the plan where he or she is in doubt as to the position of the workings. Such an endorsement is also good practice in respect of plans or drawings not required to be certified, where the surveyor has such doubts. Yet, few surveyors endorsed plans, even where they regarded aspects of the plan as open to doubt.

RECOMMENDATION 2
That the Department take steps to encourage mine surveyors more freely to identify by endorsement aspects of plans or drawings produced by them which are open to doubt.
Historical Research
Historical research into an abandoned colliery is capable of providing insight. However, it requires a degree of skill, and knowledge of possible source material. Those skills, and that knowledge, are not taught in courses in respect of surveying or mine management.

RECOMMENDATION 3
That the Department take steps to ensure that historical research is included in the syllabuses issued by the Coal Mines Qualification Board for mine management and mine surveying, and that teaching institutions are so advised.

Archival Material
Late in the Inquiry the Department obtained from State Archives the file maintained by the Inspectorate during the last years of the Young Wallsend Colliery [Ex.17.17]. That file, as one would expect, was invaluable in the interpretation of the mine plan. Had it been available to the Departmental draftsman who was required to interpret RT 523 sheet 1, sheets 2 and 3 would not have been drawn in the form in which they were produced. Had it been available to Gretley surveying staff, the error in sheets 2 and 3 would have been apparent.

RECOMMENDATION 4
The Department catalogue all relevant files and archival material (including surveyor’s notebooks) associated with Record Tracings of abandoned workings.

Prevention of Inrush
Clause 8(3) of the Coal Mines Regulation (Methods & Systems of Working – Underground Mines) Regulation 1984 requires the manager, in fulfilling his duty to prevent inrush, to have regard to such information as may be available from the Department. The abandoned workings of the Young Wallsend Colliery were recognised by Gretley as a potential source of inrush. Successive mine managers relied upon the mine surveyor to view the original record tracing or mine plan. The Court has found that the mine surveyor did not do so. Expert evidence suggested that had he done so the unreliability of sheets 2 and 3 would have been apparent.

RECOMMENDATION 5
Clause 8(3) of the Methods & Systems of Working – Underground Mines Regulation be amended to include:
(i) that the manager or his competent delegate view the original of all relevant plans held by the Department in respect of the abandoned workings.
(ii) that the manager or his competent delegate seek out and view all relevant files (whether held by the Department or by state archives) relating to the abandoned workings.
(iii) that the manager prepare a comprehensive report on the material examined pursuant to (i) and (ii) above.
(iv) that the expression “competent delegate” of the manager may include a risk assessment team, or a suitably qualified member of it.

Risk Assessment
Risk assessment is a useful discipline. It ought to have been employed by Gretley in the context of the Young Wallsend Colliery. Had it been employed, it probably would have exposed the inadequate research and the false assumptions which lay behind the depiction of the old workings. The use of risk assessment is already widespread in certain areas (such as the introduction of new machinery). It should be required in respect of the prevention of inrush.

RECOMMENDATION 6
That Clause 8 of the Coal Mines Regulation (Methods & Systems of Working – Underground Mines) Regulation 1984 be amended to require the manager to arrange for a risk assessment to be undertaken whenever mining operations give rise to the possibility of inrush.

RECOMMENDATION 7
That such risk assessment should examine, amongst other issues, the reliability of existing plans and the practicality of draining the old workings, (which should be the preferred option).

RECOMMENDATION 8
That the Department, as part of the Section 138 process, review the adequacy of the risk assessment.

RECOMMENDATION 9
That the guidelines used by inspectors under Section 138 be amended to require such a review.

The Borehole Rule
It was apparent that Clause 9 of the Coal Mines Regulation (Methods & Systems of Working – Underground Mines) Regulation 1984 (the “Borehole Rule”) was widely misunderstood. Many believed that it was only necessary to drill ahead when intruding upon an area 50 metres from old workings, measured from the perimeter of the plan. That view assumes that the plan is accurate, or substantially accurate. The accuracy of the plan, however, is an issue which must first be determined. It is only appropriate to take the perimeter of the plan as the point from which the 50 metres is measured where the position of the old workings is known with reasonable certainty. Where the location is known with little confidence, research and analysis must be undertaken to determine the likely extent of the old workings. In that circumstance, drilling in excess of 50 metres will be required.
RECOMMENDATION 10
That an Industry Committee give consideration to the reformulation of Clause 9 to make it clear that the perimeter of the plan should only be used for the purposes of measuring the 50 metres referred to where the position of the old workings is known with reasonable certainty, and that such committee consider the means by which the outline of the old workings may be established with reasonable certainty.

The Borehole Rule: Workings Above and Below
The separation between the Young Wallsend seam at Gretley (being the upper seam) and the Borehole seam (the lower seam) was 18 metres. It was suggested by certain witnesses that the 50m mentioned in Clause 9, Methods & Systems of Working – Underground Regulation was not a horizontal or inseam distance, but formed a sphere around the workings. The 50m appears to refer to the horizontal plane, i.e. the seam being worked. That view is consistent with the precaution required, namely boreholes in advance and flank boreholes. The issue concerning the proper construction of Clause 9, nonetheless, drew attention to the absence in that clause of any specific reference accumulations of water above or below the seam being worked. Such accumulations may impact upon the active seam, especially where there is a pressure head, and where the separation is not substantial.

RECOMMENDATION 11
That an Industry Committee give consideration to Clause 9 being amended to specifically address accumulations of water in disused workings or seams above and below the seam being worked.

Borehole Rule: Drilling Pattern
Clause 9 of the Coal Mines Regulation (Methods & Systems of Working – Underground Mines) Regulation 1984 (the Borehole rule) does not specify a drilling pattern other than that it must include at least one borehole in advance, near the centre of the workings, and sufficient flank boreholes on either side of the workings. Certain inspectors expressed the view that the drilling pattern was not their concern. It was a matter for the mine manager. The Court believes that view to be inappropriate. The Department should, in the interests of safety, review the drilling pattern proposed.

RECOMMENDATION 12
That Clause 9 be amended by obliging the manager to prepare drilling rules to be submitted to the district inspector for confirmation prior to the commencement of drilling. These rules are to include as a minimum:

(i) a quantification of the volume and pressure of the impounded water being drilled towards, or a quantification of the pressure, volume, toxicity or explosiveness of gases being drilled towards.

(ii) a drilling pattern designed to ensure that a safe zone always exists between the disused workings and the active workings.
(iii) control measures such as stand pipes and blow out preventors to ensure any deliberate or inadvertent holing will not result in an uncontrolled release of water/or gas.
(iv) training programmes for all employees.
(v) methods to permanently fill and seal drill holes if the need arises.

The district inspector, before giving confirmation of the rules, may amend or supplement the rules for the purposes of ensuring safety.

**Responsibility for Drilling**
Clause 37 of the *Coal Mines Regulation (Manager & Officials – Underground Mines) Regulation 1984* requires the undermanager to ensure compliance with Clause 9 of the Methods & Systems Regulation (the Borehole rule). Clause 9 is included in Part II of the Methods & Systems Regulation, which is concerned with the prevention of inrush. It is the manager who has the obligation to prevent inrush. He should also have the obligation to ensure compliance with Clause 9, it being recognised as an important precaution in the prevention of inrush. In the case of Gretley, the manager was unaware of discussions between undermanagers concerning drilling ahead, and was less than completely aware of the reasons why it was thought desirable. Had the manager been responsible for drilling, the outcome may have been different.

**RECOMMENDATION 13**
Clause 37 of the Manager & Officials – Underground Mines Regulation be deleted from the duties of an undermanager, and inserted in the duties of the manager in the same Regulation.

**The Section 138 Approval Process**
The approval process failed in respect of the Gretley application for two reasons. First, the inspectors relied upon the certified plan. The system was defective in that it did not require them to question the information which appeared on it. The central issue raised by the application, in terms of safety, was thereby removed from scrutiny. Secondly, the inspectors approached their task seeking not to interfere unduly with the discretion of the mine manager, he having the primary responsibility for mine safety. Although questionably the mine manager does have the primary responsibility for formulating a strategy to deal with known hazards, the inspectors’ role must be to question that strategy, examine the assumptions upon which it is based (including any in respect of the plan), and seek, by dialogue and the imposition of conditions, to enhance safety. The Department’s approach to issues of safety should be as rigorous as that presently adopted in respect of subsidence.
RECOMMENDATION 14
That the guidelines used by inspectors in the assessment of a Section 138 application be amended to emphasise these aspects of their role.

RECOMMENDATION 15
That paragraph 2.2.6 of the guidance notes should be amended to make it consistent, as far as proposed precautions are concerned, with other sections.

Section 138 Application and First Workings
The inrush occurred in C heading 50/51 Panel. C heading was part of a three heading development, referred to as first workings. The heading were driven to permit the installation of the miniwall, which would then extract large blocks of coal (second workings). There is no obligation under S138 to seek the Department’s approval for first workings. The Department’s supervision, through the approval process, when properly performed, is an important safeguard. Since first workings are intimately associated with the extraction which will follow, the approval process under Section 138 should extend to first workings.

RECOMMENDATION 16
That Section 138 of the Act be amended so that first workings associated with longwall, miniwall and pillar extraction should require approval as part of the S138 process.

Time limits in respect of Section 138 Applications
Mistakes were made in a variation application by Gretley lodged in August 1995. They appear to have arisen from the extreme haste with which the application was processed. Vital safety issues were overlooked by both the company, and the Department.

Consideration should be given to imposing a statutory minimum time to review Section 138 applications. Unseemly haste can be attached to these applications due to:

- late submission; and
- the need for urgent approval to avoid loss of time, production and jobs.

Whilst these matters are important, they must be subservient to safety. The process of review should be sufficient, but not hurried. The Inspectorate should be able to review an application without external pressures. A minimum time constraint on review would force companies into longer term planning. As a result they too should benefit from a more considered approach to applications. A discretion should be given to the Chief Inspector, in exceptional circumstances, to vary the period, upon written application by the company.
RECOMMENDATION 17
That Section 138 of the Act be amended so that

(i) a minimum view period of 4 months be specified for all Section 138 applications;
(ii) all variations to a Section 138 approval, other than those specified as of a minor nature, be submitted to the Inspectorate for review;
(iii) a minimum review period of 1 month be specified for applications to vary approved Section 138 plans; and
(iv) that the Chief Inspector be given the power to vary the period upon written application by the mining company, provided always that the time designated by the Chief Inspector shall be sufficient to consider all aspects of mine safety.

Young Wallsend Colliery
The Young Wallsend colliery, having been substantially emptied of water as a result of the inrush, poses a potential hazard, both in respect of the surface and underground. That hazard, in each area, is being addressed. Nonetheless, issues remain which will require continuing assessment.

RECOMMENDATION 18
That the Department supervise the implementation of a management plan which deals with the remaining hazards associated with the Young Wallsend colliery, both underground and on the surface.

Workings in a Number of Seams
The Gretley mine was working in the Young Wallsend seam. It believed that the Young Wallsend colliery had worked both the Young Wallsend seam and the Borehole seam. The mine plan of Gretley showed only the workings which the mine believed were the workings of the Young Wallsend colliery in the Young Wallsend seam. Arguably, under Clause 13(3)(b) of the Coal Mines Regulation (Survey & Plan) Regulation 1984, the mine plan ought to have shown both seams. Unquestionably it would have been an advantage had it done so.

RECOMMENDATION 19
That Clause 19 of the Survey & Plan Regulations be amended to make it clear that the mine plan should show (at least by dotted outline) workings in other seams, whether abandoned or otherwise.

Special Barrier
The issue of whether, in the allocation of the mining lease to the Gretley Colliery, the Department ought to have imposed a special barrier around the Young Wallsend Colliery, received little attention during the course of evidence. It was, nonetheless, the subject of voluminous submissions by the
company after the close of evidence. The suggestion was that in the allocation of a lease there is the opportunity for the Department to research, from amongst its own archives, any abandoned workings within the area to be allocated, and to impose a special barrier if that research suggested some uncertainty as to the position or extent of such workings.

**RECOMMENDATION 20**
The Court does not believe that it is in a position to make a recommendation. The issue was not fully investigated before it. Nonetheless, an Industry Committee should investigate the utility and feasibility of requiring the Department to make such an investigation, and to impose such a barrier.

**Section 12 of the Act**
Evidence before the Inquiry established that the Inspectorate was not complying with Section 12 of the Act which provides as follows:

“Annual reports by inspectors

12(1) Each inspector appointed under section 7(1)(c)-(h) shall, at such time or within such period as the Chief Inspector may direct, make an annual report of his official activities during the preceding year to the Chief Inspector.

(2) The reports referred to in subsection (1), as summarised by the Chief Inspector, shall be furnished by the Chief Inspector to the Minister.”

This Section is considered important and a source of necessary information for the Minister.

**RECOMMENDATION 21**
That the Inspectorate be required by the Director General to comply with all of the provisions of Section 12.

**Investigation**
Part 4 of the *Coal Mines Regulation Act 1982* sets out (inter alia) the powers of inspectors in relation to entry and inspection of coal mines and provides for examination and inquiry of persons associated or connected with a mine. The powers given by Section 59 of the Act are wide, as are supplementary powers given by Section 60 of the Act.

Section 60(1)(a) is a very important provision which enables an inspector investigating an accident to obtain information at an early stage while the relevant events are fresh in the minds of those sought to be interviewed and before such persons become liable to interference. Other provisions give the person interviewed protection, against use of his answers in evidence against him, subject to certain exceptions.

The inspectors investigating the Gretley accident were met with a demand that such questions as they desired to ask be put in writing and the interviewee be permitted to answer in writing. These demands, made on
behalf of some witnesses, were said to be upon legal advice that they were entitled to have the inspector's questions handled in this manner. Similar demands have apparently been made in other investigations.

The result was that the interview process was seriously affected. Instead of having the immediacy it clearly required this was prevented and the process taken out of the hands of the inspectors who no longer had control over it. In the result the inspectors were unable to deal by way of further questioning with answers not to the point of the questions or with answers which raised other matters which required, perhaps, clarification.

In the Court's view, the demand that the above procedure be followed was without legal justification. Nothing in the Act supports it at all. However, the Court considers the matter important to the proper adequate and immediate investigation by inspectors of the subject matter of Sections 59 and 60.

**RECOMMENDATION 22**
That the Act be altered to provide that persons interviewed by inspectors pursuant to the provisions of Sections 59 and 60 of the Coal Mines Regulation Act 1982 are required, unless excused by such inspector, to reply orally and forthwith to all questions put to them by such inspectors.

**Investigation of Deaths, Serious Bodily Injuries and Dangerous Occurrences**
The Department's role, and that of the district inspector, where there is a fatality, serious bodily injury or dangerous occurrence should be examined. There are, at present, two inhibitions to such an examination. First, there is the natural reluctance of officers of the Department to examine critically their own actions, or those of colleagues. Secondly, where they overcome that reluctance, and make such an examination, there is an obvious conflict of interests.

**RECOMMENDATION 23**
That in respect of fatalities, serious bodily injuries and dangerous occurrences there should be an investigation by the district inspector which should include:

(a) the gathering of documents;
(b) obtaining statements from relevant witnesses;
(c) a statement from the district inspector as to his involvement with the mine and the approval process;
(d) a report.
RECOMMENDATION 24
That there should be established an autonomous unit within the Department responsible for the investigation of fatalities, serious bodily injuries and dangerous occurrences, and that such unit should examine the role of the Department and inspectors of the Department in the circumstances leading up to the fatalities, serious bodily injuries and dangerous occurrences.

RECOMMENDATION 25
That the autonomous unit should report directly to the Director General rather than the Chief Inspector, and have at least one full-time officer at the level of senior inspector, together with appropriate secretarial assistance.

RECOMMENDATION 26
That such unit should, in consultation with the Chief Inspector, be provided with such additional assistance from inspectors within the Department and/or consultants, as is required.

RECOMMENDATION 27
That members of the autonomous unit should have the powers of an inspector under the Coal Mines Regulation Act 1982.

RECOMMENDATION 28
That the district inspector upon receipt of a Notice under Section 86 of the Coal Mines Regulation Act 1982, shall forthwith give a copy of such notice to the autonomous unit.

RECOMMENDATION 29
That the autonomous unit shall thereafter investigate all fatalities, and such serious bodily injuries or dangerous occurrences as the unit believes warrant investigation, provided that the Chief Inspector may at any time request that the unit investigate a particular serious bodily injury or dangerous occurrence.

RECOMMENDATION 30
That the district inspector, upon completion of the investigation, should provide such unit with the material referred to in (i), provided that:
(a) the autonomous unit may liaise with the district inspector during the course of the district inspector’s investigation;
(b) That the autonomous unit may itself begin its investigation of a fatality, serious bodily injury or dangerous occurrence during the currency of the investigation by the district inspector.

RECOMMENDATION 31
That the report of the autonomous unit in respect of a fatality, serious bodily injury or dangerous occurrence should be made public, subject to the right of the Director General, in circumstances of a proposed prosecution, to defer publication of the report, or aspects of the report, pending such prosecution.
RECOMMENDATION 32
That where a person from the Department provides assistance to the autonomous unit, or provides evidence to a Court or Inquiry, it shall be an offence to disadvantage such person in their employment by reason of such assistance or evidence, as the case may be.

Reports by District Inspectors
District Inspectors prepare reports in respect of mining accidents and dangerous occurrences. The reports are often detailed, and take some time to prepare. They usually incorporate recommendations. They are submitted to the Chief Inspector. They are not published, nor available to the public. Procuring copies of the Inspectors’ reports in respect of the Endeavour Inquiry took unusual persistence on the part of a person who had been involved in the investigation, (being the district check inspector). That person was ultimately required to make an application under the Freedom of Information legislation.

RECOMMENDATION 33
The reports of inspectors in respect of mining accidents, and incidents should be available upon request. The Department may, if it chooses, make it clear that it does not formally adopt or endorse the comments and recommendations of the inspector.

Examinations and Inspections – Section 91
The Section requires an inspector and a check inspector to whom notice has been given of an accident or a dangerous occurrence at a mine to visit the mine as soon as practicable after receipt of the notice and to complete their examinations and inspections as expeditiously as the circumstances permit. Certain inspectors hold the view that section 91 requires nothing more than attending the mine and looking at what is to be found in connection with the accident or dangerous occurrence. This would be a less than valuable exercise.

RECOMMENDATION 34
That Section 91 of the Act be amended to require the inspector concerned to furnish a full report of his examination and inspection including conclusions and recommendations to the Chief Inspector.

Closing of Shafts in Abandoned Mines
The potential hazards of abandoned shafts that have not been filled correctly, either at the time of abandonment or subsequently, have been highlighted by the Inquiry. Section 121 of the Act only refers to providing closed shafts and outlets with approved plugs, seals, barrier or enclosure. Permanent filling of abandoned shafts should be provided for in legislation.
RECOMMENDATION 35
Add to Section 121(1):
(c) if required by the district inspector such shafts and entrances shall be permanently sealed.

Drilling of Boreholes
Section 135 of the Act relates to boreholes used to prove coal. During the Inquiry, boreholes were proposed to “prove the ground” ahead of workings. It is uncertain if this Section applies to Clause 9, Methods & Systems of Working boreholes.

RECOMMENDATION 36
Section 135 should be amended to cover the drilling of boreholes to prove ground.

Assessors
Section 152 of the Act sets out the jurisdiction of the Court. Section 151 specifies those parts of the jurisdiction which require the participation of assessors. An investigation under Section 95 neither requires nor permits the appointment and participation of assessors.

The predecessor to the present Act, the Coal Mines Regulation Act, 1912-1953, by Section 33 required the appointment of assessors to assist the Court in all proceedings before it. Such assessors were required to be persons having practical experience in coal-mining and to be appointed from persons nominated by those interested in the proceedings. The assessors had the power to advise not to adjudicate, and the Court had the right to consult the assessors collectively or individually in public or in private.

In the experience of those familiar with the history and work of the Court, the value of the assistance of such experienced persons as assessors was indubitable. Why then were they excluded from Section 95 investigations? Reference to the second reading speech of the Honourable D. P. Landa (Minister for Energy, Minister for Water Resources and Vice President of the Executive Council) on the Coal Mines Regulation Bills on 6 April 1982 in the Legislative Council (Volume 168 of Parliamentary Debates at page 3425), suggests that the failure to provide for assessors in Section 95 investigations was nothing less than a draftsman’s error, not noticed by those in charge of the Bills. At page 3424 of his introduction of the Bills in the second reading speech, Mr Landa said:

“The Minister may direct a Court of Coal Mines Regulation to hold an inquiry into the cause and circumstances of the incident.... Where the Minister directs the Court to hold an inquiry the judge will be assisted by two assessors having practical mining experience. Similar provisions for reports and inquiries are provided for by the 1912 Act.”
RECOMMENDATION 37
That Section 152 of the Act be amended to include investigations under Section 95 among those matters in Section 151 which require the appointment of an assessor or two or more assessors.

Prosecution Policy
No mining company (or senior official) has been prosecuted under either the Coal Mines Regulation Act 1982 or the Occupational Health & Safety Act 1983 since April 1990. The Court suspects that before 1990 the position was little different. Since 1990, however, there have been more than 33 deaths, and a number of serious incidents. Many of the fatalities involved gross negligence, and breaches of the law. The Department’s inaction is in part the consequence of its not having a documented prosecution policy. The Court believes that such a policy is now being drafted. An attitudinal change is also required. Prosecution has a place in securing mine safety. The statutes create offences. Mining companies and senior officials must be made aware, by timely prosecution, that they are accountable under the law for their actions.

RECOMMENDATION 38
That the Department formulate a prosecution policy.

RECOMMENDATION 39
That the Department encourage inspectors to identify serious breaches of the law where they are perceived.

