



Topics

Quarterly reporting insights

Safety Maturity

Microlearning Project

Emergency Preparedness

New competencies and SWI

CPD Logbooks

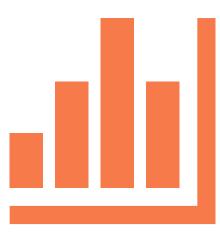




Quarterly Reports

Regulation 230

- 1 All Extractives operations must give WorkSafe information every quarter
- 1 Details of the information to report in Schedule 8
 - Description of operation
 - Material extracted
 - Number of workers
 - Number of hours worked
 - Number of notifiable events
 - Number of lost-time injuries
 - Number of days lost from work
 - Number of alternative duties injuries
 - Number of alternative duty days
 - Number of injuries requiring medical treatment

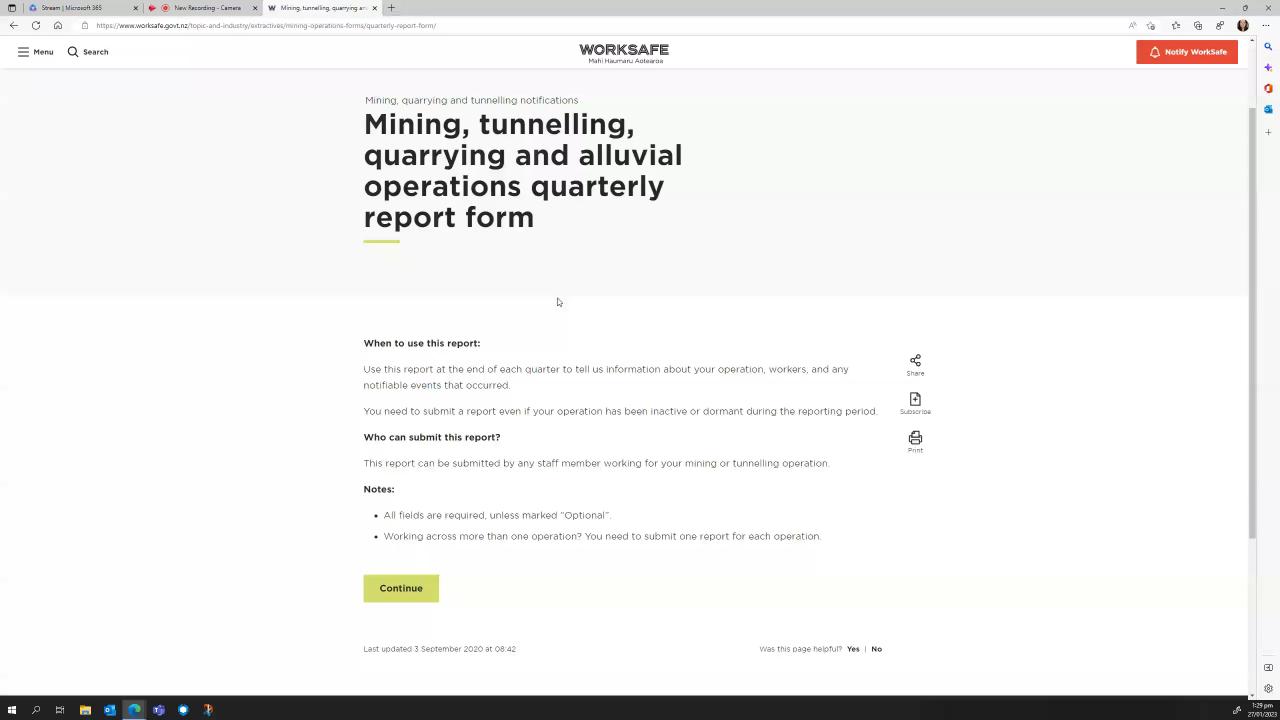


Quarterly Reports Regulation 230

- Submit using our online reporting form
- Located on the WorkSafe website
- Link to quarterly report form

Industry Reporting

How to access the reporting form





What do we use the information for?

