

Pollution Incident Response Management Plan (PIRMP)

Penrose Quarry

| Revision: | Date: | Status: | Prepared/Reviewed by: |
|-----------|------------|----------------|----------------------------|
| 9 | 04.05.2022 | Issued for use | D Thiedeke |
| 10 | 22.12.2022 | Issued for use | D Thiedeke |
| 11 | 25.04.2024 | Issued for use | D Thiedeke |
| 12 | 04.07.2024 | Issued for use | L Attard/ M Rixon /J. John |
| | | | |
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Concrete & Aggregates

HTA-E-SOP-001

Hy-Tec Industries

Safety Management System

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Pollution Incident Response Management Plan (PIRMP)

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21. ENVIRONMENTAL INCIDENT RESPONSE – POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

21.1 PURPOSE

C&A Hy-Tec Quarries have systems in place to ensure all environmental/pollution incidents and hazards are controlled and monitored in line with the relevant state legislation.

21.2 SCOPE

This element applies to all C&A Hy-Tec Quarry employees, contractors, sub-contractors and visitors to ensure that all individuals are aware of requirements with regards to environmental incident issues. This element is used in conjunction with ABL-HSE-GSS-11 for reporting. If a pollution incident occurs in the course of an activity, so that material harm to the environment (within the meaning of **Part 5.7 – Duty to notify pollution incidents** - section 147 – NSW POEO Act) is caused or threatened, the person carrying on the activity must immediately implement the site's pollution incident response management plan in relation to the activity required by this Part and report any incident / incidents that cause or threaten material harm **Immediately** after becoming aware of the incident.

21.3 PROCEDURE

All hazards relating to human health or the environment will be described in the Environmental Hazard Management Matrix (**Appendix 8G**). The details of the pre-emptive action to be taken to minimize or prevent any risk of harm to human health or the environment arising out of the relevant activity will be recorded in a JHA (**Appendix 7C**) and/or a Risk Assessment (**Appendix 7D**). Risks will be minimised using the Risk Management Process (**Appendix 7K**).

An inventory of potential pollutants on the premises will be recorded in a Hazardous Substance Register (**Appendix 17B**). This register will also include the quantity and location of the pollutant.

A description of the safety equipment or other devices that are used to minimize the risks to human health or the environment and to contain or control a pollution incident are listed in the PPE Equipment Matrix (**Appendix 19B**) and Hazard Register (**Appendix 7F**).

The names, positions and contact details of key individuals at the quarry are kept in the Management Structure Register (**Appendix 4B**).

The contact details of each relevant authority are required to be available and displayed. Examples of required authorities are below:

- (a) EPA/OEH
- (b) Local Council
- (c) Local DPI office
- (d) Safe Work
- (e) Fire and Rescue
- (f) Water Catchment Authority
- (g) Ministry of Health
- (h) Department of Agriculture, Water and the Environment

A neighbourhood contact list will be maintained at the site. In an emergency incident, the appropriate neighbours will be contacted by the Quarry Manager or delegate and will be updated as required by the Quarry Manager / delegate. Constant communication such as 2-way radios, mobile phones and Business Communication (Toolbox) Meetings etc. (**Appendix 6B**) will be used as early warning mechanisms to communicate with site staff and management throughout the incident or other times.

Concrete & Aggregates

An Environmental Incident Definition and Response Flow Chart (**Appendix 21A**) has been produced for guidance on the process of dealing with a pollution incident. "Pollution" means:

- (a) water pollution, or
- (b) air pollution, or
- (c) noise pollution, or
- (d) land pollution.

Definition - "Pollution Incident" - means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

The mine plan (**Appendix 3B**) will show the location of the premises with the property boundary and any other relevant detail.

The qualifications and training competencies of all employees will be recorded as required in the Training Register (**Appendix 11F**).

It is a legislative requirement for this plan to be tested and updated on an annual basis and within one month of an incident. To complete this requirement a Pollution Incident Response Drill Report (**Appendix 21B**) has been prepared. The checklist includes the major elements of the plan that require testing. This PIRMP is to be reviewed and updated as required at least annually to ensure that incident response systems are fully functioning and are ready to be implemented if an incident occurs. This requirement shall be listed as an action item and scheduled on the environmental compliance planner. Training records should be stored on site and in the Hy-Tec Intranet data base.

The plan will be controlled and reviewed in accordance with Element 5. Any changes will be recorded along with the date in the SMS Amendment Sheet (**Appendix 1A**).

21.4 REFERENCES

- [Environmental Protection Act 1994](#)
- [Protection of the Environment Operations Act 1997](#)
- [Protection of the Environment Operations \(General\) Amendment \(Pollution Incident Response Management Plans\) Regulation 2012](#)

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Appendix 21A

Environmental Incident Definition and Response Flow Chart

"pollution incident" means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

Meaning of material harm to the environment

(1) For the purposes of this Part:

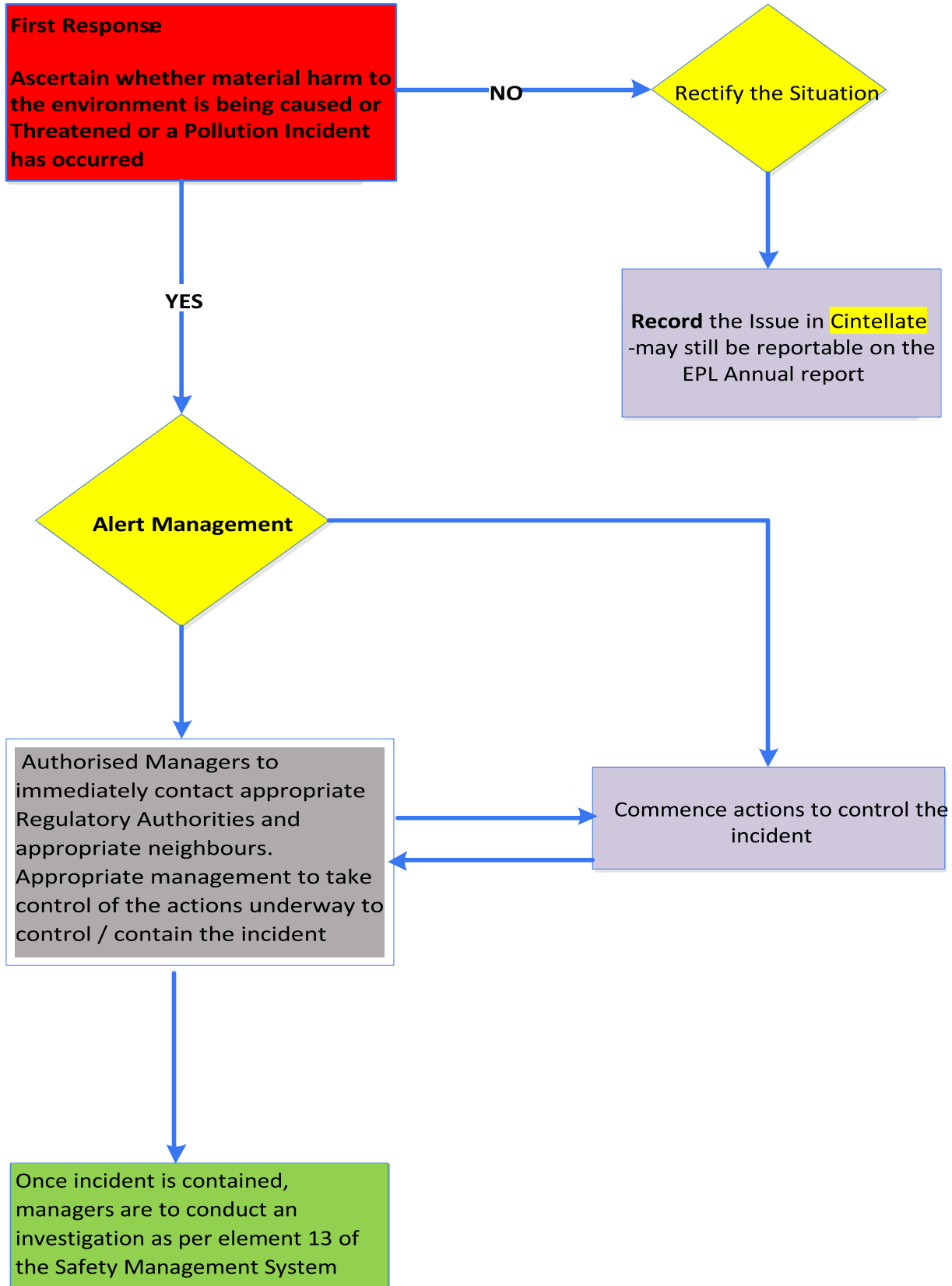
(a) harm to the environment is material if:

(i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or

(ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and

(b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

(2) For the purposes of this Part, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.