RECOMMENDATION 40
That inspectors be given training in conducting investigations, and gathering evidence, with a view to such evidence being used in a prosecution, if appropriate.

RECOMMENDATION 41
That the Department, subject to the terms of its policy, prosecute such breaches.

RECOMMENDATION 42
That the Chief Inspector report to the Minister of Mineral Resources on an annual basis as to prosecutions undertaken.

Consideration of Prosecution
The inspectors, and the Court, are each given powers to compel witnesses capable of giving relevant evidence to give such evidence. The answers provided to the inspectors, or evidence given to the Court under compulsion, is not admissible in evidence in court proceedings against the person providing such evidence (subject to an exception not here material). Some, but not all, of the evidence before the Court would be inadmissible upon this
basis. A careful assessment is required to determine whether there is admissible evidence of offences having been committed.

**RECOMMENDATION 43**
In respect of The Newcastle Wallsend Coal Company Pty Ltd that the papers be referred to the Crown Solicitor with a view to his determining whether offences have been committed under Sections 15 and 16 of the Occupational Health and Safety Act 1983.
Appendix 9
Implementation of the Mine Safety Review and the Gretley Inquiry Report

Three reviews have been of great significance in the direction that mine safety, from the perspective of Government and industry, has taken in recent years in New South Wales. These are:

- Review of Mine Safety in NSW (ACIL, Susan Johnston) March 1997

Mine Safety Review
In November 1996, the Government approved an independent review of mine safety against a backdrop of continuing death and serious injury in NSW mines.

ACIL Economics and Policy Pty Ltd (Susan Johnston) undertook an extensive review interviewing some 150 persons. The report containing 44 recommendations was tabled in Parliament on 9 April 1997 (see Appendix 8).

A two-tiered tripartite structure was set up to oversee the first stage of implementation of the recommendations with a target of April 1998.

The Steering Group, chaired by the Minister, comprising representatives of industry unions and the Department gave direction to the Implementation Group, chaired by Professor Dennis Else (the then chairman of the National Occupational Health and Safety Commission). The Implementation Group coordinated tasks associated with specific recommendations allocated to four Task Groups:

- individual mine sites
- the NSW Minerals Council
- the Department of Mineral Resources
- the NSW Mining Industry Training Advisory Board.

Task group one examined issues associated with the introduction of remote controlled equipment underground, and has produced Guidelines for the design and for the use of such equipment.

Task group two dealt with performance measures and information sharing. It developed a new set of measures for the industry and a mechanism for reporting and disseminating information about potential incidents.

Task group three examined options for a new regulatory regime embracing risk management plans and has provided a recommended model.
Task group four examined issues relating to the Department and to the Moura Inquiry. A comprehensive interim report was completed which set out a plan for the restructuring of the Department’s Mine Safety and Environment Division. It dealt with the role of mine safety officers, and the development of inspector’s work programs including:

- prioritisation of activities
- the introduction of a separate accident investigation unit
- training requirements.

In April 1998, the Steering Group on the Mine Safety Review Implementation submitted a major report on progress and of the products developed. The subsequent implementation was overseen by the Mine Safety Advisory Council.

All the recommendations of the Mine Safety Review have been dealt with and a summary report of the status of the implementation as provided by the Department of Primary Industries is included in Appendix 10.

**Gretley Inquiry**

Following the Gretley accident, the Government established the Gretley Mine Inquiry under the *Coal Mines Regulation Act, 1982* on 14 November 1996. On 7 July, 1998, the final report of the Gretley mine inquiry was handed down.

The inquiry made 43 recommendations (see Appendix 9). A document providing the Government’s response to the Gretley findings and a plan of action was produced in August 1998.

All the recommendations have subsequently been dealt with and a current status report as provided by the Department of Primary Industries is included in Appendix 11.

**Implementation**

The Department of Primary Industries in its submission notes that while the actual recommendations have been dealt with, the very nature of some of the recommendations, such as performance measures and legislation, are very long term and may be seen as requiring continuous improvement.

The ongoing implementation of appropriate strategies is overseen by the Mine Safety Advisory Council.

The Department notes that the major areas where ongoing work is occurring are dealt with under the following headings:

- development and status of mine safety legislation
- review of safety performance measures
- development of a National Mine Safety Framework
- training and competency
Appendix 10
Status of the Implementation of the 1997 Mine Safety Review Recommendations

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Action Taken</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Measurement of Safety Performance.</td>
<td>Set of Measures agreed and implemented.</td>
<td>Required action taken. Mine Safety Advisory Council continues to monitor. Improvements continue to be made. Under the national framework agreed to by the Ministerial Council, a national mining industry data set is to be established.</td>
</tr>
<tr>
<td>2. New Mix of Measures to be developed.</td>
<td>Set of Measures agreed and implemented.</td>
<td>Required action taken. Mine Safety Advisory Council continues to monitor. Improvements continue to be made. Under the national framework agreed to by the Ministerial Council, a national mining industry data set is to be established.</td>
</tr>
<tr>
<td>3. Adoption of new mix of measures.</td>
<td>Set of Measures agreed and implemented. COMET database established by Department to provide further data and target safety operations activities.</td>
<td>Required action taken. Mine Safety Advisory Council continues to monitor. Improvements continue to be made. Under the national framework agreed to by the Ministerial Council, a national mining industry data set is to be established.</td>
</tr>
<tr>
<td>4. NSW Minerals Council to develop guidelines on determining safety performance for individual mine sites.</td>
<td>Tools, guidelines and courses developed and delivered.</td>
<td>Completed.</td>
</tr>
<tr>
<td>6. Safety Incentives Production Bonuses</td>
<td>Review current practice and information provided to industry.</td>
<td>Required action taken. Further improvements planned. Provision has been included in Safety</td>
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</tr>
<tr>
<td>7. Safety Incentive Schemes</td>
<td>Review current practice and information provided to industry.</td>
<td>Required action taken. Further improvements planned. However provision in Safety legislation preventing any financial benefit or financial incentive discouraging a person from reporting health or safety matter.</td>
</tr>
<tr>
<td>8. Company Boards and Safety Indicators.</td>
<td>Company Boards now deal with safety as a major issue and annual reports show safety performance.</td>
<td>Required action taken. Ongoing as part of culture change.</td>
</tr>
<tr>
<td>9. New South Wales Minerals Council convene CEO forum.</td>
<td>Forum held plus major conferences held annual on safety issues.</td>
<td>Required action taken. Conferences continue to be held.</td>
</tr>
<tr>
<td>10. Mine Operators promote commitment of middle managers.</td>
<td>Promoted to mine sites.</td>
<td>Required action taken. Promotion continues as part of ongoing work.</td>
</tr>
<tr>
<td>11. Mine Operators provide training to mine managers.</td>
<td>Training courses provided.</td>
<td>Required action taken. Training ongoing. New legislation establishes Competency Boards to develop competency standards for persons to work safety. Mine Managers Association of Australia has implemented a program of continuing professional development.</td>
</tr>
<tr>
<td>12. Companies re-evaluate worker participation.</td>
<td>Regulations and Guidelines require worker participation. Promotion by NSW Minerals Council.</td>
<td>Required action taken. Further work undertaken as part of employee participation and as result of new OHS Act. An audit tool on consultation has been developed.</td>
</tr>
<tr>
<td>13. New South Wales Minerals Council Guidelines for Contractor Safety.</td>
<td>Guidelines developed and issued.</td>
<td>Required action taken. Contractor safety continues to be a major issue in the industry</td>
</tr>
</tbody>
</table>
and action has been taken to address concerns in mining legislation. The New South Wales Minerals Council has reissued a complete Suite of Guidelines for Contractor Safety in 2004.

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<tbody>
<tr>
<td><strong>15.</strong> Remote Control Equipment.</td>
<td>Guidelines on the design and use of remote control equipment developed and implemented.</td>
<td>Required action taken. Analysis undertaken of the causation of accidents/incidents involving mobile equipment. Resulting communicated.</td>
</tr>
<tr>
<td><strong>16.</strong> Risk Assessment and Management approaches.</td>
<td>Integrated into new legislation.</td>
<td>Required action taken. Further improvements being made to address the management of risk in legislative change.</td>
</tr>
<tr>
<td><strong>17.</strong> Companies review approaches to core risk.</td>
<td>Training and Promotion provided.</td>
<td>Required action taken. New legislation will require further action.</td>
</tr>
<tr>
<td><strong>18.</strong> Information sharing re accidents.</td>
<td>Workshops conducted Improved information provision and techniques implemented.</td>
<td>Required action taken. New projects and activities to analysis information and to identify causation ongoing.</td>
</tr>
<tr>
<td><strong>19.</strong> Structural safety and communications training.</td>
<td>Promoted</td>
<td>Required action taken. Relevant training ongoing.</td>
</tr>
<tr>
<td><strong>22.</strong> Emergency Preparedness.</td>
<td>Training Programs conducted.</td>
<td>Required action and training program conducted. Training ongoing.</td>
</tr>
<tr>
<td><strong>23.</strong> Environmental Responsibilities with DMR.</td>
<td>Devolved to Environmental Unit. Inspectors no longer perform safety functions.</td>
<td>Completed.</td>
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</tr>
<tr>
<td>26. Investigation and Enforcement.</td>
<td>Policies and procedures developed and published.</td>
<td>Required action completed. Policies and procedures continue to be reviewed.</td>
</tr>
<tr>
<td>30. Physical Examinations.</td>
<td>Minimum targets set.</td>
<td>Required action completed and continued to be monitored.</td>
</tr>
<tr>
<td>31. Unannounced Visits.</td>
<td>Represented 23% of all sites 98/99.</td>
<td>Required action completed and continued to be monitored.</td>
</tr>
<tr>
<td>35. Data base re General Rule.</td>
<td>Developed and maintained under COMET.</td>
<td>Required action taken. Major improvements to data base system currently being made.</td>
</tr>
<tr>
<td>37. Timeframes for implementation of General Rule.</td>
<td></td>
<td>Completed.</td>
</tr>
<tr>
<td>Number</td>
<td>Description</td>
<td>Progress</td>
</tr>
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<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>40.</td>
<td>Single NSW legislative for Mining.</td>
<td>Dealt with as part of the legislative review process.</td>
</tr>
<tr>
<td>41.</td>
<td>Mine Safety management plans.</td>
<td>Legislative requirements in new Regulation coal and non coal and will be incorporated in the new Legislation.</td>
</tr>
<tr>
<td>43.</td>
<td>Implementation of Moura Inquiry recommendations on training and communication.</td>
<td>Training Workshops conducted. New Information Unit established.</td>
</tr>
</tbody>
</table>
Appendix 11
Recommendations
### Implementation of Gretley Inquiry Report Recommendations (as at September 2004)

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Action taken</th>
<th>Current Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Survey teaching institutions and examinations incorporate use of historical data</td>
<td>Examinations incorporate questions on the use of historical data research</td>
<td>Implemented</td>
<td>The Board of Surveying &amp; Spatial Information of the Lands Department now administers surveying examinations. Teaching programs and examinations incorporate the use of historical data research.</td>
</tr>
<tr>
<td>4. Catalogue all files and archival material related to record tracings of abandoned mines</td>
<td>Coal mine record tracings and management systems are completed Metalliferous mine management systems reviewed Cataloguing ongoing</td>
<td>Implemented</td>
<td>Files and archival material are stored in DIGS. The development of spatial indices to record tracings continues. Survey and Drafting Directions governing the preparation and supply of plans are in place and regularly reviewed.</td>
</tr>
<tr>
<td>5, 6, 7 Prevention of Inrush</td>
<td>New regulations and supporting guidelines implemented</td>
<td>Implemented</td>
<td>Regulations commenced 1 Sept 99 Draft Guidelines adopted.</td>
</tr>
</tbody>
</table>


## Implementation of Gretley Inquiry Report Recommendations (as at September 2004)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>8. Section 138 to incorporate risk assessment process</td>
<td>• Training of Inspectorate completed&lt;br&gt;• Amendments to work instructions drafted and implemented</td>
<td>Implemented</td>
<td>Applications incorporate risk assessment process</td>
</tr>
<tr>
<td>9. Section 138 guidelines to be amended to incorporate risk assessment process</td>
<td>Application guidelines amended to include risk assessment</td>
<td>Implemented</td>
<td>Development of a model to facilitate the application process</td>
</tr>
<tr>
<td>10, 11, 12, 13 Prevention of Inrush</td>
<td>New regulations and supporting guidelines implemented</td>
<td>Implemented</td>
<td>Regulations commenced 1 Sept 99 Draft Guidelines adopted.</td>
</tr>
<tr>
<td>14. Section 138 work instructions include examination of strategies, assumptions and conditions</td>
<td>• Training of Inspectorate completed&lt;br&gt;• Amendments to work instructions drafted and implemented</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>15. Section 138 guidelines for precautions to be consistent.</td>
<td>• Training of Inspectorate completed in revised guidelines&lt;br&gt;• Amendments to work instructions drafted and implemented</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>16. Section 138 process to include first workings</td>
<td>Recommendation not supported by Joint safety Review Committee</td>
<td>All new applications are dealt with through the Subsidence Management Plan process.</td>
<td>Subsidence Management Plan (SMP) process implemented March 2004.</td>
</tr>
</tbody>
</table>
### Implementation of Gretley Inquiry Report Recommendations (as at September 2004)

<table>
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<tbody>
<tr>
<td>Recommendation assessed with the review of the Act.</td>
<td>All existing applications, within the approved boundary are dealt with under the existing Section 138 process.</td>
<td>Transition arrangements require existing applications to meet SMP requirements by March 2005.</td>
<td></td>
</tr>
</tbody>
</table>
| **17. Section 138 of the Act to be amended regarding review period** | Recommendation not supported by Joint safety Review Committee  
Recommendation assessed with the review of the Act. | All new applications are dealt with through the Subsidence Management Plan process.  
All existing applications, within the approved boundary are dealt with under the existing Section 138 process. | Subsidence Management Plan (SMP) process implemented March 2004.  
Transition arrangements require existing applications to meet SMP requirements by March 2005. |
| **18. Management of remaining hazards of Young Wallsend Colliery** | Management plans completed and implemented  
Ongoing monitoring | Implemented | Draft Guidelines for closing shafts and abandoned mines developed. Guidelines remain in draft form. |
| **19. Amendment to Survey and Plans Regulation to include workings of other seams** | • Amendment to Regulations not supported  
• Survey and drafting directions to implement recommendation | Implemented | Survey and drafting instructions support recommendation Gazetted and commenced 31 March 2000 |
| **20. Special barriers imposed in lease conditions** | No action required | Implemented | Provision already exists in legislation. |
| **21. Inspectorate to comply with** | Annual reports prepared and | Implemented | Report process in place, |
## Implementation of Gretley Inquiry Report Recommendations (as at September 2004)

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<tbody>
<tr>
<td>Section 12 notification of Act</td>
<td>summarised to comply with Section 12.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Investigations to require people to answer Inspectors questions orally and forthwith</td>
<td>Requirement included in Mines Legislation Amendment (Mine Safety) Act 1998.</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>24. Investigations to require an autonomous Investigations Unit</td>
<td>Establishment of Investigations Unit completed by July 1999. Unit is now operational</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>25. Investigations Unit to report directly to Director General</td>
<td>Implement in administrative arrangements of Unit</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>26. Investigations Unit to be assisted by Inspectors and Consultants</td>
<td>Administrative arrangements allows this assistance to be provided</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>27. Investigation Unit members have the powers of Inspectors</td>
<td>Legislation’s gives members of the unit investigative powers</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>28. Investigation Unit to be provided with a copy of accident notification from Inspector</td>
<td>Implemented through new legislation</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>29. Investigations Unit able to investigate matters it considers warranted</td>
<td>Implemented through new legislation</td>
<td>Implemented</td>
<td></td>
</tr>
</tbody>
</table>
### Implementation of Gretley Inquiry Report Recommendations (as at September 2004)

<table>
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<th>Action taken</th>
<th>Current Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. Inspector to provide information during investigation</td>
<td>Implemented through new legislation</td>
<td>Implemented</td>
<td></td>
</tr>
</tbody>
</table>
| 31. Investigation Unit reports to be made public. | • Implemented through new legislation  
• Policy statement requires reports to be not released for legal purposes. Reasons to be provided. | Implemented | |
| 32. Investigations to provide protection of people who provide assistance | Implemented through new legislation | Implemented | |
| 33. Inspectors investigation reports to be made available upon request | • Amendments to CMRA made regarding release of reports.  
• Draft policy for release of reports prepared.  
• Policy to consider legislation requirements (Section 81 of MIAct) | Policy reviewed but was not approved for implementation. | This is a complex legal issue that can prejudice the legal process regarding prosecutions. Provisions under Clause 8 of the Coal Mines (Investigation) Regulation 1999, improves transparency of information contained in investigation reports. |
<p>| 34. Inspectors to provide reports to Chief Inspector of investigation | Implemented through new legislation | Implemented | |
| 35. Colliery abandonment plan | Implemented through new legislation | Implemented | |</p>
<table>
<thead>
<tr>
<th>Recommendation</th>
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<th>Current Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>for sealing of entrances</td>
<td>legislation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. Prevention of Inrush through protective drilling of boreholes</td>
<td>Implemented through new legislation</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>37. Investigations to include inquiries to sit with assessors</td>
<td>Implemented through new legislation</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>38. Enforcement Policy to be formulated</td>
<td>Policy has been ratified and is in effect</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>39. Inspectorate encouraged to identify serious breaches</td>
<td>Enforcement policy encourages identification of breaches and commitment to adhere to policy</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>40. Inspectors trained in gathering evidence for prosecution</td>
<td>Investigations Unit seminars for emergency services and Unit protocols completed</td>
<td>Implemented</td>
<td>Training provided Investigations manual at an advanced draft</td>
</tr>
<tr>
<td>41. Prosecutions consistent with Department policy</td>
<td>Assessment Review Committee established to evaluate policy matters</td>
<td>Implemented</td>
<td>Assessment Review Committee operating with independent</td>
</tr>
<tr>
<td>42. Prosecutions to be reported annually by CICM</td>
<td>Combined with annual report Process in place</td>
<td>Implemented</td>
<td>Reported in Annual Report</td>
</tr>
<tr>
<td>43. Consideration of prosecutions referred to Crown Solicitor to determine offences under OH&amp;S Act</td>
<td>Papers in relation to Newcastle Wallsend Coal Company have been referred to Workcover Authority</td>
<td>Implemented</td>
<td>Prosecution proceeded Judgement 9 August 2004. Both companies and three individuals found guilty.</td>
</tr>
</tbody>
</table>
Appendix 12
Development and Status of Mine Safety Legislation

A process of mine safety legislation reform has taken place since the 1997 NSW Mine Safety Review. The Review recommended that there be an examination of the regulatory framework for health and safety in New South Wales mines. In particular, it recommended that there be an immediate re-examination of legislative options for the coal sector.

A report of the tripartite Steering Group, established to deal with the recommendations, was released in 1998 which included an options paper for regulatory reform including a 'preferred model' for regulatory reform. That model was influential but not determinative of the final regulatory model adopted.

Development Process

A staged approach was adopted to review the two pieces of mine safety legislation; that is, the Coal Mines Regulation Act 1982 and the Mines Inspection Act 1901 which together covered the whole NSW mining industry. The reviews progressed through the Mine Safety Advisory Council as the peak industry consultative body, which would promote industry participation and maximise the opportunity for discussion amongst the parties in the reform process.

These two Acts, and in the case of coal its precursors, have been a feature in the respective mining sectors, and their primary means of health and safety regulation over the last century. Since 1983, the industry has also been regulated by general occupational health and safety legislation – now the Occupational Health and Safety Act 2000 (OHS Act) – which applies to all NSW industry. The OHS Act was updated in June 2000 after extensive consultation with the community and sets widely accepted general standards which are relevant in all workplaces in NSW.

Despite the mine safety legislation and the OHS Act both applying, they represent quite different regulatory philosophies.

As a prelude to a formal review, a paper was commissioned on legislative options – Development of a New Regulatory Model for Occupational Health and Safety in the New South Wales Coal Industry. This was prepared by Neil Gunningham et al (Australian National University) and was released in October 1999. It addressed regulatory issues arising in developing a new regulatory model for the NSW Coal Industry. The main focus was in identifying the main shortcomings in the existing regulatory approach and the potential roles and main strengths and weaknesses of different types of standards.

In July 2000, the Carr Government initiated a formal review of the Coal Mines Regulation Act 1982. The purpose of the review was to make sure that health
and safety legislation for coal mines and related places was up to date and promoted the implementation of best practice safety standards.

This was accompanied by the release of a comprehensive discussion paper – *Transforming Health and Safety Regulation in NSW Coal Mines*. The paper was prepared in consultation with a tripartite working group whose role was to ensure that all relevant issues were canvassed.

The discussion paper provided the basis for extensive consultation on issues with the coal mining industry. All submissions were considered by the tripartite Coal Safety Advisory Committee, who in turn, reported to the Mine Safety Advisory Council.

A key issue was the continued application of the OHS Act to mining. The industry parties were of opposite views with the peak employer body calling for the OHS Act alone to apply (with no dedicated mining legislation and regulations under the OHS Act) and the principal mining union in favour of the OHS Act no longer applying to mining. It called for dedicated mining legislation alone to apply to the industry. This is the case in Queensland, the other significant coal mining state.

With the universal application of the OHS Act a long standing arrangement in NSW and recognising a need for dedicated mining legislation, the present arrangement where the OHS Act was supplemented by mining legislation was decided.

In February 2002 a position paper – *Safety Works: Proposal for a Coal Mine Health and Safety Act* – was released for further public comment and consultation. It set out the Government’s preferred position for new legislation which would repeal and replace the *Coal Mines Regulation Act 1982* with modernised legislation. The legislative proposal contained in ‘Safety Works’ together with points raised in submissions formed the policy basis for the preparation of the *Coal Mine Health and Safety Bill 2002*.

