

# Submission:

Board of Examiners Certificate of Competency Proposal Nov 2014



17 Nov 2014

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**SUBMISSION OF  
THE NEW ZEALAND MINING INDUSTRY  
SAFETY COUNCIL (MinEx)  
TO WORKSAFE  
ON**

**Consultation on requirements of holders of Certificate of  
Competence under the Health & Safety in Employment (Mining  
Operations and Quarrying Operations) Regulations 2013**

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**Organisation: MinEx**

**Position: CEO**

## INTRODUCTION

MinEx<sup>1</sup> welcomes the opportunity to submit on the Board of Examiners (BoE) proposal released 28 October 2014. We note the submission deadline of 13 November 2014 and the agreement to an extension to 3pm, Monday 17 November.

## EXECUTIVE SUMMARY

MinEx notes the very short time frame that industry has had to respond to the BoE proposals but understands the drivers behind this.

In order to develop this submission MinEx canvassed all of its members and also asked the AQA, the NZ Branch of the AusIMM, Minerals West Coast and the NZ Branch of the IOQ to do the same. The individual companies that submitted to MinEx are listed in the body of the report.

MinEx notes that the BoE unit standards selected are the proposed reviewed and amended units developed by the Extractive Targeted Review of Qualifications (Extractives TRoQ). The TRoQ has not yet completed its work with the Governance Group to meet 26 November to make a final decision on the qualifications and unit standards. This will then be put to industry for consultation during December resulting in a final recommendation report to NZQA early in 2015.

The final form of the unit standards will therefore not be known until early 2015 and it is possible that changes in unit standard content may conflict with BoE requirements. This will need to be dealt with as and if it occurs.

For the most part, MinEx supports the proposed makeup of each of the CoCs with the exception of:

- The requirement for all 1<sup>st</sup> Class and A-grade Managers to complete 23457 - *Establish the risk management system at an extractive site* commonly referred to as G3. This unit does not give people the knowledge to lead a risk assessment workshop. It is directed at the SSE responsibility and should only be required of the SSE while the A and B-grade Managers should complete 26856 - *Carry out the risk management processes at an extractive site* which does give people the knowledge to lead a risk assessment workshop;
- The requirement for all 1<sup>st</sup> Class and A-grade Managers to complete 23548 - *Establish and maintain the health and safety management system at an extractive site*. This unit is directed at the SSE responsibility and should only be required of the SSE;
- Not requiring Tunnel CoCs to complete 21281 - *Interpret and test for gases in an underground extraction site*. Both CoC grades should complete this unit;
- Not extending CIMs training to the SSE and the two Superintendent roles. All should complete these two low level units;
- A number of minor matters relating to the Mine Surveyor, ventilation unit 17705, mathematics unit 17691, and some minor errors in the Gazette notice, all of which are noted

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<sup>1</sup> MinEx is the national Health & Safety Council for the New Zealand quarry, coal and minerals industry. Its main purpose is to help industry to improve its health and safety performance, and to provide centralised industry representation on matters relating to health and safety.

in the body of the submission.

The requirement for the new competencies arising from the Royal Commission recommendations will give rise to some issues with older B-grade CoC holders who were granted their CoCs via an oral examination with no unit standards required. Consideration will need to be given as to how these people are going to be assessed by trainers when completing these new competencies. This is a process that MITO and the Trainer/Assessors will need to address along with the BoE to ensure appropriate standards are maintained across trainer/assessors.

MinEx has received submissions, and some companies have submitted direct to WorkSafe, on creating a third (C-grade Quarry Manager) CoC. MinEx does not support this concept and also notes that this is a regulation issue and regulation change is outside the scope of the current consultation process.

There is however another way to address the problem of adequate supervision of small alluvial quarries usually intermittently serviced by mobile plants with fewer than 5 workers. The BoE has available to it, via regulation 35, the CoC - *Manager of a Designated Quarry*. The Gazette notice could be expanded to include basic competencies assessed orally by a Mines Inspector after a request from a Mine Operator to appoint a competent person to the role.

## SUBMISSIONS RECEIVED

The MinEx membership list appears in Attachment I and all members were canvassed for their views. In addition, the NZ Branch of the IOQ, AQA, the NZ Branch of the AusIMM and Minerals West Coast were asked to canvas their members for their views. Specific submissions were received from:

- OceanaGold;
- Doug Hood Ltd;
- Isaacs Construction; and,
- Taylor Construction co Ltd.

MinEx received copies of submissions from the following after they submitted direct to WorkSafe:

- Bathurst Resources;
- Road Metals Ltd; and,
- The NZ Branch of the IOQ.

## DETAILED SUBMISSION

### Gazette notice error

The Gazette notice in the proposal contains an error repeated throughout the notice when the unit standard 23457 is referred to. This unit standard is *Demonstrate area control surveillance for air traffic services on site*. We assume in our submission that the actual unit standard is 23547 *Establish the risk management system at an extractive site*.

Similarly, in places unit 23548 is incorrectly stated as 23458.

### CoC unit standards

Attachment II is a matrix of unit standards against CoCs which we have developed from the Gazette notice in order to see the progression from lower to higher levels CoCs. We suggest that this format is added to the Gazette notice to make it easier to understand the proposed makeup of the CoCs.

### Extractive qualification review

The BoE process has been underway while the Extractive qualifications are under review (Extractive TRoQ). The BoE has had to make decisions based on the unit standards in front of it – the current set of unit standards.

There are a number of unit standards that will change as a result of the Extractive TRoQ that will have an effect on units selected by the BoE as required for the CoCs. In addition some qualifications have had unit standards added where the TRoQ considered material was missing from the existing qualifications.

The qualifications that mirror the CoC competency requirements are proposed for deletion. If the qualification without the explosives units disappears then there is no vehicle (qualification) in the future to have a B-grade quarry CoC endorsed *Without Explosives*.