HTQY-E-SFT-024

Hy-Tec Industries – Penrose Quarry

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Appendix 21B

Environmental Response Plan Drill Report

| | | | |
|---------------------------------------------------------------------------------------------|--|--------------------------------------------|----------------|
| Site/Location: | | Date of Drill / Environmental Issue | |
| Method Used for initiating response: | | | |
| Time of Environmental incident: | | Was Management contacted? | |
| Was Incident contained? | | Method/equipment used? | |
| Was regulatory Authority notified? | | Name of reporting person? | |
| Name of regulatory authority reported to | | Contact person at Reg. Authority? | |
| Was incident adequately cleaned up? | | Was waste disposed of correctly? | |
| Comments on the Drill / Environmental Emergency: | | | |
| | | | |
| Corrective actions to be adopted as a result of this Drill / Environmental Emergency | | By whom | By Date |
| | | | |
| | | | |
| | | | |
| Report Compiled by | | | Date |



ABL-HSE-GSS-12-03

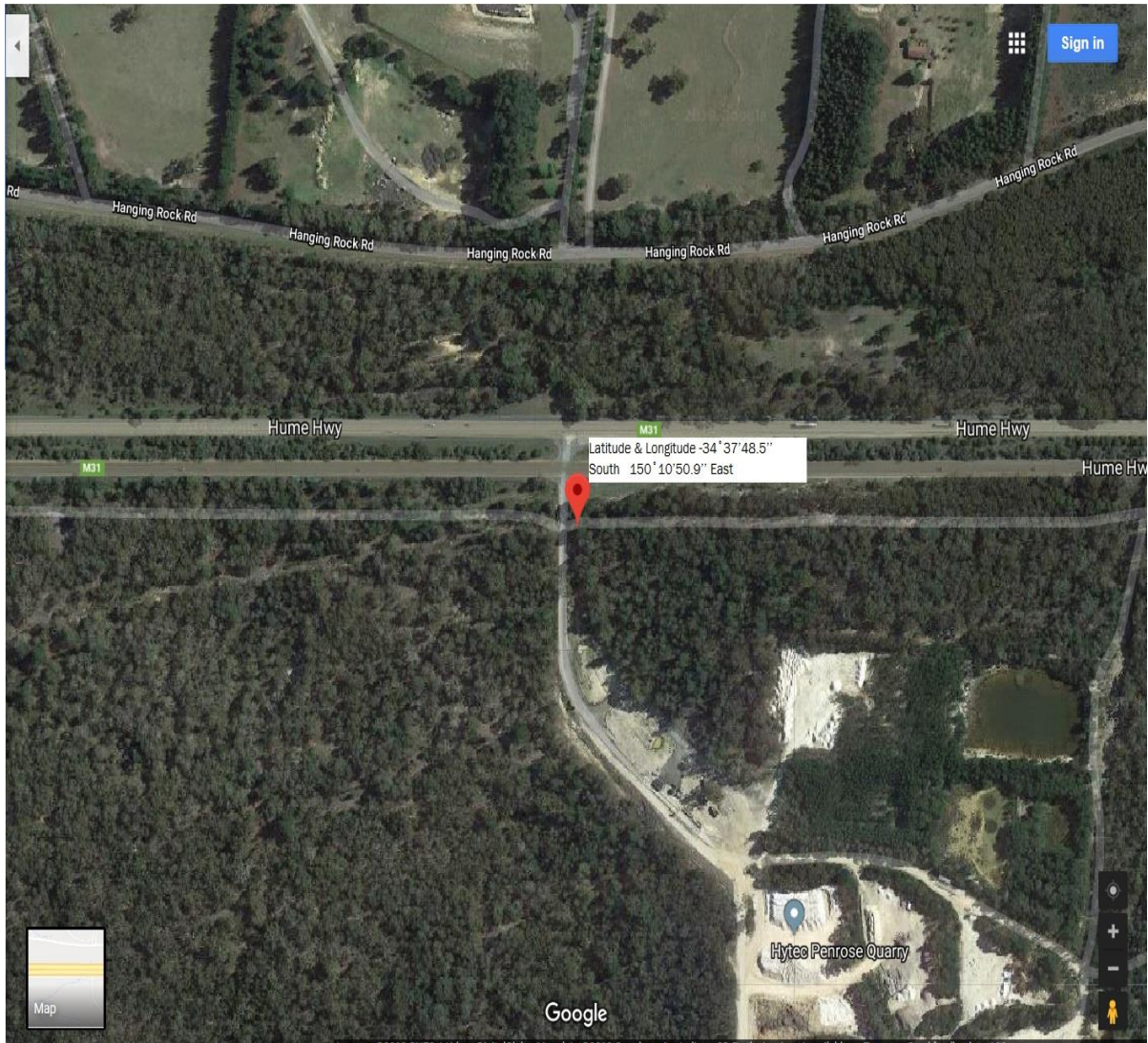
EMERGENCY RESPONSE CONTACT – PENROSE QUARRY

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| EXTERNAL EMERGENCY RESPONSE ORGANISATIONS | | | |
|----------------------------------------------|--------------------|------------------------------|------------------------------------------------------------------------------------------|
| Service | Emergency Contact | General Enquiry | Address |
| Ambulance | 000 | | |
| Bowral Hospital – (Ambulance) | 000 | 02 4861 0200 | Mona Rd, Bowral |
| Department of Industry – Water | 02 93386600 | 0293386600 | www.industry.nsw.gov.au/water |
| Department Planning & Environment | 1300 305695 | | www.planning.nsw.gov.au |
| Depart. P & E – Resources Regulator | 1300 814609 | | www.resourcesregulator.nsw.gov.au |
| Doctor, Moss vale medical centre | N/A | 02 4868 1500 | 61 Elizabeth st, Moss vale |
| E.P.A | 131555 | | |
| Fire Brigade | 000 | 02 4877 1551 02 4841 1555 | Wilkinson St, Berrima Hume street Marulan South |
| Ministry of Health | | 02 93919000 | www.health.nsw.gov.au |
| Poisons Information Centre | N/A | 13 11 26 | www.poisonsinfo.nsw.gov.au |
| Police | 000 | 02 4868 1222 | Elizabeth street Moss Vale |
| SafeWork | N/A | 13 10 50 | contact@safework.nsw.gov.au |
| State Emergency Service | 13 25 00 | N/A | |
| Wingecarribee Council | N/A | 02 4868 0888 | 68 Elizabeth Street Mose Vale |

If any emergency service (**Police, Fire or Ambulance**) is called to site, a nominated employee must meet the response team at the front gate (**13601 Hume Hwy, Paddys River**) to the Quarry and escort them to the required location.

List of Neighbourhood contacts to be maintained at the Quarry – **For privacy reasons, this list is not to be published.**



Helicopter Directions For emergency purposes

Latitude & Longitude 34° 37' 48.5" South 150° 10' 50.9" East

Being 34 degrees, 37 minutes and 48.5 seconds south / 150 degrees, 10 minutes and 50.9 seconds East



HTQY-S-HSE-072

Hy-Tec Industries – Penrose Quarry

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Appendix 4B

Register of persons occupying positions in the Management Structure

| Position | Name | Start Date | Responsible for activating Incident Response Plan (Y/N) | Responsible to Manage Pollution Incident (Y/N) | Authority to Notify (Y/N) | Finish Date |
|-----------------------------------------|-----------------------------------------------------|------------|---------------------------------------------------------|------------------------------------------------|---------------------------|-------------|
| Chief Operation Officer | Andrew Dell (0417 607 450) | N/A | N | Y | N | |
| National Planning & Development Manager | Darryl Thiedeke (02 9751 7130 / 0409 652 022) | N/A | N | N | Y | |
| Group Manager HSE Adelaide Brighton | Stephen De Musso (0439 740 293) | N/A | N | N | Y | |
| NSW General Manager | David Cilento (0418 162 498 / 02 9751 7143) | N/A | N | N | Y | |
| Hy-Tec HSE Advisor | Joe Perulero (0479 188 381) | N/A | N | N | Y | |
| Quarry Operations Manager NSW | Lee Attard (0497 603 401) | N/A | Y | Y | Y | |
| Quarry Manager | Michael Rixon (0407 107 247) | N/A | Y | Y | Y | |
| Quarry Supervisor | Mitch Moroney (0403 256 426) | N/A | Y | Y | N | |
| Quarry Supervisor | Kieron Whitlock (0460 322 199) | N/A | Y | N | N | |
| Quarry Operator | Neil Van Oosterum | N/A | Y | N | N | |
| Quarry Operator | Scott Harrison | N/A | Y | N | N | |
| Quarry Operator | Ellie Clarke | N/A | Y | N | N | |
| Quarry Operator | Steve O'Donnell | N/A | Y | N | N | |
| Quarry Operator | Leah Trinder | N/A | Y | N | N | |