- WorkSafe publish a quarterly health and safety performance report for the Extractives sector
- Provides extractives-specific information from notifiable incident reporting and quarterly reporting by industry
- Contains information on the activities of the regulator, as well as commentary on industry performance and focus areas for regulation

Link to Extractives Industry Reports

October – December 2022 What does the data look like?

As of 8 February 2023:

- 25% of active quarries reported
- 5% of active alluvial mining operations reported

On our Database records

942 Active quarries

62 Active alluvial mines

October – December 2022 What does the data look like?

As of 8 February 2023:

- 1145 workers (FTE) were reported working in quarries
- 199 workers (FTE) were reported working in alluvial mining operations

Last Industry report figures: 6692 workers in Extractives

2985 Workers in quarries (estimated)

459 Workers in alluvial mines (estimated)

1965 Workers in mines (reported)

1233 Workers in tunnels (reported)

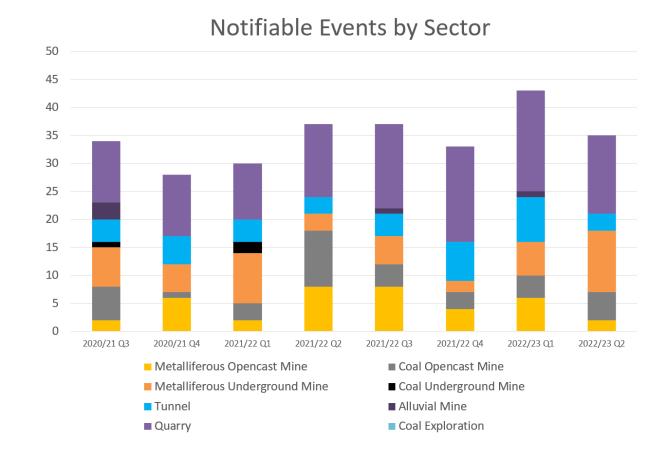
October – December 2022

What does the data look like?

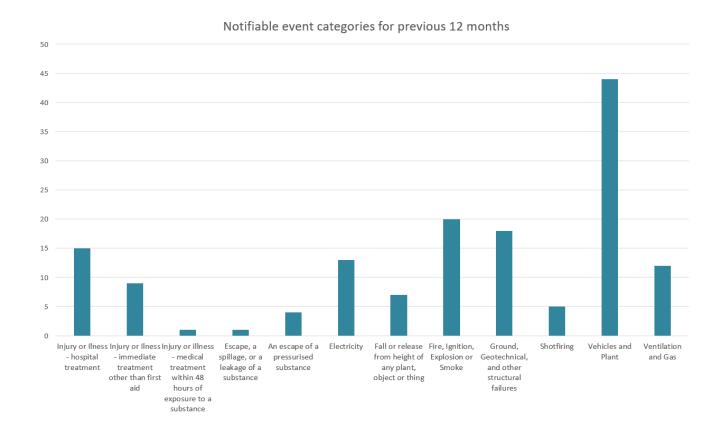
3 5 Notifiable events

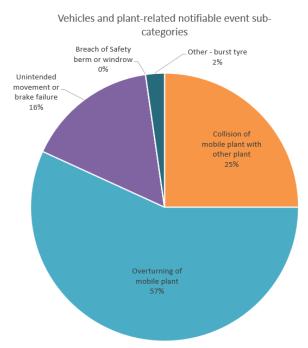
- 14 at quarries (13 individual sites)
- 21 at Mines and Tunnels (9 individual sites)

High potential incidents



Notifiable Events
What does the data look like?





Notifiable Events

Vehicles and Plant







Notifiable Events Investigation reports

- Investigation reports must be provided to WorkSafe within 30 days (from 18 July 2023 for quarries and alluvial mines)
- We will have an ongoing focus on the quality of investigations
- We will be reviewing investigation reports to identify and analyse common root causes in a more consistent manner in future
- It's likely that you'll get asked to provide additional information or fill in a questionnaire to help with this analysis.





Self Assessment Activity

- Individually, take some time, and for each category identify which option is closest to your site
- For example, the first category is Culture
- What does this look like on your site?