We deal with any of these potential issues below.

## SSE

We agree with the unit standards selected against this role but question why the SSE is not also completing 17279 and 22445 which are the two CIMs units. The *CoC consultation notice* issued by the BoE states:

*All CoC holders will need to achieve unit standards on: risk management; CIMS; health and safety requirements and human factors, with the exception of a Mine Surveyor CoC. Site Senior Executives are not required to achieve CIMS unit standard.*

It would be useful for the SSE to have some basic knowledge of CIMs in the event of an emergency at a site they are responsible for. 17279 is a level 2 unit worth 2 credits while 22445 is a level 4 unit worth 4 credits so the extra work is not onerous.

## 1<sup>st</sup> Class Manager, A-grade Opencast Coal Manager, A-grade Quarry Manager

We agree with all of the units standards assigned to these CoCs with the exception of the way the risk management units 23547 and 26856 and the safety management system unit 23548 have been assigned to the different CoCs:

- 23547 is *Establish the risk management system at an extractive site* which is commonly referred to as G3;
- 26856 is *Carry out the risk management processes at an extractive site* which is commonly referred to as G2; and,
- 23548 is *Establish and maintain the health and safety management system at an extractive site* and is closely aligned to 26856.

In MinEx's view the SSE should complete 23547 (G3) and 23548 while the remaining CoCs should complete 26856(G2).

## Risk management

The primary duty of the SSE is set out in Regulations 53, 54 and 55 below:

### **53 Site senior executive must develop, implement, and maintain health and safety management system**

- (1) *The site senior executive must develop, implement, and maintain a health and safety management system that complies with these regulations.*

### **54 Risk appraisal**

*The site senior executive must ensure that—*

- (a) *A process is in place to systematically identify the hazards to mine workers at the mining operation; and*
- (b) *The process is used when developing, implementing, and maintaining the health and safety management system, including, without limitation, each time the health and safety management system or any aspect of it is reviewed.*

### **55 Risk assessment**

- (1) *The site senior executive must ensure that—*

- (a) *A process is in place to assess the inherent risk of harm to mine workers from identified hazards at the mining operation and to identify the controls*

- required to manage that risk; and*
- (b) The process is used when developing, implementing, and maintaining the health and safety management system, including, without limitation, each time the health and safety management system or any aspect of it is reviewed.*
  - (2) Nothing in this regulation limits any specific provision in Parts 3 and 4 relating to the assessment of risks.*

These duties require the SSE to have knowledge about safety management systems and the application of risk management in a safety management system. Unit standards 23457 and 23548 are the unit standards that cover the knowledge requirements of the regulations above. The SSE's role is about establishing, maintaining, auditing and reviewing the safety management system.

In contrast, the 1<sup>st</sup> Class and A-grade managers' roles are one of implementing the safety management system. A key aspect of implementation will be having the skills and knowledge to lead risk assessment workshops. Unit 23457 does not teach this skill while 26856 does.

It would be more useful for the 1<sup>st</sup> Class and A-grade managers to complete 26856 rather than 23457 since the role that 23457 covers is that of the SSE.

### Safety management system

Unit standard 23548 deals with the establishment of a health and safety management system. It is a level 7 unit worth 20 credits and currently is not included in the current requirements for the two 1<sup>st</sup> Class Mine Manager CoCs. The purpose statement for the unit states:

*This unit standard covers the establishment and management of the Occupational Health and Safety management system in a mining organisation. Its application is to ensure the workplace is, as far as is reasonably achievable, safe and without risks to the health of employees.*

Unit standard 23457 deals with the establishment of risk management systems within the safety management system in a mine. The purpose statement for the unit states:

*This unit standard covers the actions taken to lead the development of, manage and coordinate the risk management system for a mine.*

Examination of the outcomes statements in 23548 indicates significant overlap with 26856, namely:

- **Outcome 3** - Establish and maintain procedures for identifying Occupational Health and Safety hazards;
- **Outcome 4** - Establish and maintain procedures for assessing Occupational Health and Safety risk; and,
- **Outcome 5** - Establish and maintain procedures for treating Occupational Health and Safety risks.

Clearly 23458 covers risk management matters also covered by 23457. Three issues arise with this:

1. If 23457 is considered more aligned with the SSE role then, because 23548 deals with the broader issue of the safety management system that incorporates the matters covered in 23457, both units should be restricted to the SSE role alone;

2. 23548 at level 7 is likely to be outside the capability of most A-grade surface CoC applicants with this CoC being at level 5; and,
3. As it is already proposed that the SSE complete both units (23457 and 23548) then each unit needs to be reviewed as part of the TRoQ to eliminate any overlap.

## Other issues

We also note what is likely to be an error in that the A-grade Quarry Manager is being asked to complete both 23547 and 26856 whereas the A-grade Opencast Coal Manager is being asked to complete only 26856. Both, in our opinion, should do only 26856.

There also appears to be a further error against unit standard 16686 *Conduct an incident investigation at an extraction site*. All surface CoCs include this unit except the A-grade Opencast Coal Mine Manager who should also complete this unit.

Under the proposal, and allowing for correcting the error noted immediately above, A-grade surface CoC holders must complete 26 units compared with the 15 for B-grade CoC holders. These statistics are important as, anecdotally, there is a feeling that the B-grade CoCs contain too much material and are too close to the A-grade CoCs.

This is not the case with the B-grade CoCs completing about 58% of the number of units completed by the A-grade applicants.

## B-grade Opencast Coal Mine Managers, B-grade Quarry Managers, Deputies and Underviewers

We agree with the allocation of unit standards made for these CoCs but note that there have been some concerns raised in submissions with the proposal to remove the granting of B-grade CoCs endorsed *Without Explosives*. We deal with this issue under the IOQ submission heading.