HTQY-S-HSE-072

Hy-Tec Industries – Penrose Quarry

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Appendix 4B










Register of persons occupying positions in the Management Structure

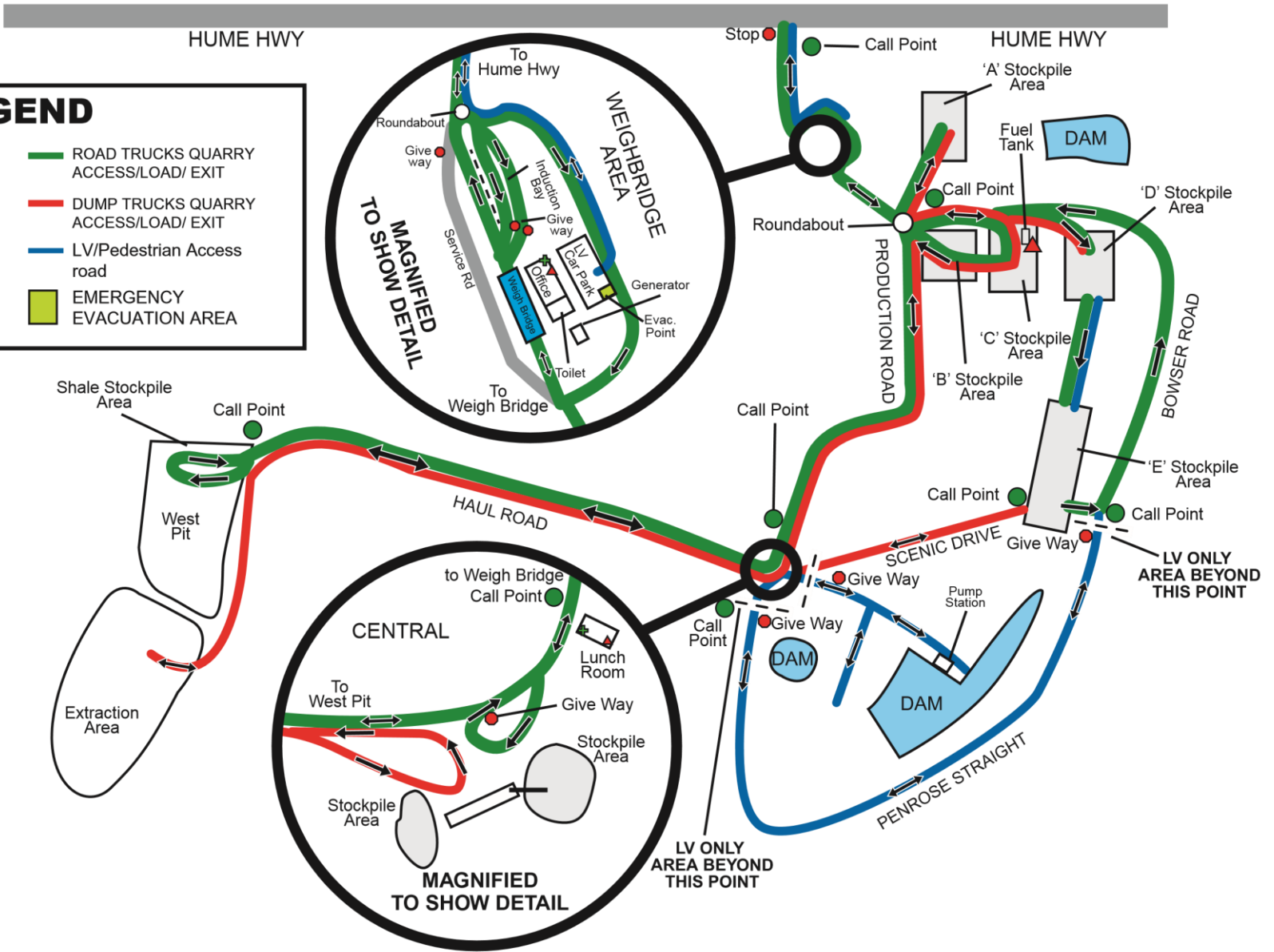
| | | | | | | |
|----------------------------|----------------|-----|---|---|---|--|
| Quarry Operator | Victor Adamson | N/A | Y | N | N | |
| Quarry Operator | Dylan Lord | N/A | Y | N | N | |
| Quarry Operator | Lindley Price | N/A | Y | N | N | |
| Weighbridge/administration | Helene Robson | N/A | Y | N | N | |

PENROSE QUARRY

LOT 1-5 HUME HIGHWAY

LEGEND

| | | | |
|-----------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------------------------------|--------------------------------------|
|  | FIRE EXTINGUISHER |  | ROAD TRUCKS QUARRY ACCESS/LOAD/ EXIT |
|  | FIRST AID KIT |  | DUMP TRUCKS QUARRY ACCESS/LOAD/ EXIT |
|  | STOP/ GIVE-WAY |  | LV/Pedestrian Access road |
|  | CALL POINT |  | EMERGENCY EVACUATION AREA |
|  | GENERAL TRAFFIC DIRECTION | | |





ChemAlert's distinct colour rating system to allows for an easy visual interpretation of the hazard level associated with chemical substances.

The three distinct colours and their meaning are as follows:

GREEN

Low Health Hazard with normal use.

User Check List:

- Read the SDS and ChemAlert report thoroughly before using the product
- Clarify any concerns you might have about the product or its application
- If PPE is specified, are workers experienced in its use?

AMBER

Moderate Health Hazard with normal use.

User Check List:

- Read the SDS and ChemAlert report thoroughly before using the product
- Clarify any concerns you might have about the product or its application
- Is there a safer substitute?
- Is the area adequately ventilated?
- Does the area of application need to be isolated?
- Is air monitoring required to evaluate exposure levels?
- Have safe work practices or procedures been established?
- If PPE is specified, are workers experienced in its use?

RED

High Health Hazard with normal use.

User Check List:

- Read the SDS and ChemAlert report thoroughly before using the product.
- Clarify any concerns you might have about the product or its application.
- Does the product need to be used (can the product or task be eliminated)?
- Is there a safer substitute?
- Is the area adequately ventilated?
- Does the area of application need to be isolated?
- Is there a first aid officer or nurse available?
- Is air monitoring required to evaluate exposure levels?
- Have safe work practices or procedures been established?
- Are medical records kept for those handling this product?
- If PPE is specified, are workers experienced in its use?



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Stock Inventory By Location

(Location Name: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY, Child Locations Included)

(Sort By: Product Name, Filter By: None)

| Stock Number | Product Name | | | | | | Supplier (Emergency Contact) | | | | | | | |
|--------------|--------------|----------------|-----------|---------------|--------------|--------|------------------------------|----------------------|----------------|-----------------|-----------|--------|-----------------|----------|
| | Hazardous | Dangerous Good | UN number | Packing Group | Hazchem Code | Status | Container Tracking | Number of Containers | Container Size | Quantity (Kg/L) | | | Risk Assessment | SDS Date |
| | | | | | | | | | | Max | Container | Actual | | |

| Location: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY/ 12FT CONTAINER | | | | | | | | | | | | | | | |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------|---------|--------|-----|----------|------------------------------------------------------------------------------|----|--------|--------|--------|--|-----------|------------------|--|
| 2347 | 32A-LINE DULUX METALSHIELD EPOXY ENAMEL SPRAYPAK GLOSS - COLOURS | | | | | | DULUX GROUP (AUSTRALIA) PTY LTD (1800 220 770/ 0800 220 770) | | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | None | No | 1 | 300 mg | | 0 Kg | | - | 27-Feb-2020 | |
| 411 | BELTGRIP (AEROSOL) | | | | | | CRC INDUSTRIES (AUST) PTY LIMITED (13 11 26 (PIC)) | | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2Y | Approved | No | 12 | 400 mg | | 0 Kg | | Available | 31-Jul-2020 | |
| 2340 | BP KOMATSU HYDRAULIC OIL 46 | | | | | | KOMATSU AUSTRALIA (+61 13 11 26) | | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 205 L | | 205 L | | - | 01-Nov-2019 | |
| 836 | BRAKE AND CLUTCH FLUID | | | | | | AMPOL AUSTRALIA PETROLEUM PTY LTD (FORMERLY CALTEX AUSTRALIA) (1800 033 111) | | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 5 L | | 5 L | | - | PRODUCT OBSOLETE | |
| 2343 | CLEAN-R-CARB | | | | | | CRC INDUSTRIES (AUST) PTY LIMITED (13 11 26 (PIC)) | | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2Y | Approved | No | 1 | 40 L | | 40 L | | - | 30-Jul-2020 | |
| 2349 | EPG INDUSTRIAL GEAR OIL 320 | | | | | | VALVOLINE (AUSTRALIA) PTY LTD (1800 804 658, New Zealand (02) 8603 2300) | | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 20 L | | 20 L | | - | 23-Aug-2022 | |
| 1630 | GENIUS GUN FLEXIBLE INSULATION EXPANDING FOAM | | | | | | SODAL AUSTRALIA PTY LTD (1300 507 011) | | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 10 | 750 mL | 36 L | 7.5 L | | - | 20-Jul-2021 | |
| 885 | GLITZ OUTDOOR CLEANER CONCENTRATE | | | | | | PASCOE'S PTY LTD (NSW) ((08) 9353 3900; 1800 065 326/ 13 11 26) | | | | | | | | |
| | Yes | DG 9 | UN 3082 | PG III | •3Z | Approved | No | 1 | 5 L | | 5 L | | - | 31-Dec-2021 | |
| 2345 | HEAVY DUTY DEGREASER | | | | | | HI-TEC OIL TRADERS PTY LTD / HI-TEC BATTERIES (1300 796 009) | | | | | | | | |
| | Yes | DG 3 | UN 1268 | PG III | 3Y | Approved | No | 1 | 20 L | | 20 L | | - | 03-Apr-2023 | |
| 2344 | LITHPLEX TAC GREASE | | | | | | HI-TEC OIL TRADERS PTY LTD / HI-TEC BATTERIES (1300 796 009) | | | | | | | | |
| | No | No | - | - | - | Approved | No | 40 | 2.5 Kg | | 100 Kg | | - | 02-Nov-2021 | |
| 2351 | LOCTITE SF 7850 CLEANING KNOWN AS YUK OFF ORANGE HAND CLEAN 400ML | | | | | | HENKEL AUSTRALIA PTY LTD (1800 032 379) | | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 1 | 15 L | | 15 L | | - | 20-Nov-2023 | |
| 2346 | MAXI TIMBER RESTORER CONCENTRATE | | | | | | GSB CHEMICAL CO. ((03) 9457 1125) | | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 1 | 2.5 L | | 2.5 L | | - | 10-Mar-2023 | |
| 2348 | MULTIBOND SMX35 - SEAL & STRETCH | | | | | | SODAL AUSTRALIA PTY LTD (1300 507 011) | | | | | | | | |
| | No | No | - | - | - | Approved | No | 5 | 290 mL | 3.48 L | 1.45 L | | - | 18-Jan-2023 | |