The Bill passed both Houses unamended and was assented to on 16 December 2002. Apart from a provision protecting appeals against acquittals under the OHS Act contained in one of its Schedules, the *Coal Mine Health and Safety Act 2002* remains uncommenced. The regulations are yet to be finalised. They have taken a considerable period of time to develop because:

- their content is quite extensive
- considerable consultation has taken place with the industry at their request.

In 2001, the Government initiated a formal review of the *Mines Inspection Act 1901*, which covers the NSW metalliferous, and extractives industries. This
complemented the review taking place for safety in coal mines. A paper – *Reviewing the Mines Inspection Act: A discussion paper on safety in quarries and metalliferous mines* – was released in August 2001. As with the coal discussion paper the preparation of this paper was also overseen by a tripartite working group.

There was extensive consultation with mining industry parties leading up to the introduction in Parliament of the Mine Health and Safety Bill 2002 for a new Act which would repeal and replace the *Mines Inspection Act 1901*. Although the bill lapsed when Parliament was dissolved prior to the last election, the period which followed provided the opportunity for further consultation and refinement of the proposal before re-introduction of the Bill. The Bill, in effect, became a public exposure Bill.

The *Mine Health and Safety Bill 2004* was introduced on 4 May 2004. It passed the Lower House and was introduced in the Upper House. However, it was not debated until 21 September 2004 when it was passed, unamended. As with the coal legislation, the *Mine Health and Safety Act 2004* will be commenced when supporting regulations are available.

In addition to the review process outlined above, the current mine safety legislation has also been subject to a review in the light of National Competition Policy (NCP) as required by the relevant COAG agreement. This entailed the preparation and circulation of NCP review papers. NCP issues were also canvassed in the other discussion papers prepared.

**The Role of the Mine Safety Advisory Council**

The Mine Safety Advisory Council reviewed the coal discussion paper and recommended its release to the Minister at its meeting of 25 May 2000. At its meeting of 1 March 2001 the Council discussed the polarised views held by parties on the continued application of the *Occupational Health and Safety Act*. It recommended that the Minister be briefed on the divergent views held. It also made a recommendation to the Minister that the discussion paper for the review of the *Mines Inspection Act* be released.

On 29 November 2001 the Council recommended to the Minister that the coal position paper, ‘Safety Works’ be released. The Council also agreed that a small task force be formed to review submissions to the Mines Inspection Review.

**Development of Regulations**

The development of regulations for the *Coal Mine Health and Safety Act 2002* has been undertaken in close consultation with the Coal Safety Advisory Committee (CSAC). That committee was provided with preliminary notes which
were the basis for drafting instructions. Members were invited to make comments or submissions on matters of concern.

A number of comments and submissions have been made and the matters raised considered in drafting. The two particular issues in the current review’s terms of reference, contractors and hours of work, were the subject of some expression of concern but no definite submission or approach in the regulations has been made.

Substantive instructions for the regulations were sent to the Parliamentary Counsel in December 2003. A third draft, received on 24 May 2004 was provided to CSAC members. The committee has also been provided with documents showing proposed treatment of matters in current regulations and the increased application of the Occupational Health and Safety Regulation 2001 to mining. The submissions of all the parties were considered in the redrafting of the regulations.

In the case of the Mine Health and Safety Act 2004 a combined meeting of the metalliferous and extractives safety advisory committees took place on 26 October 2004. A working group to progress the regulations is being formed and a timetable has been prepared.

**Aims of the Legislation**

The review of the legislation has its roots in the Mine Safety Review which saw no pressing need to consider common legislation across mining industry sectors ‘at this time’.

The clear implication is that it may well be considered in the future.

Inconsistency between the primary OHS legislation, the OHS Act, and the mining legislation has been apparent for some time.

A primary aim has been to make the legislation consistent with the OHS Act. A secondary aim has been to make the coal and metals/extractives legislation more consistent, and moves have been made in that regard.

The two sides of the industry, the coal and metals/extractives sectors, have very different demographics, history, working practices, industrial environment and economics.

The coal sector comprises predominantly large operations which are, generally, near population centres. It directly employs approximately 10,000 people.

The metals/extractives sector comprises operations ranging from hundreds of persons to one and two person operations. They are spread throughout the
State and usually not near population centres. It directly employs approximately 5,000 people.

In general, underground coal mines are subject to a broader range of major hazards by virtue of the gas encountered in them and the fact that the material mined, coal, is combustible – with resultant fire and explosion risks.

The development of the coal legislation has been based upon directions set in the revision of the Coal Mines Regulation Act 1982 regulations in 1999 – particularly the introduction of systematic safety management.

The development of the metals/extractives legislation has been built on arrangements introduced in the Mines inspection General Rule 2000.

The new Acts will cater for the particular risks arising from mining.

The Acts are supplementary to the OHS Act, which will continue to apply to the whole mining industry.

The regulatory framework is intended to:

- maintain the centrepiece role of the OHS Act with dedicated mining legislation supporting and consistent with that Act
- promote modern systematic safety management approaches that:
  - apply principles of risk management and quality assurance
  - require safety management systems to be documented and audited
  - provide for the recognised major hazards of mining to be rigorously controlled, particularly for underground coal mines
- support the expression of genuine concerns and fundamental rights in the workplace
- promote the greater supply of information to workforce representatives and processes of consultation
- ensure procedures are developed and maintained in case of an emergency which was not averted by the required management plans and systems
- provide for the more effective management of contractors at mine sites
- broaden the role of workforce representatives from only inspection of workplaces to a more consultative and involved role
- maintain effective oversight of industry by the regulator, especially for identified high risk activities underground
- allow for the better management of competence for key personnel in industry through the establishment of Competence Boards
- achieve compliance of New South Wales law and practice with ILO Convention 176 concerning health and safety in mines.
Present Position


The regulations are currently being developed in consultation with the Mine Safety Advisory Council through the relevant Safety Advisory Committees.

It is anticipated that draft Regulations for both Acts will be released for public comment reasonably soon after the government has considered this report of the Mine Safety Review 2004. An advanced draft of the coal regulations is available. The metals/extractives regulation has not yet been drafted although a mapping exercise has been undertaken to identify where regulations will be required and to consider the treatment of current provisions.
Appendix 13
Summary of UK HSE document - “Reducing risks, protecting people: HSE’s decision-making process”
13. Summary of UK Health and Safety Executive (HSE) document - "Reducing risks, protecting people: HSE’s decision-making process"

The HSE published a discussion document in 2001 (Reducing Risks, Protecting People). This document is aimed primarily at stakeholders who want to know more about HSE’s philosophy for securing the health, safety and welfare of persons at work and for protecting others against risks to health and safety arising from work activities, and the procedures, protocols and criteria underpinning the philosophy. It sets out the basis and criteria by which HSE, in complying with its functions, decides upon the degree and form of regulatory control that it believes should be put in place for addressing occupational hazards. It considers the way scientific evidence (or the lack of it) and uncertainties are taken into account and how the balance is struck between the benefits of adopting a measure to avoid or control the risks, and its disadvantages.

The document focuses on risk assessment and is very relevant to the New South Wales Mine Safety Review in terms of the role of the regulator and how the regulator makes decisions and sets regulatory priorities. An early observation in the document is to repeat the UK Robens Committee’s diagnosis of the issues at stake when regulating for health and safety. While the Robens Committee report was prepared in the 1970s, the HSE document notes that the report diagnosis still holds good, namely that:

- health, safety and welfare at work could not be ensured by an ever expanding body of legal regulations enforced by an ever-increasing army of inspectors;

- primary responsibility for ensuring health and safety should lie with those who create risks and those who work with them;

- the law should provide a statement of principles and definitions of duties of general application, with regulations setting more specific goals and standards.

The HSE document notes while there are some disagreements about the role that risk assessment should play in the regulation of risk, there is overwhelming evidence that, properly used, the results of a risk assessment often provide an essential ingredient in reaching decisions on the management of hazards. Depending on the issue, the results of a risk assessment may be expressed in qualitative or quantitative terms, or both. The proper use of risk assessment also requires inter alia that:

- the risk problem is properly framed;
- the nature and limitations of the risk assessment are clearly set out and understood; and

- the results of the risk assessment are used to inform rather than to dictate decisions and are only one of the many factors taken into account in reaching a decision.

Interestingly, the HSE document draws attention to the polarisation of approaches between large and small enterprises in regard to the blurred legal responsibilities for occupational health and safety, traditionally placed on those who create the risks or on those best situated to take steps to control the risks. In certain industries it is often no longer easy to determine who may be in such a position. Though UK case law has in many instances clarified the situation, the fact remains that for many sectors the above factors make it more difficult to coordinate the adoption of measures for controlling risks. Many more players are involved, some with little access to expertise. There has in consequence been a growing demand by small firms for a reversion to prescriptive regulation, running counter to the self-regulatory approach – a demand resisted by large firms because they do not face the same problems and are comfortable with the self-regulatory approach. This has resulted in greater emphasis being placed on the need for clarity of the status and content of the guidance element of the architecture of regulation.

The HSE document notes that perhaps the most dramatic shift in value preferences of society has been the pressure on regulators for greater clarity and explanation of their approaches to the regulation of risk. This is reflected in the broadly stated principles of good regulation published by the UK Better Regulation Task Force. These require:

- the targeting of action: focusing on the most serious risks or where the hazards need greater controls;

- consistency: adopting a similar approach in similar circumstances to achieve similar ends;

- proportionality: requiring action that is commensurate to the risks;

- transparency: being open on how decisions were arrived at and what their implications are; and

- accountability: making clear, for all to see, who are accountable when things go wrong.

The HSE document notes that this need for clarity and explanation is entirely consistent with the Robens Committee's conclusion that real progress on health
and safety is not possible without the agreement of those affected and the cooperation and commitment of those playing a role in implementing decisions.

The HSE document in Part 3 then explains the approach that HSE adopts for reaching decisions on the degree and form of regulatory control of risk from occupational hazards. This approach could be usefully adopted by the Mine Safety Advisory Council.

The HSE notes that many systems have been developed for informing and reaching decisions. The stages below characterise the system, governed by the principles set out above, that has evolved in HSE in the course of undertaking its own statutory responsibilities.

The stages are:
- Stage 1: Deciding whether the issue is primarily one for HSC/E;
- Stage 2: Defining and characterising the issue;
- Stage 3: Examining the options available for addressing the issue, and their merits;
- Stage 4: Adopting a particular course of action for addressing the issue efficiently and in good time, informed by the findings of the second and third points above and in the expectation that as far as possible it will be supported by stakeholders;
- Stage 5: Implementing the decisions;
- Stage 6: Evaluating the effectiveness of actions taken and revisiting the decisions and their implementation if necessary.

The HSE document then considerably amplifies and describes a detailed process for each of the above stages.

The HSE document in its Appendix 2 has a discussion on identifying and considering options for new regulations, approved Codes of Practice and guidance. When considering a specific risk problem, HSC/E are often confronted with the question as to how they should use the powers conferred on them by the UK safety Act to clarify how duty holders should comply with their legal duties under the Act, or to extend those duties in particular cases. In these circumstances, the HSC needs to decide whether the new measure is really necessary and, if it is, what form this should take so that the decisions reached take due account of the framework noted above, the architecture of the health and safety law, and the fact that there may be constraints in pursuing certain options. How HSC tackles this question is explored below in the context of the architecture of UK health and safety law.
As in New South Wales, the UK safety Act has a range of regulatory options at the UK Health & Safety Commission’s disposal in its role as guardian of occupational health, safety and welfare. These include making proposals to the Secretary of State for new legislation, and issuing Approved Codes of Practice (ACOPs) and guidance. The Act also allows for modernising health and safety law according to a particular architecture. HSE policy is to ensure that regulations, like the Act itself, should, so far as possible, express general duties, principles and goals with subordinate detail set out in ACOPs and guidance. As such the architecture is designed to keep the need for intervention by the regulator to a minimum.

The architecture takes the following form:

- **the general duties** on employers, self-employed persons and others in the UK safety Act. They amount to a statutory (criminal law) enactment of common law duties of care. They are comprehensive in coverage – of people, places, activities and other sources of hazard. They are qualified by ‘so far as is reasonably practicable’ (SFAIRP). An exception is Section 7, under which employees have a duty to ‘take reasonable care’ of their own and others health and safety;

- **regulations**, some of which clarify particular aspects of the general duties and are mandatory; others may introduce particular requirements for specific hazards, sectors etc. They do not add to the scope of the general duties, but regulations may impose a higher standard of duty (‘practicable’ or absolute requirements). Of special mention is the Management of Health and Safety at Work Regulations 1999. These require employers and self-employed people to assess the risks in their undertakings so as to identify the measures they need to have in place to comply with their duties under health and safety law. As such, the assessment provisions of MHSWR permeate all other workplace health and safety legislation including the general duties in the **HSW** Act;

- **ACOPs**, which clarify particular aspects of the general duties and regulations, and are HSC’s way of spelling out their implications. ACOPs have a special guidance status. If employers are prosecuted for a breach of health and safety law, and it is proved that they have not followed the relevant provisions of the Approved Code of Practice, a court can find them at fault unless they can show that they have complied with the law in some other way. Accordingly, the HSC agreed in 1996, following consultation, that it would limit the use of guidance having the status of an ACOP to cases where four conditions were met. These are when:
  - there is clear evidence of a significant or widespread problem;
- the overall approach being taken to an area of risk is by amplifying general duties in the HSW Act or preparing goal-settling regulations (see paragraph 4);

- there is a strong presumption in favour of a particular method or particular methods that can be amplified in an ACOP in support of the general duties or goal setting regulations to give authoritative practical guidance;

- the alternative is likely to be more prescriptive regulation;

**guidance**, which is not law but gives advice on measures available and what is good practice.

Regulations broadly take three forms:

- **‘process’ regulations** concerned with what has to be done to manage the control of risks. These include requirements to assess risks, set out management approaches, draw up safety cases, notify hazards, keep records etc. and may include some form of permissioning, eg licensing. Many of the requirements are derived directly from what is implicit in the general duties, eg the need to assess risks. They deal with matters where there is a need to demonstrate that risk is subject to careful, explicit control;

- **goal-setting regulations** which set out the objectives to be achieved but leave considerable freedom on how these objectives are to be met. Goals or targets to be met in such regulations are often qualified by ‘reasonable practicability’ and thus demand from both regulator and duty holders some matching of response to risk and of cost to benefit;

- **standard-setting regulations** which prescribe what constitutes an appropriate response to a hazard.
Appendix 14
Review of Safety Performance Measures

The NSW Mine Safety Review (1997) identified the need to establish a more comprehensive range of performance measures to more accurately reflect safety performance within the mining industry. To enable the more effective coverage, collection, interpretation and analysis of industry performance measures, in April 1998 the Department deployed a corporate information system called COMET (COmmon Mines EnvironmenT). It also established links with external agencies and key industry stakeholders including insurance and injury data from Coal Services Pty Ltd and WorkCover Authority NSW. This integration of industry safety information is now used to satisfy corporate strategies, business plans and processes, and underpin a comprehensive range of safety performance measures.

The information system has undergone a major enhancement in 2004 and will enable operational field staff faster and broader access to information via the internet, and provide key word analysis of data. These improvements will provide tighter alignment between the information system and business processes, work activities and trend analysis of key safety performance measures.

Annual reports on performance measures

The Department's information system collects data on Mine Safety core business processes including assessments, accidents, incidents, approvals and authorisations. To effectively and independently analyse the accident and incident data, the Department has engaged the Industry Risk Management Research Centre from the University of NSW, to undertake an annual review of the data.

The Department has also produced a number of performance measures reports that are in accordance with the recommendations of the Mine Safety Review including a ‘best in class’ comparison. The most recent of these reports is *Report to the Mine Safety Council Analysis of Comet data 1 July 1999 to 30 June 2003*. These annual performance measures reports have been communicated to the Performance Measures Task Group, sector Safety Advisory Committees, Mine Safety Advisory Council and the mining industry for feedback and the identification of problem or improvement areas in mine safety.

Analysis of data

The Performance Measures Task group, established by the then Mine Safety Advisory Committee in November 2001, provides advice on the annual performance measures reports and identifies areas for further investigation and research. The Task Group, after reviewing the annual performance measures reports, identified five areas for further research and these are:
- electrical energy
- mechanical equipment
- work environment
- hours of work
- safety performance of contractors

The aim of the investigation reports was to identify causes of accidents and incidents and to make recommendations on safety strategies.

The first and second areas of investigation have been completed for the Department of Primary Industries by the Industry Risk Management Research Centre, from the University of NSW, and the reports findings and recommendations are being communicated to the mining industry throughout NSW. The two investigation reports have identified the following main contributing factors:

- the electrical energy investigation identified that the main contributing factor to electrical shocks

- "involved equipment problems, almost always due to a pre-existing problem with equipment rather than equipment breaking or malfunctioning just before the electrical incident".

- the mechanical equipment incident investigation identified that the main contributing factor to unplanned mechanical movement incidents “overall, involved behavioural events, in particular rule-based errors in combination with unsafe work practices especially poor standard operating procedures and poor housekeeping or maintenance. just over one in five incidents involved a problem with equipment, usually breakage, just before the incident.”

The analysis of data to June 2004 on the other three areas is being prepared and is awaited. A survey reviewing hours of work and safety performance of contractors is currently being undertaken.

Development of a National Mine Safety Framework

The Commonwealth State and Territories have over a number of years been striving to work towards a nationally consistent approach to safety and health in mining.


The plan covers seven strategies, each with a nominated state to manage. The strategies cover:
- nationally consistent legislative framework
- competency support
- compliance support
- a nationally coordinated protocol on enforcement
- consistent and reliable data and analysis
- effective consultation mechanisms
- a collaborative approach to research.

New South Wales has been given responsibility for management of:

- Strategy 2 – Competency Support
- Strategy 3 – Compliance Support
Appendix 15
Operation of the Mine Safety Advisory Council and the supporting consultative process
15. Operation of the Mine Safety Advisory Council and the supporting consultative process

The Mine Safety Advisory Council is a tripartite forum, made up of employers, unions and government, established in conjunction with three industry sector committees (covering, coal, metalliferous and extractive minerals). Its principal purpose is to:

- improve safety across the mining industry in NSW
- provide strategic advice to the Minister on industry safety and health matters
- facilitate consultation and the exchange of information across industry sectors and between unions, employers and the State government.

Its goal is an industry where risks are identified and managed, miners understand they have a responsibility for each others’ safety, managers accept their responsibilities and duty of care and everyone can expect to go home healthy and safe.

It aims to interact between stakeholders and focus on working together to lead industry to a culture of safety. It looks to a regulatory and compliance framework, which holds those not meeting minimum standards accountable.

The Mine Safety Advisory Council ensures ongoing consultation with the mining industry (Government, Unions and Employers) on mine safety matters in New South Wales.

Its principal role is to increase the emphasis on safety within the three industry sectors through improved communication and education strategies to be conducted by the Department.

The Council also continues to oversee the implementation of the recommendations of the Mine Safety Review and the Gretley Inquiry.

The Council has been operating administratively for some time and since September 2003 has been established in legislation (Section 341 of the Mining Act 1992) with the agreement of all parties.

The tripartite representation on the Council (Section 47 of the Mining Regulation 2003) includes the major stakeholders, the New South Wales Minerals Council, the CFMEU, the Australian Workers Union and the Extractive Industries Association, the Government and an independent Chairperson.
Terms of Reference
The Terms of Reference as amended in May 2002, are to:

- establish strategic safety and health direction and goals
- analyse and review the safety performance of the industry and to provide information to stakeholders so that safety performance can be improved
- provide leadership to the mining industry to develop safe and healthy workplaces within a framework which:
  - encourages innovative and safe technology and processes
  - sets the strategic direction for the industry in developing competent people
  - advances a legislative framework which leads to safe mining practice
  - encourage a move towards cross-industry and national standards
  - interact with the safety advisory committees to enable them to:
    - lead their industry sectors
    - inform the work of the Council.

Achievements
During its history the Council has provided an overall strategic position with industry specific safety advisory committees providing expert input into safety matters.

The Council has provided a forum to present the strategy of the Small Mines Campaign prompted by the unacceptable rate of serious injuries and fatalities in small mines. This project assisted small mines to develop and implement effective Mine Safety Management Plans which are a key component of the improvements to the Mines Inspection Act General Rule 2000.

It has supported the Electrical Shock Awareness Campaign and the Original Equipment Manufacturer (OEM) Project, which aims to influence manufacturers to address safety and health risks at the design stage.

In contributing to legislation, the Council has taken part in the consultation process by reviewing the following:

- Mining Act 1992 in which the Minister includes representation from peak industry and employee organisations on the MSAC
- Mines Inspection Act 1901
- mining industry compliance with the ILO Convention
- Coal Mines Regulation Act, 1982
- Coal Mine Health and Safety Act 2002
- Mine Health and Safety Act 2004

Tripartite Working Parties
Working parties have been convened by the Council to undertake specific tasks and to provide reports to the Council.
Safety Advisory Committees have been involved in consultation with these working parties and often provide members.

**Communications Group**
In 2001 a tripartite communication group presented recommendations on how to improve safety information between the then Department of Mineral Resources and the mining industry as part of developing more effective communication to a broad and diverse mining industry.

**Mine Safety Review Implementation Group**
The working party presented their report to the council in November 1999. The report listed the recommendations of the Mine Safety Review still to be implemented. These recommendations were dealt with and finalised by the Council.

**Training**
Representatives from all three Safety Advisory committees formed a Mining Industry Training Sub-committee to review, develop and recommend a strategic plan and framework for training needs and systems in the NSW mining sector, in combination with cross-border and national competencies.

