Quick topics

Small Mines Safety Roadshow

February – April 2022

NSW Resources Regulator

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Quick topics - Overview

A number of short presentations on general issues:

- The "Mine Record"
- Pre-start meetings
- Pressure vessels
- Electrical maintenance
- Roads and other vehicle operating areas ROVA
- Fact sheets
- Roll-overs

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Mine records

NSW Resources Regulator

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Mine Record Legislation

- The operator of a mine site **must** keep a record for the mine site.
- The requirements for the mine site record can be found in clauses 133 and 134 of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2014.
- These provisions set out what must be included in the record, how long it must be kept and requirements for providing access to it

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What must be in the Mine Record

- A record of any improvement, prohibition or non disturbance notice issued in relation to the mine site. (Inspectors)
- A copy of any provisional improvement notice issued in relation to the mine site by a health and safety representative (HSR).
- A record of every incident notified to the regulator with a summary of the records kept in relation to a review of control measures.
- A record of all first aid treatment provided at the mine site.
- Any other record that the mine operator or petroleum site operator is required to keep in respect of the site under the WHS laws.
- Change over of shift reports (multi shift operations)

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Availability and Access

- The operator of a mine site must keep the record **available for inspection** e.g. it must be available for review by an inspector.
- The record must also be **available and readily accessible to workers** at the mine site on request. However, the operator of a mine site is only required to make **available a summary of incidents reported to the regulator.**
- The operator of a mine site is **not allowed to permit access to personal or medical information** in relation to a worker **without the worker's written consent** unless the information is in a form that does not identify the worker, and could not reasonably be expected to lead to the identification of the worker.

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How can the Mine Record be stored

- Hard Copy (Book or folder)
- Electronically (Computer)

How long must we keep the mine site record

- The operator of a mine site must keep a record that forms part of the record for **seven years** from the date the record was made or for any longer period that may be required under the WHS laws in respect of a particular record.

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Further information

NSW MAKING IT HAPPEN

Department of Industry Resources & Energy
Mine Safety

FACT SHEET| WHS (MINES AND PETROLEUM SITES) LEGISLATION

Mine or petroleum site record

June 2016

Introduction

The operator of a mine or petroleum site must keep a record for the mine or petroleum site. The requirements for the mine or petroleum site record (the record) can be found in clauses 133 and 134 of the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*.

These provisions set out what must be included in the record, how long it must be kept and requirements for providing access to it.

What the record must include

To be kept as part of the mine record or petroleum site record	Reference in legislation (where applicable)
A record of any improvement, prohibition or notice issued in relation to the mine or petroleum site	Part 10 of the *Work Health and Safety Act 2011 (WHS Act)*
A copy of any provisional improvement notice issued in relation to the mine or petroleum site by a health and safety representative. For a coal mine, any provisional improvement notice issued in relation to the mine by a safety and health representative.	Division 7 of Part 5 of the WHS Act Sections 29 and 31 of the *WHS (Mines and Petroleum Sites) Act 2013* (WHSMP Act)
A record of every incident notified to the regulator with a summary of records kept in relation to a review of control measures following those notifications.	Section 15 WHSMP Act Clause 128 of the *WHS (Mines and Petroleum Sites) Regulation 2014* (WHSMP Regulation)
Each report by a shift supervisor at the mine or petroleum site as communication between outgoing and incoming shifts.	Clause 27 of the WHSMP
A record of all first aid treatment provided at the mine or petroleum site.	
Any other record that the mine operator or petroleum site operator is required to keep in respect of the site under the WHS laws[1] (e.g. the risk assessment records).	

Keeping the mine or petroleum site record

The operator of a mine or petroleum site must keep a record that forms part of the record for seven years from the date the record was made or for any longer period that may be required under the WHS laws in respect of a particular record.

[1] WHS laws means the *Work Health and Safety Act 2011*, *Work Health and Safety Regulation 2011*, *Work Health and Safety (Mines & Petroleum Sites) Act 2013* and the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*

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Availability and access

The operator of a mine or petroleum site must keep the record available for inspection under the WHS laws. For example, it must be available for inspection by an inspector.

The record must also be available and readily accessible to workers at the mine or petroleum site on request. However, the operator of a mine or petroleum site is only required to make available a summary of incidents.

The operator of a mine or petroleum site is not allowed to permit access to personal or medical information in relation to a worker without the worker's written consent unless the information is in a form that:

- does not identify the worker, and
- could not reasonably be expected to lead to the identification of the worker.

PUB14/317 v2

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Any questions?