Stock Inventory By Location

(Location Name: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY, Child Locations Included)

(Sort By: Product Name, Filter By: None)

| Stock Number | Product Name | | | | | | Supplier (Emergency Contact) | | | | | | | |
|--------------|---------------------------------------------------------------------------------------------------------------------------|----------------|-----------|---------------|--------------|----------|-----------------------------------------------------------------------|----------------------|----------------|-----------------|-----------|--------|-----------------|-------------|
| | Hazardous | Dangerous Good | UN number | Packing Group | Hazchem Code | Status | Container Tracking | Number of Containers | Container Size | Quantity (Kg/L) | | | Risk Assessment | SDS Date |
| | | | | | | | | | | Max | Container | Actual | | |
| 2342 | NORTHFORK TRUCK WASH | | | | | | ACCO BRANDS AUSTRALIA PTY LTD (13 11 26 (Poisons Information Centre)) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 1 | 20 L | | 20 L | | - | 23-Apr-2021 |
| 2479 | PESTXPRT DIY PEST CONTROL LIKE THE PROFESSIONALS PRO-SPRAY INDOOR-OUTDOOR MULTI INSECT CONTACT AND RESIDUAL BARRIER SPRAY | | | | | | SUMITOMO CHEMICAL AUSTRALIA PTY LTD (1800 024 973 (24 hours)) | | | | | | | |
| | No | DG 9 | UN 3082 | PG III | •3Z | Approved | No | 1 | 2 L | | 2 L | | - | 19-May-2021 |
| 2350 | PINK PEARL HAND SOAP | | | | | | NOWCHEM (0413 809 255; (02) 4421 4099) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 1 | 15 L | | 15 L | | - | 11-Jan-2021 |
| 2352 | SELLEYS BBQ TOUGH CLEAN | | | | | | SELLEYS, A DIVISION OF DULUXGROUP (AUSTRALIA) PTY LTD (1800 033 111) | | | | | | | |
| | Yes | DG 2.1 / 8 | UN 1950 | - | 2YE | Approved | No | 2 | 400 g | 4 Kg | 0.8 Kg | | - | 02-Jul-2021 |
| 1161 | SELLEYS NO MORE GAPS MULTIPURPOSE (CHINA EXPORT) | | | | | | SELLEYS, A DIVISION OF DULUXGROUP (AUSTRALIA) PTY LTD (1800 033 111) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 40 | 475 g | 19 Kg | 19 Kg | | - | 02-Jul-2021 |
| 2480 | SLASHER ORGANIC WEEDKILLER READY TO USE | | | | | | ORGANIC CROP PROTECTANTS PTY LTD (13 11 26/ 1800 033 111) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 1 L | | 1 L | | - | 31-May-2023 |
| 1259 | WINDEX GLASS & MORE MULTI-SURFACE | | | | | | S.C. JOHNSON & SON, INC. (+1 866 231 5406) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 40 L | | 40 L | | Available | 20-Jun-2019 |

Location: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY/ CRIB ROOM

| | | | | | | | | | | | | | | |
|------|----------------------------------------------------|--------|---------|-------|-----|----------|-------------------------------------------------------------------------------------------|---|--------|---------|---------|--|---|------------------|
| 966 | AIR WICK AEROSOL AIR FRESHENER - LAVENDER | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 1 | 237 g | 0.47 Kg | 0.24 Kg | | - | 01-Mar-2023 |
| 2355 | AIR WICK AEROSOL AIR FRESHENER - VANILLA | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 2 | 237 g | 1.42 Kg | 0.47 Kg | | - | 01-Mar-2023 |
| 2354 | BLU TACK | | | | | | BOSTIK AUSTRALIA PTY LTD (1800 033 111) | | | | | | | |
| | No | No | - | - | - | None | No | 2 | 79 g | 0.47 Kg | 0.16 Kg | | - | 23-May-2022 |
| 2035 | CUSSONS MORNING FRESH DISHWASH LIQUID - LIME FRESH | | | | | | PZ CUSSONS PTY LTD (13 11 26) | | | | | | | |
| | Yes | No | - | - | - | None | No | 1 | 900 mL | 1.8 L | 0.9 L | | - | 01-Nov-2019 |
| 2357 | DUCK TLT FRSHPIE LIQ FRML | | | | | | S.C. JOHNSON & SON PTY. LTD. (AU) (13 11 26 (Poisons Information Centre)/ (02) 9428 9111) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 2 | 500 mL | 2 L | 1 L | | - | PRODUCT OBSOLETE |
| 2233 | EXIT MOULD | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 8 | UN 3266 | PG II | 2X | None | No | 1 | 500 mL | 1.5 L | 0.5 L | | - | 26-May-2023 |

Stock Inventory By Location

(Location Name: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY, Child Locations Included)

(Sort By: Product Name, Filter By: None)

| Stock Number | Product Name | | | | | | Supplier (Emergency Contact) | | | | | | | |
|--------------|---------------------------------------------------------------------|----------------|-----------|---------------|--------------|----------|-------------------------------------------------------------------------|----------------------|----------------|-----------------|-----------|--------|-----------------|------------------|
| | Hazardous | Dangerous Good | UN number | Packing Group | Hazchem Code | Status | Container Tracking | Number of Containers | Container Size | Quantity (Kg/L) | | | Risk Assessment | SDS Date |
| | | | | | | | | | | Max | Container | Actual | | |
| 870 | GLEN 20 ALL IN ONE SPRAY DISINFECTANT - ORIGINAL (AU) | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 4 | 300 g | 1.8 Kg | 1.2 Kg | | - | 26-May-2023 |
| 2358 | GLITZ BATHROOM CLEANER | | | | | | PASCOE'S PTY LTD (NSW) ((08) 9353 3900; 1800 065 326/ 13 11 26) | | | | | | | |
| | No | No | - | - | - | None | No | 1 | 750 mL | | 0.75 L | | - | 30-Jun-2023 |
| 2338 | GLITZ HAND WASH | | | | | | PASCOE'S PTY LTD (NSW) ((08) 9353 3900; 1800 065 326/ 13 11 26) | | | | | | | |
| | No | No | - | - | - | Approved | No | 3 | 500 mL | 1.5 L | 1.5 L | | - | 22-Feb-2024 |
| 2282 | JIF CREAM | | | | | | DIVERSEY AUSTRALIA PTY. LIMITED (1800 033 111 (24 hrs)) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 1 | 375 mL | 0.75 L | 0.38 L | | - | PRODUCT OBSOLETE |
| 1108 | LIQUEFIED PETROLEUM GAS (LPG) | | | | | | ELGAS LTD (1800 819 783 (24 hours)) | | | | | | | |
| | Yes | DG 2.1 | UN 1075 | - | 2YE | Approved | No | 2 | 45 Kg | 180 Kg | 90 Kg | | - | 01-Sep-2023 |
| 2360 | LIQUID BLEACH | | | | | | QUALCHEM (13 11 26) | | | | | | | |
| | Yes | DG 8 | UN 1791 | PG III | 2X | Approved | No | 1 | 5 L | 20 L | 5 L | | - | 14-Feb-2017 |
| 206 | METHYLATED SPIRITS | | | | | | RECOCHEM INC ((07) 3308 5200; 1300 131 001 (After hours)/ 0800 764 766) | | | | | | | |
| | Yes | DG 3 | UN 1170 | PG II | •2YE | Approved | No | 1 | 1 L | 2 L | 1 L | | Available | 31-Jan-2022 |
| 2353 | MORTEIN FAST KNOCKDOWN FLY & MOSQUITO KILLER LOW ALLERGENIC AEROSOL | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 1 | 350 g | 0.7 Kg | 0.35 Kg | | - | 31-Dec-2019 |
| 1226 | MORTEIN FAST KNOCKDOWN MULTI INSECT KILLER | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 2 | 300 g | 0.9 Kg | 0.6 Kg | | Available | 08-Jun-2021 |
| 2283 | PALMOLIVE REGULAR DISHWASHING HAND LIQUID DRY SKIN | | | | | | COLGATE-PALMOLIVE PTY LTD ((02) 9037 2994) | | | | | | | |
| | Yes | No | - | - | - | None | No | 1 | 400 mL | 1.6 L | 0.4 L | | - | 07-Oct-2022 |
| 2422 | PINE O CLEEN DISINFECTANT LIQUID PINE | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | No | - | - | - | None | No | 1 | 1.25 L | 2.5 L | 1.25 L | | - | 29-Jul-2019 |
| 811 | QUARTET WHITEBOARD CLEANER | | | | | | ACCO BRANDS AUSTRALIA PTY LTD (13 11 26 (Poisons Information Centre)) | | | | | | | |
| | No | No | - | - | - | None | No | 2 | 500 mL | 2.5 L | 1 L | | - | 23-Apr-2021 |
| 2481 | SODIUM CHLORIDE | | | | | | SILFORM PTY LTD (+61 7 4126 3631) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 500 g | | 0.5 Kg | | - | 01-Oct-2016 |
| 2356 | TOMCAT RAT & MOUSE BAIT | | | | | | BARMAC, A DIVISION OF AMGROW PTY LTD (13 11 26) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 2 | 1 Kg | | 2 Kg | | - | 31-Mar-2020 |

