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## MINE MANAGERS' ASSOCIATION OF AUSTRALIA INCORPORATED ABN 39 182 124 240

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Dear Sir / Madam,

# RE: Draft - Work Health and Safety (Mines) Regulation 2014 under the Work Health and Safety (Mines) Act 2013

On behalf of the Mine Managers' Association of Australia (the Association) we thank you for the opportunity to respond to your Consultation Document. We have consulted widely with the membership of the Association and the views expressed represent, to the best of our knowledge, the majority of the membership.

The Mine Managers' Association of Australia had its genesis as the "Colliery Managers' Association, Northern District, NSW". This Association was formed in Maitland on 31 January 1942. Since those beginnings the Association has grown considerably to a membership covering mine management personnel in all States of Australia and New Zealand, with the largest membership in New South Wales. Currently our membership stands at just over 400.

Our membership covers not only practising mine managers but also general managers, site senior executives, corporate officials, mines inspectors, consultants and educators. We have members at every coal mine in New South Wales and are, in our opinion, somewhat influential in the implementation and observance of mining legislation. We consider the Association to be well placed to provide a learned and considered view of the proposed legislative changes contained in the "Draft Regulation"

### The objectives of our Association are:

- To improve health and safety in the workplace,
- To maintain member's competencies and continue their professional development,
- To advance the interests, and raise the status of members,
- To provide support to members in employment related issues, and
- To contribute to sustainable mine development and industry growth.

### The Association achieves its objects by:

- Developing policies to support the objects of the Association, the conduct and professional development of members,
- Organising technical seminars to advance the art and science of modern mine management theory and practice and the knowledge of members,

- Providing representation on industry committees formed to frame and/or review legislation, policy or advice,
- Encouraging the use of risk management and other contemporary safety techniques to identify and control risks in the mining industry,
- Organising regular meetings or communication sessions to provide members the opportunity to effectively network with their peers,
- Promoting industry standardisation of competencies, maintenance of competencies and legislative requirements throughout Australia,
- Promoting adequate returns on mining investment as the means of causing industry growth, optimising resource recovery and providing employment opportunities, and
- Promoting sound environmental management, and sustainable development.

As an Association representing the interests of senior statutory mining officials; holders of mine manager's certificates of competency and to a lesser degree, undermanager's certificates, the main body of our considered response is directed to competency and the maintenance thereof. As a secondary assessment we also raise concerns of members who are of the opinion that certain requirements of the regulation will either require significant financial burden without delivering a commensurate improvement in safety outcomes, or will be either difficult or impossible technically to achieve compliance.

## Site Senior Executive and Mining Engineering Manager

The "statutory" position of mine manager came in to being in the late 19<sup>th</sup> century in the United Kingdom and did so after numerous fatal incidents and major mine disasters caused the government of the day to consider the safe and effective management of mines and particularly underground coal mines. Over the years in Australia, which followed closely in the early days of the 20<sup>th</sup> Century United Kingdom mining law, the position of a statutory mine manager was introduced as were other statutory positions currently required in New South Wales.

In nearly every commission of inquiry into major mine disasters in this country and sadly there have been far too many of them, the recommendations handed down emphasise the requirement of competency in dealing with the significant hazards associated with mining and that is particularly so with underground coal mining. Therefore, it is with some concern that in the proposed legislation changes we find no reference to the Site Senior Executive (SSE) having to hold competency in mining related subject matter, particularly those applying to principal hazards.

In Queensland the SSE is not required to hold mining related competencies and if the SSE does not hold a mine manager's certificate of competency at an underground coal mine, that state requires that an underground mine manager be appointed who must hold a mine manager's certificate of competency and is obligated to "control and manage the mine". We can find no similar requirement in the Regulation under review and that is a matter of grave concern.

Whilst we are strongly of the view that the most senior company official on a mine site should be a statutorily certified mine manager we would at the very least expect a similar requirement to Queensland. It is incongruous to our Association that you would appoint a person to manage an operation if that person does not understand the process to be managed and that is particularly true of the principal hazards that may prevail at a particular operation. History has clearly demonstrated in high hazard industries, not just mining, that the person responsible for the operation should be competent in the management of that operation.

We have often heard the argument that by having to appoint a person just because that individual holds a certificate of competence that one is reducing the quality of candidate available. We find

that a specious contention. The truth is that operators are failing to train persons in the broad knowledge required to successfully manage a mining operation. Surely in the amalgam that constitutes an effective manager of a mine that the requirement to understand and effectively apply mining legislation and to comprehend and control the hazards associated with mining would figure, if not greater, then be at least equal to the ability to understand the macro and micro economics of the business, capital and operational expenditure, leadership, environmental compliance and the myriad of other matters that are required to be controlled and managed.

The costs of failing to manage the hazards at a mine are staggering. A single fatality is estimated to cost over \$3 million and as in the case of say a Pike River or the two Mouras and Box Flat, the loss of a significant number of lives and the operation itself. The human toll in those events is horrific for all involved, there are no winners in such a situation - all losers; those involved, their families and friends including the shareholders of the operators. Also losers are the state and the public who may well lose a valuable resource and the royalties associated therewith.