These functions will be taken over by the competency boards, which have been established in the new legislation (*Coal Mine Health & Safety Act 2002* and *Mine Health & Safety Act 2004*).

**Performance Measures Task Force**
This was established to review safety performance for the purpose of considering and reporting on Data Quality and Analysis and Use of Data.

The terms of reference include reporting on data quality including:

- the data’s source, definitions used, completeness, integrity and accuracy
- use of codes and classification of data processing
- validation processes
- audit of the monitoring and review system
- format, layout, content, supporting information, use of rates and formulas.

The Group was instructed to examine if appropriate processes exist to identify trends to provide feedback to industry and to enable further research to examine causation, and in turn, and prevention strategies.

This involved referring to the various advisory groups to set up sub groups with appropriate and practical expertise.
Fatigue Management
The Council had several discussions on the issue of fatigue. It examined a draft Fatigue Management Guideline; discussed the Department’s fatigue assessment trials at three NSW sites and raised issues of fatigue policies such as long working hours at certain plants.

The Guideline was developed over three years with an industry working party. The Council dealt with the draft Guideline but was unable to reach agreement. The NSW Minerals Council subsequently adopted it.

The aim of this Guideline was to move fitness and managing fatigue forward, gaining industry support and an understanding of the issue.

A presentation was given about the Department’s fatigue assessment trials at three metalliferous mines and extractive industry sites. The audit team consisted of:
- representatives of the mine’s workers and management
- an inspector or mine safety officer, and
- a mentor.

The Council learned that fatigue was not often identified as part of the accident investigation process.

The Council decided to keep the matter in view. Individual concerns about various policies were referred to the Department for investigation and followed up.

Advisory Committees
Three industry sector Safety Advisory Committees (coal, metalliferous and extractive industries) report to the Council, providing advice on sector specific, technical and practical safety issues.

The Council directs the activities of the three safety advisory committees, which provide information that assist, the MSAC in reaching its strategic goals.

The safety advisory committees each meet four times a year.

The terms of reference of these three groups relate to their specific industries.

All three safety advisory committees have the same Terms of Reference:

In relation to the [sector] mining industry the [sector] Safety Advisory Committee will:
- advise the NSW Minister for Mineral Resources through Mine Safety Advisory Council on legislative regulation, broad industry policy and performance measures
- develop standards, guidelines and procedures
- develop strategies and plans for improving safety standards
- analyse performance and recommend appropriate action
- facilitate sharing and communication of information.

The committees provided comment on the review of legislation and gave advice on the development of legislation and on technical and practical safety issues. When new coal regulations were introduced in 1999 this facilitated the reporting of more significant incidents, particularly electrical incidents and dangerous equipment failures. These incidents were discussed at the industry committees to develop strategies to address particular risks.

Coal Safety Advisory Committee
This committee has been a forum of discussion of industry concerns and a key stakeholder in the preparation and review of many Mechanical and Mining Design Guidelines (MDG’s). The committee has provided considerable input into coal legislation and the Regulations to support the Coal Mine Health and Safety Act 2000 and has made recommendations regarding collecting and monitoring specific safety performance measures.

This committee has also contributed to a project on eliminating the hazard of electrical failure of trailing cables, a forum analysing the Electrical shock Incidents in the NSW Mining Industry 1999-2002 and taken part in a review of 164 “unplanned movement” incidents in the coal mining industry. It has also commented on issues relating to the MITAB Coal Competencies Review and reviewed prohibition on use of aluminium in underground coal mines.

Metalliferous Safety Advisory Committee
This committee has taken part in the regulatory reform process in reviewing the Mines Inspection Act 1901, providing input into gathering of safety performance trends and measurement.

It has reviewed guidelines relating to Air Blast for Underground Mines, Cutting and Welding and Raiseboring.

The Committee has supported the Small Mines Campaign, an intensive education program to improve the safety of small mining ventures across NSW by ensuring that small mines understand and meet their legislative safety obligations.
Topics considered by the committee included Heat Stress Management and Fitness for Work.

**Extractive Industries Safety Advisory Committee**

This committee has also raised safety issues, reviewed legislation and endorsed research projects. It contributed to the compilation of the Minerals Industry Safety Handbook. It has strongly supported the Mine Safety Management Plan handbook, the Small Mines Campaign and the Mine Safety Management Plan kit. It has identified the need for guidelines and initiated the need for a safety alert warning of the dangers of children on mine sites.

The committee has recently raised the issue of the lack of guidelines on drug impairment levels at work. The committee recommended that the Council initiate a research program to produce guidelines for drug impairment. The Council considered this at its last meeting in May 2004 and decided to include it on the agenda at a later meeting.

**Operation of the Council**

In November 2003, at a conference before the Australian Industrial Relations Commission, the CFMEU raised the role of the Council and its effectiveness. The Council agreed that the members would be most willing to hold an extraordinary meeting at short notice to discuss this matter and improve the operation of the Council. Further to this, the Council has decided to change the meeting structure to hold shorter meetings and one planning day each year.
Appendix 16
Safety performance of contractors
16. Safety performance of contractors

The Department of Primary Industries in its submission states that over the last seven years, analysis of the industry safety performance measures, in relation to contractors, highlights the following trends:

- an analysis of fatality data, from the Department’s information system, reveals that over the period from June 1997 to June 2004, out of a total of 26 fatalities, nine (or 34.6%) involved contractors.

- over the period from June 1998 to June 2004, out of a total of 2911 reportable incidents, 288 (9.9%) incidents involved contractors.

The integrity of this data needs to be validated because of a lack of confidence that the correct status of employees is known and entered into the system. Departmental inspectors have entered this data into the information system based on preliminary inquiries as to the employee status. A common error can be that the person involved identifies himself or herself as an employee when they might be an employee of a contractor company and are therefore a contractor themself. In addition, the proportion of contractor employees in the industry compared to direct mine employees is not able to be determined historically with any accuracy. Current representation of contractors in the industry can serve as a guide.

The table below details the categorisation of the incidents and the percentage of contractors involved.

<table>
<thead>
<tr>
<th>Category of Incident</th>
<th>Percentage of contractors involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Materials</td>
<td>25.0</td>
</tr>
<tr>
<td>Work Environment</td>
<td>17.2</td>
</tr>
<tr>
<td>Electrical Energy</td>
<td>11.4</td>
</tr>
<tr>
<td>Structural Failure</td>
<td>9.1</td>
</tr>
<tr>
<td>Mechanical Equipment</td>
<td>8.1</td>
</tr>
<tr>
<td>Mobile</td>
<td>7.1</td>
</tr>
<tr>
<td>Mechanical Equipment</td>
<td>6.6</td>
</tr>
<tr>
<td>Fixed</td>
<td>4.2</td>
</tr>
<tr>
<td>Explosives</td>
<td>4.0</td>
</tr>
</tbody>
</table>
In the new legislation Contractor is understood to mean a non-employee who performs work at a principal's place of work. Examples include persons from labour hire firms or specialist service or maintenance personnel who come on site. The term contractor is used in a somewhat different sense in the current mining legislation.

**Existing Provisions Relating to Contractors**  
*Occupational Health and Safety Act 2000*

The general duty of care provisions found in sections 8 and 9 of the *Occupational Health and Safety Act 2000* (OHS Act) apply to mines in NSW. This includes the duty of an employer to ensure the health, safety and welfare at work of their employees and to ensure that non-employees are not exposed to risks to their health or safety. Self-employed persons must also ensure that non-employees are not exposed to risks to their health or safety arising from their work.

There is no doubt that these provisions apply to contractors either in their capacity as employers, non-employees at someone else’s place of work or as self-employed persons.

It is well established in the case law around the OHS Act that a contractor’s duty of care to their employees extends to when an employee is working at premises occupied by a third party. It is also well established that the duty of care can be shared by a principal engaging a contractor and the contractor with respect to employees at the principal’s place of work.

There have been a number of instances in the NSW mining industry where contracting firms have been successfully proceeded against under the OHS Act. There have also been instances where a principal and a contractor have both been found liable and convicted.

In one mining case a judicial comment was made to the effect that the ‘ad hoc’ arrangements between the principal and contracting firm led to confusion and inconsistency in the instructions used by different personnel doing the same job. It is considered that the more formal relationship, which will result from the proposed legislation outlined later, will address this problem.

*Coal Mines Regulation Act 1982*  
The *Coal Mines Regulation Act 1982* uses the term ‘contractor’ in the alternate sense alluded to above. In this sense a contractor who operates all or part of a mine can be taken to be the owner of a mine. Contractors are not allowed to employ ‘officials’ for a mine without the approval of the Chief Inspector of Coal Mines. That Act and its regulations make no further provision for contractors (in either sense).
Mines Inspection Act 1901

The Mines Inspection Act 1901 also uses the term in the alternate sense in the definition of ‘owner’. It also requires records to be kept of hours worked by ‘contractors’ and ‘subcontractors’ (s47E).

The Mines Inspection General Rule 2000 contains explicit provisions covering contractors. Here the preparation of a mine safety management plan is required and a contractor may not start work at a mine without having been provided with a copy of that plan.

A contractor who regularly works at a mine may prepare a safety management plan, which can then be approved by the general manager of a mine. If the plan is approved, the contractor works to that plan. If not, then the contractor must work in accordance with the mine’s own safety management plan. There are provisions to ensure that the degree of risk assessment and compatibility of a contractor’s plan is consistent with the mine’s plan. A contractor’s management plan must cover details such as: the work process; equipment used in the work process; the standards or codes to be complied with; the records to be kept of the process; and, the competencies of personnel doing the work.

Proposed Legislative Measures Relating to Contractors

The following is provided to give an indication of the Government’s legislative response to date to particular concerns with contractors in the mining industry. It is a summary only of the main provisions of the legislation which will impact on safety management with respect to contractors.

The Occupational Health and Safety Act 2000 (OHS Act) will continue to apply to mines under the proposed legislative framework. The dedicated mining legislation has been intentionally prepared to be consistent with and supportive of the OHS Act.

Coal Operations

In the case of the coal industry the Coal Mine Health and Safety Act 2002 (when fully commenced) will require an operator of a coal operation (open cut or underground mine or coal preparation plant) to prepare a contractor management plan. That plan must make provision for matters to be prescribed by regulation. It is also part of the comprehensive health and safety management system (HSMS) required by the legislation. A consequence of this is that the plan will be subject to regular audit and review.

As a default requirement all contractors will be required to prepare a written safe work method statement describing the work to be carried out, and identifying safety and health risks and corresponding control measures. An operator then has duties to enforce conformity to that statement and the legislation.
In addition, a contractor has a duty to comply with relevant provisions of the operator’s HSMS and the operator has a duty to make contractors aware of relevant parts of the system and to ensure consistency between a contractor’s arrangements and the system.

The Act provides for higher risk classes of contractors to be prescribed by regulation. They will, additionally, be required to prepare a site-specific occupational health and safety management plan. This plan must include the identification of persons in supervisory positions, arrangements for dealing with and informing the operator of incidents, and work specific safety rules as well as safe work method statements.

Similar supervisory duties between an operator and contractor are created between a contractor and subcontractor.

These contractor arrangements are modelled on those of the *Occupational Health and Safety Regulation 2001* applying to construction work. The principal difference is that an operator will carry duties akin to those of a principal contractor under that regulation.

It has also been recognised that there may be classes of contractors for which these provisions are not warranted or those for which a variation of the provisions is warranted. To cater for this, the Act includes appropriate regulation making powers (s198). These provisions are, however, restricted only to contractors who do not undertake mining activities as part of the work that they undertake.

The Act makes provision for the prescribing by regulation of ‘high risk activities’. Generally, these will be activities for which notice must be given by an operator to the Chief Inspector (Government) as well as an industry check inspector and the site check inspector (union). The activity cannot be commenced within a prescribed time after notification (except under certain conditions). The notification must be accompanied by prescribed information related to the high-risk activity. This provides an opportunity for oversight and intervention if considered warranted.

The significance of this is that it is intended in the regulations under the Act to prescribe contractors undertaking high risk activities and blasting contractors at open cut operations as classes of higher risk contractors referred to earlier. In consequence they will be required to prepare a site-specific occupational health and safety management plan.

It is also intended to identify lower risk contractors to whom the operator’s duties with respect to them will not apply. These include delivery contractors, office equipment service contractors, office cleaning contractors, catering contractors and others engaged in similar work. It should be noted that an operator will still
 carry the duties of care with respect to them as non-employees under the Occupational Health and Safety Act 2000.

With regard to an operator’s contractor management plan it is intended to prescribe the following:

(a) pre-assessment of contractor health and safety arrangements prior to engagement,

(b) site induction of contractors, contractor employees and subcontractors,

(c) monitoring of contractor compliance with site health and safety requirements,

(d) any other measures necessary to ensure that a contractor, and any contractor’s employees, comply with the Act and these regulations while at a coal operation.
Metalliferous and Extractive Mines

Mines other than coal, including quarries, will be subject to provisions of the *Mine Health and Safety Act 2004* (when commenced). The provisions concerning contractors are similar to those under the Coal Mine Health and Safety Act in that there are reciprocal duties on both the operator of a coal operation and a contractor.

The variation between the statutes takes into account the existing provisions under the Mines Inspection General Rule 2000 and the arrangement is continued where a contractor may prepare a safety management plan which then may be accepted by the operator of a mine. An additional requirement introduced on contractors is that a safety management plan prepared by them must include a safe work method statement which provides evidence that they have assessed risks inherent in there work and put in place control measure.

The legislative response is, in general terms, a product of concerns raised from time to time by industry parties or to which attention has otherwise been brought. As in many other workplaces, working arrangements in the mining industry have changed significantly in recent times and this is especially the case with the increased use of contractors giving rise to concerns for health and safety. The legislation recognises the need for more comprehensive arrangements in this important area.

The underlying principle of the legislation is that an employee of a contractor should receive no less protection under the law than a direct employee. Both the dedicated mining statutes make it clear that the express rights and duties of employees apply equally to employees of contractors.
Appendix 17
Hours of work and fatigue management
17. Hours of work and fatigue management

Many submissions recognise that fatigue contributes to accidents and incidents across industry. There are many factors that contribute to fatigue, namely illness, stress, task-related demands, physical working environment, alcohol and drug use and working hours. The impact of these factors on an individual worker’s performance is complex.

Upper limits to miners’ working hours are in existing NSW mining legislation as well as in the new legislation that is yet to commence.

Existing legislative provisions
There are two sets of legislation governing health and safety in NSW mines: one for the coal industry and the other for the metalliferous and extractives industry.

<table>
<thead>
<tr>
<th>Current coal mining industry conditions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 168 of the Coal Mines Regulation Act 1982 (CMRA) provides for a maximum continuous period on duty of 18 hours. If this period is exceeded then a 10-hour break must be taken. No variations are allowed for. It is understood that the origin of the 18 hours was to enable “doublers” (double shifts) to be worked and not to address fatigue issues.</td>
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</table>

<table>
<thead>
<tr>
<th>Current metalliferous and extractives mining industry conditions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 29 of the Mines Inspection Act 1901 provides that a person cannot be employed below ground for more than 8 consecutive hours or for more than a total of 48 hours in a period of 7 consecutive days. A person employed below ground must also have one day off work in every period of 7 consecutive days. In the Act there are conditional means of variation of this arrangement.</td>
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</tbody>
</table>

New legislative provisions
The Coal Mine Health and Safety Act 2002 and the Mine Health and Safety Act 2004 will each be set to commence once their respective regulations are ready.

<table>
<thead>
<tr>
<th>Future coal mining industry conditions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Coal Mine Health and Safety Act 2002 does not contain specific limits on working hours. However in the second reading speech an undertaking was given that the CMRA conditions (18 hours) would be retained by way of regulation. This is a contentious area, employers are saying that there should be not be any limits, while the CFMEU holds that there should be limits. It is not believed that any group supports the 18 hours limit as an instrument of responsible fatigue management.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Future metalliferous and extractives mining industry conditions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 76 of the Mine Health and Safety Act 2004 has retained the hours provisions of the Mines Inspection Act 1901, but the means of variation will be a subject of regulation.</td>
</tr>
</tbody>
</table>
Hours worked in the industry
No accurate information is held as to the hours worked in the industry and a number of concerns have been expressed about excessive hours worked. In examining hours worked it is sometimes necessary to draw a distinction between hours being worked on a continuing basis and hours worked for a short period of time to complete a particular project or task.

Attempts to develop a guideline on fatigue management
A draft Fatigue Management Guideline was considered by the Mine Safety Advisory Council. This draft guideline was developed in consultation with an industry working party but was never agreed to. It was ultimately published by the NSW Minerals Council as a “Guideline on Fatigue Management” (2003). This guideline stipulates working hours as a risk factor and specifies hours that trigger concern. Unions are generally in favour of more explicit regulation of working hours.

Fatigue and the broader issue of fitness for work are being addressed in the development of the new regulations.

Fatigue management audit tool
An audit tool was developed by the Department of Primary Industries and trialled at three metalliferous mines and extractive industry sites. The feedback on the exercise has been reported as positive. The audit team consisted of representatives of mine workers, management, an inspector (or mine safety officer) and a mentor.

Unfortunately, agreement in the industry on the guidelines and the inclusion of a limit on hours worked could not be reached. The Department’s position is that hours worked should be a major factor taken into account in fatigue management.

National and International trends
Research has been undertaken as part of the program of the development of the new regulations. An indication of recent approaches to the regulation of working hours can be found in:

- Tasmanian Administrative Notice – to establish a Fatigue Management Policy; and
Consistent in all of these approaches is:

- a limit to daily hours (a legislated maximum number of hours that can be worked in any 24 hour period)
- limit on hours in a single week (a legislated maximum number of hours that can be worked in any consecutive seven day period)
- limit on weekly hours averaged over a period (a legislated maximum number of hours that can be worked per year; usually in terms of average hours per week calculated over a year)
- minimum regular breaks (legislated requirements for workers to be given time to rest during a working shift and also over a certain length of time).

Contractors and Hours of Work

One particular issue has been identified in relation to the difficulty that arises when a contractor arrives on site, the operator does not know what hours they have worked elsewhere in the last seven days and therefore is not informed on this issue to assess their fitness for work.

Suggestions have been made to introduce a computer tracking system. However if such a system was to be considered it would have to be a real time system making it difficult to maintain.

To address this issue it has been proposed that a regulation be developed requiring all contractors undertaking mining work at Mine Sites to provide details for the previous hours they have worked. This information, provided to the operator prior to the commencement of work, could include – location of work, length of shifts and breaks between shifts etc. The operator would then be required to make an assessment of the fitness of the contractor to undertake work. A heavy penalty would apply to the provision of false, incorrect or misleading information.
Appendix 18
Department of Primary Industries
enforcement policies of health and safety standards in mines
18. Department of Primary Industries enforcement policies of health and safety standards in mines

Outcome Sought
The principal outcome sought is the compliance by industry with acceptable standards for the management of health and safety.

Principals
The Department adopts the following principles in relation to its enforcement strategy:

a) Enforcement is a means of achieving the ultimate objectives of protecting the health and safety of the mining workforce and those who may be affected by mining.

b) Enforcement is a means of achieving the outcome of having all in the mining industry comply with acceptable standards for the management of health and safety.

c) “Acceptable standards” include not only those standards required by legislation but also standards derived from a broader body of codes, standards and guidelines.

d) The Department has an important role, as regulator, in the coordination of the development of, and the review and promulgation of acceptable standards.

e) Primary responsibility for compliance with acceptable standards lies with industry; the role of the Department is to obtain compliance and take enforcement action in cases of non-compliance.

f) Sanctions, applied from the wide range of available responses, should be applied consistently, fairly, be commensurate with the seriousness of a situation and should escalate where previous responses have not been complied with.

g) Every instance of non-compliance detected should result in a timely and effective response form the Department.

h) In the first instance, subject to the seriousness of a situation, a cooperative response would usually be preferred.

i) There should be records maintained of non-compliance with acceptable standards detected by the Department and resulting enforcement action by the Department.
j) There should always be follow up action on the part of the Department to ascertain whether requirements imposed or requested have been complied with.

k) Records should be kept of the follow up action and its results.

l) Information should be published and available to the public about detected non-compliance, enforcement action, follow up action and the results of such actions.

m) Prosecution is an integral part of the Department’s overall enforcement strategy.

n) The assessment and investigation activities of the Department support the Department’s enforcement strategy.

o) Enforcement activities should be carried out by persons trained in, and competent for, particular tasks and in accordance with established procedures.

**Enforcement Policy**

The Department will:

a) develop and maintain a strategy for the enforcement of acceptable health and safety standards in industry (“an Enforcement Strategy”);

b) improve and promulgate acceptable health and safety standards;

c) consider response in every instance where non-compliance with the relevant standards becomes known;

d) respond in a fair and consistent manner, taking into account the seriousness of the non-compliance or the imminence of danger, in a cooperative manner where appropriate;

e) respond in an escalating fashion where previous responses have themselves not met with satisfactory responses;

f) make a high level response where the severity or imminence of danger warrants such action;

g) maintain records of non-compliances detected and of the Department’s responses; follow up to ascertain remedial actions taken by industry; maintain records of the remedial action (or inaction) and of the Department’s follow up of the action (or inaction);
h) prosecute as appropriate as a part of the enforcement strategy;

i) develop and maintain mining operation assessment and investigation programs in support of the enforcement strategy;

j) develop and maintain the competency of its officers and operating procedures to effectively administer the enforcement strategy.

Policy Statement Concerning Prosecution
Prosecution will be considered in all instances where a significant breach of legislation is discovered by the NSW Department of Primary Industries, Mineral Resources. Significant breaches of legislation will include, but may not be limited to breaches which:

- cause, or are likely to cause, death, or serious injury or ill health; or continue to occur after other representations or interventions by the Department; or

- which interfere with the proper investigation of causes and circumstances surrounding an event.