- 1. No care apathy, resistance, negligence, dishonesty, hiding of incidents
- 2. Blame acceptance of need to "care" but focus is on discipline and "blame the bloke"
- 3. Compliance acceptance of need to comply but lack of real ownership
- 4. Ownership safety is owned by line managers rather than the safety department. Others see the value.
- 5. Way of life Safety is the way we do things. Everyone thinks before they act and proudly do the work to expectations.

Where do you think your site is on the chart?

Minerals Industry Risk Management (MIRM) Maturity Chart

- No care culture
 - Apathy/resistance
 - Near misses not considered
 - Negligence
 - Dishonesty
 - Hiding of incidents
- No or little training
- Poor or no communication

- Blame culture
 - Accept need to care
 - Some near miss reporting
 - Some window dressing e.g. pre-inspection cleanups and light duty
 - Disciplinary action
- Minimum / inconsistent training
- Some communication on a need to know basis

- Compliance culture
- Some participation
- Near miss discussions
- Acceptable training/awareness
- Established and good communication channels
- Regular people involvement and focus

Prevent incidents before

they occur

Compliant

- Ownership culture
 - Involvement at all levels
 - Near miss involvement
- High level of training/awareness
- Communication at a high level hiding nothing

Improve the

systems

Proactive

- Way of life
 - Comes natural
 - Personal involvement by all to prevent incidents
- Complete understanding
- All informed at all times about everything

Way we do business



Prevent a similar incident Accept that incidents

2



happen

- Reactive approach
- No systems
- No risk assessment
- Legal non compliance
- Accept equipment / process decay
- Superficial incident investigation
- Poor investigation
- No monitoring/audits
- Permit non-compliance
- Potential illegal practices

- Loose systems, elements of a **HS Management System**

Reactive

- assessment
- Minimum legal compliance
- Apply PPE as a way of eliminating exposure
- audits
- health initiatives
- Monitoring as per regulations

- Administrator driven
- Re-active risk

- Incident investigation but limited analysis
 - Focus on what happened
 - No systems focus
 - Human fault focus
- Ad hoc monitoring/
- No occupational hygiene or
- Reactive medical monitoring

OH&S Coord. driven

3

- OH&S stds system and ISO 9002 or equivalent
- Risk assessment through existing systems
- Total legal compliance
- Strictly enforce the use of PPE where required (knowing risk)
- Causal incident analysis based on event potential
- Info sharing from events
- Planned occupational hygiene / environmental monitoring
- Periodical medical examinations
- Planned monitoring/audits Safety meetings & talks
- Some task observations

- Line driven systems improvement
- ISO 14001 and OHSAS 18000 or equivalent
- Pro-active formal risk assmt
- Beyond legal compliance
- Seek to actively engineer out process/equipment inadequacies
- Incident learnings shared with all levels
- Well designed plans/procedures
- Focus on adhering to site plans and procedures
- Integrated audits
- Peer evaluation and discussion

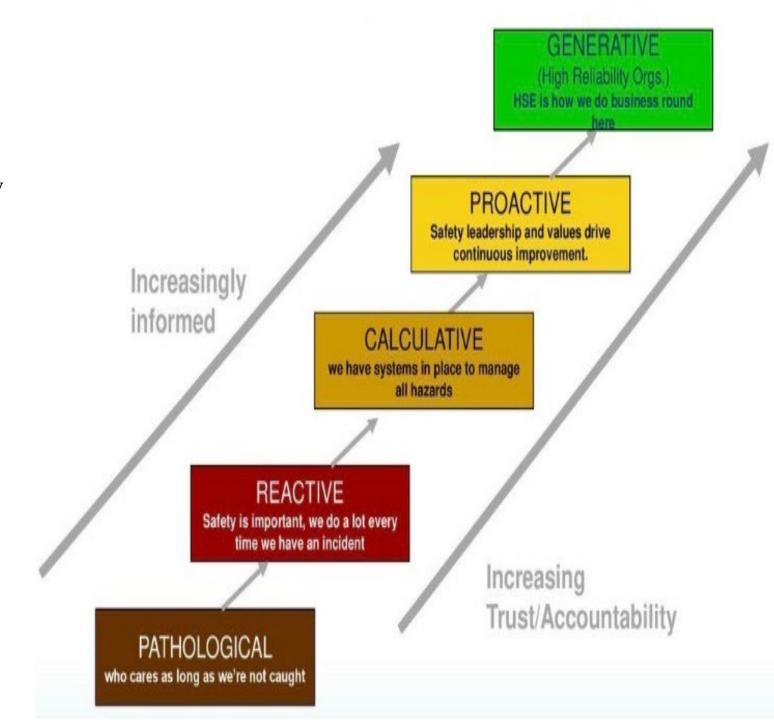
- Individually internalised
- Integrated management systems
- Risk assessment integrated into all systems
- Self regulating style
- **Eliminate problems** before they occur
- All threats considered in decision-making
- Systems enhancement through external evaluation / auditing