Stock Inventory By Location

(Location Name: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY, Child Locations Included)
 (Sort By: Product Name, Filter By: None)

| Stock Number | Product Name | | | | | | Supplier (Emergency Contact) | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------|-----------|---------------|--------------|----------|------------------------------------------------------------------------------|----------------------|----------------|-----------------|-----------|--------|-----------------|------------------|
| | Hazardous | Dangerous Good | UN number | Packing Group | Hazchem Code | Status | Container Tracking | Number of Containers | Container Size | Quantity (Kg/L) | | | Risk Assessment | SDS Date |
| | | | | | | | | | | Max | Container | Actual | | |
| Location: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY/ DIESEL BUND | | | | | | | | | | | | | | |
| 497 | AUTOMOTIVE DIESEL FUEL | | | | | | AMPOL AUSTRALIA PETROLEUM PTY LTD (FORMERLY CALTEX AUSTRALIA) (1800 033 111) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 1 | 20000 L | | 20000 L | | - | 23-Jun-2021 |
| Location: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY/ WEIGHBRIDGE | | | | | | | | | | | | | | |
| 2354 | BLU TACK | | | | | | BOSTIK AUSTRALIA PTY LTD (1800 033 111) | | | | | | | |
| | No | No | - | - | - | None | No | 4 | 79 g | 0.47 Kg | 0.32 Kg | | - | 23-May-2022 |
| 2035 | CUSSONS MORNING FRESH DISHWASH LIQUID - LIME FRESH | | | | | | PZ CUSSONS PTY LTD (13 11 26) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 2 | 900 mL | 2.7 L | 1.8 L | | - | 01-Nov-2019 |
| 2035 | CUSSONS MORNING FRESH DISHWASH LIQUID - LIME FRESH | | | | | | PZ CUSSONS PTY LTD (13 11 26) | | | | | | | |
| | Yes | No | - | - | - | None | No | 1 | 900 mL | | 0.9 L | | - | 01-Nov-2019 |
| 2337 | DETTOL ANTIBACTERIAL MULTIPURPOSE CLEANER TRIGGER SPRAY - CITRUS LEMON LIME | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 2 | 750 mL | | 1.5 L | | - | 06-Jan-2023 |
| 870 | GLEN 20 ALL IN ONE SPRAY DISINFECTANT - ORIGINAL (AU) | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | None | No | 1 | 300 g | 0.6 Kg | 0.3 Kg | | - | 26-May-2023 |
| 2338 | GLITZ HAND WASH | | | | | | PASCOE'S PTY LTD (NSW) ((08) 9353 3900; 1800 065 326/ 13 11 26) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 500 mL | | 0.5 L | | - | 22-Feb-2024 |
| 2338 | GLITZ HAND WASH | | | | | | PASCOE'S PTY LTD (NSW) ((08) 9353 3900; 1800 065 326/ 13 11 26) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 500 mL | 1.5 L | 0.5 L | | - | 22-Feb-2024 |
| 2339 | GLITZ WATERLESS HAND SANITISER | | | | | | PASCOE'S PTY LTD (NSW) ((08) 9353 3900; 1800 065 326/ 13 11 26) | | | | | | | |
| | Yes | DG 3 | UN 1170 | PG II | •2YE | Approved | No | 8 | 500 mL | | 4 L | | - | 31-Dec-2019 |
| 2282 | JIF CREAM | | | | | | DIVERSEY AUSTRALIA PTY. LIMITED (1800 033 111 (24 hrs)) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 1 | 375 mL | 0.75 L | 0.38 L | | - | PRODUCT OBSOLETE |
| 206 | METHYLATED SPIRITS | | | | | | RECOCHEM INC ((07) 3308 5200; 1300 131 001 (After hours)/ 0800 764 766) | | | | | | | |
| | Yes | DG 3 | UN 1170 | PG II | •2YE | Approved | No | 1 | 0 L | 0 L | 0 L | | Available | 31-Jan-2022 |

Stock Inventory By Location

(Location Name: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY, Child Locations Included)

(Sort By: Product Name, Filter By: None)

| Stock Number | Product Name | | | | | | Supplier (Emergency Contact) | | | | | | | |
|--------------|---------------------------------------------------------------------|----------------|-----------|---------------|--------------|----------|-----------------------------------------------------------------------|----------------------|----------------|-----------------|-----------|--------|-----------------|-------------|
| | Hazardous | Dangerous Good | UN number | Packing Group | Hazchem Code | Status | Container Tracking | Number of Containers | Container Size | Quantity (Kg/L) | | | Risk Assessment | SDS Date |
| | | | | | | | | | | Max | Container | Actual | | |
| 2353 | MORTEIN FAST KNOCKDOWN FLY & MOSQUITO KILLER LOW ALLERGENIC AEROSOL | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 1 | 0 g | | 0 Kg | | - | 31-Dec-2019 |
| 1226 | MORTEIN FAST KNOCKDOWN MULTI INSECT KILLER | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | None | No | 1 | 300 g | 0.6 Kg | 0.3 Kg | | Available | 08-Jun-2021 |
| 2422 | PINE O CLEEN DISINFECTANT LIQUID PINE | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | No | - | - | - | None | No | 3 | 1.25 L | 3.75 L | 3.75 L | | - | 29-Jul-2019 |
| 811 | QUARTET WHITEBOARD CLEANER | | | | | | ACCO BRANDS AUSTRALIA PTY LTD (13 11 26 (Poisons Information Centre)) | | | | | | | |
| | No | No | - | - | - | None | No | 2 | 500 mL | 2.5 L | 1 L | | - | 23-Apr-2021 |
| 2356 | TOMCAT RAT & MOUSE BAIT | | | | | | BARMAC, A DIVISION OF AMGROW PTY LTD (13 11 26) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 1 | 1 Kg | | 1 Kg | | - | 31-Mar-2020 |

Location: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY/ WEIGHBRIDGE/ BATHROOM

| | | | | | | | | | | | | | | |
|------|-------------------------------------------------------|--------|---------|--------|-----|----------|-------------------------------------------------------------------------------------------|---|--------|---------|---------|--|---|------------------|
| 966 | AIR WICK AEROSOL AIR FRESHENER - LAVENDER | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 1 | 237 g | 0.95 Kg | 0.24 Kg | | - | 01-Mar-2023 |
| 2355 | AIR WICK AEROSOL AIR FRESHENER - VANILLA | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 1 | 237 g | 0.95 Kg | 0.24 Kg | | - | 01-Mar-2023 |
| 2357 | DUCK TLT FRSH PINE LIQ FRML | | | | | | S.C. JOHNSON & SON PTY. LTD. (AU) (13 11 26 (Poisons Information Centre)/ (02) 9428 9111) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 3 | 500 mL | 2 L | 1.5 L | | - | PRODUCT OBSOLETE |
| 2233 | EXIT MOULD | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 8 | UN 3266 | PG II | 2X | None | No | 2 | 500 mL | 1 L | 1 L | | - | 26-May-2023 |
| 870 | GLEN 20 ALL IN ONE SPRAY DISINFECTANT - ORIGINAL (AU) | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 4 | 300 g | 1.8 Kg | 1.2 Kg | | - | 26-May-2023 |
| 2358 | GLITZ BATHROOM CLEANER | | | | | | PASCOE'S PTY LTD (NSW) ((08) 9353 3900; 1800 065 326/ 13 11 26) | | | | | | | |
| | No | No | - | - | - | None | No | 4 | 750 mL | 3 L | 3 L | | - | 30-Jun-2023 |
| 2359 | HARPIC LIQUID FRESH POWER - TROPICAL BLOSSOM | | | | | | RB (HYGIENE HOME) AUSTRALIA PTY LTD (13 11 26 (PIC)) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 1 | 700 mL | 1.4 L | 0.7 L | | - | 31-Jan-2020 |
| 2360 | LIQUID BLEACH | | | | | | QUALCHEM (13 11 26) | | | | | | | |
| | Yes | DG 8 | UN 1791 | PG III | 2X | Approved | No | 1 | 5 L | 20 L | 5 L | | - | 14-Feb-2017 |

Stock Inventory By Location

(Location Name: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY, Child Locations Included)