## Unit standard 7142

We note that the TRoQ will be proposing for industry consultation in December 2014 that the title of 7142 - *Demonstrate knowledge of the application of regulatory requirements to manage an extractive site* be amended to *Explain the health and safety legislation, and supporting documents, applicable to an extractive site*.

This effectively removes all information on the RMA Act, the HSNO Act and the Crown Minerals Act from the unit standard to make it focused solely around health and safety legislation with the RMA and Crown Minerals Act issues picked up in other units, although the final review on this is yet to be made at a final TRoQ Governance group meeting. The unit was also to be reduced from level 6 to level 5.

We understand that the BoE wishes to retain the existing 7142 and make this a requirement for all CoC holders.

CoCs are about health and safety competency and should not be extended into other areas of knowledge - environmental and mining permits in this case. Having said that, the qualifications will include the non-health and safety related units. Consultation with industry is yet to occur on the issue of deletion of the Mining Administration qualifications.

This was one of the reasons why the TRoQ, composed of industry representatives, split the content of



7142 so that it was focused on:

- Health and safety legislation; and,
- At a level appropriate for the level of the CoC holders.

The main issue that industry had with 7142 was that it contained detail at a higher level than was required for the B-grade CoC holders.

The Governance group of the TRoQ will be meeting in late November and more discussion is required around how legislative matters are dealt with in the various qualifications while ensuring that the BoE requirements are met. It may be that two unit standards are required dealing with health and safety legislation at levels 5 and 6. It may be that it is the training material that is at fault.

Regardless of the issues with the proposed level 5 unit 7142, the BoE proposal to retain the unit as it stands and apply it across all CoCs is seen as imposing too high a standard for level 4 CoCs (B-grades). One size simply does not fit all CoCs.

## **Environmental Units standards 21151, 21155 and 21156**

These units are as follows:

- 21151 Demonstrate knowledge of planning rehabilitation operations of an extractive site;
- 21155 Review consent conditions and demonstrate knowledge of the use of water at surface extraction sites; and,
- 21156 Plan, implement, and describe surface extraction production to minimise environmental impacts.

These units would not seem to fit with a health and safety based CoC so we are not sure why these are being required by the BoE. Given that they are required for the qualifications, it all seems a little academic unless a small number of CoC applicants elect to do only CoC required units. Given that this means they will not receive funding for their qualifications, it is unlikely anyone will go this route.

## **Industry proposed additions to Tunnel CoCs**

Attachment II shows in red the areas where industry considers additional units should be added to the tunnel CoCs consistent with the requirements of the regulations. The gas testing unit 21281 - *Interpret and test for gases in an underground extraction site* should be added to the A and B-grade Tunnel Manager CoCs.

The metalliferous operators have also recommended adding the following units to the same CoCs but these are considered un-necessary for Tunnel operators. This is easily addressed by the metalliferous operators who can require that their staff add the units to their qualification rather than the CoC:

- 15670 - *Demonstrate knowledge of mining methods for metalliferous mines* Level 6, Credit 20;
- 15660 - *Analyse and select mining and transportation plant for a metalliferous underground extractive site* Level 6, Credit 15; and,
- A new UG2, *Demonstrate introductory knowledge of mining methods and equipment for underground operations* Level 3 Credit 3 – a new standard developed by the TRoQ working



group as an introduction to mining methods and equipment.

## **Mathematics Unit standards 17691**

This unit is required for the 1<sup>st</sup> Class Coal Mine Manager, A-grade Tunnel Manager, Deputy and Underviewer but not for the 1<sup>st</sup> Class Mine manager, the A-grade Opencast Mine Manager or the A-grade Quarry Manager which seems to be an anomaly. One would expect a similar level of mathematics was required for all of these CoCs given the other qualification similarities.

The Level 4 qualification (B-grade level) includes the level 2 unit 25880 - *Use simple maths to solve extractives related problems*. The level 5 qualification (A-grade level) includes the level 4 unit 17691 - *Use mathematics to solve problems in an extractive industries workplace*. The level 6 qualification (1<sup>st</sup> Class Managers level) includes a level 5 unit 17692 - *Use advanced mathematics to solve problems in an extractive industries workplace*.

## **Ventilation unit 17705**

This unit is required by the 1<sup>st</sup> Class Coal Mine Manager but not the 1<sup>st</sup> class Mine Manager which is an anomaly. One would expect a similar requirement for ventilation knowledge in all underground managers although it is acknowledged that the need is more critical in underground coal mines.

## **The Mechanical and Electrical superintendents**

We agree with the qualifications requirements expressed in items (3) and (4) of the Gazette notice under each of these roles.

We note that in the *CoC consultation notice* that the two superintendent roles are not named in the section listing those excluded from CIMs units and yet the Gazette notice does not require either role to complete the two CIMs units.

As with the SSE we can see merit in these roles having some understanding of CIMs given that in an emergency they may be called upon to serve on a response team.

## **Supervisors**

These have been based on the B-grade CoCs and so if the Tunnel managers CoCs were revised as suggested above incorporating new units consideration would need to be given to the Supervisor CoC requirements. Regulation 31 sets out the Supervisor minimum competency level as being a B-grade CoC.

## **New competencies**

In addition to the issues raised elsewhere with the new competencies arising out of the Pike Royal Commission recommendations, there is a further issue relating to some older holders of B-grade CoCs where these were gained prior to the introduction of the unit standard system where there was only an oral examination.

The industry has many CoC holders in these categories who will struggle with the academic requirements of the new units. Some concession needs to be made for these people who have the experience and understanding of the required concepts but will not cope with written assessments. What we are suggesting here is a formal oral examination process with the trainer/assessor. The BoE is already proposing oral examinations by BoE panels and this would be additional to that.