Where there is a significant breach, and a prima facie case, together with a reasonable prospect of conviction, then the public interest expects that a prosecution will result.

With the Occupational Health and Safety Act as the principal health and safety legislation, charges and defendants under that Act will be considered first. This means that actions will most likely be against corporations (as the employer) but that individuals, whether management, contractors or employees who commit significant breaches may also be proceeded against.

The Department intends to effectively use prosecution as an integral part of its overall Enforcement Strategy. To do this the Department will:

a) prepare, publish and implement prosecution guidelines and keep them under review;

b) train and support investigating officers required to prepare and conduct prosecutions including the gathering, assessment and presentation of evidence and relevant law relating to offences, investigation and evidence;

c) consider prosecution as a matter of course, and in a fair, consistent and timely manner, where a significant breach of legislation has occurred;

d) keep a record of all decisions whether or not to prosecute and of the reasons for such decisions; and
e) publish information on prosecution undertaken, appropriate to the stage that the prosecution has reached at the time of publication while keeping in mind the importance of timely and relevant information being made available to industry for preventative purposes.
Appendix 19(a)
Enforcement policy and the processes used by the Department to implement the policy
The Department of Primary Industries submission notes that the Mine Safety Review (1997) addressed a range of issues including the development and publication of an enforcement policy and the establishment of an independent Investigation Unit. The Gretley Inquiry Report (1998) made similar recommendations and included investigation training for conducting prosecutions and investigating the role of the Department.

**Enforcement Policy**

In January 1999 the then Department of Mineral Resources (now DPI) released The Enforcement of Health and Safety Standards in Mines (Enforcement Policy) which had been developed following consultation with stakeholders (see Appendix 18).

The purpose of the document is to support an open and consistent approach by the Department to the enforcement of health and safety standards in mines through assessment of mining operations, investigation of accidents and incidents and where appropriate prosecution.

The document has been distributed to stakeholders and the Department made a number of presentations to industry to explain the intent and content of this policy.

The Department of Primary Industries still considers that the existing enforcement policy is sufficiently broad and robust to remain appropriate. However there has been a divergence of views amongst key stakeholders on the implementation of the policy. From the mine owners and employers perspective they have been concerned with the level of prosecution especially against individuals, and from the unions perspective they have expected a higher number of prosecutions for breaches. It is noted that the policy is similar to that adopted by WorkCover but the ability to impose “on-the-spot” fines is not utilised in the NSW mining industry.

In 1999/2000, at the request of the Minister for Mineral Resources, a review by a tripartite group of the enforcement policy and a consideration of the introduction of penalty notices (ie: “on the spot” fines) was carried out. The review recommended no change at that point and this was accepted by the Minister.

The enforcement function is a prime activity of the Mine Safety Operations Branch of the Department of Primary Industries which arises from daily work functions of assessments, inspection, investigations etc., and by the Investigation Unit which deals with all fatalities and selected serious events.
In the Department of Primary Industries Safety Operations, enforcement is undertaken in accordance with the Government's document *The Enforcement of Health and Safety Standards in Mines* (the Enforcement Policy) and the three primary occupational health and safety Acts.

Enforcement in the broader context includes the activities of assessment, licensing, authorisation, approval and certification processes, education, advice, persuasion, notices requiring cessation of activities and improvement action and investigation. When an event occurs, an appropriate level of investigation is necessary.

The Mine Safety Operations Branch has applied the Department's guidelines for “Enforcement of Health and Safety Standards in Mines” since January 1999. This published document describes a range or hierarchy of enforcement responses and discusses outcomes, principles and policy regarding enforcement, investigation, assessment and prosecution.

The specific response or range of responses depends on the particular circumstances or risk to employee health and safety. Generally, a failure to comply with an instruction or an inadequate response to an intervention, within a given timeframe, leads to a more onerous sanction being applied.

The issuing of notices by Inspectors and Mine Safety Officers within the Branch is an important means of implementing and communicating health and safety requirements.

Notices assist managers, employees and mine owners to identify risks to health and safety and propose remedial actions to minimise or remove potential hazards. Notices can also impose restrictions on work until the required remedial actions are implemented. The restrictions on work at the mine may often be determined through a consultative process between mine management, employee representatives and the Branch. In most cases, the time to achieve compliance is determined through this consultative process that considers the risk to the health and safety of employees and the implementation of satisfactory controls during the remedial actions.

To broaden the consultation process the notice is placed on a notice board and a copy given to the local check inspector or safety committee representative to ensure adequate communication to employees of any matters raised in the notice.

An enforcement process may be triggered by a planned site assessment, an unplanned incident or accident, non-compliance with safe work practices, a complaint, community issue, or hazardous industrial trend.
A safety matter resulting in a fatality or determined to be a prescribed matter will result in a stop-work notice being issued to mine management for all or part of the mine so immediate safety requirements are controlled and the accident scene is preserved. The Investigation Unit may then investigate the incident.

Significant incidents that are not investigated by the Investigation Unit are discussed between the Mine Safety Operations officer and the Area or Engineering Manager to determine the level of intervention necessary. The enforcement process is carried out by the Mine Safety Operations officer appropriately trained and competent in the technical matters apparent in the circumstances contributing to the event. For example, an incident involving mechanical or electrical equipment will include an officer who has expertise in the particular field.

Where further enforcement action is required, the Director, Mine Safety Operations is notified by the Area / Engineering Manager. A further stop-work notice may be issued and an investigation report may be required for the Director for review.

Where the enforcement sanction chosen is prosecution it is intended that a conviction is secured. The Enforcement Policy guidelines for prosecution require that evidence of an event leading to a prima facie case and sufficient that a reasonable prospect of conviction is likely, must be gathered.

Enforcement actions are recorded in the Branch's computer database COMET. Enforcement statistics are generated to monitor the level of industry compliance with the various legislative requirements.

**Investigation**
Investigation outcomes, principles and the policy for investigations are outlined in the Enforcement Policy. This statement relates to the relatively small selection of incidents, which require special attention. All parties must be aware of the Government’s approach to significant incidents and have confidence in action taken by the Department.

Preventing the recurrence of significant incidents has very high priority. Investigation protocols, skills and reporting of significant incidents continue to improve, both in the Department and within industry.

Lasting improvements, achieved within the right timeframe, necessitate the application of the full range or hierarchy of enforcement responses as described in the Enforcement Policy. Prosecution is one of those responses, but there are other responses which may be more effective and timely. Good information is essential to making decisions about the nature of appropriate responses to significant incidents.
Progress with investigations of significant incidents is closely monitored, and discussions are held at all levels in the Department as the case proceeds by Technical Advisory Groups whose role is outlined below.

**Significant Incidents**

Events where the outcome is or may have been death, serious injury or ill health, or involving apparent wilful neglect, continuing breach of legislation, evident deviation from standards and obstruction of the proper investigation of an event are addressed as significant incidents.

Apparent wilful neglect includes calculated interference with inspectors' functions, repeated deliberate breaches and ignoring directions.

**Decisions about Investigations**

The relevant field officer discusses incidents, which, on the face of it are significant, with their Mine Safety Operations Area Manager-Senior Inspector.

Area Managers may determine that a matter needs to be formally investigated, and further information obtained.

A decision-making process, which takes account of specific factors relating to the information obtained, commences at the Area Manager level and is communicated to the Director Mine Safety Operations.

The Area Managers forward reports of significant incidents as they occur. Each significant incident is reviewed by an inter-divisional panel comprised of:

- the Director Mine Safety Operations
- the Director Mine and Forest Safety Performance, and
- the Manager, Investigation Unit.

The panel may confirm, vary or revoke the decisions made about the investigation of a significant incident. The panel will independently assess each significant incident to determine whether the incident should be subject to a Level 3 investigation where prosecution is a likely outcome. The panel will assess the investigation requirement based on consideration of the relevant factors and use an “Event Review” form.

A Branch review of the decisions is undertaken at each Mine Safety Operations Area Managers meeting every two months. This review takes into account statewide consistency and strategies, resource implications, and the longer-term impacts arising from significant incidents.

Proper and relevant investigation procedures, developed by the Investigation Unit, apply.
Reporting of Significant Incidents
Field officers inform Area Managers as soon as possible of apparent significant incidents. The Area Managers inform the Director as significant events occur.

Information regarding what happened (not why it happened or any legal discussion) in significant incidents is communicated to industry stakeholders as soon as possible. The established procedure is to issue a safety alert.

Monthly Area Manager reports list apparent significant incidents and those being pursued as significant.

Those incidents, which are determined as significant, are reported quarterly to the Mine Safety Advisory Council and the three sector Safety Advisory Committees. These bodies have a role to give feedback to the Department, as well as to discuss industry approaches to the incidents. An annual summary of significant incidents is published with an outline of the response taken by the Department.

Determining the Investigation Approach to be Taken
To aid in the decision-making process for allocating resources to the investigation of an event investigations have been categorised into three types.

Level 1 events are those that the Branch becomes aware of or are notified of for which there are no legislative requirements for a site investigation to be conducted by a departmental officer. The mine operator investigates these events and information is made available to the Branch as requested.

A Level 1 event may be elevated to a Level 2 investigation based on the findings of the mine investigation. For example site or industry wide repetition of similar events may lead to the elevation of the level of investigation of such events. A departmental officer will take an overseeing and advisory role for the operator’s investigation. This may necessitate site visits, but not for the primary role of conducting the incident investigation.

Level 2 events are primarily those for which there is a legislative requirement for a departmental officer to conduct a site assessment of the incident scene. Many of these events have the potential to fall into the 'Prescribed Matters' category, which need to be assessed by the Investigation Unit. On the basis of a preliminary investigation and the contents of the Preliminary Report a Level 2 event may be elevated to a Level 3 investigation. Other events that may be considered for Level 2 investigation include elevated Level 1 events, community complaints, publicly sensitive issues and prescribed matters where prosecution is determined as not the appropriate likely response.
In considering whether a Level 2 event should be elevated for Level 3 investigation the matters listed in the 'Prosecution Guidelines' regarding the public interest being supportive of prosecution should be considered.

The investigating officer considers these factors when gathering information through the investigation process. Where a potential prosecution tends to be indicated by one or more of these factors then a review is conducted with the officer's Area Manager. If this review supports a likelihood of prosecution then a report recommending elevation to Level 3 is prepared and provided for consideration by the Director.

Level 3 events are those for which prosecution is considered as a likely enforcement activity. Events determined to fall into this category are brought into the Technical Review Panel process once sufficient information has been gathered to confirm the expectation of prosecution.

Events falling into Level 3 include Prescribed Matters where a decision has been taken that the Investigation Unit will not conduct the investigation but a potential prosecution is deemed an appropriate possible response. In addition, Level 2 matters that have been elevated for Level 3 investigation are included.

**Event Review**  
An Event Review form is used to assess the event for action of a Level 2 or Level 3 investigation. Where three or more issues are rated "High" the event will be progressed as a Level 3 investigation.

The criteria considered are:

- the seriousness of the event in terms of the likely failure that has occurred.

- The failure mode, presence or absence of appropriate controls, actions and previous record of the employer, management, supervision and individuals are examined.

- the consequences in terms of actual or potential extent

- the actual or potential injury, lost time and safety of others and mine are examined to determine whether the injury, loss or damage caused was or was likely to be substantial.

- the likelihood of recurrence of the failure and failure mode

- ease of repetition without additional management and engineering controls is examined.
• the seriousness of the event for industry generally

• the event and issues raised by it as may affect the industry or industry sector in general are examined. Events may be widespread, have application to particular mining activities or site specific.

Investigation Unit
The Investigation Unit was established within the then Department of Mineral Resources and commenced operation on 30 July 1999.

It supports the enforcement policy by investigating all fatal accidents, select serious incidents and mine disasters. During an investigation, officers gather quality information to an admissible standard for identifying systems failures, inadequate management of risks, contributing human factors, assessing the effectiveness and relevance of standards and potential non-compliance with legislation.

The Unit investigates the involvement of the Department leading up to a mine incident to improve existing business processes.

Investigation reports document findings and make recommendations to prevent a similar occurrence. The Unit is responsible for disseminating lessons learnt to stakeholders from investigations to improve safety performance of the industry.

The Unit operates independently of Safety Operations and reports to the Director General on all matters relating to investigations, inquests and legal proceedings.

The Investigation Unit has a legislative responsibility under the Mines Inspection Act 1901 and the Coal Mines Regulation Act 1982 to investigate all fatal accidents, prescribed matters and other matters of significance. Prescribed matters are determined by using a checklist of conditions stated in legislation such as a mine event;

- where serious injury is caused to a person and it is likely that death will result from injury,

- involving an explosion or ignition of gas or dust and requiring the cessation of production for a period longer than the remainder of the shift in which the incident occurred

- involving an inrush of water, or material that flows when wet, from any source.

Matters of significance may include mine events being investigated by Mine Safety Operations Branch where the Department has received:
• written complaints of conflict of interest relating to the investigating officers
• written allegations of incompetence
• written request from an organisation representing employees
• a direction to investigate from the Director General
• a request from the Minister to make a special report under Section 94 of the Coal Mines Regulation Act 1982 or Section 47K (I) Mines Inspection Act 1901.

The Manager, Investigation Unit is notified by the responding officer to a mine event or Area Manager, after it has been determined that a death or prescribed matter has occurred in accordance with the Department’s Notification Process. A preliminary report must be completed by the responding officer for the Unit Manager to nominate an Investigator. The preliminary report provides information that is required by the Department to organise and commit resources of the Department and other agencies.

Legislation requires that the Investigator must determine the cause and circumstances of a mine event and produce a report for the Director General.

The responding officer is responsible for:
• ensuring the mine manager has secured the accident scene and ensured the safety of other persons
• gathering information to complete the preliminary report
• issuing directions
• taking relevant action utilising his powers.

The responding officer may witness the removal of the casualty and liaise with Police and emergency services. An immediate response by the Department ensures the preservation of evidence necessary for the investigation and any potential prosecution.

After making an initial assessment of the accident scene, avenues of investigation are identified, relevant expertise is identified and an appropriate investigation team is assembled, based on a preliminary investigation plan. Resources are identified and within 10 days the matter is brought before the Technical Review Panel for confirming the need for resources, nomination of a legal case officer, identification and engagement of external expertise and setting investigation progress targets.

The participation of the Mine Company Representative and District Check Inspector under Clause 8 Coal Mines (Investigation) Regulation 1999 in coal mine investigations is established and their involvement with the team is defined.
The Investigator follows an established investigation process which consists of initial inquiries, scene assessment, managing the investigation, gathering information, managing exhibits, conducting interviews, reconstruction, analysis and preparing reports. Investigations are scheduled to be completed within six month, subject to technical or legal complications or involvement by the Coroner’s Support Unit or Police in the event of suspected criminal activities or forensic analysis.

The outcome of every major investigation results in the preparation of two reports.

A technical report containing information on the cause, circumstances, findings, recommendations and lessons learnt about the mine event. This report is prepared for the Director General and subject to approval, it is submitted to the Coroner and interested stakeholders for the Coronial Inquest and for stakeholders to take action to implement recommendations to improve safety.

A memorandum for Legal Services Unit of the Department containing information on potential breaches of legislation, relevant proofs and evidentiary material to substantiate a breach is prepared for seeking legal advice from Counsel and for preparing documents for filing pleadings with the Court.

The Unit operates independently of Mine Safety Operations Branch and reports to the Director General on all matters relating to investigations, inquests and legal proceedings.

**Involvement of Mine Safety Operations**
The Investigation Unit provides specialist training to the Safety Operations Branch for conducting major investigations, for enforcing legislation, participating in Inquests and assisting with legal proceedings. Training is designed to develop and maintain the general competency of officers to gather information and prepare briefs of evidence and for giving evidence in a Court.

Training included accident scene assessment, taking statements, managing exhibits, giving evidence in a witness box, managing major investigations and determining breaches of legislation. Training has involved the participation of District Check Inspectors of the CFMEU.

The Unit extends its training support to investigating officers operating in the field, by assisting with interviews and exhibit management. This process ensures that investigations are conducted impartially and diligently. The Unit has assisted with ten investigations commenced by Mine Safety Operations Branch.

Investigations require many areas of expertise. Mine Safety Operations provides expert advice in mining, electrical and mechanical engineering, ground support,
surveying, methane ignition and explosions by participating in the investigation teams. Where the required expertise is not available within the Department, a contractual process had been implemented to engage external experts.

Officers from Mine Safety Operations are seconded to the Unit to conduct major investigations, when required. Officers selected are assessed to ensure there is no conflict of interest and have skills relevant to the cause and circumstances of the accident. The acquisition of additional resources by the Unit ensures an early and effective response. A response time of 12 hours has been established.

**Conduct of Major Investigations**
Conducting major investigations is a significant activity of the Unit. The investigation process is designed to determine the cause and circumstances of a mine event and make recommendations that maybe mine specific and for general industry. Investigations follow established guidelines and aim to be completed within six months, subject to complexity.

The Unit has completed a total of 15 major investigations, consisting of five coal matters and five underground metalliferous matters, four surface mine matters and one involving a member of the public.

The Unit is currently investigating three fatal accidents and one serious bodily injury in coal mining. The three fatal accidents involve contractors. The Unit is assisting with two major investigations being currently conducted by Mine Safety Operations.

**Communication with Stakeholders**
Investigations affect many stakeholders such as eyewitnesses, mine management, contractors, families and other agencies such as the Police and Coroner’s Support Unit. A guideline has been developed and implemented to help coordinate inter-agency activities during mine tragedies titled *Guideline for Agency Coordination During Body Recovery at NSW Mines.*

The major accident response process of the Department and phases of an investigation need to be explained to persons assisting with an investigation. Prior to commencing an investigation, the Department meets with persons and organisations at the mine, to confirm jurisdiction, identify persons assisting with the investigation, nomination of mine company representatives and district check inspectors, Police assistance, notification of families, nomination of Investigator and explaining the investigation process.

The Department makes contact with the families initially in writing notifying of its involvement and within six weeks visits the families to discuss the investigation process. Regular contact is maintained during the investigation, Inquest and prosecution. An information package for families has been prepared by the Department and forwarded to families, as required.
The Unit has made many presentations to industry about the establishment and purpose of the Unit and has published a pamphlet outlining the role of the Unit.

**Participating in Coronial Inquests**
All fatal accident investigation reports are submitted to the Coroner. The Coroner decides whether an Inquest is to be held based on the need for further information, in the public interest, request from families or other parties and other factors. A total of 14 investigation reports have been submitted to the Coroner.

The Coroner has dispensed with six matters because the investigation reports satisfied the needs of the Coroner. Further the duration of Inquests has been reduced because of the adequacy and quality of the reports.

Further the amendments to Schedule 1 of the Coroners Act 1980 has special provisions for inquests concerning deaths and suspected deaths in mines and provides for a greater involvement of Investigators in such proceedings.

The Department has currently two matters before the Coroner.

**Participating in Legal Proceedings**
The Department has a strong record of enforcement in relation to prosecutions having secured 23 convictions since the enforcement policy came into force. A number of other matters are still before the Courts.

Prosecutions were lodged with the Industrial Relations Commission of NSW. Penalties awarded by the Court ranged from $1,275 to $206,250 with moiety to the Prosecutor and costs being granted to the prosecution.

**Legal Services in Enforcement**
Implementation of the Department's mine safety enforcement guidelines requires, and continues to require, significant application of legal resources. Legal advice and assistance are required by Departmental investigators and inspectors (as the case may be) in carrying out investigations and preparing and undertaking various enforcement actions, and by the Assessment and Review Committee and the Director General in considering possible prosecutions under the OHS Act, as provided under the guidelines.

Mine-related OHS prosecutions tend to be complex, expensive and vigorously defended. A substantial part of the work of the Department's legal unit is devoted to such prosecutions and related matters. Undertaking prosecutions utilises extensive resources both staffing and financial. The use of these significant resources on prosecution needs to be balanced against alternative activities that may produce a more beneficial outcome in terms of mine safety performance.
Technical Reference Panel
A Technical Reference Panel (TRP) was established by the Department to ensure major investigations were adequately resourced, ensures a legal case officer is nominated at the beginning of each investigation and provides milestones to monitor progress leading to a timely conclusion. The TRP consists of senior management, technical expertise within the Department, legal officers and investigators. Scheduled meetings enable investigating officers to advise on their progress, gain specialist information and senior management support as required.

The first meeting was held on 28 November 2003 and a total of nine meetings have been held to review the progress of eight different investigations.

Assessment and Review Committee
The Assessment and Review Committee (ARC) considers technical advice and legal advice issued by Counsel and the provisions of the Enforcement Policy and makes recommendations on legal proceedings to the Director General. The Committee records reasons and decisions on all matters recommended for prosecution. The Committee consists of four members namely an external Part Time Chair, two senior officers and a representative from WorkCover.

The structure and terms of reference of the ARC were reviewed in February 2004 following an independent review known as the Kemp Report (March 2003).
Appendix 19(b)
Determining the investigation approach to be taken by the Mine Safety Operations Branch
19(b). Determining the investigation approach to be taken by the Mine Safety Operations Branch

To aid in the decision making process of allocating resources to the investigation of an event potential investigations have been categorised into three types

<table>
<thead>
<tr>
<th>Type</th>
<th>Priority</th>
<th>Required actions by MSOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Routine</td>
<td>No site investigation</td>
</tr>
<tr>
<td>Level 2</td>
<td>Significant</td>
<td>Investigation by MSOB</td>
</tr>
<tr>
<td>Level 3</td>
<td>Serious</td>
<td>MSOB to conduct full investigations; other DPI involvement as required; prosecution a likely outcome</td>
</tr>
</tbody>
</table>

Level 1 events are those that MSOB becomes aware of or are notified of for which there are no legislative requirements for a site investigation to be conducted by a departmental officer. The mine operator investigates these events and information is made available to MSOB as requested.

