Resources Regulator
Department of Regional NSW

Investigation report

Death of a worker at West Wyalong Quarry

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Executive summary

On 24 May 2021, Mr Matthew Richens (self-employed contractor) sustained fatal injuries when he was struck by a light vehicle while working at West Wyalong Quarry, Wyalong, NSW.

About 7:05am Mr Richens and the worker travelled in a light vehicle from the administration area to the processing plant area of the mine to commence work. The processing plant area consisted of an existing processing plant on the eastern side of the area. Construction of a new processing plant was underway on the western side of the area.

Mr Richens was seated in the passenger seat and the worker was driving the light vehicle. As the light vehicle entered the vicinity of the processing plant, an electrical contractor signalled to the worker for assistance. The electrical contractor was unable to start a forklift being used on construction of the new processing plant. The worker parked a short distance from the forklift and exited the vehicle to assist the electrical contractor.

About the same time, Mr Richens exited the vehicle and walked to the middle of the processing plant area. Mr Richens knelt down on one knee and started to pick up several items which had fallen to the ground some time previous. The items included a small box, bolts, washers and a can of spray paint.

About one minute later, the worker returned to the light vehicle and entered the driver seat. The worker then drove the light vehicle forward to make a U-turn towards his left and in the direction of where Mr Richens was kneeling. The front near side of the vehicle collided with Mr Richens' back. Mr Richens was knocked to the ground. The light vehicle continued over Mr Richens with the front offside tyre running over him. The vehicle stopped and the worker exited the vehicle. About the same time, Mr Richens stood up and walked a short distance of about 5 metres before collapsing on the ground.

Nearby workers went to the aid of Mr Richens and an emergency response was activated. Emergency services were contacted while workers commenced CPR on Mr Richens. Emergency services attended the scene however attempts to resuscitate Mr Richens were unsuccessful.

Investigation findings

The investigation determined that:

- The primary cause of the incident was that Mr Richens was struck by a light vehicle being driven by the worker
- The worker was unaware that Mr Richens had adopted a crouched position in proximity to the light vehicle prior to the incident
- The relevant risk to health and safety was death or serious injury due to a collision between a light vehicle and a worker
- The mine operator had identified the risk within operational risk assessments
- To control the risk of mobile plant collisions the mine operator primarily relied upon:
    - The Principal Mining Hazard Management Plan – Transport Management Plan
    - A Safe Work Method Statement
    - Site Safety Rules
    - Trained and competent operators
- Mr Richens' attention was directed towards the items he was collecting from the ground
- Immediately preceding his re-entry into the vehicle, the worker did not scan his surroundings and identify Mr Richens nearby in the crouched position
- In the moments leading up to the incident, the worker did not follow the site safety rule known to him which required him to announce where the light vehicle was driving to.

Recommendations

Mine operators

Mine operators and contractors have a duty to identify hazards and manage risks to health and safety associated with the operation of mobile plant and to provide safe systems for managing light and heavy vehicle interactions in accordance with the *Work Health and Safety Act 2011* and related legislation.

It is recommended that mine operators and contractors:

- Review risk assessments for road and vehicle operating areas to ensure all foreseeable risks arising from the interaction between vehicles and pedestrians are captured, and appropriate controls are identified to manage those risks
- Monitor and review procedures to ensure that safety controls for managing vehicle and pedestrian interactions are implemented in accordance with the principal hazard management plan for roads and vehicle operating areas
- Implement a procedure which requires a vehicle operator to alert pedestrians when a vehicle is about to set off from a stationary position subject to a risk assessment justifying otherwise
- Provide workers with appropriate instruction and supervision to ensure procedures to manage vehicle and pedestrian interactions are followed.

Workers

Workers have a duty to take care for their own health and safety and of their co-workers. They must also comply as far as reasonably able with any work instructions given by mine operators to ensure worker safety and compliance with the *Work Health and Safety Act 2011* and related legislation.

Workers must:

- Comply with site rules
- Follow procedures to manage vehicle and pedestrian interactions
- Maintain situational awareness.

Operators of vehicles should always:

- Ensure effective positive communication with pedestrians and implement a horn sounding or other audible procedure to alert pedestrians when vehicles are about to set off from a stationary position
- Observe their surrounding area and intended path of travel both before entering a vehicle and prior to moving off

Pedestrians should:

- Never assume that vehicle operators are aware of their presence
- Stay out of trafficable areas unless safe to do so
- Ensure positive communication with vehicle operators
- Ensure acknowledgement of their presence and intended work location by vehicle operators.