Safety Behaviour

Honesty is the key to improving maturity
- The maturity chart is only truly
indicative if you are honest

Very few organisations in NZ in any sector would claim to be resilient. (And those that claim it might not be!)

It is attitude which brings improvement



SafePlus

- The maturity charts we have shown you are just some used by some industries to give an idea of where you are.
- If you want to do a comprehensive performance review of your site, we recommend starting with SafePlus.
- SafePlus is a health and safety improvement toolkit for businesses and other organisations, launched in 2017. It was developed jointly by WorkSafe New Zealand, ACC and the Ministry of Business,
 Innovation and Employment (MBIE).
- SafePlus is free online, while the Onsite Assessment and Advisory Service is led by an accredited assessor, with a negotiated fee for their services.



General Overview

A performance review and improvement toolkit that invites ideas and feedback from people at all levels of an organisation, to build collaboration in making work safer and healthier for everyone.









WHO IS IT FOR

Designed for all sectors





















PERFORMANCE REQUIREMENTS

There are 10 performance indicators of good health and safety practice across three key themes - leadership, worker engagement and risk management. These measures have been developed and tested with New Zealand businesses.

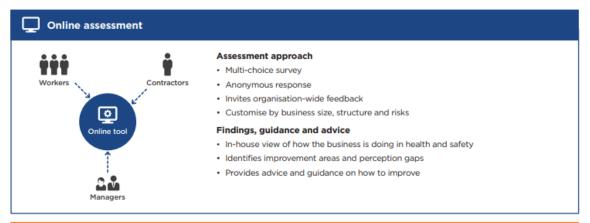


Assessment Focus

People	ai di is
Resources	*
Behaviours	₽
Systems	O ₀
Practices	<u> </u>
Attitudes	₽
Culture	**
Perceptions	<i>6</i> - 80

HOW IT WORKS

Assessment process, choose one or both:





Assessment approach

- · Led by independent assessors
- · Reviews behaviours, attitudes and work culture
- · Interviews and observations
- Deep-dive tracing 3-4 key risks through all parts of the business
- · Compares planned vs actual work practices

Findings, guidance and advice

- · Independent view of current health and safety performance
- Identifies strengths and improvement areas in leadership, worker engagement and risk management
- · Performance summary of 'deep dive' critical risks
- · Tailored, expert advice and guidance

MEASURING PERFORMANCE

A three level maturity scale is used for each performance requirement to help determine current health and safety strengths and areas for improvement and support ongoing performance improvement.

Developing

The business knows it needs to improve but has not identified what to improve or how. Likely to rely on PPE, administrative controls and informal processes and may respond reactively to address issues.

Performing

Health and safety performance is reviewed and monitored to support continual improvement. Workers are engaged and empowered. Risks are identified and actions are taken to address root causes.

Leading

Health and safety is integral to core business activities. There is a sense of ownership from workers at all levels and workers are supported to lead initiatives. The business takes a leadership role in industry to help lift performance.