A Level 1 event may be elevated to a Level 2 investigation based on the findings of the mine investigation. For example, site or industry wide repetition of similar events may lead to the elevation of the level of investigation of such events. A departmental officer will take an overseeing and advisory role for the operator's investigation. This may necessitate site visits, but not for the primary role of conducting the incident investigation.

Level 2 events are primarily those for which there is a legislative requirement for a departmental officer to conduct a site assessment of the incident scene. Many of these events have the potential to fall into the 'Prescribed Matters' category, which need to be assessed by the Investigation Unit. Existing forms and protocols are to be completed to assess a Prescribed Matter. On the basis of a preliminary investigation and the contents of the Preliminary Report a Level 2 event may be elevated to a Level 3 investigation.

In considering whether a Level 2 event should be elevated for Level 3 investigation the matters listed in the 'Prosecution Guidelines' regarding the public interest being supportive of prosecution should be considered.

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Relevant factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual or potential harm</td>
<td>Was death a possibility eg head injury resulting in brain damage, quadriplegia; was the consequence foreseeable</td>
</tr>
<tr>
<td>Is prosecution the only alternative</td>
<td>How else to achieve desired outcomes</td>
</tr>
<tr>
<td>Event history of mine</td>
<td>Past safety performance, mitigating or aggravating circumstances</td>
</tr>
</tbody>
</table>
The investigating officer considers these factors as he gathers information through the investigation process. Where a potential prosecution tends to be indicated by one or more of these factors then such a review is formalised with the officer’s Area Manager. If this review supports a likelihood of prosecution then a report recommending elevation to Level 3 is prepared and provided for consideration by the Director.

Other events that may be considered for Level 2 investigation include elevated Level 1 events, community complaints, publicly sensitive issues and prescribed matters where prosecution is determined as not the appropriate likely response.

Level 3 events are those for which prosecution is considered as a likely enforcement activity. Events determined to fall into this category are brought into the Technical Review Panel process once sufficient information has been gathered to confirm the expectation of prosecution.

Events falling into Level 3 include Prescribed Matters where a decision has been taken that the Investigation Unit will not conduct the investigation but a potential prosecution is deemed an appropriate possible response. In addition, Level 2 matters that have been elevated for Level 3 investigation are included.

A flow sheet outlining this approach to investigation determination follows.

**Event Review**

**Form**
The Event Review Form is used to assess the event for action of a Level 2 or Level 3 investigation. Where three or more issues are rated "High" the event will be progressed as a Level 3 investigation. Seriousness of the Event and Likely Failure that has occurred.

Consider how the failure was manifested. Determine whether or not it involved
• a slip, lapse, mistake, routine violation, exceptional violation or deliberate violation
• an absence of or failure to apply appropriate controls
• a causal nexus related to employer management, individual supervision or individual actions
• an employer, supervisor or individual with a record of previous convictions

An event is classed as having a level of "Seriousness" as follows

<table>
<thead>
<tr>
<th>Seriousness</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>errors of management omission / commission (establishment)</td>
</tr>
<tr>
<td>Medium</td>
<td>errors of supervisory omission / commission (implementation)</td>
</tr>
<tr>
<td>Low</td>
<td>errors of individual actions</td>
</tr>
</tbody>
</table>

**Consequence**
Consider the consequences in terms of actual or potential extent of injury, lost time, safety of others and mine, that is whether the injury, loss or damage caused was or was likely to be substantial.

An event is classed as having a level of "Seriousness" as follows

<table>
<thead>
<tr>
<th>Consequence</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury</td>
<td>Death / quadra/paraplegia, brain injury</td>
<td>Permanent partial loss of function of arms, legs, spine</td>
<td>Short term loss of function of arms, legs, spine, hands or feet</td>
</tr>
<tr>
<td>Lost time</td>
<td>Unable to return to work ever</td>
<td>Unable to return to work for 6 months to one year</td>
<td>Some lost time during the following six months likely</td>
</tr>
<tr>
<td>Potential Impact on safety of others</td>
<td>May effect more than a complete workteam</td>
<td>May effect more than an individual (less than workteam)</td>
<td>Restricted to an individual</td>
</tr>
</tbody>
</table>

**Likelihood of Recurrence**
Consider the failure and failure mode and likelihood of recurrence
An event is classed as having a level of "Likelihood" as follows
High | may readily repeat without additional management and engineering control.
---|---
Medium | possibly repeat without additional management and engineering control.
Low | unlikely to repeat without additional management and engineering control.

**Seriousness of event for industry generally**
Consider the event and issues raised by it as may affect the industry or industry sector in general.

An event is classed as having a level of "Seriousness" as follows

| High | issues raised by event are endemic to coal, metalliferous or extractive sectors and must be corrected. ie. we know of the similar events sufficient to raise a general alarm |
| Medium | issues raised by event are related to activities and equipment at the site but may have application to other mines |
| Low | issues raised are site specific ie related to activities, environment and equipment at that site |

**Response**
It is considered that the existing enforcement policy is sufficiently broad and robust to remain appropriate. The policy is clear and has not itself been a cause of criticism. Accordingly, the Department has not considered that a change to the enforcement policy is required.

An assessment and decision making tool to determine which matters should be identified for more thorough investigation has been prepared and will be trialled for use. The process is transparent and provides for review by those not directly involved.

Although the process must be fair, consistent and credible to all stakeholders, it must be recognised that

- it is important to focus resources on those matters where a full investigation is most appropriate
- differences of opinions from stakeholders on these matters will occur from time to time.
### Seriousness & Failure Mode

<table>
<thead>
<tr>
<th>Assessment criteria</th>
<th>If yes, give a rating of</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the failure caused by errors of management omission or commission?</td>
<td></td>
<td>high</td>
</tr>
<tr>
<td>Was the failure caused by errors of supervisory omission or commission?</td>
<td></td>
<td>medium</td>
</tr>
<tr>
<td>Was the failure caused by errors of individual actions?</td>
<td></td>
<td>low</td>
</tr>
</tbody>
</table>

### Consequence: Actual or potential and substantial

<table>
<thead>
<tr>
<th>Assessment criteria</th>
<th>If yes, give a rating of</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Injury</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was there a death / quadra/paraplegia, or brain injury injury?</td>
<td>high</td>
<td></td>
</tr>
<tr>
<td>Was there a permanent partial loss of function of arms, legs, spine?</td>
<td>medium</td>
<td></td>
</tr>
<tr>
<td>Was there a short term loss of function of arms, legs, spine, hands or feet?</td>
<td>low</td>
<td></td>
</tr>
<tr>
<td><strong>Lost time</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was the injured unable to return to work ever?</td>
<td>high</td>
<td></td>
</tr>
<tr>
<td>Was the injured unable to return to work for 6 - 12 months?</td>
<td>medium</td>
<td></td>
</tr>
<tr>
<td>Was the injured unable to work at some time during the following six months?</td>
<td>low</td>
<td></td>
</tr>
<tr>
<td><strong>Potential impact on safety of others</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could this event effect more than a complete workteam?</td>
<td>high</td>
<td></td>
</tr>
<tr>
<td>Could this event effect more than an individual (less than workteam)?</td>
<td>medium</td>
<td></td>
</tr>
<tr>
<td>Is this event restricted to an individual?</td>
<td>low</td>
<td></td>
</tr>
</tbody>
</table>
### Seriousness for Industry

<table>
<thead>
<tr>
<th>Assessment criteria</th>
<th>If yes, give a rating of</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the issues raised endemic to the industry sector (e.g., coal)?</td>
<td></td>
<td>high</td>
</tr>
<tr>
<td>Are issues site related but may apply elsewhere?</td>
<td></td>
<td>medium</td>
</tr>
<tr>
<td>Are issues site specific?</td>
<td></td>
<td>low</td>
</tr>
</tbody>
</table>

**Final rating**

If there are three or more ‘high’ ratings, then Level 3 investigation. Less than three ‘high’ ratings, continue current investigation level.
Appendix 20
New South Wales Mining Industry
safety culture
20. New South Wales Mining Industry safety culture

The Department of Primary Industries submission notes that, to many, ‘safety culture’ may be a nebulous concept. It is certainly a difficult and complex area. It has, however, received considerable attention in recent times in consideration of the characteristics of organisations in which safety is well managed (or, perhaps, more accurately organisations in which safety were poorly managed).

The definition of safety culture suggested by the Advisory Committee on the Safety of Nuclear Installations (ACSNI) is:

"The safety culture of an organisation is the product of the individual and group values, attitudes, competencies and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organisation’s health and safety programmes. Organisations with a positive safety culture are characterised by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventative measures."

A positive safety culture implies that the whole is more than the sum of the parts. The different aspects interact together to give added effect in a collective commitment. In a negative safety culture the opposite is the case, with the commitment of some individuals strangled by the cynicism of others. From various studies it is clear that certain factors appear to characterise organisations with a positive safety culture. These factors include:

- The importance of leadership and the commitment of the chief executive
- The executive safety role of line management
- The involvement of all employees
- Effective communications and commonly understood and agreed goals
- Good organisational learning and responsiveness to change
- Manifest attention to workplace safety and health
- A questioning attitude and a rigorous and prudent approach by all individuals

What is the ‘Culture’ of Mining

There are a number of observations included in the 1997 Mine Safety Review which have been made to describe or measure the safety culture of the mining industry.

In 1999 the Minerals Council of Australia sponsored a comprehensive study to assess the attitudes and values of the Australian mining industry workforce.

A more recent measure of ‘mining culture’ may be found in a report from Western Australia. While the work strictly relates to West Australian mining industry, which is overwhelmingly metalliferous and extractive, with only two
open cut coal operations, it is likely that at least some of the observations made are relevant to NSW. Not the least reason for this is that the mining industry is characterised by movement of personnel between states, particularly in the metalliferous sector.

The major findings of the 2002 West Australian Survey were:

- There appears to be a high level of hazard/accident/incident reporting but timely follow-up action to address hazards and feed-back on the results of accident/incident investigations could be improved.

- Some risk-taking behaviour still exists within the industry and appears to be driven by production pressures and management/supervisor acceptability of such behaviour.

- Managers and supervisors can have a significant impact on employee behaviour by communicating the expected standards for 'safe production', setting the example, and actively encouraging and promoting safe behaviour.

- Significant differences in perceptions across job groups are evident. These could be addressed through more effective communication at all levels (ie. manager-supervisor, supervisor-employee and manager-employee) and managers/supervisors allocating more time to discuss safety with employees.

- Better training of managers and supervisors in effective communication and people management skills is essential to improving mine site communications and in providing those managers and supervisors with the skills to encourage and promote safe behaviour.

- Safe work procedures are generally being developed by involving employees, but must be more readily accessible to all employees and be an integral part of employee training programs.

- Systems should be in place that, readily capture any changes that improve work practices so procedures can be updated, documented and communicated to employees.

**Can Legislation Influence Culture?**

The Department of Primary Industries believes that legislation, and arguably, in particular legislation covering the mining industry, has the capacity to significantly influence attitudes and relationships between those at a place of work. Considering the obvious undercurrent of communication needs and stratified attitudes to safety in the industry surveys outlined above, these being a measure of the safety culture, legislation can potentially play a very important role (for better or worse).
The Coal Mines Regulation Act 1982 provides an example of how industry relationships may be shaped by legislation. The following is only a brief summary of some relevant aspects of the Act.

The duty placed on the owner of a coal mine by Section 32 results in a mine manager at the apex of an imposed management structure, a command and control management hierarchy where obedience is expected.

The occupants of the different tiers of the hierarchy have formed their own interest groups which are, in turn, reflected in industrial/professional representation. The majority of the workforce is separately represented. This is not a criticism but a recognition of what is probably an inevitable outcome of the relationships imposed by the legislation. The resulting potential for the legislation to shape industry culture and, therefore, the safety culture is suggested as obvious.

The concern with this form of legislation in isolation is that it may stifle the development of a broader safety culture. One might ask – how effective is communication when it is only in the form of commands from above. One might also ask if there is not the danger of mining organisations remaining compliance driven and unable to improve the safety culture beyond that.

The argument might be put that nothing in this style of legislation prohibits or prevents the development of safety culture. The evidence available is that cultural change can be very difficult and take some time and may, in fact, be made more difficult by the existence of a firm prior culture.

An example of this was the introduction in the 1999 regulations under the Coal Mines Regulation Act of requirements to consult with the workforce. This was very different to the prevailing culture. Stories of consultation along the lines of: “Look I have to consult with you, this is what will happen” were in abundance.

Communication with the workforce by way of consultation was reinforced in 2001 with the commencement of the OHS Act. This Act introduced the broad duty for employers to consult on matters affecting health and safety with their employees. This legislation also introduced OHS representatives as a vehicle for consultation in addition to OHS committees. These requirements have always and continue to apply to mines.

The Coal Mine Health and Safety Act 2002 and the Mine Health and Safety Act 2004 will supplement those duties. The new legislation will require the provision of much more information to workforce representatives. In addition, the arguably narrow inspection role of check inspectors at mines is broadened so they will have the functions of OHS representatives (in addition to the inspection role). This will ultimately cause their routine involvement in or facilitation of consultation.
Enabling and Promoting Cultural Change
While the legislation is no doubt important in shaping the way things are done in industry it is by no means the whole picture.

Many of the aspects of a sound safety culture are likely to be very difficult, if not indeed impossible, to control by external regulation. Many go to fundamental day-to-day values and relationships needed for a sound safety culture. In the ultimate analysis, they probably as much as anything else are dependent on the good will of those who work together. For example, how can one legislate to ensure commitment in a chief executive? One can certainly legislate to put fear in them – but that is not commitment.

In these areas it is suggested that an important role of the legislation is to enable and promote those arrangements which, on best available knowledge, are likely to lead to the best safety culture. This is not to say that the legislation should not be rigorous and require guaranteed systematic approaches for the major hazards of mining.

Industry Culture

Initiatives aimed at influencing industry culture

Consultation
The promotion of the consultation requirements of the legislation has been seen as a key means of moving to increasingly informed people. All safety operations personnel in the then Department of Mineral Resources received training in the consultation provisions under the OHS Act 2000. This was to better equip them to be able to promote those provisions in industry and to ultimately assess their being put into effect.

Recently an audit tool has been developed with the intention of using that to assess consultation arrangements in industry. As well as assessments being conducted by the Department it is intended to make the tool available to mines and other industry organisations so that they may conduct their own assessments.

It is not being suggested that consultation arrangements in the mining industry are anywhere near ideal as yet. This is a difficult area where many long held values may be challenged, but it is seen as an important area where continued efforts should be directed.

Education/Information Strategy
The Department provides industry with a large volume of targeted information. This takes the form of publications, seminars, conferences and practical workshops. Some examples:

- the Small Mines Program which targeted that particular industry sector to explain and promote the OHS Act and the Mines Inspection General Rule 2000 (a previous Mine Safety Review recommendation),
- basic and advanced safety awareness courses conducted on the opal fields (as a precondition to obtaining an opal mining lease),

- Mechanical and electrical engineering seminars and a fatigue management workshop,

- presentations and information days on the development of new OHS legislation for mines,

- specific training for coal industry local check inspectors,

- the development, in conjunction with employer and employee organisations of training guidelines to support consultation arrangements in industry,

- the production and distribution of Mine Safety News, Safety Alerts and legislation updates,

- analysis of electric shock and mechanical equipment reports and production of plain-English summaries.

Enforcement Strategy
The Department has a comprehensive enforcement policy which covers the range of sanctions and interventions available. At one end of the spectrum lies the simple providing of advice. At the other lies prosecution of companies and individuals. Each intervention by a Departmental officer can have an influence on industry culture. For example, indicating an outcome to be achieved rather than the means to achieve it can be a way to foster risk management approaches in industry. The Enforcement Policy clearly lays out the broader outcomes sought and is a valuable means of promoting a safety culture.

Industry Partnerships
In partnership with industry the Department supports a major annual health and safety conference. The 2004 conference attracted around 400 delegates. A feature of the conference was an open forum where representatives of the industry parties openly discussed matters which may promote or retard the development of safety culture. Of particular interest was the observation by a prominent industry figure to the effect of: “We inch along - we don’t take giant strides in health and safety”. The response of another was to the effect that the new legislation should enable giant strides to be made. There was also a plain declaration by an industry leader that “accidents are not inevitable”.

Awards for innovation, especially innovative equipment design or application in the interests of safety, are also a feature of the conference. The Department assisted in judging the awards.

The Department also provides judging support for the annual Minex awards. These awards are based on a rigorous evaluation of safety systems and
performance using a methodology based on the Australian Quality Framework.

This involvement sends messages to industry promoting systematic approaches and innovation in the management of health and safety.

**Lessons Learnt**
The Department has undertaken a major program of the re-analysis of accidents and incidents to discover underlying engineering or cultural issues. This has been done in key areas identified and prioritised through the Mine Safety Advisory Council. The lessons learnt are fed back to industry to give them a measure of where safety efforts may be best directed. They also provide valuable information to the regulator.

The key areas so far considered are electric shock incidents and the unplanned movement of mobile mechanical equipment. Other key areas identified for future work are the work environment, contractors and hours of work. In addition, an analysis has been undertaken of the lessons to be learnt from 15 major investigations which have been undertaken by the Department's Investigation Unit.

**The Department of Primary Industries’ Culture**
The Department of Primary Industries recognises that the values and messages it has as the industry regulator may well affect the culture of industry. The DPI has undertaken a number of workshops to develop key messages, to underpin their communications and dealings with industry.

The key messages are:

1. Industry operators are responsible for leading safety efforts by implementing and continuously improving safe systems
2. Controlling risks through competent people, fit for purpose equipment and proper procedures for the lifecycle of the project, and
3. Effectively consulting and communicating with everyone at work to help achieve safe systems
4. Employees are responsible for contributing to improvements in health and safety and complying with safe systems of work
5. The Department is responsible for supporting and encouraging health and safety compliance to meet community expectations.
Appendix 21
Training/Competency in the NSW Mining Industry
21. Training/Competency in the NSW Mining Industry

Under the direction of the Mine Safety Advisory Council, the Mining Industry Training Sub-committee was established to provide an agreed, unified strategic direction for training and personnel development within the NSW mining industry. The Sub-committee includes representatives from:

- the Department of Primary Industries – Minerals
- Unions
- the NSW Minerals Council
- the NSW Mining Industry Training Advisory Body (MITAB)

Note: MITAB is a bipartite body representing employees and employers, the Institute of Quarrying, Mines Rescue Services and the Joint Coal Board (now Coal Services Corporation).

Its first task was to prepare a framework that would form the basis for a strategic direction for training and competencies into the future. Major areas of focus were the Maintenance of Competencies for Statutory Positions, a Generic Passport System for Contractors and a Mine Competency Assurance System.

The Maintenance of Competencies for Statutory Positions focused on training needs and competency criteria for specific statutory positions. A discussion paper relating to the phased withdrawal of certification of statutory positions was prepared to initiate broad consultation across each mining sector and to identify possible alternatives to the current certification process. The outcomes from this issue were presented to the Mine Safety Council and incorporated into the strategic direction for competency development. The first phase will require competencies to be defined and assessment procedures to be developed.

A draft Training System Assessment document for auditing mine site compliance with new legislation was developed. In view of the OHS Act requirements the committee recommended the establishment of a sub-group to develop and implement a training workshop for mine site Check Inspectors, who inspect and advise employees on health and safety matters in the workplace. This has resulted in an annual one-day training seminar conducted for Check Inspectors which has been well attended.

The Generic Passport System for Contractors focused on a generic induction program for the mining services sector, as employees from this sector were transient and often inexperienced in the hazards associated with mining. There were a number of conflicting views on the application and administration of a generic passport system and the recognition of ‘passport’ systems interstate. Stakeholders did not support the draft Training System Assessment document and the Generic Passport system for contractors. As a result, the projects were not pursued.
The Mine Competency Assurance System project was developed by MITAB through a grant arrangement with the NSW Department of Education and Training. The project considered the quality assurance process needed to monitor Registered Training Organisations (RTO’s). Funds have been used to prepare a draft framework and a series of audit tools, which will be progressed by the new Competence Boards when established. Due to a lack of Australian government funding, de-registration of the MITAB is currently underway. The NSW Mining Skills Association has replaced MITAB as the new training advisory body and the association's inaugural meeting was scheduled for late 2004.

The strategic direction is primarily to gain demonstrated commitment from the mining industry and individual mine sites in NSW to having competent people operating mines and having progressive systems in place to ensure their people are competent. A draft strategic direction paper presented to the Mine Safety Advisory Council concluded that a working party should be established and incorporate the new Competence Board members under the new mining legislation. It also proposed that the new Competence Boards would replace the Mining Industry Training Sub-committee and work in partnership with the Mine Safety Advisory Council.

Competency needs for the mining industry are also under review from a national perspective as part of seven key strategic elements of the National Mine Safety Framework (NMSF). The Chief Inspectors of Mines Subcommittee (more widely known as Conference of Chief Inspectors of Mines, CCIM) was commissioned to initiate a review of issues, training needs and priorities regarding competency requirements and assessment. NSW has been given the responsibility for establishing a national working group to progress this element of the NMSF.

Competence Boards

A key aspect of any safe system of work is the presence of suitably competent people who perform important health and safety functions in mines.

Current provisions under the Coal Mines Regulation Act 1982 and the Mines Inspection Act 1901 focus on the granting of certificates of competency based on qualifications and examinations conducted under the auspices of the existing Boards.

Review of these two Acts identified the provisions as effectively limiting the capacity of the current Boards to deal with competency matters outside of the legislative framework.

