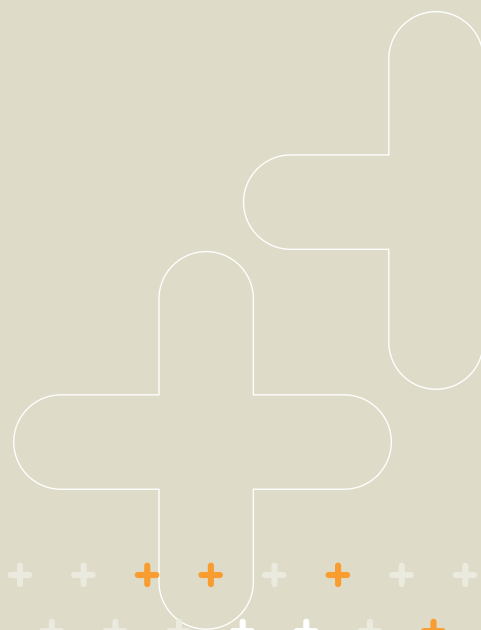


# SUMMARY OF PUBLIC SUBMISSIONS ON Discussion Paper: Improving health and safety hazard management in the underground mining industry

DEPARTMENT OF LABOUR  
SEPTEMBER 2008



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## **INTRODUCTION**

### **Purpose**

This paper summarises the public feedback on the discussion paper: *Improving health and safety hazard management in the underground mining industry*, and identifies submitters' preferred options for improvement.

The Government will use the feedback gained from this consultation to develop further measures to improve health and safety hazard management systems in the underground mining industry.

### **Background**

#### ***Review of the underground mining health and safety framework***

The public consultation process followed the Department of Labour's review of the legislative and regulatory framework for underground mining. The review's context is the inherently hazardous nature of underground mining and its potential for catastrophic events, and public concern arising from two fatalities in 2006.

The review identified that the performance-based approach under the Health and Safety in Employment (HSE) Act 1992 is essentially sound, but there is an opportunity to improve the regulatory framework.

The framework includes the HSE Act and the two mining-specific regulations (a full outline of the framework is set out in Appendix 1):

- the HSE (Mining Administration) Regulations 1996, which require certificates of competence for managing and supervising underground mining operations, and
- the HSE (Mining - Underground) Regulations 1999, which describe processes for managing hazards and require certain records and notifications

The department's review of the current framework identified several problems:

- the way hazards are managed varies across workplaces, and the HSE Act and regulations do not provide systems/process support on how to comply
- the Mining Underground Regulations are performance-based, and some underground mines – particularly smaller mines - may have trouble deciding how best to comply
- a lack of procedural guidance on employee participation leaves underground mining potentially open to commercial pressures and day-to-day worksite management decisions
- managers in charge of smaller mines can be less qualified than managers in charge of larger mines even though the mining hazards are the same, and
- the tight labour market means fewer workers experienced in hazard management are available.

Underground mining is a very small sector, with only a few operators and around 300-350 total employees (a summary of the industry profile is set out in Appendix 2).

### ***Public discussion paper on underground mining***

To address the problems, a discussion paper for public consultation was put out in March 2008, to gather mining industry feedback on problems and solutions. The discussion paper contained a number of options, some of which can be achieved under the current regulatory framework and others that would require amendment to primary legislation, or the passing of specialised legislation. The paper anticipated that there may need to be a combination of preferred options.

To encourage comprehensive industry involvement, the discussion paper contained enough detail and practical examples to inform stakeholders and gather feedback, yet was broad so as not to stifle stakeholders' ideas. The following options were not formed proposals with costings, and further consultation would be needed should any regulatory change be proposed:

- *safety case regime* – regulates to require operators to document their safety management systems and gain approval from the department before they operate. The systems would include such things as: safety policy, processes for assessing risks, performance standards to measure the effectiveness of the system, and major hazard management plans
- *controls on high risk activities* – regulates for one or more of:
  - *licensing* – to require a license before carrying out high risk activities, and/or
  - *third-party monitoring/supervision* – regulating third-party monitoring/supervision by requiring supervision of high risk activities by an appropriately qualified person, and/or
  - *notification* – expanding the current notification requirements in the Mining Underground Regulations (i.e. notification of commencement and cessation of operations, and installation of shafts and windings), by requiring notification to the department before carrying out high risk activities, allowing the department to conduct checks
- *health and safety management systems and major hazard management plans* – regulates to require a documented health and safety system and hazard management plans from the outset. The systems would include the same things as the safety case option
- *increased supporting guidance/ACOP* – increased supporting guidance including an ACOP, which would cover technical standards, and could also set out the elements of a health and safety management system and hazard management plans
- *extending coverage of the Mining Underground Regulations* – extends the Mining Underground Regulations to include further technical standards, covering any gaps in the existing provisions.
- *amending the Mining Administration Regulations* – amends the Mining Administration Regulations to raise the required competency for managing small mines.

- *employee participation requirements* – regulating for elected worker check inspectors<sup>1</sup>, or a mining sector ACOP on employee participation, and
- *health and safety inspector visits* – regulating the frequency and nature of inspector visits.

## Overview of Submitters

### **Submitter categories and perspectives**

The department received 17 submissions on the underground mining discussion paper. The following table shows the submitters by category (see Appendix 3 for more submitter details (note that the report identifies individual, non-business submitters by letter):

<b>Category</b>	<b>Submitter</b>	<b>No</b>
<b>Large employers</b>	Solid Energy	10
	Pike River Coal	15
	Newmont Waihi Gold	14
<b>Medium/small employers</b>	Roa Mining	17
<b>Sector groups</b>	MinEx	9
	NZISM	12
	EMA	11
<b>Ancillary service providers</b>	McConnell Dowell	7
	Mr King	2
	Mr Stewart	3
<b>Interested individuals</b>	Submitter A	1
	Mr B	4
<b>Unions</b>	EPMU	6
	NZCTU	13
<b>Workers</b>	Mr C	8
	Mr D	16
<b>Crown</b>	Crown Minerals	5

The submissions provide a range of views, with different perspectives and levels of knowledge. The categories of submitter indicate their broad perspective, i.e. whether from an employer/business (operator) perspective, or a worker perspective:

- the majority of submissions, 10 out of 17, have more of a business/operator perspective (comprising employers, sector groups (including MinEx) and ancillary service providers), and
- four have a worker perspective (unions and the two workers)

Another perspective issue is that a number of submitters were connected in some way with the two fatalities in 2006. This was almost inevitable given the small size of the sector, and the department has been sensitive to this dimension in the analysis.

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<sup>1</sup> A description of check inspectors is set out in Appendix 2.

## **OVERVIEW OF SUBMISSIONS**

### **Overarching themes**

Submitters overwhelmingly want to maintain the performance-based model, and do not want a return to prescription (including both employer and worker perspective submitters).

Most submitters accept the value of reviewing the underground mining regulatory framework. One submitter (EMA), however, did not see a case for separate treatment for underground mining.