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1. Purpose of the report

This report describes the mining workplace incident investigation (the investigation) conducted by the NSW Resources Regulator (the Regulator) into the cause and circumstances of the death of Mr Matthew Richens at West Wyalong Quarry located at 331 Wargin Road, Wyalong on 24 May 2021.

2. Investigation overview

2.1. Major safety investigations

The Regulator investigates critical workplace incidents in the NSW mining, petroleum and extractives industries. The Regulator carries out a detailed analysis of incidents and report its findings to enhance industry safety and to give effect to its compliance and enforcement approach.

2.2. Legislative authority to investigate

Investigators are appointed as government officials under the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and are deemed to be inspectors for the purposes of *the Work Health and Safety Act 2011*. The Regulator has also delegated some additional functions to investigators including the power to obtain information and documents for the purpose of monitoring compliance with these Acts.

2.3. Regulator response

The incident was reported to the Regulator on 24 May 2021. The Regulator deployed mine safety inspectors and investigators to the mine after which an investigation commenced.

On 4 June 2021, the Regulator published an Investigation Information Release (IIR21-07)[1] to provide information concerning the incident and recommendations to the mining industry.

3. Involved parties

3.1. The mine

West Wyalong Quarry (the mine) is an open cut, hard rock quarry, located at 331 Wargin Road, Wyalong. The mine supplies construction materials. The mine carries out activities including drill and blast, load and haul, crushing, grinding and separation, transportation and sales.

3.2. Mine operator and holder

Regional Quarries Australia Pty Ltd (ACN: 602 653 029) (Regional Quarries) is the nominated operator for the mine. Regional Hardrock (West Wyalong) Pty Limited ATF Regional Hardrock West Wyalong Unit Trust (ACN: 631 673 106) is the nominated mine holder.

Maas Administration Pty Ltd (Maas) employed the worker who was driving the light vehicle involved in the incident (the worker) but Regional Quarries directed the worker, contracted Mr Richens to perform work at the Quarry, operated the light vehicle involved in the incident and was the person conducting the relevant business or undertaking (**PCBU**) at the time of the incident.

3.3. The deceased

Mr Matthew Richens resided at Young, NSW. He was self-employed, operating an unincorporated business trading as Richens Welding and Fabrication. On 1 February 2021, Mr Richens was engaged by Regional Quarries to assist with welding and fabrication repairs, installations and work activities associated with construction of the new processing plant at West Wyalong Quarry. Mr Richens was

[1] The IIR was published at an early point in the investigation at which time the best available evidence identified Regional Hardrock (West Wyalong) Pty Limited as the mine operator. Subsequent investigations established with certainty, however, that Regional Quarries Australia Pty Ltd was in fact the mine operator

engaged for the duration of the construction of the new processing plant and scheduled to work Monday to Friday with weekend work as required.

On 23 February 2021, Mr Richens completed the Contractor and Employee Induction for West Wyalong Quarry.

Mr Richens was 23-years old at the time of his death.

3.4. The worker – light vehicle operator

The worker was the light vehicle operator at the time of the incident. He was a fulltime employee of Maas at the mine and a qualified boiler maker. He had worked at the mine for over 20 years under the previous owner before returning to the mine about two years ago under the current owner after an absence of about 5 years.

At the time of the incident the worker was involved in construction of the new processing plant. His duties included coordinating tasks and workers including Mr Richens.

3.5. Mobile plant involved in the incident

The light vehicle involved in the incident was a Nissan Patrol utility with NSW road registration (the vehicle). The vehicle was a two-door utility, white in colour. The vehicle formed part of Regional Quarries operations and was serviced and maintained on site. The vehicle was fitted with a bullbar and driving lights. The rear tray was black in colour. There was a horizontal reflective yellow line across the driver's side, rear and passenger side of the vehicle. A "Regional Quarries" placard was fitted to the tailgate and roll bar of the vehicle.

There were two orange flashing lights affixed to the top of the roll bar with one light above the driver's side and the other above the passenger side. A white pole with an amber flag was affixed to the bullbar on the passenger's side.

The front registration plate was slightly misshapen. No other damage was noted across the vehicle.