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Prestart Meetings

(Toolbox Meetings)

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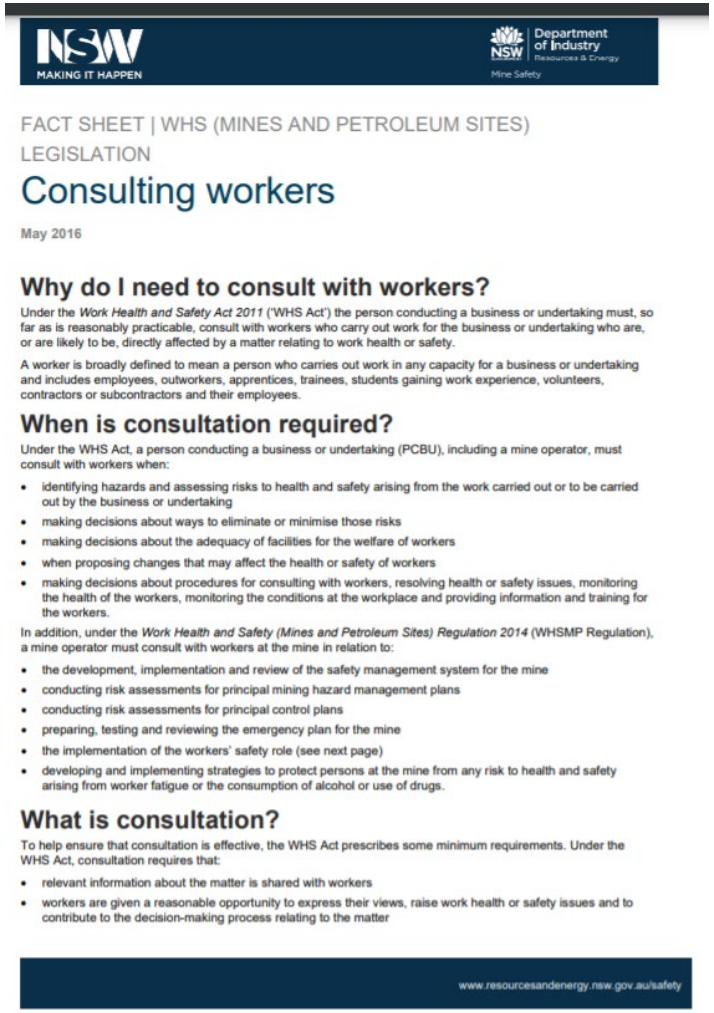
Consultation Requirements

You can use your tool box meeting to consult with employees when:

- identifying hazards and assessing risks
- making decisions about ways to eliminate or control risks
- making decisions about adequacy of workplace facilities
- proposing changes that may affect the health and safety of workers
- making decisions about procedures for the following:
  - consulting with workers
  - resolving safety issues
  - monitoring workers' health and conditions
  - providing information and training



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NSW Department of Industry Resources & Energy Mine Safety

FACT SHEET | WHS (MINES AND PETROLEUM SITES) LEGISLATION

Consulting workers

May 2016

Why do I need to consult with workers?

Under the *Work Health and Safety Act 2011* ('WHS Act') the person conducting a business or undertaking must, so far as is reasonably practicable, consult with workers who carry out work for the business or undertaking who are, or are likely to be, directly affected by a matter relating to work health or safety.

A worker is broadly defined to mean a person who carries out work in any capacity for a business or undertaking and includes employees, outworkers, apprentices, trainees, students gaining work experience, volunteers, contractors or subcontractors and their employees.

When is consultation required?

Under the WHS Act, a person conducting a business or undertaking (PCBU), including a mine operator, must consult with workers when:

- identifying hazards and assessing risks to health and safety arising from the work carried out or to be carried out by the business or undertaking
- making decisions about ways to eliminate or minimise those risks
- making decisions about the adequacy of facilities for the welfare of workers
- when proposing changes that may affect the health or safety of workers
- making decisions about procedures for consulting with workers, resolving health or safety issues, monitoring the health of the workers, monitoring the conditions at the workplace and providing information and training for the workers.

In addition, under the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014* (WHSMP Regulation), a mine operator must consult with workers at the mine in relation to:

- the development, implementation and review of the safety management system for the mine
- conducting risk assessments for principal mining hazard management plans
- conducting risk assessments for principal control plans
- preparing, testing and reviewing the emergency plan for the mine
- the implementation of the workers' safety role (see next page)
- developing and implementing strategies to protect persons at the mine from any risk to health and safety arising from worker fatigue or the consumption of alcohol or use of drugs.

What is consultation?

To help ensure that consultation is effective, the WHS Act prescribes some minimum requirements. Under the WHS Act, consultation requires that:

- relevant information about the matter is shared with workers
- workers are given a reasonable opportunity to express their views, raise work health or safety issues and to contribute to the decision-making process relating to the matter

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Toolbox Meeting

A toolbox meeting, or toolbox talk is **a short periodical consultation at work**, to raise and discuss:

- operational matters
- potential hazards and control measures
- problems or to highlight specific safety concerns / risks
- training

Opportunity for you to hear:

- that the workers understand what as been discussed
- the views and insights of your employees
- feedback on topics raised.

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How to Conduct the Toolbox Meeting

Form 4B: Staff toolbox meeting record

Meeting details

Date:	Location:
Time:	
Minute organiser (name):	Signature:
WHS representative (name):	Signature:

Meeting attendance

	Name	Position title
Present:		

Issues covered

Work planned for today:

Issues covered (cont.)

New work to be performed today:
Safety documents required for today (e.g. SWMS, permits, Take 5, inductions, inspections):

Action required

Action	Responsible person	Timeframe

4. Consultation | Approver: | Date: | Program 4

How to Conduct the Toolbox Meeting

- Set the scene for the meeting — keep it real and be positive.
- Encourage everyone to join in and provide their own feedback, knowledge and experiences.
- Use simple language for everyone to understand to convey the key health and safety messages.
- Opportunity to provide positive feedback for safe actions, hard work and initiatives.
- Avoid criticism and acknowledge everyone for their contributions.
- Should be documented – what was discussed, who attended.