(Sort By: Product Name, Filter By: None)

| Stock Number | Product Name | | | | | | Supplier (Emergency Contact) | | | | | | | |
|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------------|-----------|---------------|--------------|----------|-------------------------------------------------------------------------------------------|----------------------|----------------|-----------------|-----------|--------|-----------------|------------------|
| | Hazardous | Dangerous Good | UN number | Packing Group | Hazchem Code | Status | Container Tracking | Number of Containers | Container Size | Quantity (Kg/L) | | | Risk Assessment | SDS Date |
| | | | | | | | | | | Max | Container | Actual | | |
| Location: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY/ WORKSHOP | | | | | | | | | | | | | | |
| 2341 | 4251 - ENGINE OIL SHPD 15W-40 | | | | | | 77 B.V. (+31 78 652 7652) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 205 L | | 205 L | | - | 14-Aug-2019 |
| 2449 | ACETYLENE, DISSOLVED | | | | | | SUPAGAS PTY LIMITED (1300 651 106) | | | | | | | |
| | Yes | DG 2.1 | UN 1001 | - | 2SE | None | No | 2 | 0 None | | 0 | | - | 08-Mar-2024 |
| 1649 | ADBLUE | | | | | | AMPOL AUSTRALIA PETROLEUM PTY LTD (FORMERLY CALTEX AUSTRALIA) (1800 033 111) | | | | | | | |
| | No | No | - | - | - | None | No | 2 | 1000 L | 2000 L | 2000 L | | - | 18-Jan-2022 |
| 2074 | ADBLUE | | | | | | AUSBLUE (1300 287 258) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 1000 L | 2000 L | 1000 L | | - | 05-Oct-2020 |
| 2445 | ADBLUE DIESEL EXHAUST FLUID | | | | | | BIOBLUE AUSTRALIA PTY LTD (13 11 26) | | | | | | | |
| | No | No | - | - | - | Approved | No | 2 | 1000 L | 4000 L | 2000 L | | - | 15-Jul-2022 |
| 2446 | ANTIFREEZE/COOLANT 50/50 PREMIXED | | | | | | RECOCHEM INC. CANADA (613 996 6666 (CANUTEC)) | | | | | | | |
| | Yes | DG 9 | UN 3082 | PG III | •3Z | Approved | No | 2 | 205 L | | 410 L | | - | 16-Nov-2020 |
| 2444 | BOSTON PENETRATING MULTILUBE SPRAY, 400GM | | | | | | CW BRANDS PTY LTD ((08) 9353 3354) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 1 | 400 g | 2 Kg | 0.4 Kg | | - | 08-Apr-2021 |
| 836 | BRAKE AND CLUTCH FLUID | | | | | | AMPOL AUSTRALIA PETROLEUM PTY LTD (FORMERLY CALTEX AUSTRALIA) (1800 033 111) | | | | | | | |
| | No | No | - | - | - | None | No | 1 | 5 L | | 5 L | | - | PRODUCT OBSOLETE |
| 2127 | BRAKLEEN (AEROSOL) | | | | | | CRC INDUSTRIES (AUST) PTY LIMITED (13 11 26 (PIC)) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | None | No | 12 | 500 g | | 6 Kg | | - | 13-Jul-2021 |
| 1728 | CHEMTECH CT18 SUPERWASH | | | | | | ITW POLYMERS & FLUIDS PTY LTD (1800 385 556 / 0438 465 960/ 1800 039 008/ (03) 9573 3112) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 1 | 25 L | 50 L | 25 L | | - | PRODUCT OBSOLETE |
| 2065 | DY-MARK LINE MARKING PAINT SOLVENT BASED - ALL COLOURS | | | | | | DY-MARK AUSTRALIA ((07) 3327 3099) | | | | | | | |
| | Yes | DG 3 | UN 1263 | PG II | •3YE | Approved | No | 2 | 500 g | 2.5 Kg | 1 Kg | | - | 20-Aug-2021 |
| 2443 | ENGINE DEGREASER - 15 OZ | | | | | | CRC INDUSTRIES, INC. (USA) (+1 800 424 9300) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2Y | Approved | No | 3 | 500 g | | 1.5 Kg | | - | 23-Apr-2020 |
| 2443 | ENGINE DEGREASER - 15 OZ | | | | | | CRC INDUSTRIES, INC. (USA) (+1 800 424 9300) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2Y | Approved | No | 6 | 500 g | 6 Kg | 3 Kg | | - | 23-Apr-2020 |

Stock Inventory By Location

(Location Name: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY, Child Locations Included)

(Sort By: Product Name, Filter By: None)

| Stock Number | Product Name | | | | | | Supplier (Emergency Contact) | | | | | | | |
|--------------|---------------------------------------------------------------------------------------------------------------------------|----------------|-----------|---------------|--------------|----------|-----------------------------------------------------------------------------|----------------------|----------------|-----------------|-----------|--------|-----------------|-------------|
| | Hazardous | Dangerous Good | UN number | Packing Group | Hazchem Code | Status | Container Tracking | Number of Containers | Container Size | Quantity (Kg/L) | | | Risk Assessment | SDS Date |
| | | | | | | | | | | Max | Container | Actual | | |
| 2447 | ETHOXYACETYLENE SOLUTION (271365) | | | | | | MERCK LIFE SCIENCE PTY LTD (1800 862 115 (24/7)/ +61 2 9037 2994/ 13 11 26) | | | | | | | |
| | Yes | DG 3 | UN 1993 | PG II | •3YE | Approved | No | 1 | 0 None | | 0 | | - | 27-Nov-2023 |
| 2451 | FLEETMASTER 30 | | | | | | HI-TEC OIL TRADERS PTY LTD / HI-TEC BATTERIES (1300 796 009) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 20 L | 40 L | 20 L | | - | 28-Nov-2021 |
| 1726 | KOMATSU ANTIFREEZE COOLANT SUPERCOOLANT AF-NAC | | | | | | KOMATSU AUSTRALIA (+61 13 11 26) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 205 L | | 205 L | | - | 01-Nov-2019 |
| 2344 | LITHPLEX TAC GREASE | | | | | | HI-TEC OIL TRADERS PTY LTD / HI-TEC BATTERIES (1300 796 009) | | | | | | | |
| | No | No | - | - | - | Approved | No | 2 | 180 Kg | 540 Kg | 360 Kg | | - | 02-Nov-2021 |
| 2344 | LITHPLEX TAC GREASE | | | | | | HI-TEC OIL TRADERS PTY LTD / HI-TEC BATTERIES (1300 796 009) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 20 Kg | | 20 Kg | | - | 02-Nov-2021 |
| 2448 | OXYGEN, COMPRESSED | | | | | | SUPAGAS PTY LIMITED (1300 651 106) | | | | | | | |
| | Yes | DG 2.2 / 5.1 | UN 1072 | - | 2S | None | No | 2 | 9.5 m³ | 9500 L | 19000 L | | - | 08-Mar-2024 |
| 2479 | PESTXPRT DIY PEST CONTROL LIKE THE PROFESSIONALS PRO-SPRAY INDOOR-OUTDOOR MULTI INSECT CONTACT AND RESIDUAL BARRIER SPRAY | | | | | | SUMITOMO CHEMICAL AUSTRALIA PTY LTD (1800 024 973 (24 hours)) | | | | | | | |
| | No | DG 9 | UN 3082 | PG III | •3Z | Approved | No | 1 | 2 L | | 2 L | | - | 19-May-2021 |
| 2480 | SLASHER ORGANIC WEEDKILLER READY TO USE | | | | | | ORGANIC CROP PROTECTANTS PTY LTD (13 11 26/ 1800 033 111) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 1 L | | 1 L | | - | 31-May-2023 |
| 2442 | SOUDAL ROOF & GUTTER SILICONE | | | | | | SOUDAL AUSTRALIA PTY LTD (1300 507 011) | | | | | | | |
| | No | No | - | - | - | Approved | No | 12 | 300 mL | | 3.6 L | | - | 10-Mar-2022 |
| 2453 | SPILL STATION CHEMICAL ABSORBENT | | | | | | SPILL STATION AUSTRALIA PTY LTD (1300 664 266) | | | | | | | |
| | No | No | - | - | - | None | No | 1 | 0 None | | 0 | | - | 13-Mar-2018 |
| 2452 | SUKERUP INDUSTRIAL ORGANIC ABSORBENT | | | | | | SPILL STATION AUSTRALIA PTY LTD (1300 664 266) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 0 None | | 0 | | - | 20-Mar-2023 |
| 2450 | SUPASHIELD 52 | | | | | | SUPAGAS PTY LIMITED (1300 651 106) | | | | | | | |
| | Yes | DG 2.2 | UN 1956 | - | 2TE | None | No | 1 | 4.9 m³ | 9800 L | 4900 L | | - | 08-Mar-2024 |
| 2356 | TOMCAT RAT & MOUSE BAIT | | | | | | BARMAC, A DIVISION OF AMGROW PTY LTD (13 11 26) | | | | | | | |
| | Yes | No | - | - | - | Approved | No | 2 | 1 Kg | | 2 Kg | | - | 31-Mar-2020 |
| 2438 | ULTRAMAX 46 HYDRAULIC OIL | | | | | | VALVOLINE (AUSTRALIA) PTY LTD (1800 804 658, New Zealand (02) 8603 2300) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 206 L | | 206 L | | - | 15-Nov-2021 |