Case Study









Microlearning

Proof of concept



High mobile plant incidents



directly engage with workers



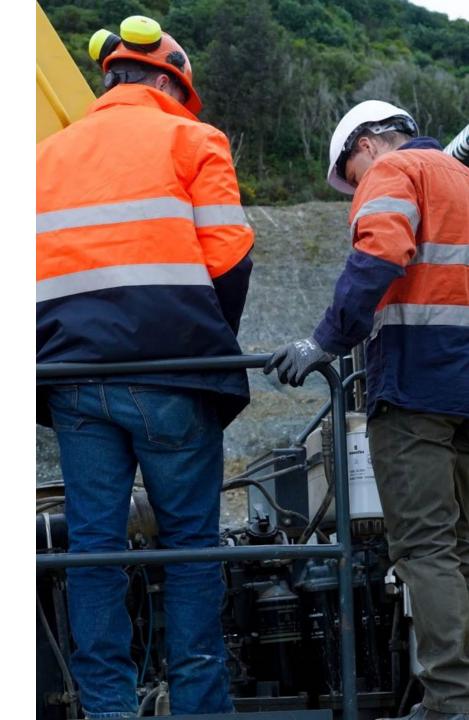
Learning happens in the learner it doesn't happen to the learner—we use what we know, what we can relate to and build on our knowledge. Learning happens within the person



Builds on existing knowledge



We have developed eight micro-learning modules for workers to support them to be safer when operating mobile plant. Key message for WORKERS



Quarries Microlearning

Quarries Health & Safety Learning



Safety Refresher

This module covers safety in general. It is a refresher on some important health and safety concepts.



Wearing Seatbelts

This module is about the importance of wearing seatbelts when operating mobile plant.



Reversing into a tipping position

This module covers the safety related to reversing into a tipping position, including managing risks and driver visibility.



Raising a Hoist

This module is about the risks and controls when raising a hoist including the important factors to consider when deciding to...



Machine Capabilities & Technology

This module looks at the risks associated with the use of mobile plant and machinery, how to manage these risks and what must...



Fit for Purpose & Service

This module looks at the importance of inspecting and servicing vehicles and what checks should be done on vehicles being use...



Tip Head Design

This module is about tip head risks and controls, traffic management and communication at a quarry site.



Open Edge Protection

This module is about open edge protection, its purpose, why it is important and how to maintain it.

Quarries Microlearning



Quarries Microlearning



Microlearning

Next Steps

- Trialed the proof of concept with three quarry operators. 32 responses, overall positive. Reviewing the feedback on usability, videos, images, quizzes and case studies to make improvements.
- Developing a video for Managers to explain what microlearning is and how it works.
- WorkSafe will work with industry for a way to make it available to industry and maintain and develop content.





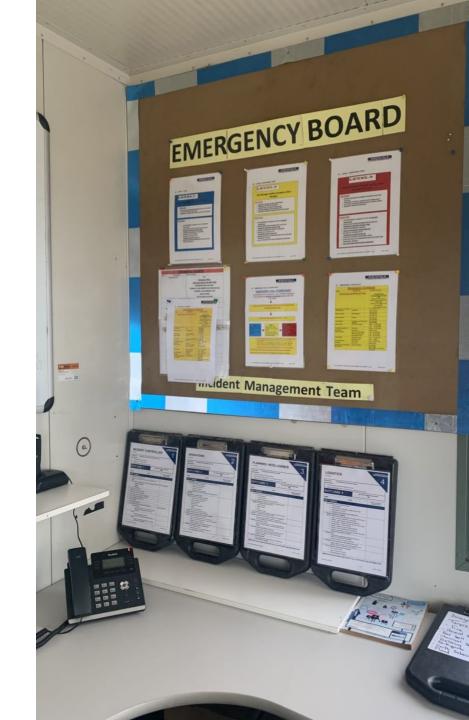
Legislation

General Risk and Workplace Management Regulations

- Reg 13 Duty to provide first aid
- Reg 14 Duty to prepare, maintain and implement emergency plan

MOQO Regulations*

- Reg 104 Consultation with emergency services
- Reg 105 Emergency management plan
- Reg 106 Testing emergency management plan
- Reg 124 Crush injuries and rescue of trapped or injured persons
- Reg 125 Treatment and transport of sick and injured workers
- Reg 126 Resuscitation Equipment