## Mine Surveyor

MinEx supports the selection of the units for this CoC and notes that they are simply units dealing with the mining environment within which the surveyor is working.

## Manager at a designated quarry

Other submissions have raised the concept of a third level quarry CoC. MinEx does not support this and it is outside the scope of the current process as it would require a regulation change.

MinEx is however supportive of the concept of using regulation 35 (h) below to achieve a similar purpose. Such a CoC could be granted to alluvial gravel operation supervisors who work under an A-grade CoC holder. The CoC could be granted by an inspector under the following suggested conditions:

- The Mine Operator provides a letter requesting appointment and setting out why the Mine Operator considers the person to be a competent person to manage the designated operation;
- The competent person would need to have a minimum of 5 years relevant operating experience;
- The quarry would need to be one in which explosives were not used;
- One key aspect of competency that the Inspector could assess orally would be the applicant's ability to safely run the designated operation; and,
- Another aspect of competency evaluation could be the applicant's basic understanding of the regulations and best practice guidelines relevant to the designated operation.

### ***Regulation 35 Certificates of competence***

*The following kinds of certificate of competence may be issued under regulation 41:*

- (a) *site senior executive:*
- (b) *first-class mine manager:*
- (c) *first-class coal mine manager:*
- (d) *A-grade opencast coal mine manager:*
- (e) *B-grade opencast coal mine manager:*
- (f) *A-grade quarry manager:*
- (g) *B-grade quarry manager:*
- (h) *a certificate of competence as a manager to manage the quarrying operation specified in the certificate:*
- (i) *A-grade tunnel manager:*
- (j) *B-grade tunnel manager:*
- (k) *coal mine underviewer:*
- (l) *supervisor:*
- (m) *coal mine deputy:*
- (n) *electrical superintendent:*
- (o) *mechanical superintendent:*
- (p) *mine surveyor:*
- (q) *ventilation officer:*
- (r) *winding engine driver.*

## Isaacs Construction submission

MinEx supports items 1 to 3 of this submission. Isaac's submission in their item 4 is similar to the solution offered by MinEx under the heading *Manager at a Designated Quarry*.

## Bathurst Resources submission

This submission was forwarded to MinEx after it was submitted to WorkSafe.

### Risk management training

MinEx does not support Bathurst position on units 23547 and 26856. Bathurst recommends that the A-grade Opencast Coal and Quarry Managers along with both 1<sup>st</sup> class Mine Manager CoC holders should complete both risk management units. MinEx does not support this concept for the reasons given in our submission. The argument that the SSE will not always be present at the mine site is irrelevant. The SSE roles is about establishing and maintaining the safety management system, not implementing it.

### 7142 legislation training

MinEx does not support separate units for 1<sup>st</sup> Class Managers and others. The regulations are the regulations and it would be difficult to see how you could create lower level legislation training other than as already proposed by the TRoQ.

### Environmental units

We have already submitted that these are not required for the CoCs while noting they are in the qualifications.

### Mine Surveyor

MinEx does not support the creation of two categories of Mine Surveyor as suggested by Bathurst. Most Mine Surveyors are called upon to survey both underground and opencast mines and the inevitable result will be a preference for the suggested Underground/Opencast combined.

MinEx also questions why section 4(a) relating to 6 months experience in surface surveying not being required for the CoC.

MinEx supports retention of unit 17696 *Demonstrate knowledge and ability to work at a surface extraction site* for Mine Surveyors as it is a companion unit to 7146 - *Demonstrate basic knowledge and ability required to work in an underground mine*.

MinEx does not support deleting 7142 for Mine Surveyors. Most of this unit deals with the mining regulations and Mine Surveyors need to have this knowledge. The TRoQ is proposing shifting the environmental content of 7142 to other units.

### Worker health training

MinEx supports Bathurst stance on worker health but notes that companies will be required to offer training in their Worker Health Principal Control Plan.

### Trainers and assessors

The recommendation regarding trainers is one for MITO and not the BoE.

### Gas testing

MinEx has submitted that all underground and tunnel CoCs should complete 21281.

## IOQ Submission

### New unit standards

IOQ has submitted the following on the new unit standards:

*... there are some of the new unit standards (US) that are at the same level for both the "A" Grade and "B" grade CoCs. The IOQ NZ (Inc.) believes that there should be a differential between some of these new US for the two different CoC levels, to properly reflect the CoC grade (see details in specific comments).*

The table below shows what the TRoQ is proposing with the new units and noting that the A-grade CoCs are level 5 while the B-grade CoCs are level 4.

Unit	Description	Proposed Level	Proposed Credits	Comment
<b><u>7142</u></b>	Demonstrate knowledge of the application of regulatory requirements to manage an extractive site	<b><u>5</u></b>	10	<b><u>All CoCs</u></b>
16810	Develop a workplace emergency management plan	6	10	SSE
<b><u>17279</u></b>	Demonstrate knowledge of the coordinated incident management system(CIMS)	<b><u>2</u></b>	2	<b><u>A &amp; B</u></b>
<b><u>22445</u></b>	Describe the roles and functions of a CIMS Incident Management Team	<b><u>4</u></b>	4	<b><u>A &amp; B</u></b>
23547	Establish the risk management system at an extractive site	7	20	Currently A but we submit neither A nor B
23458	Establish and maintain the health and safety management system at an extractive site	7	20	Currently A but we submit neither A nor B
<b><u>26855</u></b>	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site	<b><u>5</u></b>	10	<b><u>A &amp; B</u></b>
<b><u>26856</u></b>	Carry out the risk management processes at an extractive site	<b><u>4</u></b>	10	Currently B but we propose <b><u>A &amp; B</u></b>

In the table above the units required of the A&B grade CoCs are highlighted in bold and underlined. Two units are at level 5 and the rest below level 5 and so there would appear to be no issues for the A and B-grade CoC holders relating to unit level. The TRoQ recommended changes to 7142 are designed to address the perceived issues with this unit for B-grade applicants although the issue here may well be with the training material rather than with the unit standard.