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Any questions?

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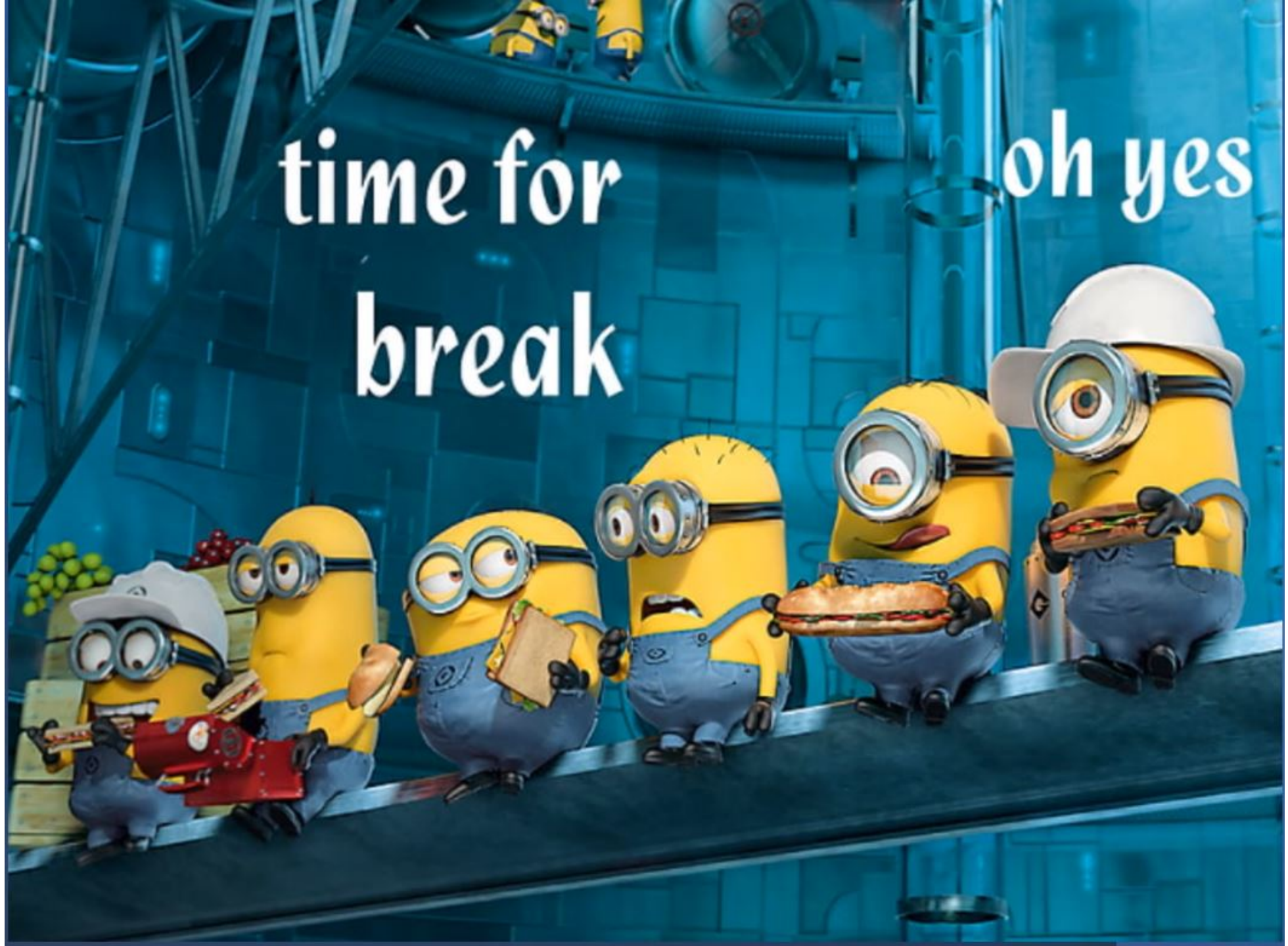

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Pressure vessels – Air receivers and hydraulic accumulators

- Fixed plant e.g. crushers, compressors
- Mobile plant e.g. dump trucks

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QUARRY MANAGER'S RESPONSIBILITY

- First and foremost you must manage and control any hazards for pressurised equipment as required by legislation. Australian Standards are there to provide more detailed supporting guidance
- Pressurised equipment is mostly hydraulic or air and also includes the hoses and lines and safety pressure relief valves
- Must ensure pressure vessels of any size are regularly inspected to make sure they are safe to operate and fit for service
- Must ensure design and item registration requirements are met in accordance with the Work Health and Safety Regulation 2017 Part 5.3

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What you need to do

- Prepare and maintain a register of any pressure vessels on site
- Engage a competent pressure vessel inspector
- Confirm what pressure vessels need Design Registration
- Confirm what pressure vessels need Item Registration
- Confirm what pressure vessels need to be inspected regularly by a competent pressure vessel inspector
- Confirm what pressure vessels can be inspected regularly by a competent person eg some very small vessels such as air brakes on trucks can be inspected by the operator on a pre-start