Your emergency plan

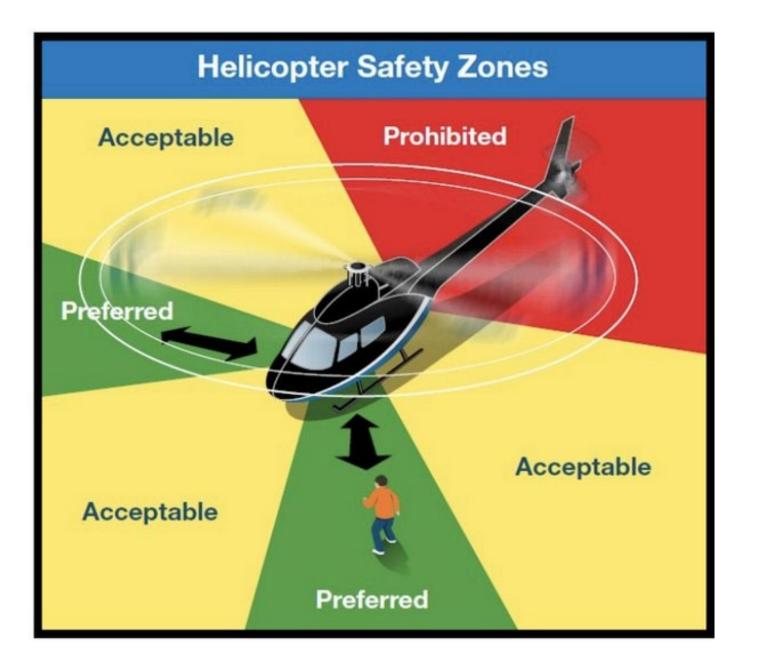
- Needs to be site specific
- Refer to your risk assessment what are the likely emergency scenarios for your site?
- Vehicle rollover? Stabilising vehicles, extraction from vehicles, head & crush injuries.
- Entrapment in plant? Crushing injury or loss of limb
- Fall from height? Head and crush injuries
- Electrical shock? Burn injuries



Preparing your emergency plan

- What are the likely scenarios?
- How long will it take for an ambulance or rescue helicopter to arrive at your site? This is how long you need to keep workers alive and comfortable for.
- What is in your first aid kit, rescue equipment bag and do you and workers know how to use it?
- Test your communication dead zones. When you phone 111
 they may need to keep you on the phone, you may need a
 second phone on site.
- Social media and media
- Contacting next of kin
- Support for workers
- Worker Consultation







Safety Around Helicopters

APPROACHING OR LEAVING A HELICOPTER



Do not approach without receiving a visual signal from the pilot. Do not leave without a visual or spoken instruction to do so. Stay where the pilot can see you at all times.



On sloping ground always approach or leave on the downslope side for maximum rotor clearance.



If blinded by swirling dust or grit, STOP – crouch lower, or sit down and wait for assistance.





Do not approach or leave a helicopter when the engine





Crouch while walking for extra rotor clearance. Always remove hats. Never reach up or chase after anything that blows away.



Carry long objects horizontally below waist level - never upright or on the shoulder.

TAKEOFF, LANDING, AND LOADING OPERATIONS







When directing the pilot for landing, stand with back to wind and arms raised.



orward and to the side to signal the bilot. Ensure the sling is not across he skid. Never ride on the sling.



When directing the pilot by radio, remember

Fasten and adjust your seat belt on entering the fastened until the pilot signals you to get out.

Testing your emergency plan

- Test the emergency plan regularly to ensure it remains effective and to train all workers in the emergency plan
- Test all parts of the plan, including:
 - accuracy of emergency contact details
 - accounting for people on the site
 - notifying all managers on or off site at different times of the day and night
 - emergency services response.
- Exercises should be realistic scenarios based on the hazards and emergencies identified in the emergency plan.
- Practise the most likely emergencies and life preserving,
 escape and rescue scenarios most frequently



Guidance Material

- ACOP for emergency preparedness
- Emergency Plans Fact Sheet
- Underground mines emergency protocol



APPROVED CODE OF PRACTICE

Emergency Preparedness in Mining and Tunnelling Operations

AUGUST 2016

WORKSAFE



August 2018

Emergency plans

An emergency plan is a written procedure telling people in the workplace what to do in an emergency. This fact sheet tells you, a person conducting a business or undertaking (PCBU), how to prepare and maintain an emergency plan for your workplace.