### Explosives

Currently the Gazetted competency requirements, through the Mining Administration qualifications, allow the level 4 qualification to be endorsed *With* or *Without Explosives*. CoC holders with qualifications endorsed *Without Explosives* were permitted to manage quarries that did not use explosives so long as they employed 4 or fewer workers. The current BoE proposal has all CoC

holders completing:

- 17694 - *Demonstrate knowledge of explosives and their properties*, level 3, 10 credits; and,
- 21152 - *Demonstrate and apply knowledge of storing explosives for use*, level 4, 10 credits.

This has arisen because that is the position that the TRoQ came to. Companies wanted well rounded individuals with some basic mining knowledge and not just the health and safety related knowledge. These units are well within the capability of B-grade applicants.

The TRoQ is proposing removing the Mining Administration qualifications and requiring that all remaining qualifications include these basic explosives unit standards. The TRoQ proposal is yet to go out for industry consultation.

The BoE proposal has resulted in submissions from one company and the IOQ to retain the status quo. In other words allow for the qualifications to be issued endorsed with or without explosives. The qualifications are not a matter for the BoE. It may be that the TRoQ consultation process will result in the same outcome as the BoE proposal. For the sake of good and proper consultation we feel that this issue of the explosives competencies be held over until the TRoQ process is completed.

There is a further issue with the proposal relating to explosives in that the draft Gazette notice does not state what existing CoC holders endorsed *Without Explosives* will be required to do. We assume that they may be required to complete the unit standards prior to seeking renewal of their CoC if it is time limited. What will be required of life-time CoCs if the endorsement is to be removed?

Having addressed the IOQ proposal relating to the explosive endorsements above, the status quo can be retained by the use of the CoC - *Manager of a Designated Quarry*, as addressed elsewhere in this submission.

### **Experience requirements for A-grade and B-grade Quarry Managers**

The IOQ has submitted that no underground experience is relevant to a quarry CoC but offers no justification for this statement. MinEx do not support this aspect of the IOQ submission.

From a safety perspective, the underground experience in a higher risk production environment is valuable experience relevant to a quarry operation. The only real skill/knowledge they may not have picked up entirely is equipment related and the required Gazette experience in opencast mines or quarries is, in our opinion, sufficient to balance this.

### **1st Class Mine Manager Experience**

The IOQ submission considers that there is no need to require this CoC holder to gain additional experience in an opencast mine or quarry because they understand that the 1st Class CoC holder must have 2 years experience in an opencast mine and so the extra requirement is redundant.

This is not correct. The Gazette notice does not require either category of 1<sup>st</sup> Class Mine Manager to complete time in an opencast mine.

We also do not understand why this submission is made as it appears to contradict the submission above.

### **Log book requirement**

The IOQ recommends that the need for the logbook be included in the gazette notice and we agree.

### **Taylor Construction submission**

# Submission:



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Their submission is attached and we request that it be considered by WorkSafe.

Parts of the submission relate to the Extractive TRoQ and should be made during the industry consultation on the review. They are outside the scope of the BoE proposals.

There is a recommendation that unit standard 16686 is replaced with 17601 and 26856 be replaced with 17602. The units selected are Extractives units which is why they have been selected. We will be asking the TRoQ to assess the MITO units against those suggested by Taylors which belong to *Domain - Occupational Health and Safety Practice* but these seem to be generic units while those selected by the BoE are from the Extractives Domain.

There is also a recommendation that the two CIMs units are not required for Quarry Managers. MinEx does not support this recommendation and notes that the CIMs units were a Pike River Royal Commission recommendation accepted by the Government.

There is a recommendation that unit 17602 should replace 26855 which misses the point with 26855 which is a human factors unit while 17602 is a unit standard dealing with applying hazard identification and risk assessment procedures in the workplace. The human factors unit 26855 was a Royal Commission recommendation and MinEx supports its inclusion in all CoCs.

The recommendation concerning unit 8902 is one that will be passed on to the TRoQ being outside the scope of the BoE proposal.

The recommendation to add a third CoC level - C Grade operator, would seem to be catered for by the Safe Mines : Safe Workers to introduce a Mine Worker competency and we understand WorkSafe still have this in mind.

## ATTACHMENT I – MINEX MEMBERSHIP

This submission is made on behalf of the individual companies listed in Attachment III and the following list of MinEx members.

A B Equipment Ltd	McGregor Concrete Ltd
A B Lime	Mike Edridge Contracting Ltd
Atlas Quarries Ltd	MITO
Bellingham Quarries Ltd	Monovale Sand Quarry Ltd
Birchfield Coal Mines Limited	New Creek Mining
Blackhead Quarries Ltd	Newmont
Bradken Resources Pty Ltd	NZ Steel
Brightwater Engineering	Oamaru Shingle Supplies Ltd
Buller Coal Limited	OceanaGold
Burkes Creek Coal	ORICA Mining Services
Byfords Construction Co Ltd	Origin Quarries Ltd
Christchurch Ready Mix Concrete Ltd	Perry Resources (2008) Ltd
CRL Energy Ltd	Porritt Sand
Digger School	Porter Group
Downer Edi Works Ltd	Prenters Aggregates Ltd
Envirofert Ltd	Pukepoto Quarries Ltd
First Break Mining & Construction Ltd	Quality Roding & Services (Wairoa) Ltd
Francis Mining Co Ltd	Rangitikei Aggregates Ltd
Fulton Hogan Ltd	Ravensdown Fertiliser Co-op
Glencol Energy Ltd	RealSteel
Goughs	RedBull
Green Vision Recycling Ltd	River Run Products Ltd
Groeneveld New Zealand Ltd	Roa Mining Co Ltd
H G Leach & Co Ltd	Road Metals Co Ltd
Harliwich Holdings Ltd	Roding New Zealand
Hauraki District Council	Rock Products Ltd
Higgins Aggregates Ltd	Rocktec Ltd
Higgins Contractors Wairarapa	Sandvik Mining & Construction Ltd
Holcim (New Zealand) Ltd	Selwyn Quarries Ltd
Holcim (NZ) Ltd Kiwi Point Quarry	Sibelco NZ Ltd
Horokiwi Quarries Ltd	Solid Energy NZ Ltd
Huntly Quarries Ltd	Southern Aggregates Ltd
Infracon Aggregates	Stevenson Resources Ltd
J Swap Contractors Ltd	Stevensons Mining
K B Contracting & Quarries Ltd	Taupo Scoria Ltd
Kai Point Coal Co Ltd	Taylor Coal Ltd
Kaipara Excavators	Taylor's Contracting Co Ltd
Kenroll Industrial Coal (2011) Ltd	The Isaac Construction Co Ltd
Lake Road Quarries	Total Lubricants/Oil Imports
Liebherr Australia Pty Ltd	Transdiesel Ltd