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DESIGN REGISTRATIONS

Work Health and Safety Regulation 2017 Clause 243 Plant design to be registered

•List of equipment is in Part 1 of Schedule 5

- Competent inspector can confirm what is included for you
- SafeWork certificate must be supplied to you by the OEM / Manufacturer / Supplier
- Not completed by the site (unless you alter the original design) but the certificate must be requested by the site and kept accessible in the site Safety Management System

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ITEM REGISTRATIONS

Work Health and Safety Regulation 2017

- Clause 246 Items of plant to be registered
  - List of equipment is in Part 2 of Schedule 5

- NOT supplied by OEM / Manufacturer / Supplier
- Site must apply to SafeWork for the certificate but this can also be facilitated by the competent inspector on your behalf
- The certificate, which is due for regular renewal with SafeWork, must be kept accessible in the site Safety Management System

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Item registration of these pressure vessels is not required but the hazards still need to be controlled

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TYPICAL REGISTRATION CERTIFICATES (extracts shown only)

CERTIFICATE OF PLANT DESIGN REGISTRATION

Occupational Health & Safety Act 2000
Occupational Health & Safety Regulation 2001

ABN: 77 682 742 966
Phone: (02) 4321 5498
Fax: (02) 4325 5094

Registration No: PV 6-113134/08 **ABN:** 70000086706 **Issue Date:** 10/10/2008

Controller: ATLAS COPCO AUSTRALIA PTY LTD
Trading As: ATLAS COPCO AUSTRALIA PTY LIMITED
Postal Address: PO BOX 6150
BLACKTOWN DC
NSW 2148

Plant Type: Pressure Vessel Original

Design Description:

Quality System	No
Hazard Level	C
Contents	Harmful
Chamber 1 Volume (l)	91
Chamber 1 Design Pressure (kPa)	1800
Chamber 1 Temperature (°C)	-29 TO 120
Chamber 1 Fluid Type	Gas
Drawing Number & Revisions	02977 REV 03 - PART NO 1604982984
Pressure Vessel	Air receiver

Special Conditions

MODIFIED HAZARD LEVEL FROM D TO C

CONDITIONS:

1. This registration applies only to the design described above which has been notified to WorkCover NSW in accordance with the OHS Regulation 2001.
2. The plant owner will require a copy of this certificate. A copy of the certificate must therefore be supplied to the manufacturer so that it can, in turn, be provided to the supplier and owner with the item of plant or equipment.
3. WorkCover NSW reserves the right to audit the registered design at any time to assess compliance with its Acts and Regulations. If an audit is undertaken, detailed information may be requested relating to the design of the plant. Design systems of work and documentation may also be audited. If an audit identifies non-compliance, all plant built to that design may require modifications, and in some cases, may be prohibited from use.
4. This Registration is automatically invalidated if the design is altered to an extent that requires new measures to control risks. A person must not use, or cause or allow plant manufactured to the original design to be used at a workplace unless notification of the alteration, or the prescribed form, has been confirmed by WorkCover NSW.
5. The Registration Number should be quoted in all correspondence to WorkCover regarding this item. Any queries should be addressed to WorkCover's Licensing Unit.

CERTIFICATE OF PLANT ITEM REGISTRATION

Occupational Health & Safety Act 2000
Occupational Health & Safety Regulation 2001

ABN: 77 682 742 966
Phone: (02) 4321 5498

Registration No: U 6-184514/14 /0 **Issue Date:** 24/11/2014 **Expiry Date:** 23/11/2015

Controller:
Trading As:
Postal Address:

Item Type: Pressure Vessel

Description of Item:

Chamber 1 Hazard Level	C
Chamber 1 Contents	Non Harmful
Chamber 1 Volume (l)	116
Chamber 1 Design Pressure (kPa)	1000
Chamber 1 Fluid Type	Gas
Manufacturer	DAFENGRONGGENGDA PV CO LTD
Model	CONQUEST WD38
Serial Number	S2099
Pressure Vessel	Air receiver

Location:

(If mobile plant, this is the location where usually stored or maintained)

Special Conditions:

CONDITIONS:

1. This registration applies only to the item described above which has been notified to WorkCover NSW in accordance with the OHS Regulation 2001.
2. This certificate of registration (or a copy) must be kept in the vicinity of the item of plant to which it refers. For mobile plant, the Registration number must be displayed on the item in a prominent location and be of a permanent nature and clearly legible.
3. This Registration is automatically invalidated if the item is altered in any way that is different to the original design specification, or changes the capacity of the item. This does not include routine maintenance, painting or changes equivalent to original design specifications.
4. The Registration Number should be quoted in all correspondence to WorkCover regarding this item. Any queries should be addressed to WorkCover's Licensing Unit.

Any questions?

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Electrical Maintenance

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Why do we do it?

