



Quarry Conference 2022

New Plymouth

13th - 15th July

WORKSAFE
Mahi Haumarū Aotearoa

Why new regulations?

“This paper seeks changes to the Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016 (the Regulations) to make quarries safer and clarify parts of the Regulations.”

Hon. Iain Lees-Galloway 2019



General Principals of the new regulations

Most important – Structured and Written Health and Safety Management Systems are required at all Quarries

- HSMS must be Commensurate with the nature size and complexity of the operation -- (Proportionate)

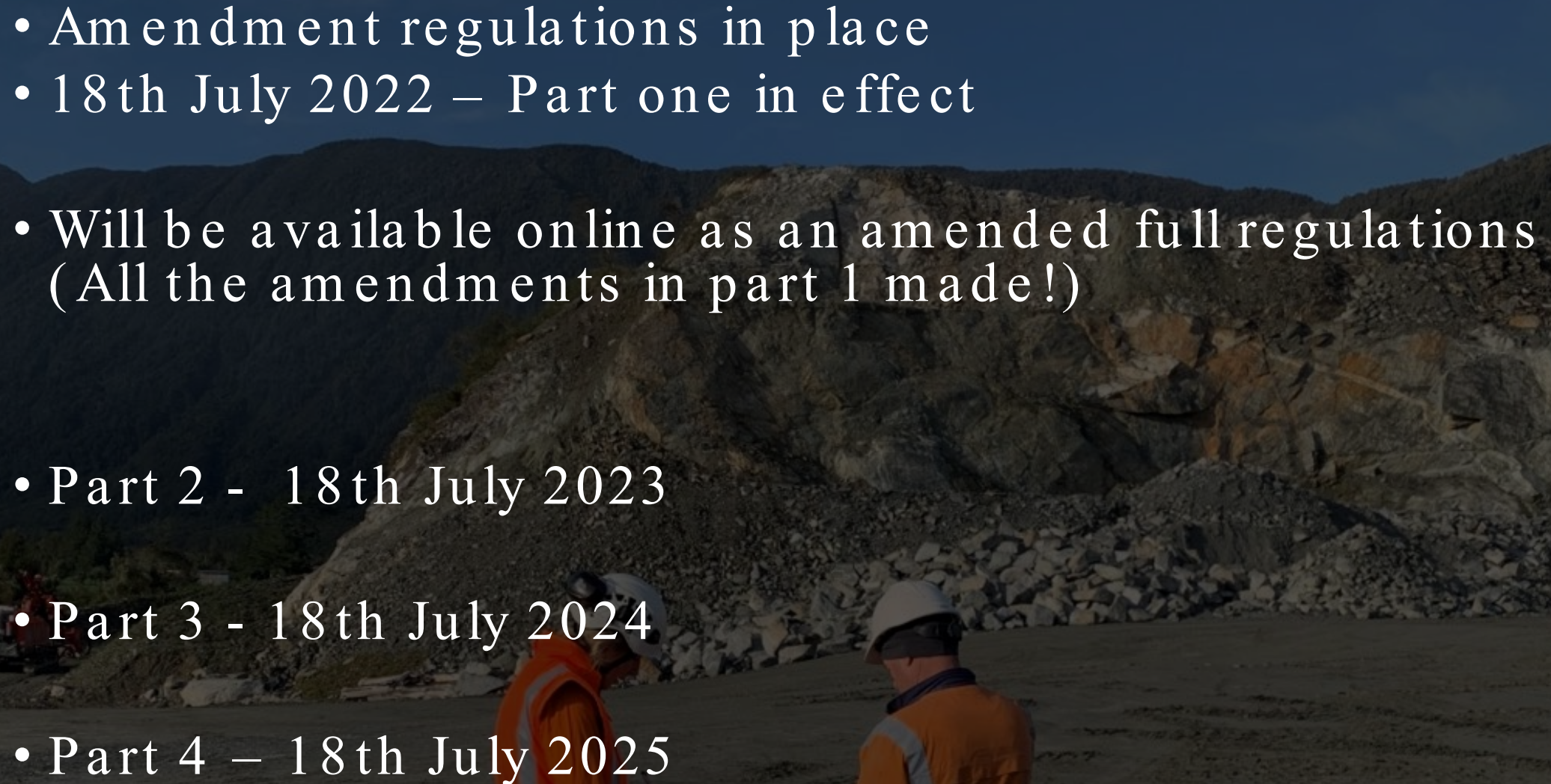
A and B Grade Quarry different requirements