Figure 1 – The vehicle (Nissan Patrol) involved in the incident (Source: NSW Police)

4. The incident

4.1. Incident location

The incident occurred at the West Wyalong Quarry located at 331 Wargin Road, Wyalong. The incident location was within an active operational area identified as the processing plant area. On the eastern side of the area was the existing processing plant. To the western side of the area a new processing plant was under construction.

Figure 2 – Aerial image of mine (Source: NearMap)

Figure 3 – Incident scene sketch (Source: NSW Police)

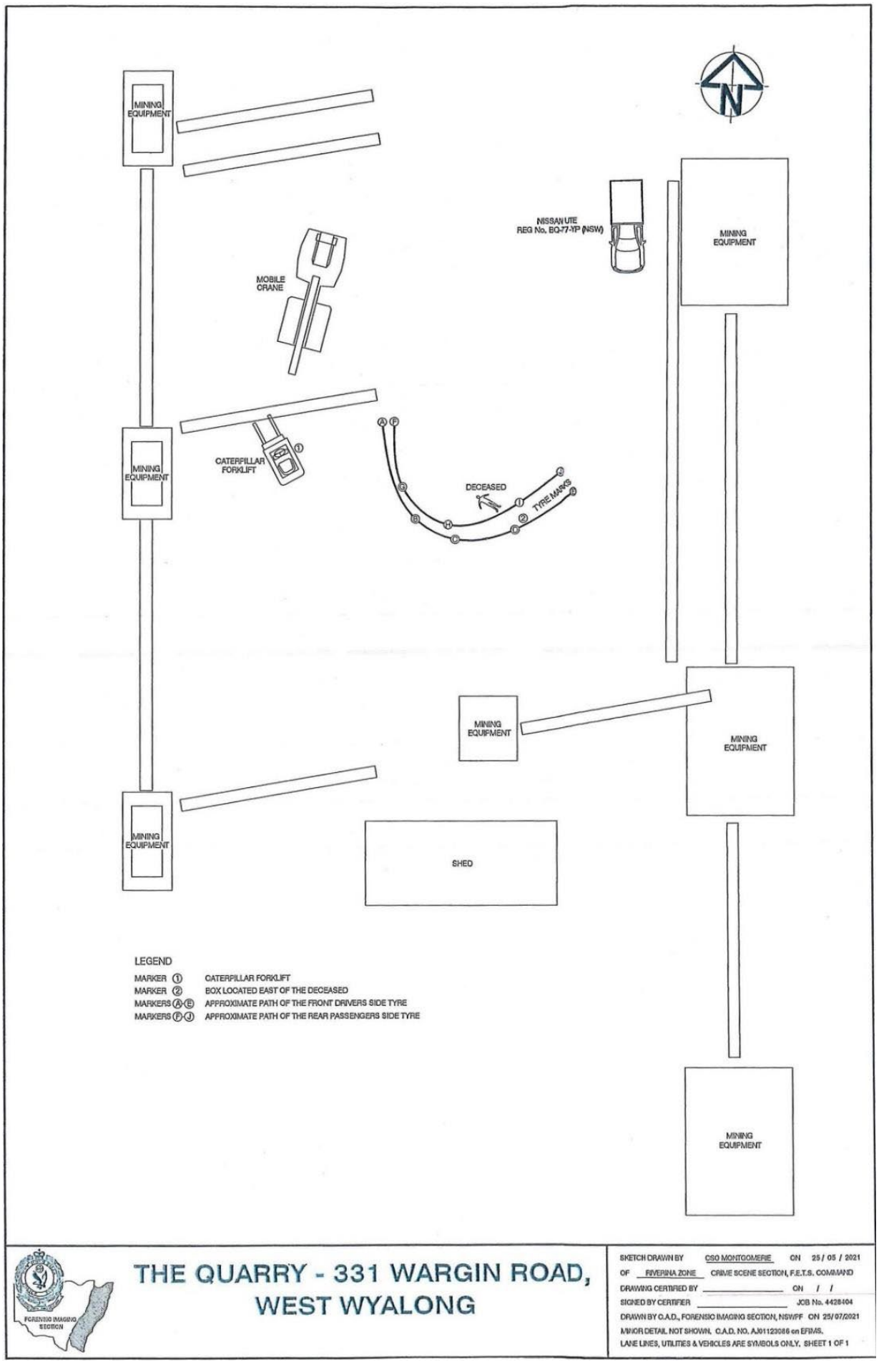

Figure 4 – View of incident scene in a southerly direction taken the day after the incident (Source: NSW Resources Regulator)

4.2. Start of shift

About 6:45am on 24 May 2021 workers attended a pre-start meeting conducted by the acting Quarry Manager. All workers on site attended the toolbox meeting, including contractors.