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Longburn Shingle Company Ltd  
Materials Processing Ltd  
Maungaraki Lime Ltd  
McCallum Bros Ltd

Tyreline Distributors Ltd  
Victory Lime 2000 Ltd  
Waiotahi Contractors Ltd  
WaterCare Laboratory Services  
Wharehine Ltd  
Winstone Aggregates

## ATTACHMENT II – PROPOSED UNIT STANDARDS AGAINST EACH CoC

Key:

Gaps in CoC content	BoE proposed units
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Unit Standards	Description	SSE	1 <sup>st</sup> Class Mine Mgr	1 <sup>st</sup> Class Coal Mine Mgr	A-Grade Opencast Coal Mine Mgr	B-Grade Opencast Coal Mine Mgr	A-Grade Quarry Mgr	B-Grade Quarry Mgr	A-grade Tunnel Mgr	B-grade Tunnel Mgr	Coal Mine Deputy	Coal Mine Underviewer	Mine Surveyor	Ventilation Officer	Winding Engine Driver	Mechanical Superintendent	Electrical Superintendent	Supervisor Underground Metalliferous Mine	Supervisor Tunnelling Operation	Supervisor Opencast Coal Mine	Supervisor Opencast Metalliferous Mine
<b>New unit standards from Safe Mines : Safe Workers</b>																					
7142	Demonstrate knowledge of the application of regulatory requirements to manage an extractive site																				
16810	Develop a workplace emergency management plan																				
17279	Demonstrate knowledge of the coordinated incident management system(CIMS)																				
22445	Describe the roles and functions of a CIMS Incident Management Team																				
23547(G3)	Establish the risk management system at an extractive site																				
23548	Establish and maintain the health and safety management system at an extractive site																				
26855	Analyse human factors present in workplace practices to determine how they contribute to incidents at an extractive site																				
26856(G2)	Carry out the risk management processes at an extractive site																				
<b>Current unit standards</b>																					
2401	Safely shut down and isolate machines and equipment																				

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Unit Standards	Description	SSE	1 <sup>st</sup> Class Mine Mgr	1 <sup>st</sup> Class Coal Mine Mgr	A-Grade Opencast Coal Mine Mgr	B-Grade Opencast Coal Mine Mgr	A-Grade Quarry Mgr	B-Grade Quarry Mgr	A-grade Tunnel Mgr	B-grade Tunnel Mgr	Coal Mine Deputy	Coal Mine Underviewer	Mine Surveyor	Ventilation Officer	Winding Engine Driver	Mechanical Superintendent	Electrical Superintendent	Supervisor Underground Metalliferous Mine	Supervisor Tunnelling Operation	Supervisor Opencast Coal Mine	Supervisor Opencast Metalliferous Mine
3271	Suppress fire with hand extinguishers and fixed hose reels																				
7143	Inspect and report on extractive site and operations																				
7144	Review and implement plans for ongoing operations of an extractive site																				
7145	Design, establish and maintain effective ventilation systems for an underground mine																				
7146	Demonstrate basic knowledge and ability required to work in an underground mine																				
7164	Describe and operate a winding engine in an underground extractive site																				
8899	Plan storage for product processed at extractives sites																				
8902	Prepare and implement safety plans for surface face and benching operations																				
8905	Construct and maintain access roads within surface extraction sites																				
8909	Maintain working surfaces at surface extraction sites																				
8922	Conduct safety checks prior to equipment usage at an extractive site																				
15658	Select excavation and transportation plant for surface extraction																				

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Unit Standards	Description	SSE	1 <sup>st</sup> Class Mine Mgr	1 <sup>st</sup> Class Coal Mine Mgr	A-Grade Opencast Coal Mine Mgr	B-Grade Opencast Coal Mine Mgr	A-Grade Quarry Mgr	B-Grade Quarry Mgr	A-grade Tunnel Mgr	B-grade Tunnel Mgr	Coal Mine Deputy	Coal Mine Underviewer	Mine Surveyor	Ventilation Officer	Winding Engine Driver	Mechanical Superintendent	Electrical Superintendent	Supervisor Underground Metalliferous Mine	Supervisor Tunnelling Operation	Supervisor Opencast Coal Mine	Supervisor Opencast Metalliferous Mine
15660	Analyse and select mining and transportation plant for a metalliferous underground extractive site																				
15662	Evaluate ground conditions and design support methods for underground mines and tunnels																				
15663	Design and maintain stockpiles and sloping surfaces in surface excavations and stockpiles																				
15664	Demonstrate knowledge of the geological nature of surface extraction sites																				
15665	Demonstrate knowledge of the geology of surface extraction																				
15666	Demonstrate knowledge of the geology of underground extraction																				
15667	Demonstrate knowledge of extraction methods and the effects of geological features on these methods																				
15668	Demonstrate knowledge of mining methods for underground coal																				
15669	Demonstrate knowledge of tunnelling methods																				
15670	Demonstrate knowledge of mining methods for metalliferous mines																				
15672	Demonstrate knowledge of the Mines Rescue Service																				
16686	Conduct an incident investigation at an extraction site				??																