Principal Hazards are only a subset of the HSMS

The full regulations provide very good direction on what to include in a HSMS and how to structure the system

Reg 56 Content of Health and Safety management system

Introduction of the Regulations

- Amendment regulations in place
 - 18th July 2022 – Part one in effect
 - Will be available online as an amended full regulations (All the amendments in part 1 made!)
 - Part 2 - 18th July 2023
 - Part 3 - 18th July 2024
 - Part 4 – 18th July 2025
- 
- The background image shows a quarry or construction site. In the foreground, two workers wearing orange high-visibility safety vests and white hard hats are standing and looking towards the right. Behind them is a large, dark, rocky embankment or pile of material. The sky is a clear, deep blue, suggesting a clear day. The overall scene is dimly lit, possibly during the early morning or late afternoon.

Quarry Definition

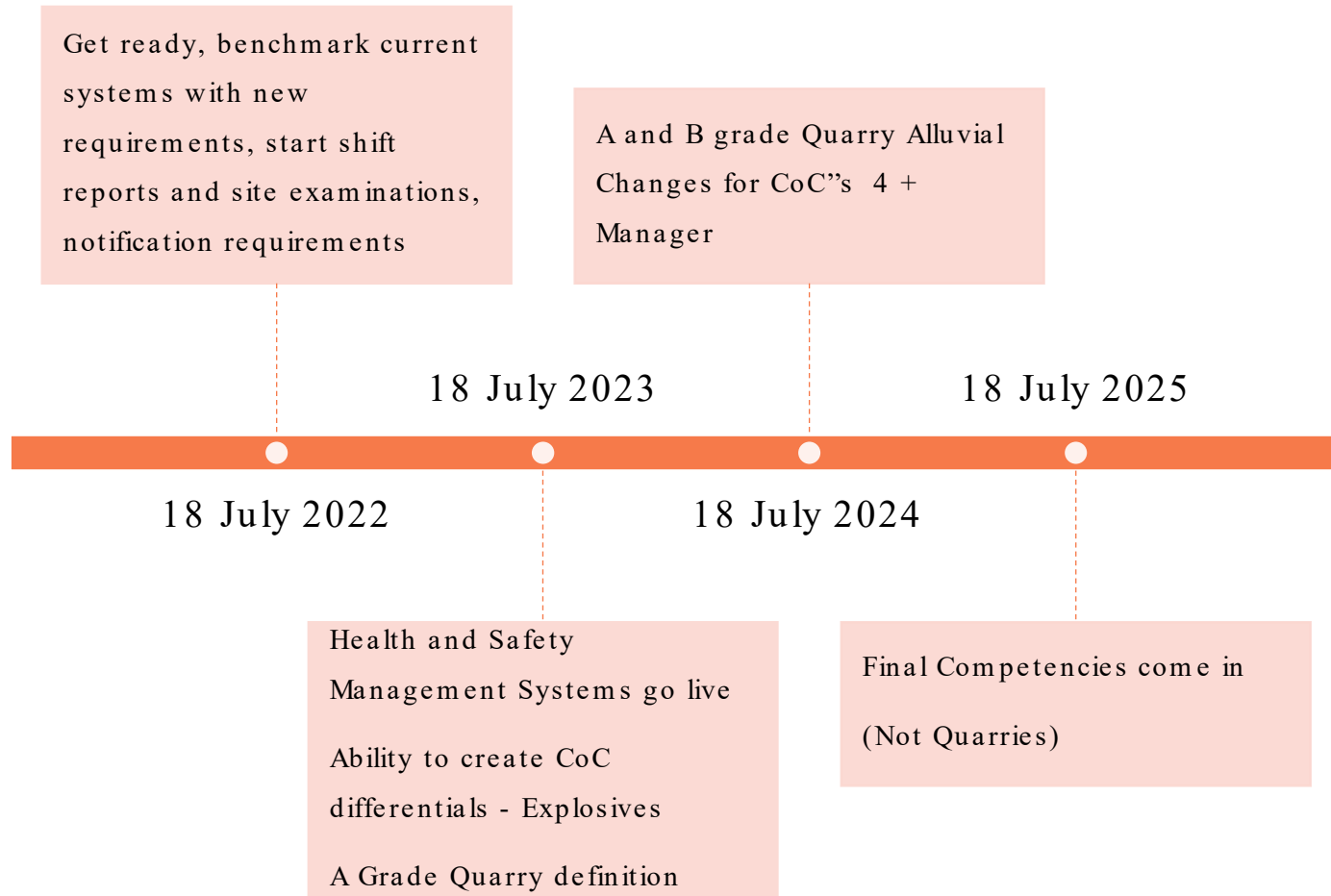
- **Health and Safety at Work Act, Schedule 3, Meaning of quarrying operation**
- (1) In this schedule, **quarrying operation**—
- (a) means an activity carried out above ground for the purpose of—
- (i) extracting any material, other than coal or any mineral, from the earth; or
- (ii) processing any material, other than 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) Subclause (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.