Some submitters noted that the injury claims were not a good indicator of the need for change, as injury claims highlight common injuries rather than major hazard risks (which are low probability/high consequence).

Strengthening of the regulatory framework for a documented health and safety management system is the most supported type of change.

Most submitters support a “package” of approaches rather than a single solution.

Submitters were polarised on employee participation, and whether to regulate for check inspectors. Worker perspective submitters see check inspectors as a small change and the most effective solution for improving safety in underground mining, whereas employer perspective submitters see check inspectors as overly prescriptive and inconsistent with the performance-based approach.

### **Support for change/extent of change**

Almost all the submitters accept the value of reviewing the underground mining regulatory framework. Only two submitters considered there was no real problem. Solid Energy did not consider a review was justified by the injury evidence. They were happy with the existing framework, but considered increased guidance could improve clarity for small operators. EMA Northern considered mining was no different from other industries, and did not need separate treatment.

All submitters support some degree of change. All employer, sector, ancillary and union submitters support the current performance-based framework under the HSE Act. The EPMU called for “greater prescription ... where this makes sense”. One individual and one worker appeared to support returning to a more “prescriptive” framework (Mssrs B and C).

The general nature of the change most submitters prefer is strengthening of the regulatory framework, usually through requiring risk-based hazard management. Four submitters support non-regulatory change, through guidance or greater resourcing of inspections (though these submitters did support the proposed amendment to the competency requirements in the Mining Administration Regulations).

The following table shows submitter preference regarding overall framework and type of change:

Submitter	Type of framework		Type of change	
	Performance	Prescriptive	Guidance	Regulation
<b>Large Employers</b>				
Solid Energy Ltd	Y		Y	
Pike River Coal Ltd	Y			Y
Newmont Waihi Gold	Y			Y
<b>Small Employers</b>				
Roa Mining	Y		Y	
<b>Sector Groups</b>				
MinEx	Y		Y	
NZISM	Y			Y
EMA	Y		Y	
<b>Ancillary</b>				
McConnell Dowell Ltd	Y			Y
Mr King	Y			Y
Mr Stewart	Y			Y
<b>Individuals</b>				
Submitter A	Y			Y
Mr B		Y		Y
<b>Unions</b>				
EPMU	Y			Y
NZCTU	Y			Y
<b>Workers</b>				
Mr C		Y		Y
Mr D	Y			Y

## Mixed options

Most submitters indicated that a mix of options is needed. The following table summarises each submitter's preferred option, and the mix of options supported:

Submitter	Preferred Option	Options Supported
<b>Large employers</b>		
Solid Energy	Guidance	Increase guidance (hazard management plans already required under HSE Act)
Pike River Coal	Competency	Strengthen competency requirements; hazard management; supported by detailed codes
Newmont Waihi Gold	Hazard management	Strengthen hazard management; support with notification and competencies
<b>Small employers</b>		
Roa Mining	Resource inspectorate	Resource inspection; amend Mining Administration Regulations re manager qualification for small mines
<b>Sector organisations</b>		
MinEx	Guidance	More explicit standards in a documented safety system (by guidance or regulation); support with guidance
NZISM	Hazard management	Require safety systems; support with consulted codes of practice
EMA	ACOP	Provide ACOP; establish database of mine plans; no regulatory changes, except competency, as hazard management plans are already required

ctd/...

<b>Submitter</b>	<b>Preferred Option</b>	<b>Options Supported</b>
<b>Ancillary service providers</b>		
McConnell Dowell	Hazard management	Require safety management systems supported by an ACOP and guidelines
Mr King	Hazard management	Require safety management systems; support with notifications and 3 <sup>rd</sup> party monitoring; possibly require safety case; increased inspection
Mr Stewart	Safety case	Require hazard management plans that are site-specific; this could be by requiring a safety case
<b>Interested individuals</b>		
Submitter A	Hazard management or ACOP	Require mining plans (use these as a way to link licensing, notification and hazard management plans), support with ACOP and 3 <sup>rd</sup> party monitoring
Mr B	Resource inspectorate	Resource inspectorate, supported by check inspectors
<b>Unions</b>		
EPMU	Check inspectors	Require check inspectors; safety case/hazard management plans and licenses if worker consultation is built in
NZCTU	Check inspectors	Require check inspectors; consulted hazard management plans, and safety case provided workers are fully involved
<b>Workers</b>		
Mr C	Check inspectors	Require check inspectors
Mr D	Check inspectors	Require check inspectors
<b>Government</b>		
Crown Minerals	NA	Neutral submission, highlighting role re mine plans and commencement of work with DoL

## Small mines

One of the broad themes in this review of underground mining and in the submissions was the issue of small mines. The objective of the review was to find solutions that were suitable for small as well as large operators.

Only one smaller operator made a submission, and there were no submissions from any one or two person operations. Most submitters noted that the hazards and risks are the same regardless of mine size, but there was recognition of the need for clear and simple systems for small operators to use.

## SUBMITTER FEEDBACK

### Safety case regime

A safety case regime regulates to require operators to document their safety management systems and gain approval from the department before they operate. The systems would include such things as: safety policy, processes for assessing risks, performance standards to measure the effectiveness of the system, and major hazard management plans.

A safety case was supported by two of the ancillary service providers (Msrs King and Stewart), and both unions – but was the primary option only for Mr King.

This approach generated strong opposing submissions:

Pro	Supporter profile	Con	Opposition profile
4	2 Ancillary, 2 Unions	6	2 Employers, 2 Sector, 1 Ancillary

Supporters considered this option would ensure operators, especially small mines, established before starting operations how they would manage safety, therefore building industry knowledge, and making it easier for the department to check and audit the safety systems. Supporters considered that operators should not enter the industry unless they are able to provide for safety and accept the costs associated with that.

Union submitters supported a safety case option alongside worker check inspectors. They noted that a safety case regime had not prevented fatalities in the rail industry in 2000, and that both the subsequent Ministerial inquiry and international research indicated that real worker participation was key to the successful operation of a safety case. They saw this finding as reflecting a need for worker/safety committee sign-off of the safety case, which could be supported by an ability to withdraw support for the case.

Newmont Waihi Gold supported the idea of a safety case, but without the requirement for departmental approval. They supported the Victorian practice (as described in the discussion paper), which more resembles a documented health and safety management system than a safety case option.

Submitters opposing the safety case option (Pike River Coal, Roa Mining, MinEx, EMA, McConnell Dowell) had the following concerns:

- requiring a full safety case would be too onerous and costly for the small mining industry, especially for small operators
- the model is relatively “untried” (despite operating in the rail sector, and its emergence for Australian mining) – submitters considered New Zealand lacks enough experience to operate it effectively without undue compliance costs, and
- submitters considered that the department does not have the resources to operate an approval system without causing undue delay and cost for operators.

Two submitters were more neutral. NZISM indicated that the cost and complexity, especially for smaller operators, could be dealt with by providing a

standard system and simplified risk matrix. Ancillary submitters indicated that support models and services would need to be available for smaller operators. Solid Energy thought this was a good concept, possibly useful for smaller mines. However, it did not consider the department had the resourcing to administer it effectively. Solid Energy considered a safety case approach could potentially be combined with the documentation required for Crown Minerals.