Legislation says you have to, for all items of plant at the mine (not just electrical):

- **WHS Reg 37**
  - **Maintenance of control measures** – Includes all control measures from your risk assessments
- **WHS Reg 150 (1)**
  - **Inspection and testing of electrical equipment - ** Test and tag of equipment supplied from a socket outlet (240V & 415V)
- **WHS Reg 165 (1)**
  - **Testing of residual current devices -** Testing of RCD's
- **WHS Reg 213**
  - **Maintenance and inspection of plant** – All plant including electrical plant

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Why do we do it?

We have all done risk assessments to determine what hazards we have, and what control measures we will put in place to control those hazards.
But they have to be maintained.

WHS Reg 37 Maintenance of control measures

- **A duty holder who implements a control measure** to eliminate or minimise risks to health and safety **must ensure that the control measure** is, and **is maintained** so that it remains, effective, including by ensuring that the control measure is **and remains**:
  - (a) fit for purpose, and
  - (b) suitable for the nature and duration of the work, and
  - (c) installed, set up and used correctly.

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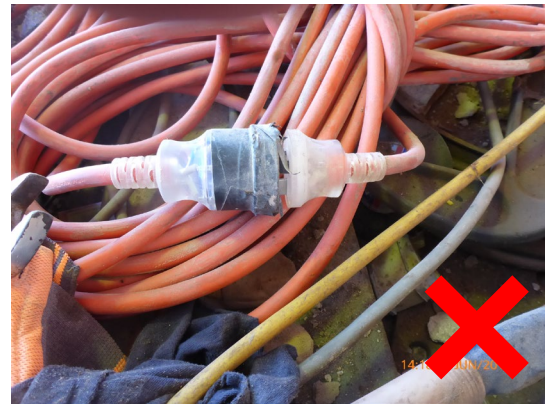
Why do we do it?

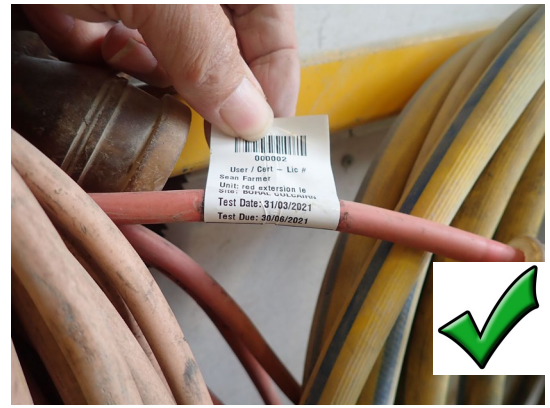
WHS Reg 150 (1) Inspection and testing of electrical equipment (aka “Test & Tag”)

A person conducting a business or undertaking at a workplace must ensure that electrical equipment is regularly inspected and tested by a competent person if the electrical equipment is:

(a) supplied with electricity through an electrical socket outlet, and

(b) used in an environment .. which … exposes the equipment to … moisture, heat, vibration, mechanical damage, corrosive chemicals or dust.





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Why do we do it?

WHS Reg 165 (1)Testing of residual current devices (RCD's)

A person with management or control of a workplace must take all reasonable steps to ensure that residual current devices used at the workplace are tested regularly by a competent person to ensure that the devices are operating effectively.

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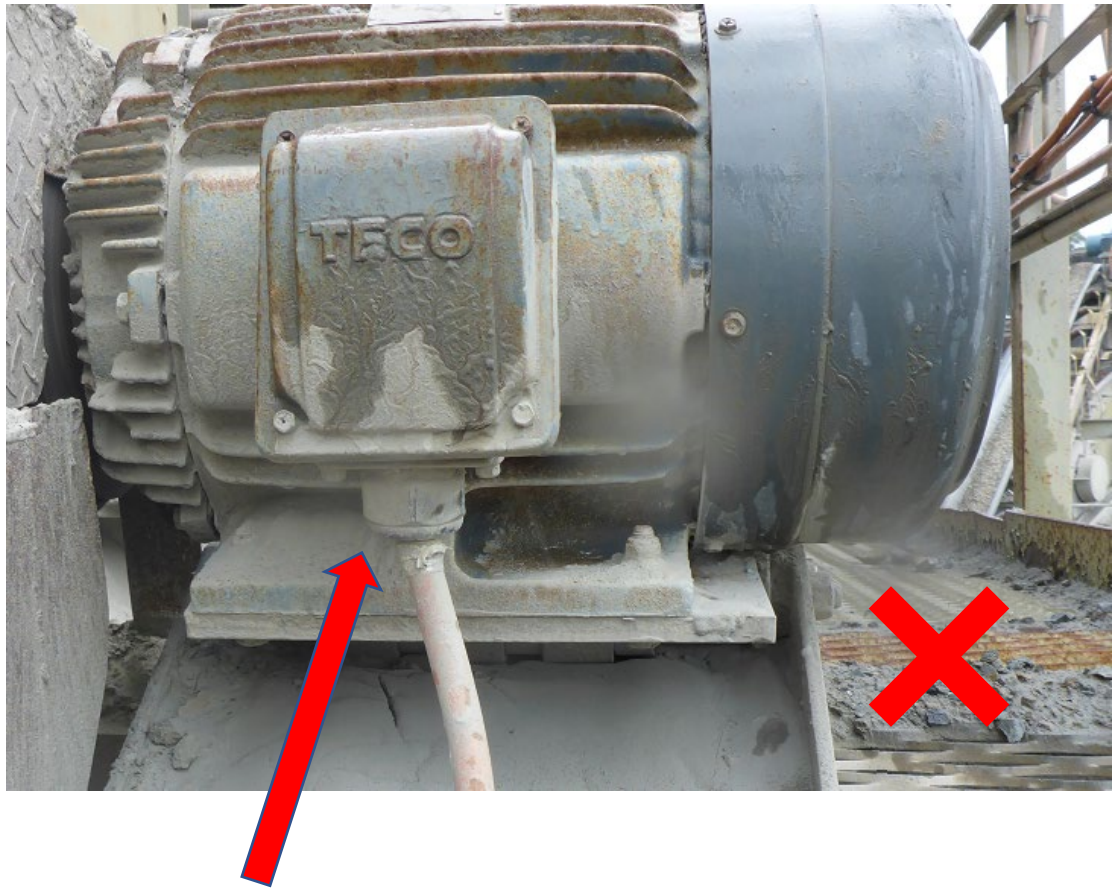
Why do we do it?