To clarify what is and what isn't a quarrying operation,

- 1) a processing plant that processes recycled concrete is not a quarry operation.
- 2) a place where material is extracted and processed is a quarrying operation.
- 3) if the extracted material is taken to another location and crushed or screened, that place is a quarry operation.
- In relation to point 3 there has been discussion between MBIE and WorkSafe to review the definition of a quarry operation. But at this point no changes are imminent.

A Phased In Approach

“It won’t happen overnight”



You will see a new version of the regulations every year until 2025

Part 1 Changes

- Principal Hazard – replace “series of recurring accidents” with people “being exposed to potentially fatal health risks”
- Elec and Mech Sup – only U/G
- Responsible person introduced
- Manager – “Ensure Adequate Supervision”
- Health Monitoring of staff
- Immediate Requirements
- Notification, reporting, schedule 5
- Operations Record , Shift Reports,
- Authorisation of Operators
- Examinations –
 - Pre-Shift + Weekly all areas



Quarry Operator Responsible Person

- Responsible Person – new term to be able to include giving duties to Quarry Operators
- Mines Tunnels have an SSE to develop, document implement and maintain the Health and Safety management system for a mining operation
- It will be the operators responsibility for a Quarry



Quarry Manager

Current

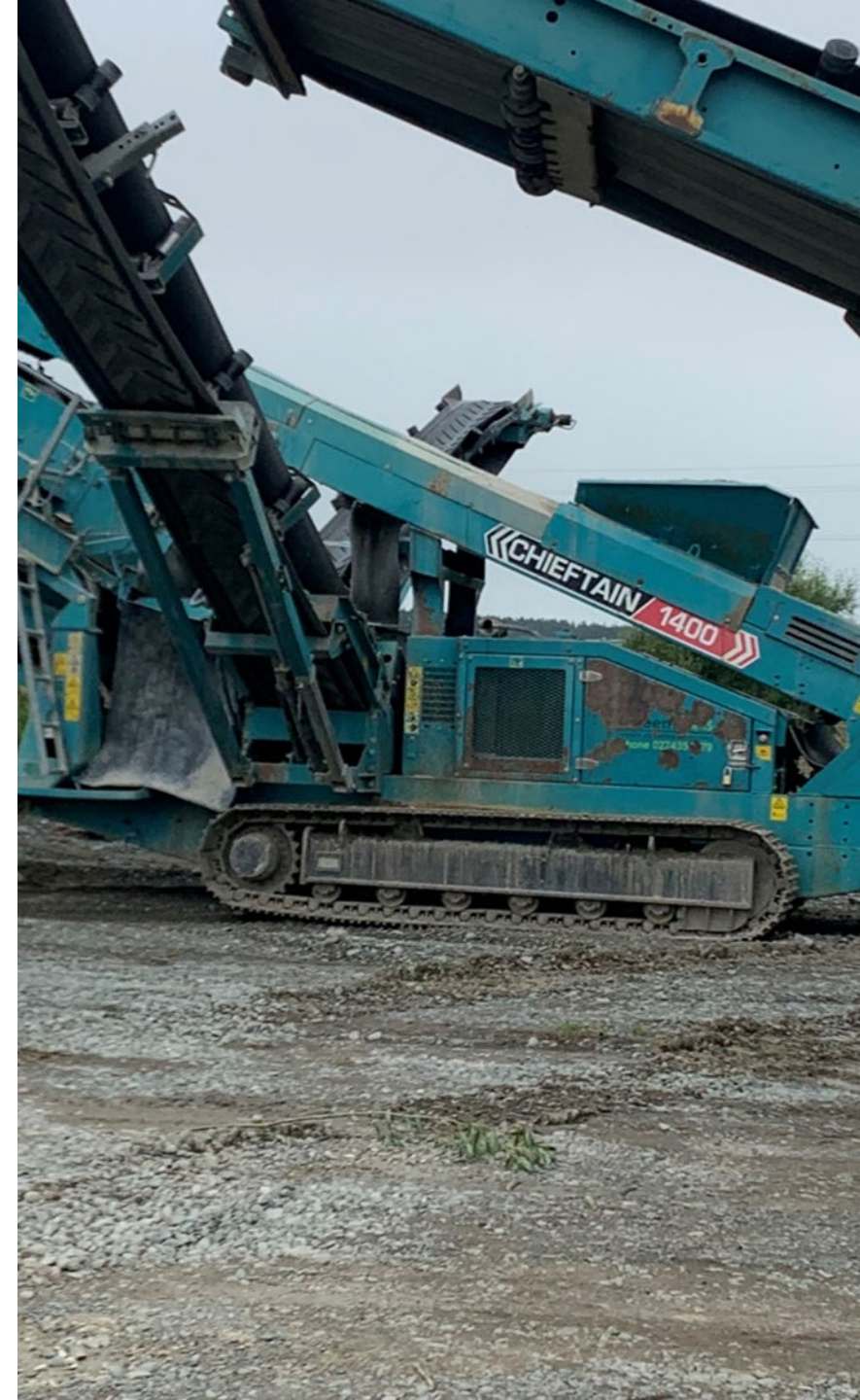
The quarry operator of a quarrying operation must appoint a person to—

- manage the quarrying operation; and
- supervise the health and safety aspects of the quarrying operation on every day on which any quarry worker is at work.

Proposed Change

The quarry operator of a quarrying operation must appoint a person to—

- manage the quarrying operation; and
- ensure that there is adequate supervision of:
 - all quarry workers and any other persons at the quarrying operation, to protect them from risks to their health and safety while at the operation; and
 - the health and safety aspects of the quarrying operation on everyday on which a quarry worker is at work.



Notifications to WorkSafe

- Commencing
- Suspending
- Recommencement
- Abandoning
- Appointments
- Quarterly Reports
- Six month reports
- Notifiable Events



Extractives industry

2021/22 Q2

October to December



Site Inspections, Operational Reports & Investigation

- Operational Record Available in Office
- Shift reports required
- Site Examinations
 - Prior to start and during shift
 - All accessible areas weekly
 - Records of Notifiable events

Part 2 Changes

- Written H&S management system required- Part 3
 - Reg 56 contents
- CoCs will be in place – Explosives endorsement?
- Definition of A Grade Quarry in place
- Principal Hazards PHMPS PCPS required if identified