Submitters' views about the contents of a safety case were similar to the contents of a health and safety management system.

## **Requiring specific controls for high risk activities**

### ***Licensing high risk activities***

Regulating to require a license before carrying out high risk activities.

Requiring activities to be licensed was not the preferred option of any submitter, and was supported by only two. More submitters opposed this option:

<b>Pro</b>	<b>Supporter profile</b>	<b>Con</b>	<b>Opposition profile</b>
2	2 Union	6	2 Employer, 2 Sector, 1 Ancillary, 1 Individual

The EPMU saw licensing as part of a safety case, as a safety case would identify activities requiring a license. They considered licensing requests should be made by the health and safety committee.

Opposing submitters raised a number of concerns. Solid Energy considered it would be difficult to identify what should be licensed. Pike River Coal suggested that a standard matrix of risk factors would be needed. Mr King commented that if used, it would only be for one-off, unique activities. McConnell Dowell and Mr King noted that a licensing approach cuts across a risk management approach. MinEx, NZISM and individual submitter A considered this approach of little value. MinEx noted that licensing could be seen as transferring the employer's responsibility.

Several submitters provided ideas of what could be covered, even if they did not support the approach:

- MinEx and Pike River Coal referred to activities where there is innovation or the need to depart from an established industry standard, such as - working within 50m of a fault; working near old workings; development work in gassy mines; single entry headings beyond a certain length; introduction of new technology for roof support, explosives etc
- NZISM referred to gas drainage, dewatering, maintaining adequate ventilation, P5 explosive use, new development through faulted ground or where there are known or suspected areas of bad ground
- the NZCTU raised blasting and exploration.

NZISM raised the idea of having a 5-yearly "license to operate", where every main section of the mine, including production and development sections, shaft, pit bottom activities would have to meet minimum standards of housekeeping and discipline issues. The operating license would identify the things that need separate auditing. This concept appears similar to a safety case.

Some submitters raised issues about competency and licensing people rather than licensing activities. These comments are discussed below under amending the Mining Administration Regulations/competency.

**Third party monitoring of high risk activities**

Regulating third-party monitoring/supervision by requiring supervision of high risk activities by an appropriately qualified person.

Under this option certain activities would need to be performed by or under the supervision of an appropriately qualified person. Submitters took different interpretations of this option, and it was not a preferred option.

Several submitters (Mr King, Solid Energy, Pike River Coal, NZISM, McConnell Dowell and Mr Stewart) took it to mean certain activities being performed under third party supervision. Mr King was neutral, but considered it could be useful for smaller mines so as to avoid having to cover one-off activities in the safety case. The other submitters opposed this approach, noting that it duplicates the existing managerial qualification and competency requirements, and it is not risk-management based. NZISM commented that the existing system should be fixed before introducing a new one. Pike River Coal noted the small size of the New Zealand industry, the small number of specialists, and the risk of conflicts of interest.

Several submitters were more open to third party monitoring as a form of audit mechanism. From this perspective, some submitters supported monitoring – the unions and individual submitter A. Most were more neutral (Pike River Coal, Roa Mining, MinEx, EMA and Mr King). Submitters raised links with health monitoring under the HSE Act (NZCTU, EPMU and EMA), and most of the others raised ACC auditing and the need to align any monitoring with this. Some also said that auditing needs to be by a mining expert, not a generalist health and safety expert. Individual submitter A noted that a third party auditor could be more proactive than a departmental inspector. Individual submitter, Mr B, supported monitoring– by the department as the regulator.

**Notification of high risk activities**

Expanding the current notification requirements in the Mining Underground Regulations (i.e. notification of commencement and cessation of operations, and installation of shafts and windings), by requiring notification to the department before carrying out high risk activities, allowing the department to conduct checks.

Extending existing notification requirements by adding other activities was not a primary option for any submitters. It was supported by some submitters as part of a mixed approach, and was also opposed by some:

Pro	Supporter profile	Con	Opposition profile
4	1 Employer, 1 Ancillary, 1 Union	5	2 Employer, 1 Sector, 1 Ancillary, 1 Individual

Supporters of this option considered it could cover “non-core” activities (Newmont Waihi Gold), or “unusual” activities (Mr King), and outside “normal” activities that posed a risk (NZCTU).

Newmont Waihi Gold referred to shaft sinking or working near old workings, and that these should require notification and re-submittal of the hazard

management plan. Mr Stewart saw it as inherent in a licensing system. Mr King considered this could apply to any activity that was outside the usual operation. The NZCTU referred to activities that could affect the local community, either through direct impact (e.g. injuries or flooding), activities which might affect services to a local community (e.g. loss in power, water supply) and activities which might affect the environment.

Submitters opposing further notification considered that this option lacked any value or purpose, as too bureaucratic, the department did not have the resources to follow up notifications, and there would be business risks from any delays (Solid Energy, Pike River Coal, NZISM, McConnell Dowell). They considered management of hazards would be best done through the hazard management plan. Individual submitter A noted that this implied that all activity should be notified since mining is a high hazard industry.

Some submitters were more neutral, considering the option could have merit, but they did not think it could operate effectively with current departmental resourcing (EMA, Mr Stewart, and MinEx).

Submitters considered that any notification should not duplicate the reporting requirements to Crown Minerals under the Crown Minerals Act.

## Health & safety management system, hazard management

Regulating to require a documented health and safety system and hazard management plans from the outset.

This option had the highest level of support as the primary approach for improving safety (all from employer-perspective submitters, as all the worker perspective submitters primarily preferred check inspectors). Many, including union submitters, also supported this option as part of a package of options

Pro	Supporter profile	Con	Opposition profile
4-6	1 Employer, 2 Sector, 2 Ancillary, 1 Individual	1	1 Worker

There was a consistent theme that requiring a health and safety management system should apply equally to smaller mines, as risks are the same regardless of size. Some noted, however, that smaller mines would have less complex systems.

Most submitters sought a risk management approach, to be supported by more detailed guidance (or an ACOP) to enable individual mines to prepare the content of their plans. Some submitters mixed this option with strengthening qualification /competency requirements, and/or with a notification system. Two submitters also supported third party monitoring in a mix.

Most supporters considered the system needed to cover all the risks and hazards of underground mining, not just some, although some thought it could emphasise the high risk hazards. Pike River Coal noted that: the system would identify the hazards and risks of the operation; describe how these risks are controlled; describe the management system to be put in place to ensure that the controls and processes are consistently applied; describe how the operator will specifically comply with the relevant Acts and Regulations covering their operations.

Some submitters considered a framework could easily be taken from Australian models, and some referred to MinEx guidance. Pike River Coal considered that a good start would be the Victorian model set out in the discussion paper (i.e. a documented safety system containing the safety policy, systems and procedures for controlling risks, performance standards for measuring the system's effectiveness, and the audit process, plus a safety assessment for major hazards, showing the methodology and likelihood and severity of potential harm).