- **WHS Reg cl 213 maintenance and inspection of plant**
- (1) the maintenance, inspection and testing of plant is carried out by a competent person.
- (2) The maintenance, inspection and testing must be carried out:
  - (a) in accordance with the manufacturer's recommendations, if any, or
  - (b) if there are no manufacturer's recommendations, in accordance with the recommendations of a competent person, or
  - (c) in relation to inspection, if it is not reasonably practicable to comply with paragraph (a) or (b), annually.



Poly gland on steel wire armoured cable

What do we have to maintain?

Some control measures from your risk assessment

- Cable insulation
- Protective enclosures (IP Rating);
- Earthing systems,
- Protective devices (e.g. overload, short circuit),
- Protective equipment (emergency stops, lanyards, sensors)
- Poles, switchboards, motors, junction boxes, cable glands
- etc etc etc

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How should we maintain our electrical site?

- Engage and nominate a licensed electrical contractor as your “Qualified Electrical Tradesperson” - WHSR cl 213(1) ✓
- The mine in consultation with the QET:
  - develop a list of inspections and tests that are required ✓, then
  - assign a schedule to those inspections ✓, and
  - build a simple calendar of inspections scheduled over the year ✓ (next slide).
- Make sure the quarry manager has the list of scheduled inspections and implements it ✓ ✓

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ELECTRICAL MAINTENANCE - 2022

Test Type	Jan	Feb	Mch	Apl	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Test & Tag tools, cords		19										
RCD Testing		19										
Earth leakage tests		19										
Plant inspection - Estops												
Plant inspection - Lanyards												
Plant inspection - IP, cables, signs, labels												
Welders, leads & clamps												
Earth continuity tests												
Insulation resistance tests												
MEN Link, Main earth test												
Emergency lights		19										
Verify currency of buried services drawing		19										
Mobile plant ELV systems		19										

Yellow = Scheduled month

19 Yellow + Number = Scheduled inspection done on that day (19th in this case)

PLANT INSPECTION CHECK LIST

Inspection of electrical field equipment.

Each item list is to be checked that it works, labels are in place and can be read, and there are no cracks or damage that will allow water or dust to get into it.

INSPECTED BY: ---------- **DATE:** ----------

PLANT	ITEM	Working OK	Labels in place	Seals OK	Comment
CV01	Estop tail LHS				
	Estop Tail RHS				
	Lanyard LHS				
	Lanyard RHS				
	Cables secure				
	Cable glands				
CV02	Estop tail LHS				
	Estop Tail RHS				
	Lanyard LHS				
	Lanyard RHS				
	Cables secure				
	Cable glands				
Screen	Estop LHS				
	Estop RHS				
	Cables secure				
	Cable glands				
Power outlet CV01 Tail					
Power outlet CV01 head					

Signed .....

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Record keeping

You need to keep records of all tests and inspections carried out.

- Use the calendar as a record of what was scheduled and when it was done
- File the inspection reports with the calendar
- You then have an annual record of what you maintain, when you plan to do it and when you actually do it.
- (A purchase order and a tax invoice do not count as a record of inspections and test done.

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Any questions?