At the conclusion of the meeting, mine workers and electrical contract workers separated to prepare for work. The worker and another worker drove to the existing processing plant to prepare for their work. The worker directed the other worker to prepare the service truck which was parked near the new processing plant. The worker told the other worker that he would drive the vehicle back to the workshop area and collect Mr Richens before bringing him to the processing plant to commence work.

4.3. The incident

About 7:05am the worker and Mr Richens drove towards the processing plant area after Mr Richens was collected by the worker from the workshop area. As they approached the area an electrical contract worker waved to the worker for assistance. The worker drove towards the new processing plant construction area and parked the light vehicle.

The electrical contractor told the worker that the forklift used on the construction of the new processing plant was not starting. The worker alighted the light vehicle and went about trying to locate a set of jumper leads from the nearby service truck.

About the same time Mr Richens exited the vehicle and walked to the middle of the processing plant area. Mr Richens knelt down on one knee and started to pick up several items which had fallen to the ground some time previous. The items included a small box, bolts, washers and a can of spray paint.

About one minute later, the worker returned to the light vehicle and entered the driver's seat. The

worker stated that he looked over his left shoulder and out the back window, to check for any approaching vehicles, before driving forward to make a U-turn towards his left and in the direction of where Mr Richens was kneeling. The vehicle travelled about 10 metres before the front near side of the vehicle collided with Mr Richens' back. Mr Richens was knocked to the ground. The light vehicle continued over Mr Richens with the front offside tyre running over the top of his body. The worker, upon realising that he hit something, stopped the vehicle. He alighted the vehicle. About the same time Mr Richens stood up and walked a short distance of about 5 metres before collapsing to the ground.

Nearby workers went to the aid of the deceased and an emergency response was activated. Emergency services were contacted by telephone while workers commenced CPR on the deceased. Emergency services attended the scene, however, attempts to resuscitate the deceased were unsuccessful.

The entire incident was recorded on CCTV from a camera which monitors the mine's diesel fuel bay.

4.3.1. Cause of death

On 28 May 2021 a post- mortem examination was conducted with the direct cause of death identified as "chest and abdominal injuries". No underlying or other significant conditions were identified as having contributed to Mr Richens' death.

External examination revealed superficial abrasions and lacerations to both hands and legs. Contusions were noted to the chest and abdomen and rib fractures on the left side. Toxicology detected no alcohol or illicit drugs.

5. The investigation

5.1. Investigation activities

The investigation examined the incident including the circumstances leading up to it, the cause of it and the actions of the involved workers. The investigation activities included scene assessments, mechanical inspections of the vehicle, examination of the safety management system, formal interviews with relevant parties and analysis of the collision by an accident reconstruction expert.

5.2. Examination of the incident scene

The incident scene was examined by NSW Police and Regulator investigators. The examination identified the movements of Mr Richens immediately prior to the incident and the path of travel of the light vehicle.

The examination found that the incident area was an unsealed, gravel surface. The surface was free of major defects and obstructions. There were no line markings, physical barriers or designated parking delineations for mobile plant operators or marked pedestrian walkways in the area. The light vehicle was parked nearby the incident scene, however, it had been moved after the incident to escort NSW Ambulance to the scene.

Mr Richens was in-situ at the time of examination. He was lying in the supine position with his arms and legs extended from his torso. Mr Richens was wearing an orange coloured hooded jumper, orange long sleeve work shirt, dark coloured pants and steel capped work boots.

Mr Richens had various pieces of medical equipment attached to his body that were used during attempts to resuscitate him.

Figure 5 – View of incident scene in a southerly direction taken the day of the incident (Source: NSW Police)

5.3. Examination of the vehicle

A mechanical examination of the light vehicle was conducted by a NSW Police mechanical examiner. The examination found no mechanical defects or faults on the vehicle which may have been a contributing factor to the incident.

5.4. Analysis of the collision

An accident recreation expert engaged by the Resources Regulator performed a recreation of the collision and, as a result of it, concluded that Mr Richens was obscured from view by the left side 'A' pillar of the vehicle when the worker re-entered the vehicle, sat in the drivers set and moved forward in the vehicle. As the worker drove forward and executed the U-turn, the recreation identified there was a period of approximately 2 seconds during which Mr Richens, in a crouched position, came into the worker's view if he had been looking to his front left whilst driving.