Unions supported a documented health and safety management system covering employee participation, such as the involvement (or possibly sign off) of health and safety representatives/committees in the hazard management plans.

The NZCTU stressed the need for the safety system to be simple and clear so that workers could understand it, especially more vulnerable workers like migrants.

Some submitters sought better integration between improving the health and safety systems and the existing requirement to provide mine plans to Crown Minerals. The individual submitter A considered plans could be required to contain features such as adjacent workings, method of work, ventilation, gas management, fire fighting provision, self rescuer caches and accompanied by the associated risk assessments.

### **Increased guidance/ACOP**

Increased supporting guidance including an ACOP. This would cover technical standards, and could also set out the elements of a health and safety management system and hazard management plans.

Two to four submitters preferred guidance/an ACOP as the best way to improve safety in underground mining (Solid Energy and the EMA had a clear preference, Submitter A had an indicative preference, and MinEx clarified its preference for guidance in its meeting with officials, but indicated it would also support regulating a documented health and safety management system).

Five other submitters supported increased guidance/ACOP as part of a package of options (Pike River Coal, NZISM, McConnell Dowell, EPMU and NZCTU). There was no real opposition to the idea of increased guidance, apart from two ancillary submitters who felt guidance was too general and did not add value, whereas a documented health and safety system or a safety case would be more site-specific.

Some thought guidance on best practice would be particularly useful for small operators (Solid Energy, McConnell Dowell).

In March 2008, MinEx released a suite a guidance, which was not referred to in the discussion paper. The MinEx guidance included an industry code and several specific guides. MinEx advised that they have received positive feedback from industry, and, would welcome working with the department to extend the guidance and potentially incorporate overseas information.

There was considerable consistency over what technical standards should be covered by guidance. The MinEx guidance covered:

Environment - lighting, first aid, hot/cold environments, access, toilets
Personnel – covers a range of things, including training and PPE
Mine and tunnel planning (plans)
Control of significant hazards: hazard identification and risk assessment; hazardous substances; fire and explosion; spontaneous combustion; inundation; outburst/rockburst; strata/lining failure; ventilation
Equipment and machinery
Compressed air environment
Shafts and windings
Emergency response

The MinEx guidance contained the most comprehensive list, but a number of other submitters made similar suggestions (Pike River Coal, NZISM, McConnell Dowell). These included: ventilation; gas management; engineering plans (covering mechanical, electrical and mobile equipment); explosions; inrush; strata control; the underground environment; support and planning, personnel provisions; traffic management; change management; mine inspection; change management; and gas monitoring.

Submitters often referred to existing Australian standards (note that Australian material has been considered and referred to in the MinEx guidance). One individual submitter, who was not aware of the MinEx guidance, said that a pre-2008 industry draft code was a “good start” (note that this document had clear similarities to the MinEx guidance).

One area of difference was inclusion of employee participation. The EPMU commented that employee participation has not been included in the MinEx guidance, whereas MinEx considered that the employee participation provisions of the HSE Act are sufficient.

Some submitters strongly supported development of guidance in consultation with industry involvement (Pike River Coal, McConnell Dowell, EMA). The EPMU said input was needed from experienced miners.

Submitters held differing views about whether to have an ACOP or industry guidance. Both provide evidence of practice, and an ACOP is evidence of preferred practice. NZISM, one individual, and the two unions preferred a detailed ACOP. Solid Energy and MinEx preferred guidance, saying this format would be equally enforceable and more flexible. MinEx commented that a number of existing ACOPs have been allowed to become out-of-date.

## **Expanding the Mining Underground Regulations**

Extending the Mining Underground Regulations to include further technical standards, covering any gaps in the existing provisions.
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No submitters supported this option. Some thought the existing standards were sufficient, while some thought they were piecemeal and should be removed into guidance.

## Mining Administration Regulations/competency requirements

Amending the Mining Administration Regulations to raise the required competency for managing small mines/and consideration of other options for improving competency.

Submitters, including Roa Mining, the smaller mine operator, generally agreed that the need for managerial competency is not dependent on the size of the mine, as the risks are the same regardless of size.

Most supported the specific proposal to revoke regulation 11(3) of the Mining Administration Regulations. The department did not receive any submissions from very small mine operators. One submitter, Mr B, opposed this revocation. Some submitters noted the need for a transitional process for this change.

Position	No	Submitters
Primary option in mix	1	1 Employer
Key component of package	8	2 Employer, 3 Sector, 2 individual, 1 union
Support amending Reg.11(3)	8	1 Employer, 3 Sector, 2 Ancillary, 2 union
Opposed to amending Reg.11(3)	1	1 Individual

There was a high level of overall support for ensuring mine managers are appropriately qualified and competent. Pike River Coal described managerial qualifications and competency as the "primary means of providing safety, industry specific guidance and governance at operational level".

Some submitters had concerns about levels of supervision and competency in practice. MinEx and Pike River Coal provided feedback on other ways to improve competency:

- extending competency requirements to all those in management or supervisory positions underground and key industry professionals such as mine engineers, surveyors, geologists etc, whose advice is used to make safety related decisions underground
- improving on-going competency development, and systems management (through the Industry Training Organisation setting standards and feeding into an accreditation body)
- extended competency requirements should not be a prerequisite to appointment
- the specific competency standards should be removed from the Mining Administration Regulations as gazetting is unnecessarily cumbersome, and
- recognising overseas qualifications because skill shortages and the size of New Zealand's industry mean we have to recruit from overseas.

Several submitters commented on the terminology of competence, qualification and skill. Pike River Coal and NZISM considered the term "competent person" needed to be defined in the law. The NZCTU considered there needed to be an agreed definition of "competent", and that this should link to skills development and the department's 2008 *Skills Strategy* discussion paper. The EPMU considered the requirement in the Mining Underground Regulations for certain

roles to be done by a “competent” person could be supported by licensing. One individual submitter (Mr B) considered the department should reject the term “competent”, and insist on qualified and experienced, as competency is too open to interpretation.

This issue was strongly linked to workforce issues – that mining is a growing industry, and it is increasingly hard to get skilled workers and managers. A number of submitters suggested ways to build the workforce; EMA suggested establishing a mining (“digger”) school.

## Employee participation

### Check inspectors

Regulating for elected worker check inspectors.

The primary feedback from worker and union submitters was for improved employee participation through check inspectors, as the single most effective solution for improving health and safety in underground mines.

This option also had a high level of opposition:

Pro	Supporter profile	Con	Opposition profile
5	2 Unions, 2 Workers, 1 Individual	9	4 Employers, 3 Sector, 3 Ancillary

Union submitters saw the check inspector as an specialised form of employee participation (additional to any health and safety representative).