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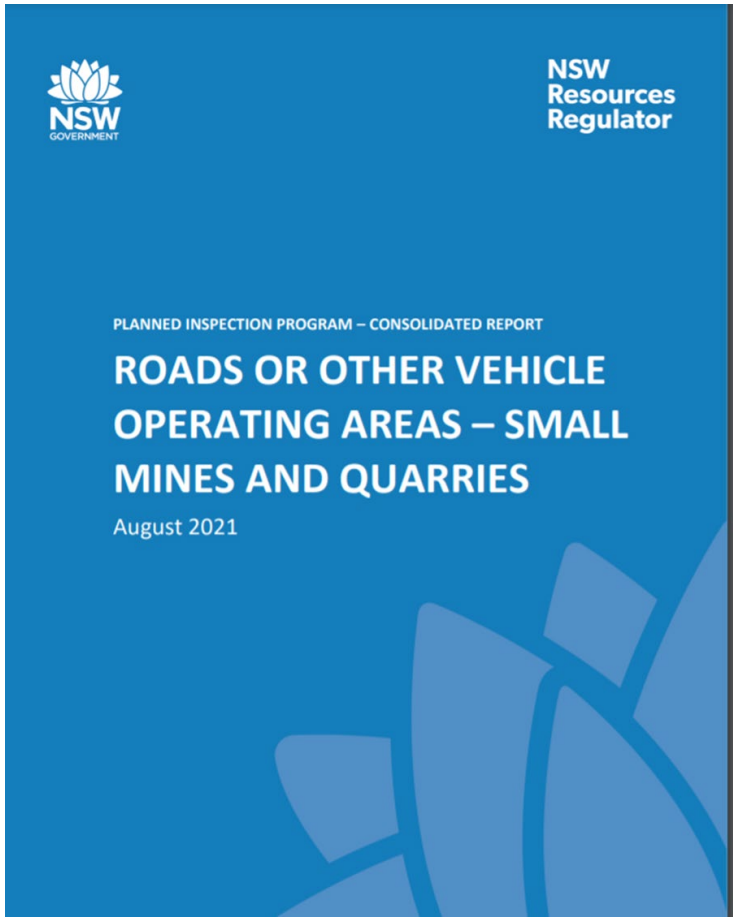
Planned Inspection - ROVOA -(Roads or Other Vehicle Operating Areas) Summary Report



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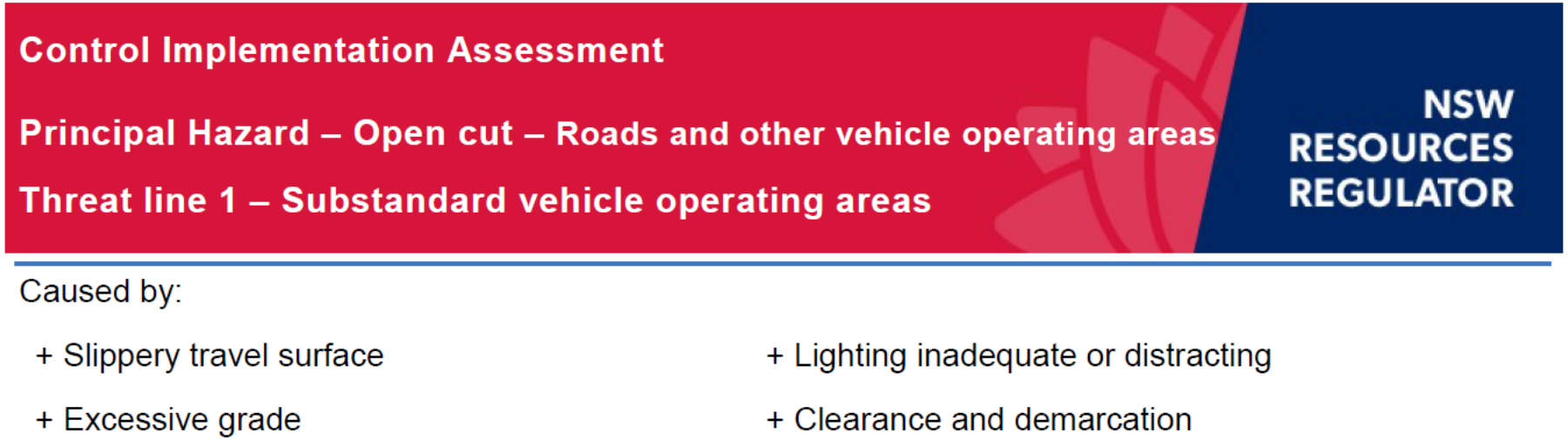
Planned inspection program

- This report summarises assessment findings from 86 mines or quarries in relation to the principal hazard of roads or other vehicle operating areas (ROVOA)
- Inspections were carried out from September 2019 to December 2020.
- ROVOA continued into 2021, with limited inspections due to covid.



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Key Findings

The below points outline the key findings which were uncovered during the planned inspection program:

1. Several Principal Hazard Management Plans (PHMP) for ROVOA made no reference to the requirements of the WHS(MPS) legislation and as such lacked consideration of specific hazards and controls (*clause 28 - Movement of Mobile Plan & Schedule 1, Part 2, clause 4 – Roads or other vehicle operating areas*).
2. Some sites did not have any type of ROVOA PHMP and relied on controls listed in other safety documents e.g. Safe Work Method Statements, Safe Work Procedures and induction safety rules.

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Key findings (con't)

3. Underpinning risk assessments lacked site specific content and were often shared between locations without consideration for specific site conditions and hazards.
4. Underpinning risk assessments regularly had no worker or subject matter expert involvement (e.g. maintainers, pit designers and health professionals) and were merely an attempt to satisfy legislative requirements.
5. The inclusion of '*intersection*' design standards in ROVOA PHMP documents were often missed and was rarely evaluated in the underpinning risk assessment.
6. The acknowledgement and use of accepted industry road standards was often overlooked.

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Key findings (con't)

7. Many examples were identified where site ROVOA standards did not meet the requirements of the mine operator's documents.
8. Opportunities for minimising and/or segregating vehicle interaction were not adequately assessed or implemented, particularly with respect to pedestrian segregation.
9. The inclusion of '*road and other road related standards*' in the ROVOA PHMP was often poorly implemented and not well understood by workers.