- High Risk working faces- geotechnical advice from a competent person B Grade Quarries

- Part 7 – Tip heads, authorize operators, conveyor belt requirements, Road and other vehicle operating surfaces design , Emergency
- Treatment of injured workers – first aid equipment
- Part 10 – provide PHMPS 2 mths prior
- Investigation of Notifiable Incidents -



Things Your HSMS System Must Have

- a health and safety policy
- the processes for identifying hazards and the controls required to manage the risk of harm to workers
- accident/incident investigation
- principal hazard management plans and principal control plans required for the operation (A Grade Quarries)
- Description of Competency requirements
- description of arrangements to monitor the health and safety of workers
- arrangements for the monitoring, assessing and inspecting of workplaces.



Principal Hazards

A Grade Operations Only –

Likely to be less Principal Hazards for quarries than large surface mines and underground mines and tunnels.

Any hazard arising at the operation that could create a risk of multiple fatalities in a single accident, or that could create a risk of multiple people being exposed to potentially fatal health risks in relation to any of the following:

- Ground or strata instability
- Roads and other vehicle operating areas
- Explosives
- Any other hazard arising at the operation meeting the above criteria.



Part 3 Changes

- A grade, B Grade CoC requirements change



Quarry Managers

The differences

- A Grade manager with explosives
 - Can manage any quarry operation
- A Grade manager with no explosive
 - Can manage any quarry operation where explosives are not used
- B Grade manager with explosives
 - Can manage a quarry operation with max four workers and use explosives
- B Grade manager with no explosive
 - Can manage a quarry operation with max four workers and no explosives used
- Site Specific – criteria is unchanged.



A Grade Quarrying Operation



Manager



More than four workers

B Grade Quarrying Operation



Manager



No more than four workers

- Who counts as a worker?



Workers associated with Extraction and Proc...

- Who doesn't count as a worker?



e.g. Office Worker or Visiting Truck Driver

Part 4 Changes

- No changes for Quarries in part 4



An aerial photograph of a large-scale industrial quarry or processing plant. The site is dominated by a complex network of conveyor belts and machinery, including several yellow excavators and a blue truck. Large piles of sand and gravel are visible throughout the facility. In the background, there are buildings, a green arched structure, and a road. The foreground shows a deep, excavated area with visible tracks and a small yellow vehicle. The text "Other Industry Updates" is overlaid in white on the center of the image.

Other Industry Updates



Other Industry Updates - HPIs

- HPI Focus – Post notification site visit – 65% of all incidents
- Note consistent area of concern Vehicle interactions and roll overs
- Undertaking Mobile Plant project
- Supplementary information will be requested once notified
- Develop a more detailed database – causal factors
 - Align with MINEX, Operators
- Micro Learning Initiative



Other Industry Updates - Micro Learning

- Microlearning provides flexibility, timeliness and accessibility as workers can access directly via a mobile phone or tablet for 2-to-3-minute sessions daily. This tool integrates research-based science to achieve sustainable progress for educating workers and changing safety behaviour.
- PROOF OF CONCEPT
- Developed 8 modules – will trial

Other Industry Updates - CoC Compliance

- Continue to work our way through non-compliant sites
- Prosecution is a lengthy process
- Since last year we have concluded 20 overdue notices
 - Conducted interviews to form cases
 - Most have complied or in the case of three or four ceased operating
 - Some are on hold with persons in the final stages of qualifying – Exams booked
- The Process is resource consuming – BUT will CONTINUE
- Note we notified 78 local government (regional and District Council) that they should ensure quarry operators seeking consent or permits should provide evidence that they have CoCs to appoint to safety critical roles



New Regulation Video...

Starring-

Grayden Haine

Brad Cobham

Matt Webster

Ma Parata

Joe Hunter

Shawn McLean

Featuring
Charlene Donald

Guest
Appearance
Stuart Heslop



NZ Regulator says – “Star Studded and Makes Compelling viewing”



Questions?

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

WORKSAFE
Mahi Haumaru Aotearoa