The EPMU considered they would be elected, have 5 years experience, hold a minimum of a mine deputy qualification, and would be required to attend training. They would have the following roles:

- to immediately order the withdrawal of employees from the mine or part of the mine believed to be dangerous to life or injurious to health (as determined by the inspector), or order immediate discontinuance of any dangerous practice, or evacuation of the mine in emergency situations
- to inspect the mine every two weeks (and upon a miner’s request regarding a dangerous condition or practice), and provide a written report to the mine manager, and
- to support health and safety representatives and committees in the development of safety cases and make recommendations to the department regarding granting/withdrawing any high risk activity license.

The EPMU considered that check inspectors from larger mines could fulfil the role for smaller mines that were too small to have check inspectors of their own. Mr D saw check inspectors’ role as more limited – having the power to request that a dangerous situation be fixed, or if not, to call upon an inspector.

The EPMU saw check inspectors as a “simple” change, not intended to be inconsistent with the current HSE regulatory framework, and they were not seeking legislative change to the principal HSE Act. They believed check inspectors could be implemented by a mix of specific regulation and as part of a safety case. The EPMU advised that they had not been successful in negotiating for check inspector-type roles under the employee participation provisions of the HSE Act, and, instead, the default provisions the default

employee participation provisions applied (health and safety representatives and committees).

The EPMU advised that, in the past, check inspectors were respected by mine managers and worked effectively with them. They also said the union used this role only for safety, not for industrial bargaining.

The concerns raised by union and worker submitters were:

- payment of production bonuses to supervisors creates an inherent conflict with prioritising safety (EPMU, CTU, Mr C)
- managers were less likely to be experienced miners, and more likely to be trained in other specialties (EPMU)
- a perception that the HSE Act gave employers freedom to write their own safety regulations, and, employers were using "permits to work" on a regular basis when these were meant only for emergency situations (Mr C)
- a perception that the change to everyone being responsible for safety did not work, and meant that no-one was taking charge (Mr C)
- mines were deeper and harder to mine, increasing the risks, especially in coal mines (EPMU)
- hazard and incident reports "disappear into the system" and are not acted on quickly enough (Mr C)
- experienced miners are disillusioned with health and safety committees, because the meetings are unsatisfactory and there is not equal representation of union members and management (Mr C), and
- Mr D believed it was "common practice" for some officials to take a complainant off the job and replace him with someone who was willing to do the work.

Submitters coming from the employer perspective opposed check inspectors as a return to prescription and a more confrontational management style with workers and the union. They noted:

- mine operators already had to have qualified managers, and it duplicated a function already required of employees
- it blurred responsibility, as the HSE Act placed safety duties primarily on employers
- the HSE Act already provided for health and safety representatives, committees, hazard notices, and the right to refuse unsafe work
- there was no special case on the evidence for having a separate system just for mining, when there are other high hazard industries
- it risked creating tension in workplace, which had created poor working relationships in the past, and could be used for industrial reasons by the union, and
- they did not consider the EPMU had sought different employee participation arrangements.

### ***ACOP for employee participation***

An underground mining sector ACOP on employee participation.

No submitters supported an employee participation ACOP for underground mining as the best option to improve employee participation.

Mr King gave qualified support to the idea, and the NZCTU and NZISM considered an employee participation ACOP would generally be more applicable to all industries, not just mining.

Four submitters opposed an employee participation ACOP option (MinEx, EMA, McConnell Dowell and Mr Stewart). Some commented that an ACOP just for mining was not warranted. Six submitters, including the four opposing, considered that there are already good mechanisms through the existing HSE Act processes - health and safety representatives and committees, hazard notices and the right to refuse unsafe work. The two additional submitters in this group were Newmont Waihi Gold and Solid Energy.

### **Improving inspections**

Regulating the frequency and nature of health and safety inspector visits.

One individual submitter, Mr B, supported regulating for inspector visits. Five submitters opposed regulating increased inspection (Solid Energy, Pike River Coal, MinEx, Mr Stewart, and McConnell Dowell).

Four submitters (Roa Mining, NZISM, Mr King, Mr Stewart and NZCTU) supported increased resourcing for the inspectorate and more frequent visits, but not through increased regulation.

Mr B saw increased inspection as the best way to improve safety, especially for smaller mines, because this would address non-compliance with safety, which was the main problem as most fatalities were avoidable.

Supporters of increased inspection and inspectorate resourcing considered there would need to be a larger pool of inspectors, and that inspections could function as an audit (one submitter said they could look forward, not just at past performance).

Some submitters suggested three-monthly cycles of visits, or even shorter periods for smaller mines (NZISM, Mssrs B and King). NZCTU suggested more regular visits, and when an operation changes. They also suggested inspectors go underground to check the mine with the check inspector and health and safety representatives. Pike River Coal recommended a regular cycle of visits, with times worked out between inspector and operator.

The most common reason for opposing increased regulation for inspections was that mining should not be singled out from other industries. One submitter considered there was no value, another said it could create expectations that couldn't be met, and another noted that it would not pick up problems early.

## **Additional matters raised**

### ***Mine plans***

As an additional question, submitters were invited to comment on whether it would be of value to implement a system to ensure all mine plans are available to those who require them, and ways of doing this.

Eleven submitters agreed strongly with the need for improvements here, including Crown Minerals, who were neutral in respect of the discussion paper generally. No submitters were opposed.

The EMA described such a system as “paramount” for improving safety and Mr B said it was a “no-brainer”.

Some submitters made links between the requirements to keep and update mine plans under the Mining Underground Regulations, and the requirement to submit and update plans under the permitting process under the Crown Minerals Act. They wanted the processes to be more integrated to avoid duplication. Some preferred that the overall process should be administered by Crown Minerals, others preferred the department.

Some submitters wanted to improve coordination between the documentation and reporting under the Crown Minerals Act and the health and safety requirements under the Mining Underground Regulations. These comments arose particularly around coordinating a documented health and safety system or safety case, and regarding any increased notification requirements.

Crown Minerals advised officials that they are establishing a GIS database of underground mine workings for resource management, and are already working with the operational side of the department to investigate improving information sharing and management.

### ***Clarity of mining regulations***

In response to an invitation to raise any options that were not mentioned in the discussion paper, some submitters considered the current mining regulations very unclear, and need to be rationalised. Predominant themes were integrating the two sets of regulations, and removing prescribed standards from the Mining Underground Regulations.

## **SUBMITTER PREFERENCES**

### **Problem clarification**

Analysis of submitter feedback clarified that there were two problems where health and safety hazard management could be improved in the underground mining industry.

#### ***Smaller mines have variable safety practices***

A known problem of the performance-based model is that small businesses have a “structural vulnerability” from lack of resources and management expertise<sup>2</sup>. The 2006 fatalities indicated that the mining industry faces these problems. The following causes were identified:

- there is little process-based prescription or guidance to support the general duties in the HSE Act or the more generic processes in the Mining Underground Regulations
- the managerial qualification for small mines (under eight workers) should be higher as the risk is the same, regardless of mine size
- there is a lack of supporting technical guidance, and
- a potential need for increased inspector visits.

#### ***Employee participation***

Mine workers and unions considered that existing employee participation arrangements did not sufficiently protect workers given the risks they take in working in underground mines.