The new approach - established in the Coal Mine Health and Safety Act 2002 and the Mine Health and Safety Act 2004 – maintains the granting of certificates of competency. However it introduces changes to ensure that the underlying system can be modified over time and is able to incorporate future changes.
The Coal Competence Board will replace the Coal Mining Qualifications Board and the Metalliferous Mines and Extractive Industries Competence Board will replace a number of boards of examiners.

The primary function of each Board is to oversee the development, initial assessment and maintenance of competence standards for people performing health and safety related functions in the mining industry. The Boards will also be subject to the direction of the Minister.

Specifically, the Boards will be able to:

- establish competence standards for operational functions that may impact on health and safety – for functions set out in regulations or identified by Board.
- accept competence standards set by the other bodies recognised by the Board – such as the Mining Industry Training Advisory Body.
- appoint persons to define and document competence standards.
- assess a person’s level of competence, including assessments that a person has maintained previously assessed levels of competence.
- accept initial or ongoing competence assessments conducted by other bodies recognised by the Board.
- appoint and pay people to assess a person’s level of competence.

The new framework allows a flexible approach to identifying functions which may need competence standards. An initial set of functions and competence standards will be identified in the regulations. These will be closely based on current certificates of competency under the present legislation but may be varied by the Boards with the approval of the Minister. Further functions may also be identified by the Boards which may then determine a relevant standard.

The approach enables the Boards to start with the current arrangements for the competence of important position holders in the industry and to identify additional functions for which people are at risk. Furthermore, the Boards can assess situations where functions are identified which have a scarcity of competent people to perform them.

The Boards will maintain core competencies for all functions identified.

These new arrangements will enable consistency to be maintained with arrangements for certificates in other jurisdictions. They support the principles of mutual recognition; not only within the mining sector but also across a range of functions undertaken in other industries where nationally agreed competencies may be applicable to the mining industry.
Another important feature is that the Board will be able to deal with the issue of ongoing maintenance and assessment of competence. Under current arrangements, people are issued with certificates of competence for life which is unusual in the present day. Arrangements can be put in place to impose requirements on persons to retain their certificates. A similar approach is used by other professional bodies.

The approach will also facilitate adoption of advances in the development of competency standards made through industry bodies such as the Mining Industry Training Advisory Body.

Changes in the area of vocational and educational training which enable and support the use of accredited bodies to assess a person’s competence can be effectively utilised by the Board.
Appendix 22
NSW Minerals Council Recommendations
22. NSW Minerals Council Recommendations
LIST OF RECOMMENDATIONS
Terms of Reference 1 and 2

Measuring Safety

1. **DMR electronic access system enhancement**
The DMR further develop its web access facility so it can better integrate site and industry data and enhance its ability to produce reports.

2. **Accident cause information**
The DMR provide clear accident data regularly to mining companies and sites for strategic plan development and to industry advisory committees for preventive strategy development.

3. **Lessons learned information exchange**
The DMR develop a database of lessons learned, indexed so industry can readily access safety alerts on specific items. Links should lead searchers to other relevant guidance material. The database should include:

   - Controls for dealing with risks.
   - Ways to address causes of incidents.

The DMR should consider using the Minerals Industry Co-operative Initiative (MICI) project plan for alerts. The DMR should refrain from legal action on near misses reported through the system. This would be in line with WorkCover’s practice that encourages sites to seek help with problems without risk of prosecution.

4. **Fatal risks analysis**
The DMR and industry increase research on and an analysis, of fatal risks and develop a major hazards strategy. Research should include identification of fatal risk factors in accidents over the last 10 years. Work to be the responsibility of sector safety advisory committees such as the Coal Safety Advisory Committee.

5. **Data measurement**
The DMR consider measuring total recordable incidents, contractor incidents and positive performance measures in its reporting suite.
Safety Incentives and Safety Bonuses

6. Site review of safety incentive schemes
Employers and their workforces assess safety incentive and safety bonus schemes regularly to check results against objectives and identify unintended consequences.

Regulations and Safety Incentives

7. Safety incentive scheme performance indicators
The industry to develop positive performance measures for assessing incentive schemes. Best practice safety incentive schemes should be linked to a range of positive performance indicators broader than just safety indicators.

8. Legislative provisions for safety incentive schemes
Legislative provisions for incentive schemes include clauses specifying that:

- Scheme objectives must support employee participation in safety programs.
- Schemes should move towards the inclusion of a broader range of performance indicators.
- Sites must develop measures of positive performance.

Roles of Key People

9. Annual forum
Industry organise annual forums which support mining company and site development of annual safety plans. Forums allow safety professionals, chief executives, mine managers, safety committee chairpersons and union representatives to brainstorm safety challenges. Forums to:

- Inform delegates about action arising from this review and similar improvement strategies.
- Share lessons learned.
- Update everyone on planned safety initiatives.

10. Guidance material
DMR make all guidance material accessible electronically and distribute single copies free of charge. All DMR public documents to be free of charge.

Workforce Involvement

11. Union directives to employees
Future legislation must address the inappropriate power of the unions to direct members not to participate in employer safety initiatives such as safety culture surveys. The industry needs a mechanism to manage industrial manipulation of safety measures. It is an incontrovertible fact that such union activity is contrary to the spirit of the OHS Act 2000 and detracts from and jeopardises the mining industry’s ability to improve safety.
Engineering and Equipment

12. Safe design project
A tripartite committee to develop a safe design project to improve equipment safety at the design phase. Equipment manufacturers to contribute significant resources to this task.

Risk Management

13. Risk-based legislation
NSW Government to support a risk-based approach to legislation development. All new legislation should support the principles outlined in NSW Government and Council of Australian Government (COAG) policy on occupational health and safety and on broader best practice regulation.

14. Hazardous zones in underground coal mines
The DMR, industry and unions consult to update the hazardous zones definition.

15. Aluminium
The Government consider that the approach in the ACARP study be incorporated in the proposed Coal Mine Health and Safety Regulations.

16. Non-flameproof diesels
The Government consider aligning the proposed Coal Mine Health and Safety Regulation with interstate and overseas legislation and Australian Standard AS3584-1991. The DMR take a more active role in mine trials of non flame-proof diesels.

17. Registration of plant
The Government specify in proposed legislation a central register for mine plant and equipment. NSWMC believes it would be more efficient for companies and sites to provide the DMR with electronic registers of plant, rather than duplicating work by maintaining item-by-item registers for the department.

Analysis of Accident Information

18. Accident causes and analysis
The DMR develop its database to enable industry to search for information on incidents, their details and causes.

19. DMR website enhancement
Government fund the DMR to upgrade its database to index safety alerts and crosslink incidents, guidance material, hazards, risk assessments, risk controls and statistics.
20. Free access to guidelines
The DMR make guidance material available immediately and at no charge on its website. The DMR should not cut staff because of resultant loss of income.

21. Impediments to information sharing
A tripartite working party address impediments to information sharing. Government and industry to resource this project adequately. The task to include examination of how other countries have solved this problem, including information on US Mine Health and Safety Administration Fatalgrams service and safety alert service. Working party to be facilitated by blame-free approach to sharing information on incidents and accidents.

22. US Department of Mines alert material
The DMR review US Department of Labour, Mines Health and Safety Administration material and incorporate useful features into its own material.

Training
23. National Mine Safety Framework (NMSF) competency support strategy
All parties support the working party on the competency support strategy of the NMSF. This working party should look at:

• How best to adapt national competency standards to individual sites.
• How to phase out statutory certificates of competency as the industry illustrates due diligence and duty of care in appointing competent people to relevant positions.
• Commissioning an industry training needs analysis for safety, and establishing a training program. Government to fund development of courses linked to competency standards.

NSWMC notes that NSW has accountability for implementing this strategy, hence its reference in this review.

All parties support the development of causal analyses of incidents for use in training. Industry could seek funds for the development of causal information through the training body network.

24. Trainees
The DMR commission a review of employment arrangements for trainees to find ways to increase recruitment to the industry.

25. Online training
The training body network to consider the online training model developed for coal mine deputies for wider application to other competencies.
The Inspectorate

26. DMR, Investigation Unit, Inspectorate transparency and development
The DMR, its Investigation Unit and the Inspectorate become more transparent. The DMR should fully review the Accident Investigation and Analysis Unit, its role and functions. The review should consider training needs in mediation, investigation skills and communication. It should examine the WorkCover Authority model for opportunities to improve mineral industry arrangements.

27. Annual safety objectives
The DMR take the lead in safety by listing annually what it perceives as the industry’s key safety risks and by producing an annual program of DMR preventive activities. This should include timelines for implementation with progress against targets reported at each Mine Safety Advisory Council meeting. The program should include objectives, training, information material, and feedback from stakeholders.

28. Prompt investigation reports
The DMR set a six-month target for decisions to prosecute following a fatality or other serious event.

When the Coroner’s Court is involved, the aim should be for the court to complete its investigation and bring down a finding within three months.

The DMR should report to the industry regularly on incident causes and on prosecution matters, without jeopardising the investigation.

29. Structural issues
The DMR ensure the Chief Inspector of Mines has sufficient resources to meet his or her workload and fill this vital leadership role in the industry.

Legislation and Regulation

30. Performance-based legislation
Lessons from implementation of the General Rule guide developments in the coal sector towards performance and risk-based legislative models. For consistency, this style of legislation should be mirrored in other industry sectors.

31. Support for the Inspectorate
The Minister and DMR executives to give strong support to leaders in the Mines Inspectorate.

Moura Inquiry

32. Keeping the 2004 Review tightly focused
The Government look at implementation of the Moura recommendations for lessons for the 2004 Review. Recommendations flowing from this review
should be targeted, tightly focused and have time limits. The 1997 Mine Safety Review issued a large number of recommendations, putting enormous strain on everyone. This diluted the focus on some important recommendations, starving them of well-deserved attention.

33. **Systematic management of risk in coal regulations**
All parties use the Moura Inquiry recommendations and safety management plans as the foundation for progress towards a more risk-based approach to regulation, particularly in the coal sector. The success of safety management plans in the metalliferous sector and the implementation of safety systems in the 1999 coal regulations were vital steps towards more systematic management of risks. New legislation should support these initiatives more extensively.

**The Gretley Report**

34. **Focused, prompt investigation case management**
The regulators improve processes for investigation and management of fatalities and serious events to finalise them promptly. The focus, process and timing of case management must be greatly improved. The Court of Coal Mines Regulation and the prosecution by WorkCover in the Gretley case was an example of an unacceptable delay in the application of justice. Eight years to finalise the Gretley case is extremely poor practice.

35. **Trade union attitudes**
The 2004 Review seek a change in trade union attitudes to safety implementation, and particularly the attitude of some officials. A review of the implementation of the Gretley recommendations has created grave concerns in the NSWMC about the value of some tripartite involvement in safety matters.

**Terms of Reference 3**

**Impediments to Safety Advisory Bodies**

36. **Annual safety forum**
The industry organise tripartite annual safety forums to encourage parties to collaborate on mutual safety goals.

37. **Regional safety forums**
The industry organise regional safety forums to raise the profile of safety throughout NSW. Forums should be consultative and include presentations of critical issues, sharing of significant issues and experiences and lessons learned.

38. **Mediation and political agendas**
The industry retain existing tripartite consultation mechanisms subject to:
• Issue papers and background papers being provided in hardcopy and electronically at least one month before the meeting date. All parties should be told of matters for decision. Industrial forum dates should be set when initial documents are distributed.
• A requirement to lodge written submissions with all other parties at least one week before the meeting. Submissions should identify areas at issue.
• All parties having the right to independent lobbying meetings with constituents without interference from third parties.
• The right of safety representatives to attend.
• Independent mediation to assist resolution of disputed matters.
• A Government process to review failed forums, consider the Government’s position, advise all parties of mediation results and invite submissions suggesting solutions.
• A review by all parties, and particularly trade unions, of structural impediments to agreement, followed by early and open declarations of perceived problems before talks resume. Parties should not have hidden agendas and should be open about the issues.

The Mine Safety Advisory Council to adopt a formal constitution detailing as standard agenda items:

• Legislative developments and changes to mainstream and mining legislation.
• Reports on outstanding actions.
• Tabling of member company summaries of activities, with important matters discussed under ‘other business’.
• Statistical performance, with the new committee deciding on the data it requires.
• Incident and accident information, including summaries of causes and lessons learned.
• Prosecution update, including dates to be heard, status and detail of proceedings, and prosecution results.
• Progress of National Mine Safety Framework action plan.
• Progress on 2004 Mine Safety Review recommendations.
• Other business, with no surprises presented at the meeting. Members should request inclusion of discussion items two weeks before agenda finalisation and such items should be restricted to matters which would result in action decisions.
• Independent presentations agreed by the council.

40. Mine Safety Advisory Council representation
Government, company, trade union and industry association membership of the council be at the highest level. Membership should include the chairman of the NOHSC to ensure the MSAC is aligned to national safety agendas and to the State representative on the National Mine Safety Framework standing committee. To resolve disagreements the council should have an independent mediator.
41. **Strategic safety management**
The Mine Safety Advisory Council formulate a 10-year industry safety vision and strategy as the basis for the preventive activities of each sector advisory committee.

The strategic plan to address incident causes and risks, and be aligned to national strategies and the National Mine Safety Framework.

The Mine Safety Advisory Council agree on its constitution and role.

The strategic plan have these minimum requirements:

- Targets for improvement in lost time injury frequency rates and numbers of fatalities, and campaigns to achieve the targets, with accountabilities and action timelines.
- Management of mobile plant, general machinery and fixed plant, which the Comet Report said were the most common agency for incidents and accidents.
- Details of how, who, and in what context specific risks will be addressed.

42. **Meeting processes**
Each consultative committee ensure:

- That it actively attacks safety issues with a team approach, rather than becoming a forum for the exposition of intractable positions.
- All parties agree on committee roles and accountabilities.
- That its members accept that the Mine Safety Advisory Council and its committees exist to make OHS recommendations to the Minister and do not exist for lobbying on industrial issues. Experience has demonstrated that failure to recognise this has blocked agreement on many safety matters. This problem must be remedied if the council is to be effective.
- That its presentations are co-ordinated, with members notified beforehand and given information on the reasons for the presentation. Presentation matters should remain on agendas, with reports on progress against targets, until the matter is completed.

43. **Coal Safety Advisory Committee changes**

The Coal Safety Advisory Committee should:

- Address as standard agenda items at all meetings key incidents, projects, and lessons learned.
- Provide Mine Safety Advisory Council updates at each meeting.
- Update at each meeting all legislative developments including submission requirements, deadlines, and consultative processes.
- Ensure representation is industry-based and proactive.
- Ensure its primary purpose is to review and comment on preventive safety issues.
44. **Extractive Industry and Metalliferous Industry Safety Advisory Committees**

These committees adopt recommendations pertaining to the Coal Safety Advisory Committee and:

- That the Government retain both committees for logistical reasons, given that meeting locations might include Broken Hill.
- Representation continues to include large and small organisations, employees, and trade unions where they truly represent employees.
- If an organisation has no union representation, then that organisation’s workforce be represented by its OHS committee chairperson.
- Neither group should see regulatory reform as its function. Regulatory reform should be an activity undertaken outside of the Safety Advisory Committee and should be a separate, facilitated process with boundaries that support decision making.
- Both committees’ primary purpose should be to make recommendations on preventive safety and to share decisions based on lessons learned.

45. **Other improvements to consultative committees**

- Meeting dates be set in advance and be observed. Cancellations impede progress and diminish the commitment of members.
- Committees include in their constitutions the roles of chairpersons. This role should be reiterated regularly.
- Committees be properly briefed on Mine Safety Advisory Council developments.
- Committee activities support the Mine Safety Advisory Council’s vision and strategic plan.
- Committees not tolerate lobbying of industrial issues.
- The set agenda items of meetings include updates on incidents and lessons learned, major activities, initiatives, legislative changes and new developments, including NOHSC activities.
- Committee activities be preventive in nature.
- Committees task people, and put time limits on those tasks. The chair and secretariat should see follow-up as a vital role.

**Terms of Reference 4**

**Safety Performance of Contractors**

It is recommended:

46. **Positive performance indicators**

Mining companies wanting to measure contractor safety and compliance with site safety standards consider the development of positive performance indicators for contractor safety, including:

- Safety communications – the number of communications of safety messages, such as toolbox meetings, completed each 1000 hours worked.
• Hazard identification and rectification. The number of hazards reported through internal systems, toolbox meetings, safety committee walks, workplace inspections and audits.
• Workplace inspections. The number completed per nominated number of supervisors – for example, one inspection per supervisor per week.
• Subcontractor control. The number of safety plans or safe work method statements completed before beginning on site, as a percentage of the number of contractors engaged.

47. **Forum to foster mine site-contractor partnerships**
The Government convene a forum between mines and contractors to explore partnerships to improve safety and identify contractor safety risks.

48. **Preferred contractor status**
Companies consider linking contractor performance indicators to performance-related rewards such as preferred contractor status.

49. **Consultation mechanisms**
Industry convene a coordinated consultation forum to examine safety improvements and opportunities for further improvement.

50. **Improvement opportunities**
Companies consider having consultation reviews as part of each major contract to identify improvement opportunities with their Contractors.

51. **Caution with green cards**
The Government consider adoption of a generic industry induction for contractors in line with our comments made on page 63.

The Government review the impact of the green cards system on contractor safety in the construction industry before implementing a similar scheme in the mining industry.

The NSWMC urges serious deliberation to ensure the industry does not dilute the value of site-base induction programs which outline site risks, site requirements, site safety management systems and site values.

A review of the construction industry green card system should include an analysis of incidents before and after its introduction.

The Mine Safety Advisory Council should consider results of the review.
52. **Contractor legislative accountability**
The 2004 Mine Safety Review panel consider ways to hold contractor companies more accountable for safety in accordance with legislation.

NSWMC suggests the Mine Safety Advisory Council take up this issue and determine whether a contractor safety management plan accreditation system would benefit the industry. The DMR could approve or accredit such plans in the same way it accredits mine safety management plans.

Contractors unable to meet accreditation criteria should be suspended until their plans are approved.

53. **Contractor safety management plans**
The Government add to regulations a requirement that contractors establish a safety management plan, following the welcome inclusion of site requirements for a contractor safety management system in the coming review of mine health and safety regulations.

54. **Industry contractor safety campaign**
Government and trade unions recognise the NSWMC release of guidelines and provision of workshops to train contractors and employers in safety accountabilities and processes.

**Broad Practice of Hours of Work and Fatigue Management**

55. **Proposed regulatory solution**
All parties support the NSWMC guidelines on fitness for work and fatigue management in all regulatory models. This proposed solution envisages all operations developing fitness for work policies and procedures based on thorough risk assessment.

All future legislation follow the risk-based models outlined by the Regulatory Review Unit of the NSW Cabinet Office and comply with the Council of Australian Governments (COAG) Guidelines for National Standard Setting and Regulatory Action.

The NSWMC believes that, failing endorsement of these recommendations, an independently mediated forum might be necessary, supported by a full and independent analysis of fatigue management practices in all NSW mining industry operations.

56. **Mediated forum**
The DMR convene an independently mediated forum to reach agreement on fitness for work and fatigue management. The NSWMC believes it is clear that the industry and trade unions are unable to agree on these issues.

57. **Independent review**
Failing adoption of the recommendation headed Proposed Regulatory Solution, the DMR commission an independent survey of all mine sites to analyse fatigue management practices, fitness for work, and hours of work.
The survey should determine whether the industry is managing risks and whether it should address excess working hours. NSWMC believes there is no substance to the perception that hours of work are the main causes of fatigue-related incidents.

58. Code of practice
The DMR adopt the NSWMC Fatigue Management Guidelines in proposed legislation to ensure a minimum standard for fatigue risk assessment and control. It should consider the role of employee representatives in addressing this and the recommendation above for an independent review of fatigue management at all mine sites.

59. Audit tool for fatigue risk management
The DMR give top priority to development and implementation of its audit assessment tool for site fatigue management plans. The DMR developed this tool with tripartite involvement, and the Inspectorate’s current evaluation should provide the DMR with useful information for the review of regulations under the new Mines Health and Safety Act.

The audit tool should be available to industry through the DMR web site for self auditing against the agreed model.

Other Industry Risks

60. Targeting key risks and developing priorities
The Mine Safety Advisory Council (MSAC) commission an independent review of safety risks. The review to include analysis of incident causes. It should provide the MSAC with a baseline from which to formulate a five-year, or preferably 10-year, safety plan.

61. Review of fatal accident risks
The MSAC safety risks report (detailed in the above recommendation) to highlight fatal risks to enable industry to develop a list of major hazards.

62. Serious injuries and causal analysis
The MSAC safety risks report (detailed in the above recommendation) to analyse the causes of fatal and serious injuries to enable industry to respond in safety plans and safety management.

Terms of Reference 5

DMR Enforcement Policy and Processes

63. ‘Public good’ application
The DMR review the enforcement policy to better explain the ‘public good’ influence on decisions to prosecute.
64. **Enforceable undertakings**
The DMR to implement incrementally, and with full transparency, the whole range of enforceable undertakings listed in its hierarchy of enforcement options, rather than going straight to the top of the list.

65. **Enforcement procedures**
The DMR publish a complementary document describing its enforcement procedures. It should develop its procedures within the context of the National Mine Safety Framework.

66. ** Expedited investigations**
The DMR expedite investigations and provide more resources to analysis of delays and to communicating the lessons learned. The NSWMC suggests it review prosecutions going back 10 years to identify impediments to quick resolution.

67. **Inspectorate competencies**
The DMR review the Inspectorate training program and processes of investigation, communication and enforcement to ensure inspectors have full resources to implement their role and to provide feedback to the industry.