What to include in an emergency plan

Emergency plans must include the following:

- emergency procedures including:
- an effective response to an eme
- evacuation procedures
- procedures for notifying emergency services at the earliest opportunity
- medical treatment and assistance procedures
 procedures to make sure there is effective
- communication between the person authorised by you to coordinate the emergency response and all other persons at the workplace

What to consider when making an emergency plan

When working out your emergency plan, you must take into account:

- the size and location of the workplace
- the number of workers
- the nature of the work being carried out and the workplace hazards
- the types of emergency situations your workplace may face. For example:
- fire or gas leak
- electricity or water outage

A A



5 Minute Break

Tyre checks

- Do you check for bulging?
- Exposed wall lining?
- Damage to beading?
- When was the last time you discussed the best type of tyre for your operation with your tyre supplier?





The Regulations Revision

- The Regulation Revision included some changes to the CoC required to manage sites.
- Gazette Notices will also be replaced with a Safe Work
 Instrument from 18 July 2023 (Part 2)
- A Safe Work Instrument (SWI) is a way of listing a lot of details required in the regulations
 - e.g. the competencies required for each CoC.



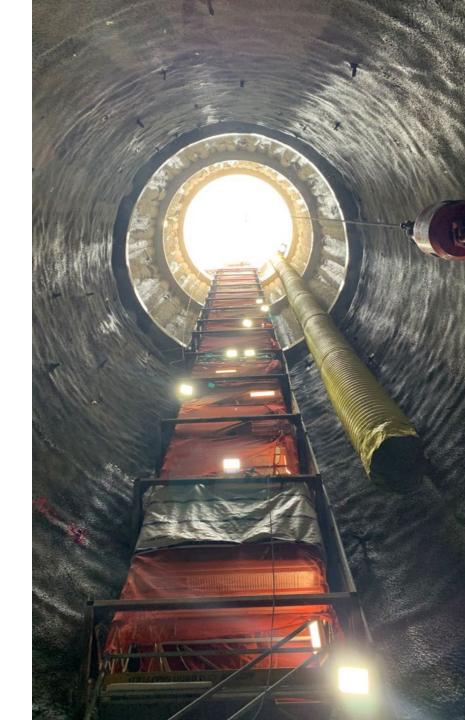
The requirement to have a SWI – what does this mean?

- All the gazette notices, including CPD notices, will no longer be relevant; there will only be one SWI document.
- Should be simpler to understand and can be amended more easily
- Some historical issues can be fixed E.g. Unit standards replaced as cited ones have expired etc.
- The BoE have considered the consultation work that was previously completed in September 2017, which was put on hold due to the regulation review.
- In this review there were submissions from industry to include leadership training, human factors, health etc. in the CoC competencies.



Safe Work Instrument

- This was a significant opportunity to review the competencies.
- The BoE has completed this review and has updated the competency framework for all CoCs as well as establishing the new CoCs and "endorsements".
- The SWI must now be consulted on the minister will want this completed prior to approving it.
- Any B Grade sites that have explosives must have the unit standards



Existing CoC holders and transition period

- All existing CoC holders will retain their CoCs.
- There will be no retrospective requirement to complete new unit standards.
- (We note that completing the new unit standards would be good CPD!)
- Regulatory requirements are not BoE issues that the BoE can change or modify i.e., the type of CoC required for an operation is specified in regulations not the SWI
- There are changes to what a B Grade CoC can manage coming into effect in Part 3 of the Revised Regulations (from July 2024)



The BoE has considered the upgrading of a current B grade CoC to an A grade CoC for Quarries.

- And is proposing that the holder of a current B grade CoC (who completed an oral exam for their B grade after 2015) should only have to complete the additional unit standards for the A grade but not be required to sit another oral exam.
- The reason for this is that those B grade holders have already been examined on the basis that they could manage a large complex site. That the previous oral examination was sufficient.
- B grade CoC holders who haven't completed a recent oral exam would be required to sit an oral exam for an A grade if they wanted to apply for an A grade CoC.