### **Submitters’ preferred options**

#### ***The options preferred by submitters were:***

- Both employer and employer/worker submitters overwhelmingly want to maintain the performance-based through the HSE Act, and do not want a return to prescription. Most submitters accepted the value of reviewing the underground mining regulatory framework, although one submitter (EMA Northern) did not see a case for separate treatment for underground mining.
- Most submitters support a “package” of approaches rather than a single solution.
- Submitters provided the following feedback for improving safety, especially to improve safety practice in smaller mines:
  - there was good support for better documentation for health and safety management systems, especially so that smaller mines have clearer and more consistent practices, and there was a secondary preference for a mandatory element to this documentation
  - there was good support for improving competency through:

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<sup>2</sup> See *OHS Regulation for a World of Changing Work*, Bluff et al, Federation Press 2004.

- amendment to the competency of small mine managers, by raising the competency required for managing small mines in the HSE (Mining Administration) Regulations 1996, and
  - exploring other ways to improve competency of those working in underground mining
- There was good support for improving management of high risk activities by providing increased supporting guidance or an ACOP for technical standards
  - Several submitters supported increased inspectorate resourcing, but only one considered this should be regulated.
  - Submitters sought coordination with mine reporting processes under the Crown Minerals Act.
  - It was not possible to determine a preferred option on employee participation from submissions, as these were very polarised. However, in terms of the principles of good regulation, regulating for check inspectors would have to be weighed alongside the status quo (encouraging parties to use the flexible employee participation arrangements under the HSE Act in good faith), and a mining-specific employee participation ACOP.

## **Summary of submitter feedback**

### ***Options context***

#### *Options for health and safety systems*

There are three different options for ensuring that mines have clear and consistent health and safety management systems. These three options are alternatives that would enhance the systematic identification and management of hazards already required by the general duty in the HSE Act. The three options range from a high level of regulatory requirement down to providing clearer process guidance, as follows:

- regulating for documentation and approval – a safety case regime requires operators to document their safety management systems and gain approval from the department before they operate
- regulating for documentation – requires a documented health and safety system and hazard management plans from the outset, or
- providing guidance – provides increased supporting guidance or an ACOP setting out the elements of a health and safety management system and hazard management plans. (This option can be an alternative to regulating, and can also provide additional and more detailed support for the contents of a regulated health and safety management system.)

#### *Complementary options*

The following options can be combined and coexist with any health and safety management system (the status quo or one of the three options above):

- regulating competency – amending the Mining Administration Regulations to raise the required competency for managing small mines/and considering other options for improving competency

- controlling high risk activities –
  - prescribing standards – extending the Mining Underground Regulations to include further technical standards
  - regulatory controls - requiring high risk activities to be licensed, supervised and/or notified (these options were all set out individually in the discussion paper)
  - providing practice guidance on technical standards – providing increased supporting guidance including an ACOP, which would cover technical standards
- improving inspection – regulating the frequency and nature of inspector visits, and
- improving employee participation – regulating for elected worker check inspectors, or a mining sector ACOP on employee participation.

***Preferred health and safety management system options***

Nine submitters supported improved health and safety management systems (Solid Energy, Newmont Waihi Gold, MinEx, NZISM, EMA, ancillary service providers, individual submitter A).

Submitters preferred regulating for a documented health and safety management system, but also supported using guidance or an ACOP:

<b>Level of requirement</b>	<b>Strong preference</b>	<b>Mild preference</b>	<b>Opposition</b>
Safety case: documentation & approval	1	2	5
	Mr Stewart	EPMU, NZCTU	Pike River Coal, Roa Mining, MinEx, EMA, McConnell Dowell
Documented HS management system in regulations	4	NA	1
	Newmont Waihi Gold, NZISM, McConnell Dowell, Mr King		Mr D
Guidance/ACOP	2	2	NA
	Solid Energy, EMA	MinEx, Submitter A	

***Preferred supplementary options***

*Competency*

Most submitters supported raising the managerial qualification for small mines, and submitters raised several other ideas about improving competency in the sector.

Submitters also raised other ways of improving competency, such as defining terms, promoting continuous development, licensing other experts (such as mine surveyors), and streamlining the process for training requirements.

*Controlling high risk activities*

There was no support for more prescribed standards in regulations.

For licensing, third party monitoring and notification options, in all cases submitter opposition outweighed support. There was also little consistency over what activities to control. Opposing submitters were concerned that

departmental resources could not currently support a licensing or notification regime.

There was strong submitter support for increased guidance for technical standards, but submitters were divided on whether this should be through guidelines or an ACOP.

#### *Regulating the frequency and nature of inspection*

Several submitters supported increased inspectorate resourcing, but only one considered these should be regulated.

#### *Employee participation*

- Worker and union submitters (four) preferred increased employee participation through check inspectors.
- Union submitters sought “sign off” by health and safety representatives as part of a safety case/ documented safety system or any licensing.
- Employers, sector groups and ancillary services providers opposed check inspectors.
- No submitters preferred an employee participation ACOP specific to underground mining.

#### ***Submitter feedback on other options***

##### *Mine plans*

Submitters supported improved coordination with the Crown Minerals unit, to improve the availability of mine plans of old workings, and avoiding duplication of reporting under both health and safety and Crown Minerals processes.

##### *Improving the clarity of the regulations*

Some submitters considered that the regulations could be combined and simplified.

## APPENDIX 1 – REGULATORY FRAMEWORK

The legislative and regulatory framework for underground mining comprises:

- *The HSE Act* - this is a performance-based law that promotes the prevention of harm to all people at work or in the vicinity of places of work. It places duties on employers, the self-employed, employees, principals and others who are in a position to manage or control hazards. It emphasises systematic management of health and safety, and requires employers and others to maintain safe working environments and implement sound practice. It recognises that successful health and safety management is best achieved through good faith co-operation in the place of work and, in particular, through the input of those doing the work.
- *The HSE (Mining Administration) Regulations 1996 (the "Mining Administration Regulations")* - require certificates of competence for managing and supervising underground mining operations (these largely carry over the pre-HSE Act provisions).
- *The HSE (Mining - Underground) Regulations 1999 (the "Mining Underground Regulations")* - require mine plans, certain records (e.g. operations, employees underground, monitoring), notifications (commencing and ceasing operations, and specific accidents), and some prescribed technical standards. The policy intention of the regulations was to provide well-defined standards for known hazards that could have lethal consequences (i.e. structural collapse, flooding, inadequate ventilation, gas explosions, fire and equipment failure), support the development of quality management systems, and assist the inspectorate.
- *The Hazardous Substances and New Organisms (HSNO) Act 1996 and regulations* - these cover the use of explosives and other hazardous substances in underground mines.

The HSE Act framework replaced the Mining Act 1971, the Coals Mines Act 1979, and the Quarries and Tunnels Act 1982. These were sector/activity specific, and highly prescriptive of technical workplace standards. The Acts were administered by the Mining Inspection Group, based in the Ministry of Commerce (now the Crown Minerals unit of the Ministry of Economic Development), and funded through an industry-specific levy. The inspection role transferred to the department in 1998 and the industry levy was abolished. Crown Minerals still administers the Crown Minerals Act 1991, which covers mining permits etc.