68. ** Tripartite working party for National Mine Safety Framework (NMSF) strategy**
A tripartite working group support the NSW representative for the NMSF implementation. The working group should report regularly to the Mine Safety Advisory Council with analysis and endorsement of improvement strategies, including those for implementing ‘best practice enforcement’ in NSW.

**Terms of Reference 6**

**NSW Mining Industry Safety Culture**

69. **Safe design with safe culture**
The industry to give high priority to addressing the serious technical risks in the design of equipment. This task must be addressed in a way that engenders trust among all parties and which enhances development of a safety culture in the industry.

70. **Forum to identify issues for Mine Safety Advisory Council (MSAC)**
The DMR organise a forum to develop a list of high priority safety culture issues for the attention of the new Mine Safety Advisory Council. NSWMC believes this would be more effective than using this 2004 Review to determine the issues. The forum should be inclusive, and effectively facilitated. Safety culture improvements involve changes in behaviour, and NSWMC sees high-level communication skills at the heart of such advances. It believes that if MSAC reforms are to be effective they should be well negotiated and well communicated. The MSAC must keep important issues such as safe design of equipment clearly in focus.
71. *Tripartite study tour*
The DMR should review the results of a recent Queensland Department of Mines tripartite study tour to compare their department and the Queensland mining industry with overseas counterparts. The tour included a review of a UK industry initiative called Step Change and a review of the Ontario-based Mines and Aggregates Safety and Health Association (MASHA). NSWMC believes both programs would be worthwhile in NSW mining industry tripartite frameworks. The review should include commentary and analysis. Messrs Mitch Jkeman (AngloCoal), Greg Dalliston (Queensland district check inspector) or Roger Billingham (Queensland Inspectorate) could provide detail of their study tour, Step Change or MASHA.

72. *MINEX evaluators from the DMR*
MINEX is the annual national mining safety excellence award. The DMR Inspectorate to provide at least two field safety officers a year to be MINEX evaluators. The DMR has volunteered some field safety people as evaluators over the years but regular participation would enhance sharing of safety excellence in industry and throughout the DMR.

73. *Union officials and behaviour-based safety*
Union officials must consider availing themselves of the third day of the NSWMC’s annual OHS conference in May 2005 to attend the workshop led by Professor James Reason - a recognised UK-based international expert in risk management and human behaviour. The Mine Safety Advisory Council to consider further development of an understanding of behaviour-based safety.

74. *Industry performance on sustainable development*
Mining industry companies to sign on to the Minerals Council of Australia Sustainable Development Code, and that they audit their systems and publish their performance against the code requirements. The Sustainable Development Code includes standards for health and safety, environment, and community performance and is benchmarked against international standards.

75. *Analysis of safety culture improvements*
The Mine Safety Advisory Council to develop an honour system recognising safety performance in statistics, innovation and site improvements. This could help industry identify sites to nominate for the national MINEX Award. The honour system could be similar to that described in Attachment 19, which provides a snapshot of safety culture improvements, including an honour board, at DuPont’s Bayswater Plant.

76. *Literature Review and Industry Action Plan*
Industry appoint a tri-partite task group to undertake a literature review of behavioural and safety culture improvements and develop an improvement plan for implementation by the Mine Safety Review Council.
Appendix 23
CFMEU Recommendations
23. CONSTRUCTION FORESTRY MINING AND ENERGY UNION (CFMEU) RECOMMENDATIONS

a) Head Office

The Union believes that the Committee should report to the Minister that safety in the industry remains in a similarly parlous state as it was when the Mine Safety review and the Gretley Inquiry reports were made. The safety culture in the industry has not changed and new challenges have not been addressed. The industry is failing to manage crucial factors such as contractors, hours of work, risk assessment and consultative processes. The Department is failing to effectively enforce the regulations.

As we have set out earlier in this submission the industry continues to have a poor safety record compared with other sectors. Adequate resources are not devoted by either the industry or the regulators to address this poor record. There is nor reason for the failure to allocate resources in an industry that generates enormous profits from export trade.

The Committee should report to the Minister that more resources must be allocated to safety. Those resources should be expended in further steps including further inquiries and reviews to bring to light the failings of the industry in the expectation that the identification of those failings will lead to solutions.

The Terms of Reference

1 & 2. The Implementation of earlier recommendations

The committee has been asked to review the progress of the implementation of the recommendations of the Mine Safety Review and the Gretley report and consider whether any change in the implementation of these recommendations is required. So far as the material contained in this submission demonstrates that there has been a failure to implement those recommendations the union says that those responsible should be censured.

So far as the need for change in implementation is concerned, recommendations should be made as to how they may now be implemented quickly.

3. The Operation of the Mine Safety Advisory Council

As stated in chapter 4.3 the union believes that there is a need for the strengthening of consultative processes throughout the industry.
4. **Contractors and Hours of Work**

The union believes these two issues to be critical. The committee should consider the material in chapter 4.1 and 4.2 of this submission as demonstrative of serious failures by the industry in dealing with these crucial aspects of mine safety. It is clear that these issues have led to deaths and serious injuries in the industry in recent times. We believe that a Board of Inquiry should be convened under s94A of the CMRA to investigate the failures of the industry and the Department to address these important issues. The committee should recommend to the Minister that such a Board be established.

5. **Review the enforcement policy of the Department**

The union believes that the Department's enforcement record has improved little since the Gretley report. The policy has flaws and they are identified in Chapter of this submission. The Department's record in an attitude towards prosecutions when considered against the accident statistics remains appalling. The committee should recommend that a specific review of the prosecutions policy and practices should occur. Such review should be conducted by an independent expert with experience in prosecution work. The aim of the review being to advise the Minister specifically on means of addressing the problem of a lack of effective prosecutions by the Department and means of improving this record.

6. **Consider ways of improving mining safety culture**

The committee should advise the Minister that there is much work to be done. The safety culture of the industry must be inadequate as it is failing to address the needs of workers. There are worrying trends: there is a culture developing among one third of the industry, the contract workers, which is fearful of raising safety concerns. There is a culture of working longer hours. There is a culture of top down safety management and a failure to properly consult. There is a culture of using risk assessments to justify unsafe practices.

The industry seems incapable of addressing these trends. In many ways the industry is responsible for them. It is the companies who are demanding the "Flexibility" of contract labour. It is the companies who insist on fewer employees working longer hours. It is the companies who are creating safety forums that exclude proper worker representation. The companies are hiring the consultants to produce risk assessment results they want.

It falls then to government to regulate and enforce those regulations. The trend to de-regulation should be abated. The regulations should be updated to meet the aims of reducing the carnage which has been a feature of the industry for too long.
The Union restates its call for a Special Board of Inquiry to fully investigate the matters addressed in this submission and report to the Minister on the appropriate regulatory regime to improve the safety performance of the NSW Mining Industry.

b) The Northern District Branch of the Mining and Energy Division of the CFMEU

- Investigate and review the way in which contracts (for labour) are administered and the management structure that controls the job requirements, structure and environment for the safety of workers.

- Funding to the department of Primary Industries, Mineral Resources must be increased to an adequate level to provide for more inspectors at the ground level.

- Unannounced inspections must be unannounced with regular site assessment to occur.

- Information dissemination from assessments to be in accordance with Department's stated objectives. With detailed records of outcome of assessments made available to workforce and public as well as a requirement that every action be acted upon, records be kept by the mine, employers and the Department verifying they have occurred. With this information required to be made available to workforce and public.

- That the NSW Government, in light of the revenues generated by the coal industry, adequately fund the Minerals Division of the Department of Primary Industries to ensure:

  1. That enough coal mine inspectors and safety officers are employed to allow for routine inspection at mines to be carried out, as these are currently not occurring.

  2. Inspectors with an appropriate range of skills must be employed to order to comply with the above. The removal of the requirement that Department Inspectors have mine manager qualification. The current requirement which means that only real career path for Inspectors, if they leave the Department, is to obtain employment with the mining companies they were meant to regulate.

  3. Manning within the Investigation Unit is maintained at all times to facilitate the timely prosecution of companies who fail in their duty of care to contractors and employees.
• The Department should ensure that all guidelines that are still in draft format, i.e. inrush prevention, reclaim tunnels, sealing of abandoned mines and shafts etc. be brought to completion then gazetted by the Chief Inspector of Coal Mines.

• Contractor management within the industry needs to ensure that contractors are afforded the same protections in relation to safety as full-time employees. This is currently not the fact.

• All recommendations from the Mine Safety Review and the Gretley Inquiry must be fully implemented in line with the previous commitment of the NSW Government.

• The use of safety incentive schemes, and their effectiveness, should be reviewed and eliminated.

• An industry-wide training scheme should be developed for all new entrants to the industry, regardless of their employment status.

• Implement systems to ensure employers are required to perform adequate risk assessments.

• The Department to enforce adequate systems of work and take action where employers fail to do so.

• The implementation of a complain mechanism that can be accessed by employees and the Union, in which failings of the Department and its inspectors in taking appropriate actions can be examined on an ongoing basis.
Appendix 24
Department of Primary Industries
Proposals
24. DEPARTMENT OF PRIMARY INDUSTRIES PROPOSALS

Mine Safety Advisory Council
In assessing the effectiveness of the Council, it is considered that the establishment, make-up and function of the Council are appropriate and the revised Terms of Reference are applicable for an advisory body such as this.

To be effective, Council representatives should be in agreement with strategic direction and support the priority of strategies to be pursued.

It is proposed that:

(i) the Council arrange a planning day to workshop the strategic direction and priorities of the Council and produce a five-year plan for the consideration of the Minister, which can then be reported against on a quarterly basis.

Contractors
It is proposed that:

(i) a survey of large mines be conducted to collect data on safety performance and contractors and be completed by December 2004

(ii) the new legislative requirements in relation to contractors be introduced as soon as possible

(iii) the Department undertake a major audit of the practice performance and compliance under the new legislative requirement, some 18 to 24 months following the introduction of the legislation.

Hours of Work
(i) It is considered that hours worked should be a major factor taken into account in the management of fatigue. Whether it should be an absolute limit applying to all operators under all circumstances should be considered by the Government in light of the risks in the industry and any possible ramifications for industry generally.

(ii) To assist in any deliberation on hours, a survey of hours worked at large mines is to be undertaken with the intention of providing the review with appropriate data and analysis in December, 2004.

(iii) In relation to the lack of knowledge of the hours worked elsewhere before arriving on a mine site and people’s fitness for work, computer swipe card systems have been suggested to manage this problem.

Enforcement
It is considered that the existing enforcement policy is sufficiently broad and robust to remain appropriate. The policy is clear and has not itself been a cause of criticism. Accordingly, it is considered that no change to the enforcement policy is required.
It is proposed that an assessment and decision making tool, which has been prepared by the Department to determine which matters should be identified for more thorough investigation:

(i) be provided to the industry for their information

(ii) have a trial implementation by the Department.

Culture
It is proposed that:

(i) the range of activities that the Department is pursuing to positively influence the safety culture of the mining industry continue,

(ii) the Mine Safety Advisory Council address safety culture as a major ongoing agenda item, and

(iii) a survey of the safety culture in the New South Wales mining industry be undertaken 12 months after the new legislation comes into force.
Appendix 25
Recommendations from other submissions

*Note:* Not all submissions made recommendations in a format that could be readily extracted (and only recommendations clearly presented in submissions are reproduced here). This compilation of recommendations was prepared by the Review Secretariat to assist the Review process, and any omissions or errors are unintentional.
25. **Recommendations from other submissions**

**COLLIERY OFFICIALS ASSOCIATION**

1. Safety in the industry could be improved by promoting more competency-based training. You only have to look at the number of people sitting for Certificates of Competency examinations across the state. There is a major shortage of Deputies looming and no-one seems to be addressing this vital area of safety (90 deputies out of 140 can access early retirement in the next 12 months in the Northern District alone)

2. The industry must find ways to encourage and assist more employees to study for Certificates of Competency and promote the acceptance of responsibility for health and safety across all employees in order to develop a greater degree of self accountability and responsibility within the mining culture.

3. Supervisors, tradesmen and operators must be given the opportunity to truly consent and develop safe operating procedures that will be accepted and embraced by the very people whose health and safety is directly impacted by mining operations.

4. Companies must factor into their budgets the cost to production of the consultative process and must make available the facilities and opportunity for a diverse cross section of their employees to become involved in the development and implementation of safety management plans and safe operating procedures.

5. Mining companies, unions and other organisations representing various levels of the management structure must commit to cooperation and work together with the Department to satisfy the public expectation that people who gain employment in the coal mining industry, will have permanency of employment and enjoy a life free of injury and incapacitation through mining activities.

6. The Coal Mine Safety advisory council should be re-convened as soon as possible to carry on with the current development of the new Coal Mine safety regulations in consultation with the Department and all other interest groups represented.

7. The Colliery Officials Association firmly believe the Department should continue to have ownership and oversee the basic standard of achievement for examinations of the three classes of mining competencies in order for the public expectation of accountability to be satisfied.
AUSTRALIAN WORKERS UNION

- Revise current regulatory provisions on hours of work in preparation for the introduction of a specific set of clauses for introduction as part of the new Regulation under the Mines Health and Safety Bill 2004.

- Clarify the role of the Department and any protocols that are available for assessing hours of work regimes and whether any process of "approval" exists where hours of work exceed current legislative requirements.

- Evaluation direction, scope and style of legislation dealing with hours of work that is in place for industries such as transport.

- Explore administrative arrangement that will prevent the contracting out of statutory positions.

- Regulations to permit implementation of contractor passport system.

- Provide clear guidance material to clarify jurisdictional boundaries between


- Review the chains of communication between the MSAC and sector-specific committees.

- Identify equivalent bodies in other states and ensure process of reporting to a national body is established

- Ensure representation of all relevant mining sectors on MSAC.

ASSOCIATION OF PROFESSIONAL ENGINEERS, SCIENTISTS AND MANAGERS, AUSTRALIA – COLLIERIES STAFF DIVISION (APESMA)

Implementation

APESMA recommends that;

- the recommendations of the (previous) reviews should be categorised into three groups – Mandatory (immediate and high priority) – Necessary (important) - desirable (mainly applying to mines with larger workforces), and

- implementation responsibility and timelines be attached to each category of recommendation
**Hours of work and fatigue management**

APESMA **recommends** that staff contracts should contain maximum or standard hours clauses or, at the very least, recognition that staff should only be required to work "reasonable" overtime.

APESMA **recommends** that employers be required to implement fatigue policies and these policies and practices must be subject to audit by the inspectorate.

**Training Accreditation**

APESMA **recommends** that consideration be given to enhanced accreditation and re-accreditation arrangements for all mine officials. Subject to an appropriate apportionment of the respective obligations of employers and employees, it may be appropriate for mine officials to be periodically re-accredited. If the relevant accrediting authority is not satisfied with the level of knowledge of the applicant at the time of re-accreditation then that authority may require remedial training or further structured training for the relevant official.

**Communications**

APESMA **recommends** that all mines should be required to have written procedures for effective communication. These procedures should include – reports required to be prepared relative to safety and by whom – the material to be included in such reports – and who is required to receive and read such reports.

APESMA **recommends** that there be strict auditing and enforcement of these communication requirements.

**Audits**

APESMA **recommends** that there be clearly defined audit and inspection responsibilities for both mine management and the Inspectorate.

**AUSTRALIAN MINES AND METALS ASSOCIATION (AMMA)**

In essence, AMMA recommends that the industry’s continued ability to self-regulate is the most appropriate approach for the following reasons:

- It allows the continuation of safe, rewarding and commercially sensible working hours arrangements;
- It allows for a continuation of the improvements in the safety record of the industry;
• It enables rewarding wage levels to be paid to employees, commensurate with their efforts and their time spent at work;

• The combinations of work and non work time on offer have the dual reward to employees at high wage levels plus blocks of family and leisure time, thereby assisting companies to attract the right employees and the right skills mix; and

• Furthermore, the selected combinations of work and non work time (that is, rosters) can be designed to suit the operational objectives (production, safety, costs including employee wages, etc) of each site according to their different context and needs.

In summary, the basis for AMMA’s recommendation for such an approach is:

• The industry’s record of self-regulation;

• The industry’s operational maturity and track record of innovation and improvement in addressing operational challenges;

• The explicit recognition from the industry that these issues are real and challenging, and require a careful set of strategies over time rather than a quick fix approach;

• The industry’s safety performance improvement; and

• Lastly, and perhaps most importantly, the rigorous manner in which the industry is already addressing the working hours issue.

AMMA’s recommended outcome in dealing with the fatigue management and hours of work issue is a continuation of the resources industry’s self-regulation. As shown above, this approach provides the discretion to each operation to implement rosters to suit the interests of business, safety and employees. Such an approach is appropriate given the NSW metalliferous mining sector’s demonstrated ability to address the issue of fitness for work including rostering arrangements in a mature and proactive fashion. A prescriptive “one size fits all” approach is not only unnecessary and overly restrictive, but it fails to address the fundamental objective which is the effective management of fatigue to ensure employee safety in the workplace. This cannot in any way be compromised.

However, if a Mining Industry Code of Practice is to be developed, or the Mine Safety Review Panel prefers a multi-regime approach, or the Panel is persuaded that a limitation on working hours adequately addresses the complex issue of fatigue, AMMA urges the Mine Safety Review Panel to move forward in a cautious approach with full industry consultation and the engagement of fatigue experts.
ILLEGALCOAL (BHP)

Recommendation:

To assist in taking the mining industry culture to ‘the next level’, it is our recommendation that organisations be encouraged to implement a Behavioural Safety Program, which continues to drive people making safe decisions.

Recommendation:

it is recommended that a review occurs on the enforcement policy and the processes used by the Department to implement this policy.

Recommendation:

The regulation of fatigue and fitness for work is being handled effectively at Illawarra Coal sites, therefore, it would be our recommendation that the management/control of such issues be kept at this level and not managed through legislation. The imposition of legislation does not allow for individual site needs and risks to be managed according to the level of risk, and through ‘generalised legislation’ may actually impede the best efforts of organisations to manage this issue.

Therefore, it would be our recommendation that Fatigue Management Plans (incorporating hours of work) be developed by all sites in consultation with employees and not through legislation.

The Mine safety review needs to ensure that Contractors are an integrated part of any organisation and not managed as a separate entity.

ROCHE MINING

Roche Mining recommendations to the NSW department of Primary Industries and Mineral Resources are to:-

- Provide regulations and policy that support Risk assessment based safety management strategies;

- Recognise the positive contribution of contractors to safety in the mining industry and to support the contractor management initiatives of NSW Minerals council including ‘Information for contractors working in the NSW Mining Industry’;

- Shift from the policy and practice of closed investigation with intent to prosecute to that of open, collaborative investigation and a rapid sharing of knowledge.
ANGLO COAL DRAYTON

We recommend:

• Organisations such as Coal Services Health should have a fully independent board. Coal services Health should have to be fully funded on a fee for service basis.

• Mainstream OHS legislation (with risk based coal industry regulations and a mining specific inspectorate) and mainstream workers compensation legislation should apply to the coal industry.

• Need to ensure pressure is kept up on businesses to perform in terms of OHS deliverables process and risk based OHS systems approach.

• Companies and not individuals (unless the act was criminal or criminally negligent) should be prosecuted for breaches of OHS.

• Safety culture cannot be legislated. It is a product of management and employees and their relationship within a strong OHS framework. Organisations with a good safety culture achieve this independently of external influence. Government must set up legislation that allows relationship to grow by removing third parties from interfering in the relationship, where it is unnecessary.

• Third parties should only become involved when minimum standards are not met.

• Good safety culture is achieved by:

  - Strong leadership (site and corporate)
  - Strong OHS systems and support
  - Accountability assigned, understood and accepted
  - Genuine care for employees/contractors and their well being and demonstration of this
  - Sound application of risk management strategies
  - Engagement of employees through consultative and cooperative processes in OHS issues
  - Rehabilitation programmes for work and non work related issues
  - Encouragement of incident reporting
  - Training that delivers competent trained persons, accepting accountabilities
  - Focus on achieving behaviours that contribute to good OHS outcomes through encouraging good OHS behaviours
XSTRATA COAL

Recommendations

1. The Mine Safety review should encourage the development of a risk-based approach to mine safety regulation and operation in NS, consistent with:
   - the government's 2000 green Paper and 2002 white Paper; and
   - the principles of the OHS Act

It must also place urgent priority on the completion of the new regulations attached to the 2002 Coal Mine Health and Safety Act, which are designed to address outstanding recommendations from the 1997 Mine Safety review and specific terms of reference of the 2004 Mine Safety Review.

2. The Mine Safety Review should call for an investigation to establish why it has taken an unsatisfactory length of time to progress the new legislation, which was a key recommendation of the 1997 Mine Safety Review.

3. The Mine Safety Review should ensure that industry committees such as the Mine Safety Council and Coal Mine Safety Advisory committee should adopt a strategic approach with defined and agreed objectives, roles, processes including a mechanism for resolving strong difference of opinion and appropriate support.

4. The Mine Safety Review should ensure a holistic and flexible approach is taken to enhance safe mining operations in NSW, rejecting simplistic prescriptive measures. In particular, current proposal to introduce a risk based systems approach for contractor and fatigue management should be supported.

5. The Mine Safety Review should recognise the positive role safety incentive schemes can play in shaping culture and raising awareness of risk.

6. The Mine Safety Review should recognise the failings in the DMR's current approach to enforcement and prosecution, with its resultant negative impact on safety and the industry's ability to source future managers.

7. The Mine Safety Review should review or request a review by Government of existing and proposed safety legislation (industrial manslaughter or workplace death) to ensure that individual rights to natural justice are applied and that the mining industry is not being legislated out of operation in NSW.

8. The Mine Safety Review should give strong consideration to the NSWMC's submission, which reflects the broader industry's views, with particular attention to be given to suggested recommendations for future action.