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Unit Standards	Description	SSE	1 <sup>st</sup> Class Mine Mgr	1 <sup>st</sup> Class Coal Mine Mgr	A-Grade Opencast Coal Mine Mgr	B-Grade Opencast Coal Mine Mgr	A-Grade Quarry Mgr	B-Grade Quarry Mgr	A-grade Tunnel Mgr	B-grade Tunnel Mgr	Coal Mine Deputy	Coal Mine Underviewer	Mine Surveyor	Ventilation Officer	Winding Engine Driver	Mechanical Superintendent	Electrical Superintendent	Supervisor Underground Metalliferous Mine	Supervisor Tunnelling Operation	Supervisor Opencast Coal Mine	Supervisor Opencast Metalliferous Mine
17691	Use mathematics to solve problems in an extractive industries workplace		??		??																
17693	Explain and determine water flow, select pumps, and structures for an extraction site																				
17694	Demonstrate knowledge of explosives and their properties																				
17705	Describe, develop, and maintain basic ventilation systems for an underground mine or tunnel		??																		
17741	Demonstrate specialist underground survey techniques																				
17742	Survey and draw an underground extractive site plan																				
17743	Demonstrate knowledge of survey principles and apply to an extraction site																				
17744	Read and interpret an underground extractive site plan																				
17745	Survey and draw a surface extractive site plan																				
21151	Demonstrate knowledge of planning rehabilitation operations of an extractive site																				
21152	Demonstrate and apply knowledge of storing explosives for use																				
21153	Demonstrate and apply knowledge of dewatering, pump maintenance, and cleaning settling ponds at extraction sites																				

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Unit Standards	Description	SSE	1 <sup>st</sup> Class Mine Mgr	1 <sup>st</sup> Class Coal Mine Mgr	A-Grade Opencast Coal Mine Mgr	B-Grade Opencast Coal Mine Mgr	A-Grade Quarry Mgr	B-Grade Quarry Mgr	A-grade Tunnel Mgr	B-grade Tunnel Mgr	Coal Mine Deputy	Coal Mine Underviewer	Mine Surveyor	Ventilation Officer	Winding Engine Driver	Mechanical Superintendent	Electrical Superintendent	Supervisor Underground Metalliferous Mine	Supervisor Tunnelling Operation	Supervisor Opencast Coal Mine	Supervisor Opencast Metalliferous Mine
21155	Review consent conditions and demonstrate knowledge of the use of water at surface extraction sites		Blue		Blue	Blue	Blue	Blue												Blue	Blue
21156	Plan, implement, and describe surface extraction production to minimise environmental impacts		Blue	Blue	Blue	Blue	Blue	Blue												Blue	Blue
21278	Describe, install, and reassess support systems for an underground mine		Blue	Blue					Blue	Blue		Blue						Blue	Blue		
21280	Demonstrate knowledge of and design an effective ventilation system in an underground mine		Blue	Blue					Blue					Blue							
21281	Interpret and test for gases in an underground extraction site		Blue	Blue					Red	Red	Blue										
21629	Evaluate and implement plans to manage old workings and inundations in underground sites		Blue	Blue																	
21661	Demonstrate knowledge of the use of electrical reticulation plant and equipment in underground mines			Blue							Blue	Blue									
21662	Demonstrate knowledge of development and extraction plant and methods for underground coal mining			Blue							Blue	Blue									
21821	Supply, maintain, deliver, and store services for an underground mine			Blue					Blue	Blue	Blue	Blue		Blue		Blue	Blue	Blue	Blue		
21823	Analyse and select mining and transportation plant for underground coalmines			Blue								Blue									

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Unit Standards	Description	SSE	1 <sup>st</sup> Class Mine Mgr	1 <sup>st</sup> Class Coal Mine Mgr	A-Grade Opencast Coal Mine Mgr	B-Grade Opencast Coal Mine Mgr	A-Grade Quarry Mgr	B-Grade Quarry Mgr	A-grade Tunnel Mgr	B-grade Tunnel Mgr	Coal Mine Deputy	Coal Mine Underviewer	Mine Surveyor	Ventilation Officer	Winding Engine Driver	Mechanical Superintendent	Electrical Superintendent	Supervisor Underground Metalliferous Mine	Supervisor Tunnelling Operation	Supervisor Opencast Coal Mine	Supervisor Opencast Metalliferous Mine
22056	Demonstrate knowledge of theoretical mechanics for extractive industries																				
22057	Demonstrate knowledge of fluid power systems used in underground mines and tunnels																				
22903	Demonstrate knowledge of modern manufacturing concepts and their significance in plant maintenance																				
22904	Demonstrate knowledge of modern engineering plant maintenance practice																				
22905	Demonstrate planned maintenance work on mechanical equipment																				
23550	Manage the mine ventilation system at an extractive site																				
25878	Demonstrate knowledge of crushing and screening plant for extractives industries																				



## ATTACHMENT III – TAYLOR CONSTRUCTION SUBMISSION

### Specific Comments

Certificate of Competence Name: **A Grade Quarry Manager**

*Comment on the proposed content – unit standard & experience suitability & relevance (or other suggestions)*