## **APPENDIX 2 - UNDERGROUND MINING INDUSTRY PROFILE**

### **New Zealand**

Underground mining is a very small sector. There are seven operating underground mines – five coal mines, and two metalliferous (gold/silver) mines, employing around 300-350 employees. There are applications in train for some smaller underground coal mines, and there are a number of inactive coal mines (i.e. with permits, but not operating). In around the last six years there has been a dramatic reduction in the number of small underground coal operators.

Coal mining is centred in Huntly and the West Coast. It is dominated by the state-owned operator, Solid Energy. Solid Energy operates the Huntly East, Spring Creek and Terrace mines. Another large operator, Pike River Coal, has recently commenced operations on the West Coast.

There are several smaller mines. A smaller operator, Roa Mining, operates the Roa mine, with 33 workers. Black Reef Mine Ltd is still under a prohibition notice, Wellman is a 1-person development some way from production, and the department has recently received notice of a 2-person operation looking to start up around Greymouth.

Metalliferous mining is centred in Waihi and Otago, with two large operators: Newmont Waihi Gold (Favona underground mine), and Oceana Gold Limited (Fraser underground mine).

Under the Crown Minerals Act 1991, Crown Minerals receives plans of underground workings and/or annual summary reports detailing mining activities undertaken. They also carry out regular site visits to mines, maintain databases of all mines and quarries, and are establishing a GIS database of underground mine workings for resource management purposes.

Before numbers reduced, small operators made up the bulk of operators, and produced only around 10% of the coal and gold.

Production is growing in underground mining. 2006 was a record year for coal production, producing 5.767 million tonnes, half a million tones more than in 2005. Gold production increased slightly from 2005, to 10,618kg. The total value of industrial mineral production in 2006 was \$558m, a 14.3% increase from 2005. Underground mining produces only a portion of this revenue (for coal this is around 14%).

### **Australia**

Australia has a large mining industry, including underground coal mining – in size and as a proportion of the national economy. It provides our most important reference point for safety and health information and systems.

There is a significant flow of personnel between New Zealand and Australia, predominantly to Australia. There is also a flow of capital, as a number of large operators in New Zealand are Australian or international companies.

Workplace health and safety laws for mining are applied at a State level, and the states have adopted variations of a performance based model. A summary of the New South Wales (NSW), Queensland and Victorian frameworks was provided in the discussion paper.

NSW has a more prescriptive framework. It requires a comprehensive health and safety management system with specified components, including: systems (such as an inspection programme), and major hazard management plans, notification of high-risk activities, and licensing for certain activities.

Queensland requires a health and safety management system, which is similar to New Zealand's HSE Act system. An underground mine is required to have a principal hazard management plan, which covers at least some listed items. This is supported by very comprehensive regulations.

Victorian regulations require a safety management system to be documented, and sets out the content. It requires a safety assessment for major hazards, including methodology, nature, likelihood, severity of potential harm, and reasons for adopting/rejecting controls. This is similar to the HSE Act hazard identification, but sets it out greater detail.

The Australian experiences are useful for the review of the New Zealand regulatory framework, but the different systems mean it is not possible to "harmonise" with Australia. A Federal project is currently underway in Australia to review the scope for harmonising state health and safety laws, including mining. Australia also has extensive best-practice technical standards and guidance material, that New Zealand can and does draw on heavily.

## **Mining fatalities in 2006**

Two fatalities in 2006 were the impetus for the review of the underground mining framework. These occurred in smaller mines:

- Tiller mine, operated by Black Reef Mine Ltd - on 8 March 2006, Mr Robert James McGowan, died of impact/crush injuries to his neck, chest, spine and limbs following an inundation of water. This was a small mine, worked by only two-three people. The department took prosecutions against: the operator, the mine manager, and another whose details are suppressed. This matter was sub judice during the review, but the Court has made findings and sentencing decisions – although there are appeals. More information is now in the public domain and may inform this review.
- Roa mine, operated by Roa Mining Company Ltd (who is one of the submitters on the discussion paper; and it appears that one of the worker submitters was a survivor of this incident) - on 8 September 2006, Mr Bernard Green was crushed by a sudden roof fall. This is a larger mine, operated by the Roa Mining Company Ltd, which employs around 33 staff. There was no prosecution.

These two incidents illustrated potential issues for smaller mines, especially the Black Reef case. In the Black Reef case, the Court's findings highlighted some key safety issues: the value of a health and safety system from the outset, the importance of accurate mine plans and plans of old workings; potentially a particular need for mines to use external experts; and technical issues around the risk of inundation – drilling ahead, and practice regarding safety margins and barriers with old workings. The Roa Mine case highlighted the value of having a safety system. The investigation noted the absence of supporting technical guidance for underground mining.

## **Mining injury information**

There are no statistics specifically for underground mining, but there is injury data for the mining industry as a whole. The mining injury and fatality incidence rate, at 0.9 per 1,000 full-time equivalent (FTE) employees has

remained relatively stable over the last 10 to 15 years (both in New Zealand and Australia), with metalliferous mining trending gradually down, and coal mining staying relatively constant.

Of all industry groups, mining consistently had the highest incidence of injury claims from 2002 to 2005, and was second highest in 2006, with 165 claims per 1,000 FTEs compared to the general incidence rate of 126. It also has a high incidence of "entitlement" claims (i.e. claims for weekly compensation for time off work) at 25 compared to 17 for all industries (this rate is exceeded by, but reasonably close to, rates for other high hazard industries – agriculture, manufacturing, transport and construction). Mining has a similar injury claims profile to other industries in terms of the nature of claims.

Injury claims are not a good measure for high hazard industries, as they do not take account of the potential for catastrophic incidents and loss of life (low probability, high consequence incidents). A visiting Australian professor (and expert in high hazard industry occupational safety and health), Andrew Hopkins from the Australian National University, confirmed this, saying that if employers focus on addressing injury claims, they reduce slips, trips and falls, they become "systematically complacent" about the major hazards.

Since its origins in the mid 1800s, underground coal mining has been categorised by major incidents. Looking at multiple fatality incidents in the period 1850 to 1998, there have been 204 fatalities (19% of a 1,096 total mining industry fatalities).

On average these occurred every 13 years, and it has now been 16 years since the HSE Act, and 10 years since the last multiple fatality incident. It is useful to remember that multiple fatalities may only occur many years apart.