Continuing Professional Development

Renew every five years

B grade 60 hours over 5 years

A grade 120 hours over 5 years



Continuing Professional Development

What counts

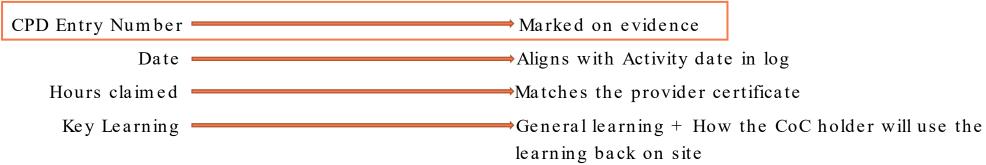
- > Field visits
- > Conferences
- > Webinars
- > Research of new plant and equipment
- > Risk assessments
- > WorkSafe inspections when learn something / research

Maintain, improve or broaden your knowledge, skills or personal qualities



CPD Logbook Example





CPD Training - ACT Safety via	UNRESTRICTED	legislation, emergency management, leadership	8	No	CPD Certificate
Refer to the list of activities on information sheet	RESTRICTED			HOURS	Describe evidence provided, remember to note CPD entry number on the evidence.
ACTIVITY	UNRESTRICTED /	AREAS OF LEARNING	HOURS	SPECIALIST	EVIDENCE
F	tefer to the list of activities on information sheet CPD Training - ACT Safety via	REFERENCE OF TRAINING - ACT Safety via UNRESTRICTED	ACTIVITY Refer to the list of activities on information sheet UNRESTRICTED / RESTRICTED / RESTRICTED RESTRICTED / RESTRI	ACTIVITY UNRESTRICTED / AREAS OF LEARNING HOURS RESTRICTED RESTRICTED RESTRICTED RESTRICTED RESTRICTED RESTRICTED RESTRICTED RESTRICTED REGISLATION, emergency 8	ACTIVITY Refer to the list of activities on information sheet UNRESTRICTED / AREAS OF LEARNING HOURS RESTRICTED HOURS PD Training - ACT Safety via UNRESTRICTED legislation, emergency 8 No

Refer to the questions on the inforamtion page to assist in writing the key learning(s)

Legislative requirements to meet them H&S at work act 2015. Organisational requirements, human/lost production/the underlaying costs. ACC Requirements - meet requirements to reduce insurance. Planned events/Official visits - CIMS Planning. Roles and funtions of CIMS - Redirection/Readiness/Response/Reduce Emergency Risks, I learnt about planning for emergency situations, that you need a good communication coordinator, clear plans and resources to meet the plans and use of best practices. This will help me with knowing how I can best prepare emergency management plans to have the best possible outcome and what roles people will need to do.



CPD Entry	Number	→ Marked on evidence	
	Date	Aligns with Activity date in log	
Hours	cla im e d	→Matches the provider certificate	
Key	Learning	General learning + How the CoC h	older will use the
		learning back on site	

23.9.21	CPD Training - ACT Safety via zoom	UNRESTRICTED	legislation, emergency management, leadership	8	No	CPD Certificate
DD / MM / YEAR	Refer to the list of activities on information sheet	RESTRICTED			HOURS	Describe evidence provided, remember to note CPD entry number on the evidence.
DATE	ACTIVITY	UNRESTRICTED /	AREAS OF LEARNING	HOURS	SPECIALIST	EVIDENCE
CPD entry number: Allocate a CPD entry num	ber for this activity	1				
CoCs Held (at time of CPD activity)	B-grade quarry manager					
Name:		Mobile phone:		Email:		

KEY LEARNINGS

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	Date	Aligns with Activity date in log	
	Hours claimed	→Matches the provider certificate	
	Key Learning	General learning + How the CoC l	holder will use the
		learning back on site	

23.9.21	CPD Training - ACT Safety via zoom	UNRESTRICTED	legislation, emergency management, leadership	8	No	CPD Certificate
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CPD	Entry Number	Marked on evidence
	Date	Aligns with Activity date in log
	Hours claimed	Matches the provider certificate
	Key Learning	General learning + How the CoC holder will use the
		learning back on site

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Getting you home healthy and safe.
That's what we're working for.