- 1) Environmental - Maintain US 21154 It is Resource Consent focussed and is appropriate environmental training for initiating a Quarrying operation. This is followed by US 21156 training in managing and understanding the ongoing environmental requirements of an operation.
- 2) Amendment is required to US 21153 **outcome 3** in regards to Pump Maintenance to include “if pumps are used on your site” or similar text as it relates to quarries. The majority of Quarries do not use pumps making **outcome 3** of this unit standard difficult to achieve for the trainee.
- 3) (2)(b) Recommend maintaining the “if the holder works in an operation where explosives are used” as it is more appropriate for Quarry sites in regard to the definition of quarries in section 19N of the H&S in Employment Act 1992;

#### **19N Meaning of quarrying operation**

- (1) In this Act, **quarrying operation**—
  - (a) means an activity carried out above ground for the purpose of—
    - (i) extracting any material, other than any coal or any mineral, from the earth; or
    - (ii) processing any material, other than any coal or any mineral, at the place where the material is extracted; and
  - (b) includes the place where an activity described in paragraph (a) is carried out; and
  - (c) includes any place in which any material extracted or processed in a quarry is crushed or screened.

(2) Subsection (1) applies whether or not the material is to be extracted or processed for commercial gain and whether or not the material is extracted or processed by the use of explosives

The current system with ‘unrestricted’ and ‘restricted’ A and B Grade Quarry Managers certificates is more relevant. Additional standards not specific to explosives could either be placed under Group 1 or 2 or a separate ‘Risk Management’ Group as they may be applicable to the operation and not necessarily confined to Explosives use.

- 4) Unit Standard 16686 appears to be an unnecessary duplication of Unit Standard 17601 which a number of workplaces have and are currently using to train employees in Incident Investigation.
- 5) Unit Standard 26856 appears to be a duplication of Unit Standard 17602
- 6) Unit Standards 23457 and 23458 have been transposed and should read 23547 and 23548.

- 7) Unit Standards 17279 and 22445 are not relevant for A or B Grade Quarry Managers, these units are more appropriate for an underground operation. In a Quarry operation it would be rare (not known to have happened in the past) to have an event involving multiple casualties over a period of time of sufficient duration to enable the establishment of a CIMS multi-agency approach.

## Specific Comments

Certificate of Competence Name: **B Grade Quarry Manager**

*Comment on the proposed content – unit standard & experience suitability & relevance (or other suggestions)*

- 1) Environmental - Maintain US 21154 It is Resource Consent focussed and is appropriate environmental training for initiating a Quarrying operation. This is followed by US 21156 training in managing and understanding the ongoing environmental requirements of an operation.
- 2) A) Amendment is required to US 21153 **outcome 3** in regards to Pump Maintenance to include “if pumps are used on your site” or similar text as it relates to quarries. The majority of Quarries do not use pumps making **outcome 3** of this unit standard difficult to achieve for the trainee.
- B) US 21153 – is only suitable for those quarry sites that operate a washing plant for various processed aggregates with discharges of water and fines to settling ponds with re-use of the water through the plant. Consideration should be given to quarries situated in a hillside or small plant operations that do not have issues with discharge of water other than surface ‘run-off’ during periods of heavy rain – in this instance settling ponds and measures to stem the flow of water and accumulated solids as a result of the heavy rain from entering streams or rivers which may already be covered in US 21154 and/or US 21156
- 3) (2)(b) Recommend maintaining the “if the holder works in an operation where explosives are used” as it is more appropriate for Quarry sites in regard to the definition of quarries in section 19N of the H&S in Employment Act 1992;

### 19N Meaning of quarrying operation

- (1) In this Act, **quarrying operation**—
  - (a) means an activity carried out above ground for the purpose of—
    - (i) extracting any material, other than any coal or any mineral, from the earth; or
    - (ii) processing any material, other than any coal or any mineral, at the place where the material is extracted; and
  - (b) includes the place where an activity described in paragraph (a) is carried out; and
  - (c) includes any place in which any material extracted or processed in a quarry is crushed or screened.
- (2) Subsection (1) applies whether or not the material is to be extracted or processed for commercial gain and whether or not the material is extracted or processed by the use of explosives

The current system with ‘unrestricted’ and ‘restricted’ A and B Grade Quarry Managers certificates is more relevant. Additional standards not specific to explosives could either be

placed under Group 1 or 2 or a separate 'Risk Management' Group as they may be applicable to the operation and not necessarily confined to Explosives use.

- 4) Unit standard 16686 appears to be a duplication of Unit Standard 17601 which a number of workplaces have and are currently using to train employees in Incident investigation.
- 5) Unit Standard 26856 appears to be a duplication of Unit Standard 17602.
- 6) Unit Standard 26855 would not be considered relevant for a B Grade Manager as they are responsible for less than five workers on site and could be covered by 17602 (26856).
- 7) Unit Standards 17279 and 22445 are not relevant for A or B Grade Quarry Managers, these units are more appropriate for an underground operation. In a Quarry operation it would be rare (not known to have happened in the past) to have an event involving multiple casualties over a period of time of sufficient duration to enable the establishment of a CIMS multi-agency approach.
- 8) Unit Standard 8902 – To be relevant to B Grade Quarry Managers, proposed changes to the unit standard need to ensure the training notes and planning resources achieve the clear objectives of this unit standard regarding preparing and implementing safety inspection plans rather than Quarry Plans.
- 9) A third level of qualification is required – i.e. C Grade operator – someone with who operates a crushing /screening operation and is possibly working on their own. This could be through the **Health and Safety in Employment (Mining Operations and Quarrying Operations) Regulations 2013** – by way of a Surface Permit – **Certificate of Competence**. This third or lower level has been largely overlooked with the changes introduced. The numbers of operators requiring this level of certificate would be substantial. Unit standards relevant to this level would mainly be Level 2/Level 3 industry standards e.g. first aid 26551/26552, 17602 Hazard Id, 8901, 8909, 8922 etc and be working under supervision. If unsupervised then Level 5 16695 and 7143 could be prerequisites.

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