As the vehicle continued to execute the U-turn Mr Richens was again obscured by the left side 'A' pillar of the vehicle. Immediately before impact, Mr Richens would not have been visible to the worker.

6. Investigation findings

The investigation determined that:

- The primary cause of the incident was that Mr Richens was struck by a light vehicle being driven by the worker
- The worker was unaware that Mr Richens had adopted a crouched position in proximity to the light vehicle prior to the incident
- The relevant risk to health and safety was death or serious injury due to a collision between a light vehicle and a worker

- The mine operator had identified the risk within operational risk assessments
- To control the risk of mobile plant collisions the mine operator primarily relied upon:
  - The Principal Mining Hazard Management Plan – Transport Management Plan
  - A Safe Work Method Statement
  - Site Safety Rules
  - Trained and competent operators
- Mr Richens' attention was directed towards the items he was collecting from the ground
- Immediately preceding his re-entry into the vehicle, the worker did not scan his surroundings and identify Mr Richens nearby in the crouched position
- In the moments leading up to the incident, the worker did not follow a site safety rule known to him which required him to announce where the light vehicle was driving to.

6.1. Risks to health and safety

The investigation identified that the primary risk to workers' health and safety was serious injury or death caused by mobile plant and pedestrian interaction within an active mining area at the mine. The risk had the reasonable potential to cause multiple deaths in a single event, thereby meeting the definition of a 'Principal Hazard' prescribed by clause 5 of the Work Health Safety (Mines and Petroleum Sites) Regulation 2014 (WHSMPR) and, in turn, invoking requirements to develop and implement a principal hazard management plan and specific controls under Division 2 of the Regulation.

6.2. Identification and assessment of the risk

6.2.1. Principal Mining Hazard Management Plan

In March 2021, Regional Quarries conducted a review of its Principal Mining Hazard Management Plan concerning roads or other vehicle operating areas. The risk assessment considered the hazards and risks associated with mobile plant interactions, including pedestrians.

6.2.2. WHS Risk Register

Regional Quarries developed a risk register for operations at the mine. The risk register identified 'collision with pedestrian' as a medium risk.

6.2.3. Safe Work Method Statements

In October 2020, Regional Quarries developed a safe work method statement (SWMS) for the work activity of building the new plant. The risk assessment considered the hazards and risks associated with travelling to and from the work area. The SWMS identified hazards including heavy and light vehicle interactions, pedestrians and collisions. The SWMS identified the hazards as a 'medium risk'.

In February 2021, Regional Quarries developed a SWMS for the work activity of conducting light vehicle operations. The risk assessment considered the hazards and risks associated with light vehicles entering and leaving the mine site. The SWMS identified hazards including collisions with other workers on the site. The SWMS identified the hazards as giving rise to a medium risk.

6.3. Risk Controls

6.3.1. Principal Mining Hazard Management Plan

In March 2021, Regional Quarries conducted a review of its Principal Mining Hazard Management Plan concerning roads or other vehicle operating areas. The risk assessment considered the hazards and risks associated with mobile plant interactions, including pedestrians. The risk assessment identified controls for interaction with pedestrians as:

- Ensure all pedestrian walkways that are considered 'main thoroughfares' are delineated and well sign posted
- Ensure designated parking zones for heavy and light vehicles with pedestrian access to nearest building
- Pedestrian safety communicated in induction process with handheld UHF's to be utilised if access to stockpile or pit area is required.

6.3.2. Transport Management Plan

In November 2021, Regional Quarries updated its transport management plan for the site. The plan identifies paths of travel for 'sale and production' vehicles and 'production' vehicles. The plan identifies a maximum speed of 40km/h for the site.

6.3.3. WHS Risk Register

The Regional Quarries risk register for operations at the mine identified 'collision with pedestrian' as a risk along with a number of controls. The controls identified are:

- Positive communication in operating areas
- UHF channel
- Traffic management (speed limited areas signage)
- Inductions
- Light vehicle parking bays will be marked
- 'reverse parking only' policy will apply on site
- Emergency planning
- PPE (Hi-viz & seatbelt)
- Fitness for work policy.

6.3.4. Site Rules

Regional Quarries has implemented a number of site safety rules. Applicable site safety rules relevant to this incident are:

- Please be aware of mobile plant at all times (traffic will abide by the 40km/h site speed limit)
- Positive communication protocols are required on site (UHF channel 10).