Stock Inventory By Location

(Location Name: Adbri Limited/ CONCRETE & AGGREGATES/ NEW SOUTH WALES/ HY-TEC/ PENROSE QUARRY, Child Locations Included)
 (Sort By: Product Name, Filter By: None)

| Stock Number | Product Name | | | | | | Supplier (Emergency Contact) | | | | | | | |
|--------------|------------------------------------------|----------------|-----------|---------------|--------------|----------|--------------------------------------------------------------------------|----------------------|----------------|-----------------|-----------|--------|-----------------|-------------|
| | Hazardous | Dangerous Good | UN number | Packing Group | Hazchem Code | Status | Container Tracking | Number of Containers | Container Size | Quantity (Kg/L) | | | Risk Assessment | SDS Date |
| | | | | | | | | | | Max | Container | Actual | | |
| 2439 | ULTRAMAX HVI 68 | | | | | | VALVOLINE (AUSTRALIA) PTY LTD (1800 804 658, New Zealand (02) 8603 2300) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 25 L | | 25 L | | - | 14-Feb-2022 |
| 2221 | VALVOLINE AW 68 HYDRAULIC OIL | | | | | | VALVOLINE LLC (1800 825 8654) | | | | | | | |
| | No | No | - | - | - | Approved | No | 1 | 205 L | | 205 L | | - | 06-Jul-2023 |
| 2440 | WHITE KNIGHT SQUIRTS GLOSS BLACK AEROSOL | | | | | | PPG ARCHITECTURAL COATINGS (1800 883 254/ 0800 000 096) | | | | | | | |
| | Yes | DG 2.1 | UN 1950 | - | 2YE | Approved | No | 3 | 310 g | 3.1 Kg | 0.93 Kg | | - | 25-Aug-2020 |

Stock Inventory By Location

Appendix

| | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Max Quantity | Max Quantity is calculated by multiplying the Max value of the Stock Inventory Item with the Container Size of the Stock Inventory Item, where the Max value is available. |
| Container Quantity | Container Quantity is calculated by multiplying the Number of Containers of the Stock Inventory Item with the Container Size of the Stock Inventory Item. |
| Actual Quantity | Actual Quantity is calculated by adding the available quantities in all the Container Items of a Stock Inventory Item where Individual Container Tracking is switched on, and Container Item is active. |

SAFETY MANAGEMENT SYSTEM

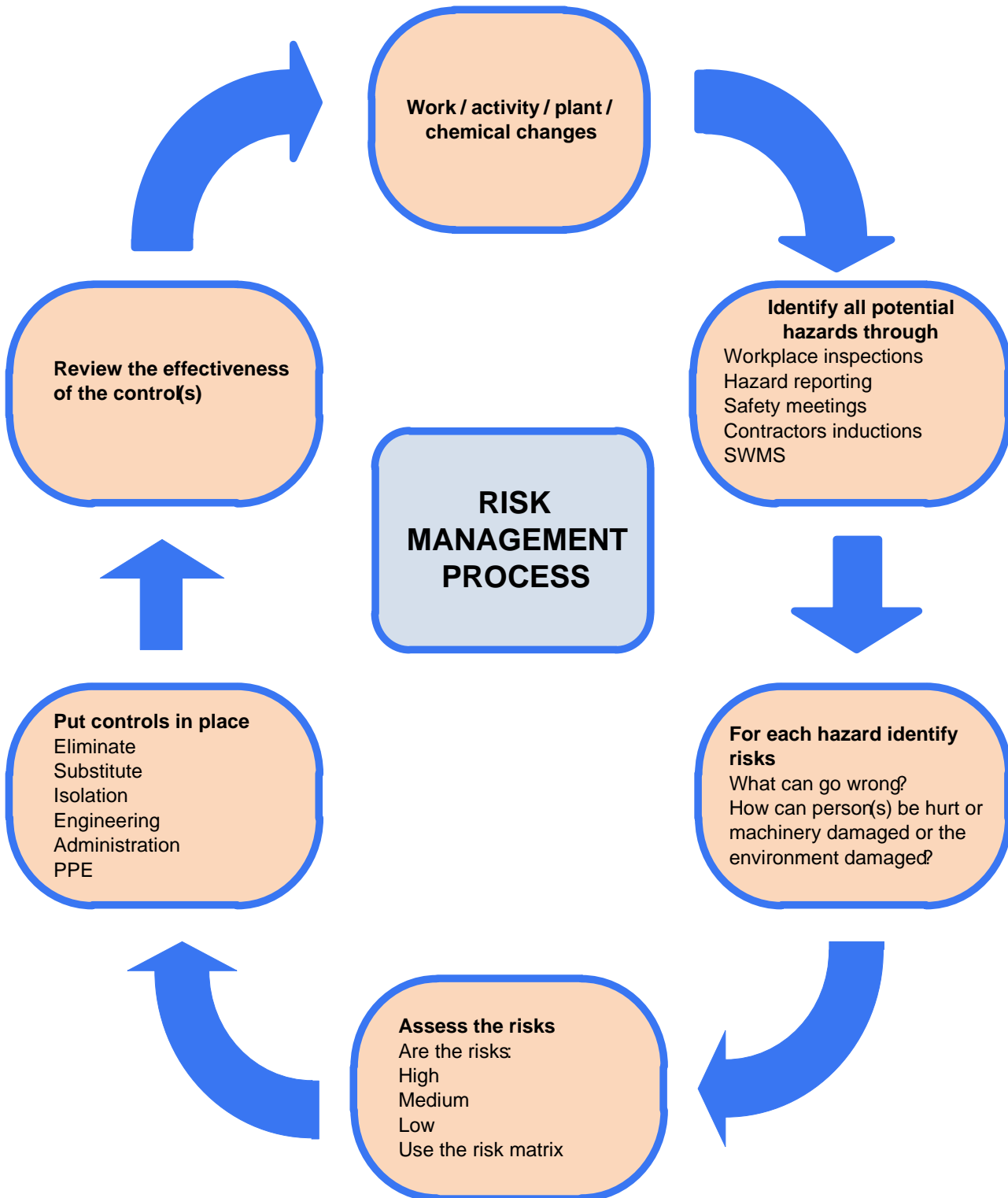
HTA-P-FC-005

Hy-Tec Industries – Penrose Quarry

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Appendix 7K

Risk Management Process





ABL-HSE-GSS-07-01

RISK ASSESSMENT TOOL

"Uncontrolled Copy When Printed"

Risk Assessment Guidance

Refer to consequence table in "ABL-HSE-GSS-07-04 HSE Risk Assessment Process". Only Safety examples are provided below.

CONSEQUENCE (the extent of the harm or damage with current controls in place)

| | |
|--------------|----------------------------------------------------------------------------------------------------------|
| Negligible | - Minor Injuries requiring First aid Treatment. |
| Minor | - Single or multiple injuries requiring medical treatment. |
| Serious | - Single or multiple injuries requiring hospitalisation and incurred a loss of more than one full shift. |
| Significant | - Single severe injury causing irreversible permanent disability or impairment or single fatality. |
| Catastrophic | - Incident with short or long term effects causing multiple fatalities. |

LIKELIHOOD (the chance of the situation occurring with current controls in place)

| | |
|-------------|------------------------------------------------------------------------------------------------------------------|
| Rare | - The consequence may only occur in exceptional circumstances or 'the probability is close to zero'. |
| Unlikely | - The consequence is not likely to occur. There is confidence that it will not occur although it is conceivable. |
| Possible | - The consequence could occur sometime or 'I've heard of it happening'. |
| Probable | - The consequence is likely to occur. It is known to occur, or not surprised as it has happened' several times. |
| Very Likely | - It is almost certain that the consequence will occur. Common or frequent occurrence. |

| CONSEQUENCE | LIKELIHOOD | | | | |
|--------------|------------|----------|----------|----------|-------------|
| | Rare | Unlikely | Possible | Probable | Very Likely |
| Negligible | 1 | 2 | 4 | 7 | 11 |
| Minor | 3 | 5 | 8 | 12 | 16 |
| Serious | 6 | 9 | 13 | 17 | 20 |
| Significant | 10 | 14 | 18 | 21 | 23 |
| Catastrophic | 15 | 19 | 22 | 24 | 25 |