In the last 50 years, there were fewer fatalities per multiple fatality incident, suggesting major improvements to safety practices:

<b>Date</b>	<b>Fatalities</b>	<b>Mine</b>	<b>Yrs between fatalities</b>
1958	4	Westhaven	3
1967	19	Strongman	9
1985	4	Boatmans	18
1998	3	Mt Davy	13

There are also high numbers of single fatalities. A 1995 seminar paper, *A summary of the evolution of coal mining safety legislation, together with a traditional viewpoint* (by WP Brazil, of the Francis Mining Company for the Coal Producers Federation of New Zealand Inc) noted the high number of miners who "met a solitary death". Looking at total fatalities, there has been a marked drop in mining industry fatalities in latter years – a 41% drop in the 10 years before and after the HSE Act came into force. The following table shows how total mining fatalities have reduced by 80% in the last 50 years:

<b>Period</b>	<b>Fatalities</b>
1957-1966	85
1967-1976	95 (includes 19 multiple fatalities, Strongman mine)
1977-1986	58
1987-1996	31
1997-2006	17

There are clear themes to causes of multiple fatality incidents – most involve explosions, caused by ignited mine gasses. In early cases there was a greater

danger where lighting was from naked flames, and a number of explosions were caused by cigarettes, and these things have changed with time. Even today, using explosives and shot firing still have regulatory requirements under the existing framework. Other causes of multiple fatalities are: flooding from old mine workings, inadequate ventilation, and collapse (and the Tiller and Roa mine fatalities in 2006 involved collapse and flooding). All the causes of multiple fatality incidents are well-known major hazards.

Historically, multiple mine fatalities led to reviews of safety practices, and usually some regulatory change.

### **Background on safety case regimes**

A safety case regime is emerging within performance-based legislative frameworks as best practice for regulating large, high risk/low probability industries that involve public safety risk (such as oil and gas exploration, nuclear, and it has been recommended for mining in Australia)<sup>3</sup>. Safety case models (or similar) apply in New Zealand for the rail, civil aviation and maritime sectors. The difference between a safety case option and requiring a documented safety system is the need for the regulator to approve the safety case before operations commence. It is generally recognised that a governmental commitment to resourcing the regulator is essential, and without this safety case regimes do not work effectively.

### **Background on check inspectors**

Check inspectors were described slightly differently by submitters, but the basic concept is an elected experienced, qualified and trained miner who would have all or some of the following roles:

- to immediately order the withdrawal of employees from the mine or part of the mine believed to be dangerous to life or injurious to health (as determined by the inspector), or order immediate discontinuance of any dangerous practice, or order evacuation of the mine in emergency situations
- to inspect the mine every two weeks or a miner's request regarding a dangerous condition or practice, and report in writing to the mine manager
- to support health and safety representatives and committees in the development of safety cases and make recommendations to the department regarding granting/withdrawing any high risk activity license.

This is very similar to the workmen's (or "check") inspector provided in s173 of the former Coal Mines Act, which was the pre-HSE Act form of employee participation in underground mining. Workmen's inspectors were appointed by workers at their own cost, and had experience and qualification requirements. They had the power to inspect mines, but could not order workers to withdraw from the mine/part of the mine or cease any dangerous practice. They could request the manager to withdraw miners, or remedy/discontinue any dangerous practice (s188). If the manager did not act on this request, the check inspector could make the same request to a mines inspector.

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<sup>3</sup> Refer: two working papers from the Australian National University's National Research Centre for Occupational Safety and Health Regulation: *Working Paper 37: Safety Case Regulation for the Mining Industry*, Hopkins and Wilkinson, July 2005, and *Working Paper 45 Is the Australian Mining Industry Ready for a Safety Case Regime?*, Heiler, March 2006.

Employee participation requirements in the HSE Act as enacted were high level, and did not include any sector-specific arrangements. The EPMU requested inclusion of check inspectors during the 1998 consultation on the Mining Underground Regulations, but they were not included.

The HSE Act provisions for employee participation were expanded in 2002. The general duty to provide reasonable opportunities for employee participation applies to everyone. The provisions requiring an employee participation system apply automatically to organisations with 30 or more employees, and to smaller organisations if any employee requests employee participation. Parties may make their own arrangements, or there is a default mechanism (of health and safety representatives/committees) if this is not agreed. The provisions are flexible, and could allow an agreed sector-specific arrangement. The 2002 amendments also allow trained health and safety representatives to issue hazard notices (which may be notified to an inspector), and to advise an employee, in the context of employee's ability to refuse unsafe work, if any work they are required to perform is likely to cause serious harm.

### APPENDIX 3 - SUBMITTER NAMES AND NUMBERS

No	Submitter	Type	Category
1	Confidential submitter A <sup>1</sup>	Individual	Interested individual
2	Tony King	Individual	Ancillary service provider
3	Dave Stewart	Individual	Ancillary service provider
4	Mr B	Individual	Interested individual
5	Minerals Unit, Crown Minerals, Ministry of Economic Development <sup>2</sup> ("Crown Minerals")	Organisation	Government
6	NZ Amalgamated Engineering, Printing & Manufacturing Union Inc <sup>3</sup> ("EPMU")	Organisation	Union
7	McConnell Dowell Constructors Ltd ("Crown Minerals")	Organisation	Ancillary service provider
8	Mr C	Individual	Worker
9	MinEx Health & Safety Council <sup>3</sup> ("MinEx")	Organisation	Sector group
10	Solid Energy New Zealand Ltd <sup>4</sup> ("Solid Energy")	Organisation	Large employer
11	Employers and Manufacturers Association (Northern) ("EMA")	Organisation	Sector group
12	New Zealand Institute of Safety Management ("NZISM")	Organisation	Sector group
13	New Zealand Council of Trade Unions <i>Te Kauae Kaimahi</i> ("NZCTU")	Organisation	Union
14	Waihi Gold Company Limited t/a Newmont Waihi Gold ("Newmont Waihi Gold")	Organisation	Large employer
15	Pike River Coal Limited ("Pike River Coal")	Organisation	Large employer
16	Mr D	Individual	Worker
17	Roa Mining Company Limited, and Francis Mining Company Ltd <sup>5</sup> ("Roa Mining")	Organisation	Small/medium (SME) employer <sup>6</sup>

<sup>1</sup>: Individual submitter A, requested confidentiality

<sup>2</sup>: Crown Minerals' submission is "neutral", in that it does not address the discussion paper directly. They described their role and advised that they are working with the department, exploring efficiencies around mining operations data and information sharing, and storage and accessibility of mine plans. They consider that safety is improved through good access to reliable mine plans with all relevant information marked on, and an information base of old workings.

<sup>3</sup>: Two submitters requested meetings: MinEx and the EPMU. The department met with them on 30 July and 21 July respectively. Also, MinEx advised the department that the EPMU (although it is on the MinEx Council) holds different views on this issue, and these should be taken directly from the EPMU submission. The EPMU confirmed this. This means that the MinEx submission comes entirely from its industry members.

4. Solid Energy offered officials the opportunity to visit their mines, but this opportunity was not taken up, as officials have been given support in the analysis process from departmental operational staff.
5. The Roa Mining submission was from both Roa Mining and the Francis Mining Company, and has been analysed as a single submission.
6. There were no submissions from very small operators (one or few person operations), despite wide circulation of the discussion paper. Further consultation on any proposals with very small operators would be needed.