6.3.5. Safe work method statement

The October 2020 safe work method statement (SWMS) for the work activity of building the new plant considered the hazards and risks associated with travelling to and from the work area. The SWMS identified hazards including heavy and light vehicle interactions, pedestrians and collisions.

The SWMS identified controls as:

- Pos Com UHF10
- Flashing lights
- UHF
- Call up when approaching HME
- TMP
- Escorted visitors
- Exclusion zones
- Park up areas.

6.3.6. Induction and training

A Contractor and Employee Induction was in place at the mine. Any contractor, employee or visitor considered a medium or high risk was required to complete the induction. The induction included the site safety rules and site transport management plan. The induction included discussions on traffic controls and restrictions.

6.3.7. Positive Communications

Regional Quarries has implemented 'positive communication' protocols at the mine. The protocols include the use of UHF radio to announce movement of vehicles and the use of UHF radios by pedestrians when approaching heavy vehicles or stockpiles.

6.4. Other available reasonably practicable control measures

The regulators Health and safety at quarries guide (published August 2018)(the Guide) *'gives practical advice on health and safety control measures at quarries'*.

It includes particular guidance directed toward the development, implementation and maintenance of control measures for risks arising from hazards associated with interaction between vehicles and pedestrians at a quarry.

The following 'horn sounding procedure' is included in section 11.9.4 'Drivers Visibility' of the Guide:

> *There should be a procedure (commonly known as the 1-2-3 horn principle) to be followed before a vehicle drives off:*
>
> - *moving from being parked overnight or otherwise not in use – a single beep from the horn with a five second delay before driving off*
> - *moving from an operational area – two beeps from the horn, with a five second delay before driving forward*
> - *moving in reverse – three beeps from the horn with a five second delay before reversing.*

Regional Quarries had not implemented a horn sounding procedure prior to the incident.

6.5. Actions taken post incident

Following the incident Regional Quarries implemented additional control measures for risks arising from hazards associated with the interaction between vehicles and pedestrians at a quarry including the following:

- The review and update of its 'Roads & Other Vehicles Operating Areas Management Plan'
- The introduction of a 'horn sounding procedure' for all vehicles on site consistent with that included in the regulators Health and safety at quarries guide. The horn sounding procedure is used to alert others of the intended movement of mobile plant. The alert is a series of short horn signals:
  - 1 horn blast prior to start-up of machine
  - 2 horn blasts prior to moving the vehicle forward
  - 3 horn blasts prior to reversing the vehicle
- Installation of pedestrian barriers in appropriate areas, such as the site office area.

6.6. Foreseeability of the risk and incident

The risk of serious injury or death arising from mobile plant interactions was reasonably foreseeable. The risk was known to Regional Quarries as outlined in the various risk assessments undertaken by the mine.

6.7. Causal factors

The investigation considered a number of potential causal factors which may have contributed to the incident:

6.7.1. Environmental

The investigation found no evidence to suggest that environmental factors contributed to the incident. Sun glare was considered, in circumstances where the worker was turning the light vehicle toward the east just after 7:05am, but there was no evidence discovered to support sun glare being a factor. In particular, the worker did not raise his vision being obscured by sun glare or any other item at the time of the incident or immediately preceding it.

There was no evidence to suggest any other environmental factors such as dust, noise, road conditions, a physical obstruction outside the vehicle impeding vision or weather was a factor in the incident. In particular, both vehicle and pedestrian traffic at and around the incident site was light both leading up to and at the time of the incident.

6.7.2. Equipment

The investigation found no evidence to suggest the plant being used contributed to the incident except to the extent that the left side 'A' pillar obscured the worker's view of Mr Richens upon re-entry to the vehicle and for a number of seconds thereafter.

The light vehicle was fit for purpose and, as described above, examination of it after the incident found no mechanical defects or faults which may have contributed to the incident.

At the time of the incident Mr Richens was wearing his orange coloured high-visibility hooded jumper in accordance with site rules. Whilst he did not see it prior to the incident, it was what the worker observed when he stopped the light vehicle after feeling a 'bump' and '….seen like the orange coat in the dust'.

6.5.3. Task/job factors

The investigation found no evidence to suggest the task being undertaken contributed to the incident. There is no evidence to suggest that time constraints or workload contributed to the incident. There is no evidence to suggest the physical or mental demands of the task contributed to the incident.