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Recommendations

1. Ensure that ROVOA PHMP documents are developed in consultation with the workforce and subject matter experts which are based on the findings of a documented risk assessment.
2. Ensure that ROVOA PHMP documents are site specific and record the required road and other road related standards for the mine.
3. Ensure that ROVOA PHMP acknowledges and references the requirements of known industry standards, (e.g. Section 5, Guide to health and safety at quarries – Nov 2018 (see web site).
4. Eliminate unnecessary vehicle interactions on-site through segregation of traffic or permit restrictions, where reasonably practicable.

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Recommendations (Con’t)

5. Eliminate unnecessary vehicle/pedestrian interactions through the implementation of designated pedestrian corridors and controls when working in proximity of mobile plant.
6. Supervisors understand the requirements of the ROVOA PHMP and implement them in consultation with the workers.

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Where to find this report (and other reports)

https://www.resourcesregulator.nsw.gov.au/safety-and-health/incidents/safety-inspection-programs

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Any questions?

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Safety inspection programs Factsheets

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Factsheets

- Factsheets are normally published prior to an assessment program commencing
- They may reference relevant published safety alerts, safety bulletins and other relevant publications
- They give a short overview of why it is being run, as well as what aspects will be concentrated on.
- They don’t restrict the assessment from looking at other issues at the mine.
- A consolidated report is normally published at the completion of the program to advise industry of the findings.

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Programs that have already started / finished

Tier 2 and Tier 3 quarries

1. Dust (finished)
2. Roads or Other Vehicle Operating Areas (ROVOA) (finished)
3. Entanglement (underway)
4. Training and competencies (commenced)
5. Emergency response (planned)
6. Slope stability / mine planning (planned)

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FACT SHEET

Assessment program - Entanglement – Tier 2 and Tier 3 quarries

June 2021

The Resources Regulator is commencing a program of planned inspections and targeted assessments across the quarrying sector which will be focussing on the risk of entanglement.

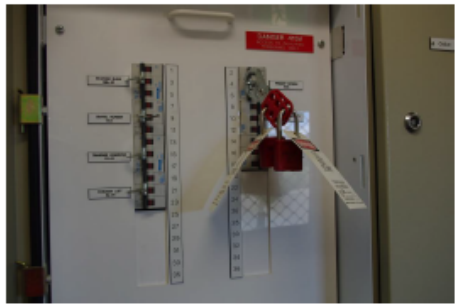
Entanglement is a hazard which has the potential to cause serious and/or fatal injuries to workers if not controlled effectively. This fact sheet is primarily based on the critical controls for entanglement risks within tier 2 and tier 3 quarries and should be considered by mine operators when assessing the risk at their operation.

Equipment safeguarding

Guards prevent people accessing entanglement hazards.

Safe standing zones

People remain a safe distance from unguarded entanglement hazards.



Isolation standards

Prevent equipment starting while people are working near entanglement hazards.

Emergency stops

Enable stopping of the plant in the event a worker becomes entangled.

Considerations

Arising from investigations into entanglement related incidents, it is evident that non-compliance to these key control measures has contributed to incident outcomes, which include both severe and fatal injuries to workers. When identifying and implementing control measures, mine operators are reminded to apply the hierarchy of controls to ensure health and safety risks are minimised as far as is reasonably practicable.

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FACT SHEET

Assessment program - Entanglement – Tier 2 and Tier 3 quarries

Other relevant safety alerts and bulletins published by the NSW Resources Regulator:

DATE PUBLISHED	REFERENCE	TITLE
Jun 2020	Investigation Information Release	Worker's arm injured in belt press filter
Aug 2019	Code of Practice	Managing the risks of plant in the workplace
Nov 2018	SB18-18	Drill rig safety
Sep 2016	Code of Practice	Mechanical engineering control plan
Mar 2008	SA08-05	Miner's arm injured using drill rig
Nov 2006	SA06-19	Operator's hands injured in conveyor at quarry
Aug 2002	SA 02-12	Quarry operators arm caught in unguarded conveyor

CM9 reference

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Any questions?

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Rollovers

Why do we still have them?

What do you believe are the main reasons for vehicle rollovers?

You may have experienced this, know someone who has or you have seen a safety alert.

- Ground conditions – weather, roads (berms, slope), stockpile areas, bunds/berms
- Operators - experience, age, fatigue, knowledge of machine, mobile devices, limited or little training, load placement, exceeding machine design limitations e.g. speed
- Management - supervision, production pressures
- Machine (itself) – flat tyres, not fit for purpose, not maintained, limitation of machine

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What should you do?

You investigate the causal factors and fix them! Eliminate the Hazard.

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ADTs are not made to rollover

Ask any OEM and they will tell you it is not in the design or in the handbooks

What caused this?

An example of a non ADT rollover

What caused this?

And another one.

What caused this rollover?

An excavator this time

Reason?

Comments anyone?

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Any guesses on the cause of this rollover

What's this?

What can happen?

An example of a ADT rollover

What caused this?

Any questions?

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