Our firm recommendation is that the most senior employee of the PCBU (operator) on a mine site should have a recognised mining competency and that competency should be a mine manager's certificate for the class of mine being managed.

## **Practising Certificates**

We applaud the introduction of practising certificates. This is a significant part of the tenet of the Association, increasing the knowledge and understanding of mine managers and maintaining their competency.

This was also a major recommendation of the Moura 2 Mining Warden's Inquiry:

"it is recommended that that certificates not be granted for life and that a system needs to be developed and put into effect as soon as practicable that requires certificate holders to demonstrate their fitness to retain the certificate on a regular basis, at intervals of not less than three years and not more than five years. The process should aim to ensure that certificate holders maintain a sound knowledge base on, and keep abreast of, technical developments in coal mining and most particularly those relevant to coal mine safety".

The Association introduced a system of CPD (Continuing Professional Development) for the benefit of members in January 2004 as we recognised the requirement to ensure our members maintain the highest levels of competence. Members intending to practice are obliged to register for CPD and comply with the code of practice and other requirements of the scheme. An annual technical seminar is organised over two days, in addition to full day technical sessions associated with our two general meetings each year, to provide opportunities for members to accumulate approved CPD hours. Events and courses run by other organisations are vetted and approved where suitable for additional CPD hours.

The breadth of the scheme was expanded in 2013 which now covers two seminars in Central Queensland. These are organised to coincide with QRC (Queensland Resources Council) SSE meetings as CPD Participants do not have to be members of the Association to enrol in the CPD scheme.

We would be very interested in making a presentation to the Competence Board to allow them to consider what we believe is a unique program to enhance the competence of participants enrolled in the scheme. The subject matter is heavily focused on statutory competence and practical health and safety outcomes presented or vetted by experienced mine management or relevant personnel.

There are some questions where we would appreciate clarification;

- How will this requirement affect the Mutual Recognition Act? If another state does not require practising certificates (PC) how will NSW be able to prevent others from practising in this state if they have never held a PC?
- How will persons not practising in the particular role for which a PC is required be able to maintain their practising certificate?
- Given the variation in legislative requirements in each of the states, how will one be "tested" on competence and the maintenance thereof for each of the separate states, particularly if one transfers from state to state?

## Other matters causing concern or requiring qualification

- 3 Definitions
  - Contractor A number of people and organisations have cause to come onto a mine site and may be caught up in this definition of Contractors. Is this intended? Exemptions to consider are:
    - Geotechnical engineers, ventilation engineers etc. who visit to offer advice and are accompanied by a mining official.
    - Transport contractors who deliver materials to the mine store.
    - Power supply authorities and telecommunication companies.

The ability for smaller contractors to comply with the requirements is questionable.

- Explosion-protected a more accurate definition, in our opinion, would be, "not capable of propogating an explosion of methane air mixture outside the enclosure". Explosion protected equipment is designed to withstand the force of an internal explosion. The definition as it stands could refer to other classes of protected equipment.
- 9(5)(a) does this apply to the various forms of job safety analysis carried out by employees prior to commencing work?
- 16(1) we are of the view that if a SMS (Safety Management System) has been reviewed following the due process and a need for change has been identified, the change should be implemented immediately and then respective authorities notified. Not as proposed as giving notice of the proposed change to the regulator first as this in essence defeats the purpose of addressing a safety or health issue in an efficacious manner.
- 27 This requirement is, again in our opinion too prescriptive, and would be difficult to achieve as written. Shift arrangements in mines vary from change on the surface to change over on the job with varying shift overlap times. Travelling distance to the various parts of the mine also differs.

It would place an obligation on the supervisor to seek information by telephone from a central location and prevent that supervisor exercising control of work sites at critical times of the shift operation, e.g. start and finish of shift.

Is the supervisor of each outgoing shift the undermanager or deputy in an underground coal mine?

- 31(1) Seismic activity is an outcome of rock fracturing and, theoretically, is ever-present in all forms of mining. At very low energy release levels in underground coal mining, it is referred to as micro-seismic activity. It only becomes a concern in underground coal mining when it is of a sufficient magnitude to present a risk to health and safety, when it is then referred to as a seismic event (or bump, or pressure burst, or strain burst, or rock burst). Since micro-seismic activity is a form of seismic activity, thresholds may need to be specified for what constitutes 'seismicity'
- 44 & 45 we are firmly of the belief that these two clauses are impractical to achieve unless a specific testing regime is specified. Certain standards that would guarantee detection of illicit substances viz; urine testing is currently subject to dispute through Fair Work Australia and we know of no current standards that apply to the monitoring of fatigue.

- 47(2) it is considered another clause should be added, such that if the workings cannot be inspected, as has happened in older mines, that exploratory boreholes or other methods be used to ensure it is safe before connecting the workings.
- 55(1) we suggest that this clause should refer to accessible places where people work or travel. In other areas we respectfully suggest that the aim is inertisation.
- 60(3) This requirement would be difficult to achieve in cut-throughs where air will only flow at that rate if restrictions or hurdles are placed in headings. This would significantly increase split resistance and reduce total air flow.