6.7.3. Fitness for work

The investigation found no evidence that either Mr Richens or the worker were affected by drugs or alcohol or impaired due to fatigue.

6.7.4. Organisational factors

The investigation found that the absence of a horn sounding procedure was one factor that contributed to the incident in that, having regard to the circumstances surrounding the incident, its implementation would have provided advance notice to Mr Richens that the light vehicle was about to commence moving and, in turn, at least seven seconds (if not more) for him to stand and make himself more visible to the light vehicle driver, inform the driver of his presence and / or move out of the path of the light vehicle.

The investigation otherwise found that Regional Quarries had implemented a number of control measures (refer section 6.3 'Risk Controls' above), both Mr Richens and the worker were trained in the site safety rules and the worker was licensed and competent to drive the light vehicle with which he was familiar (it was used as a work and personal vehicle).

6.7.5. Human factors

The investigation found that immediately prior to the incident:

- No form of communication between Mr Richens and the worker occurred. Mr Richens exited the light vehicle to collect the dropped items unbeknown to the worker. The worker exited before

returning to the light vehicle in order to return to the workshop unbeknown to Mr Richens

- The Regional Quarries 'positive communication' protocol had no part to play in the incident, to the extent there was no violation of it by either worker at the time of the incident, because Mr Richens was not required to carry or use a UHF radio as he was not approaching a heavy vehicle or stockpile
- The worker:
  - Did not expect Mr Richens to be positioned where he was at the time of the incident – he expected Mr Richens to have made his way to the processing plant after having parked the vehicle as it was the reason he drove Mr Richens there from the administration area
  - Did not turn his mind or attention to where Mr Richens was or may have been:
    - As he approached the light vehicle
    - As he entered the light vehicle, occupied the driver's seat and caused it to move forward in an arc towards the east
  - Had his vision obscured by the A-frame of the light vehicle for a number of seconds after entering the light vehicle and occupying the driver's seat
  - Did not see Mr Richens, whose body height had been made smaller through adoption of a kneeled position on the ground, as he looked over his left shoulder and out the rear window to check for approaching vehicles before causing the light vehicle to make a left arc to the east
- Mr Richens had his back turned to the light vehicle as he kneeled and directed his attention to the items he was collecting from the ground
- The investigation established that the two orange flashing lights affixed to the top of the roll bar of the light vehicle were not operating prior to, at the time of or shortly after the incident, contrary to the site's requirements and evidence provided by the worker. CCTV footage shows the vehicle's orange lights were operating on one occasion only on the morning of the incident when escorting the ambulance to the incident site.

7. Recommendations

7.1. Mine operators

Mine operators and contractors have a duty to identify hazards and manage risks to health and safety associated with the operation of mobile plant and to provide safe systems for managing light and heavy vehicle interactions in accordance with the *Work Health and Safety Act 2011* and related legislation.

It is recommended that mine operators and contractors:

- Review risk assessments for road and vehicle operating areas to ensure all foreseeable risks arising from the interaction between vehicles and pedestrians are captured and appropriate controls are identified to manage those risks
- Monitor and review procedures to ensure that safety controls for managing vehicle and pedestrian interactions are implemented in accordance with the principal hazard management plan for roads and vehicle operating areas
- Implement a procedure which requires a vehicle operator to alert pedestrians when a vehicle is about to set off from a stationary position subject to a risk assessment justifying otherwise
- Provide workers with appropriate instruction and supervision to ensure procedures to manage vehicle and pedestrian interactions are followed.

7.2. Workers

Workers have a duty to take care for their own health and safety and of their co-workers. They must also comply as far as reasonably able with any work instructions given by mine operators to ensure worker safety and compliance with the *Work Health and Safety Act 2011* and related legislation.

Workers must:

- Comply with site rules
- Follow procedures to manage vehicle and pedestrian interactions
- Maintain situational awareness.

Operators of vehicles should always:

- Ensure effective positive communication with pedestrians and implement a horn sounding or other audible procedure to alert pedestrians when vehicles are about to set off from a stationary position
- Observe their surrounding area and intended path of travel both before entering a vehicle and prior to moving off

Pedestrians should:

- Never assume that vehicle operators are aware of their presence
- Stay out of trafficable areas unless safe to do so
- Ensure positive communication with vehicle operators
- Ensure acknowledgement of their presence and intended work location by vehicle operators.