Similarly, in standing places in multiple heading developments or place change districts, it would decrease the air quantity available for ventilation of places where the bolter and miner are operating.

The safeguards are already there in legislation governing air purity and airborne dust, this requirement does little or nothing to enhance the dilution of noxious or flammable gasses nor increase the comfort of persons.

• 63(3)(e) - This appears to us quite onerous where there are arrangements in place to deal with a stoppage of the main fan. It should be risk based and dependent upon the circumstances of gas make etc.

Do alternate arrangements require full fan performance?

- 66(1)(h) the meaning of "ensure that stone dust is applied to each roadway at least once per day" is ambiguous and could be taken to mean all roadways in the mine and we assume that is not the intent. In addition, some operations that use place changing systems of mining use a risk based approach to apply stonedust once each pillar cycle. At present, this is achieved through exemption. It would be desirable to enable some flexibility in the legislation for such a risk based approach.
- 69(2)(c) in some older mines, particularly those with shaft winders, the requirement to retrofit automatic remote sealing doors could prove prohibitively costly and could mean the closure of some marginal operations if this became a requirement.
- 69(2)(d)-(h) practical experience has shown that the most effective siting of an inertisation device (particularly a GAG engine) may well not be the airlock at the entrance to a mine, indeed in older mines with extensive workings it may well be the most ineffective place to site the inertisation equipment. We believe that an evaluation should be conducted by computer programme, such as "Ventsim" to determine the most efficacious entrance or connection and it is at that point the inertisation equipment locator should be installed. Further, recent technical developments suggest that smaller GAG type engines with adjusted pressures and flows to match the conditions maybe better suit to be connected to the area of concern rather than a mine wide application.

Other inertisation devices such as the Floxyl and Nitrogen inertisation plant are lower capacity but higher pressure low temperature devices that require only boreholes to access parts of the mine.

Arrangements for rapid sealing of a mine are necessary. Airlocks can be built afterwards if there is a need. Provision for testing of the connection point for the inertisation unit, which may be a pipeline and valve, seems unnecessary.

It is difficult to see the need for an airlock capable of admitting large mobile plant to a sealed area especially via a shaft.

These provisions should be less prescriptive and allow options best suited to the circumstances.

- 71 The requirement to prevent intake air from travelling across the face of a permanent seal or installing 140kPa seals could prove either impossible to comply with at some operations and certainly would be prohibitively expensive at others. Whilst we agree this is best practice the truth is that many operations were never laid out to meet this requirement and we are of the opinion that whilst there should be that intent going forward that for this regulation to be retrospective it could well see the closure of a number of operations. These provisions are overly onerous and costly for mines that have extensive areas of old workings on either side of main access headings. This in our view should be risked based and not prescriptive.
- 72(2)(d) provisions to prevent power being incapable of restoration before ventilation is corrected suggests complex ventilation monitoring, which in our view is unreliable. Is this the intent or is manual interruption to power with appropriate interlocks acceptable?
- 85(2)(b)(ii) we consider this requires further clarification in the case of open cuts. A production area should be an area involved in the extraction of coal and not "any part of a mine within 100 metres of the site"
- 85(5)(a)(iii) it is our opinion that the frequency of inspection is too prescriptive and that a risk based approach is more appropriate. This would permit the deputy or OCE to focus their attention on higher risk activity and not just mandatory time based requirements on much lower risk activity.
- 95(4)(c) the very large older mines, particularly in the Southern District would experience significant difficulty in meeting the requirements of this clause.
- 96(6)(e) the ability to rehydrate in irrespirable atmosphere is meritorious however, we know of no current arrangement that would permit retro fitment to current Dräeger CABA units. Therefore, is there a timeframe to permit retro fitment or acquire replacement masks.
- 103 We suggest the wording read "the relevent parts of the safety management system.."
- 104 again should this read "the relevant parts of the safety management system"
- 162(1) we are extremely disappointed that the Association are not invited to nominate a representative to the Board given the nature of the Board and the technical competencies to be considered.
- 177(a)(viii) this requires qualification (viz: *unplanned collapse*) otherwise, theoretically, nearly all forms of secondary extraction in underground coal mining would be classified as dangerous occurrences.
- 177(a)(xvii) similarly, since surface cracking and deformation is invariably associated with secondary extraction methods in underground coal mining in Australia, all forms of secondary extraction in coal mining could be considered to constitute dangerous occurrences under this clause.

### General

Many who have read the Draft Regulation have difficulty in having to open other documents to cross reference with the WHS Act and WHS (Mines) Act. Whilst we are aware the volume of the Regulation would be markedly increased, is it possible to have the "references" included in the Regulation to ameliorate the utilisation of the Regulation?

Whilst the above comments represent the key issues for our Association, we encourage you to carefully review submissions from companies on technical matters, as many of our members have also contributed to these submissions. Given the extensive and detailed prescription contained within these draft regulations, a workable legislative framework is essential for a safe and sustainable mining industry in NSW.

Should you wish to clarify any matter contained in this submission, please contact the association Secretary on 0419 545 767.

Yours faithfully

Gavin Taylor President MMAA