| | Negligible | Minor | Serious | Significant | Catastrophic |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Health & Safety | Minor Injuries requiring First aid Treatment. No ongoing health effects. Near Miss with the potential consequence for the injuries above | Single or multiple injuries requiring medical treatment No ongoing health effects. Near Miss with the potential consequence for the injuries above. | Single or multiple injuries requiring hospitalisation and incurred a loss of more than one full shift. Near Miss with the potential consequence for the injuries above. | Single severe injury causing irreversible permanent disability or impairment or single fatality. Near Miss with the potential consequence for the injuries above. | Incident with short or long term effects causing multiple fatalities. Near Miss with the potential consequence for the injuries above. |
| Environmental Impact | Minor incident with minimal or no lasting effects. Onsite uncontrolled release immediately contained. Clean-up completed within 12 hours. Less than 5 litre spill | Incident with minor effects on the environment. Onsite uncontrolled release not immediately contained or minor off site release. Clean-up completed within 72 hours. 10 to 20 litre spill. | Incident with medium term effects on the environment. Offsite uncontrolled release with an effect on the environment for one year. | Incident with serious environmental effects. Offsite uncontrolled release not contained causing of up to 10 years impact duration. | Catastrophic incident with impairment of the ecosystem function. Significant and identifiable risk to humans, animals and plant species. |
| Community | Low level incident Public concern restricted to one local complaint | Minor- medium impact issue Public concern with a small local group Potential for local media attentions | Medium impact issue Ongoing public concern with a local group or community Involvement of non-government organisation - Local media | Serious social incident Ongoing local and/or state issue. Involvement of government department/s and non-government organisations. National Media | Very Serious Incident Ongoing state or national issue. Involvement of federal government department/s and non-government organisations. National media |
| Cost or Damages | < \$10K | \$10K - \$50K | \$50K - \$150K | \$150K - \$1M | > \$1M |
| Investigation Team | Local Supervisor or Manager OHS representative or member of the OHS committee | Plant Manager Team Leader / Supervisor OHS Representative or Member of the OHS committee | Plant Manager (Investigation leader) HSE Manager Manager external to site OHS Representative or member of the OHS committee | Manager External to site or discipline (Investigation Manager) HSE Manager Site Manager OHS Representative External resources or assistance as required | Manager External to site or discipline (Investigation Manager) HSE Manager Site Manager OHS Representative External resources or assistance as required |
| Investigation Outcomes | Completion of incident report form including: Brief report covering: <ul style="list-style-type: none"> Description of incident Contributing factors Prevention Measures | Completion of incident form: Brief report covering the following: <ul style="list-style-type: none"> Brief statement from person's involved and witnesses Description of incident Contributing factors Prevention measures | Completion of incident form: Investigator Terms of Reference. Incident timeline. Detailed report covering the following: <ul style="list-style-type: none"> Detailed statement for person's involved and witnesses Description of incident Contributing factors Recommendations and prevention measures | Completion of incident form: Investigator Terms of Reference. Incident timeline. Detailed report covering the following: <ul style="list-style-type: none"> Detailed statement for person's involved and witnesses Description of incident Contributing factors Recommendations and prevention measures | Completion of incident form: Investigator Terms of Reference. Incident timeline. Detailed report covering the following: <ul style="list-style-type: none"> Detailed statement for person's involved and witnesses Description of incident Contributing factors Recommendations and prevention measures |



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Appendix 8G

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| HAZARD | SOURCE | HEALTH EFFECTS | INFO | MEASUREMENT | ASSESS RISK | CONTROLS | REVIEW | RESPONSIBLE |
|-------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------|
| Appendix 8G | | Environmental Hazard Management Matrix | | | | | | |
| Dust | Traffic | <p>Worker Health Issues;</p> <p>Eye injuries/infections due to airborne dust.</p> <p>Respiratory problems due to inhalation.</p> | <p>Monthly dust monitoring results consistently below the required concentrations.</p> <p>Worker exposure and protection provided proved acceptable.</p> | <p>Worker Health Measurement;</p> <p>COAL Services have developed SEGs and carry out monitoring</p> <p>Workers Health examinations conducted annually.</p> <p>Environmental Measurement;</p> <p>Monthly and annual water and dust collection samples analysed.</p> | <p>Worker 13</p> <p>Environment 17</p> | <p>Water truck used on a regular basis during operating hours to minimise dust production from haul road traffic.</p> <p>Quarry office access road re-surfaced with Rotormil to minimise dust production and reduce material track marks leaving quarry.</p> <p>Dust suppression system continually improved and more effective methods sourced.</p> <p>Work area kept clean and tidy to prevent build up of dust/debris.</p> | <p>Worker 9</p> <p>Environment 13</p> | All |
| | Plant | <p>Skin allergic reactions due to contaminated dust.</p> <p>Environmental Issues;</p> <p>Downpour of rain washing silt and contaminants into waterways.</p> | | | | <p>Policies in place regarding mandatory use of eye protection i.e. double eye protection when grinding.</p> <p>Workers trained in the selection and use off appropriate eye and respiratory protection.</p> <p>Confined space to be cleared of all atmospheric hazards and air quality monitored by competent person before and during confined activities.</p> | | |
| | Cleaning | <p>Dust contamination affecting local ecosystem biodiversity.</p> <p>Airborne dust carried off site.</p> | | | | <p>Ensure sufficient ventilation is available before entry proceeds. (Extraction fans must be used if welding is being carried out)</p> <p>Test results to return readings within allocated concentrations, if pollutant concentrations exceeded, contingency plans implemented.</p> <p>Three continuous sampling apparatus in place for airborne dust monitoring.</p> | | |



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|----------------|------------|---------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------|
| | Blasting | | | | | If blasting is to occur it will be carried out by competent external contractors with the minimizing of dust and fly-rock production considered. | | |
| Waste Material | Production | Environmental Issues; General waste disposal. | Council limits production to 550,000t per annum extracted from the premises. | Environmental Measures; Production and subsequent waste quantities recorded. | Worker 1 Environment 8 | Quarry produced overburden is to be reused in rehabilitation program | Worker 1 Environment 5 | RH |
| | Office | Site Waste leaving quarry site into local catchments. | Minimal waste product is produced.. | | | Office waste collected and disposed of off site in an approved manner. | | |



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|--------|-----------------|-----------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------|
| Heat | Sun | Worker Health Issues; Dehydration. Exhaustion. Skin Damage. | | Worker Health Measures; Incident and near miss reports. Worker Health Examinations | Worker 13 Environment 1 | Sunscreen and drinking water located in offices. Employees to partake in safe work methods with regard to heat, including adequate PPE. Employees educated on the dangers of heat stress and methods to combat the problem. Working in heat and dehydration educational signs displayed in crib rooms. First aid officer on site during working hours. Adequate first aid equipment available. | Worker 9 Environment 1 | All |
| | Plant/Machinery | | | | | Long sleeves and trousers to be worn during work activities and a hat to be worn when working outdoors. | | |
| | Hot Work | | | | | Ensure compliance with work/rest requirements as outlined in ABL-HSE GOS-29-02 Fatigue Management Requirements. Drivers to be instructed in Fatigue Management requirements. | | |
| | Tools | | | | | Mobile equipment to have functioning air conditioning system installed, when necessary windows tinted to protect drivers from sun exposure. Screens in place to segregate work area. Hot work signs erected. Only competent/trained personnel to carry out hot work. Ensure hot work is conducted in a designated hot work area with a Hot Work Permit/JSA/SWMS to be completed and filed. | | |



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| Noise | Traffic | Worker Health Issues; Industrial deafness. | No noise monitoring has been carried out, but external contractor is being sourced for worker noise exposure survey. | Worker Health Measurements; Worker Health Examinations. | Worker 21 Environment 1 | Hours of work. 6:00-18:00 Monday-Friday. Regular maintenance carried out on equipment to minimise noise production. Sound proofing on mobile plant engine compartments. Instruction on selection and use of suitable hearing protection. Hearing protection worn as required. PPE signage displayed in appropriate locations. Noise limits <35dB(A) for 15minute intervals. | Worker 14 Environment 1 | All |
| | Plant | | | COAL Services have developed SEGs and carry out monitoring Worker noise PPE and knowledge examined to determine adequacy. Quarry boundary to be monitored to determine level of quarry produced noise. | | | | |
| | Blasting | | | In case of future blasts ground vibration peak particle velocity and air blast overpressure monitored at each blast by acting company. | | | | |



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| Hazardous Substances | Chemicals | Worker Health Issues; | | Worker Health Monitoring; | | MSDS register kept and maintained on site. Suitable storage facilities/bunded area available to be made available as required with development. Suitable PPE available and used as required. Safer substances sourced and used where possible. | | |
| | Fuels | Chemical burns. Fume inhalation. Poisoning. Flammable substances. | | Incident and Near miss reports. Workers health examination conducted. | Worker 13 Environment 21 | Personnel suitably trained/informed in the process of refuelling plant, generators and handling of hazardous substances. Maintenance to be carried out in designated area. Danger signage in place (Corrosive Substance, etc). Procedures in place for major environmental incidents. | Worker 9 Environment 14 | All |
| | Waste Oil (plant/machinery) | Environmental Issues; Hazardous substances leeching into groundwater/waterways. | | Catchments water quality monitoring monthly and annually. Yearly Swamp monitoring. Annual Environmental Monitoring Report developed by external contractor. | | Spillages cleaned up immediately using spill kits available. All spill kit stocks maintained, correct spill kit procedure form located with each spill kit. Further in regards to spills: <u>Large Spill</u> 1) In the case of large spills contact relevant personnel 2) Stop leak without risk. 3) Move containers from spill area. 4) Approach the release from upwind 5) Prevent entry into sewer, water courses, basements or confined areas. 6) Wash spillages into an effluent treatment plant or proceed as follows. 7) Contain and collect spillage with non- combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place into a container according to local legislation. 8) Determine flammability and if required use spark- | | |



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| | | | | | | <p>proof tools and explosive proof equipment. Dispose of via a licensed waste disposal contractor</p> <p>9) Contaminated absorbent material may pose the same hazard as the spill product</p> <p>10) In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment.</p> <p>11) Recover product from the surface</p> <p>12) Dispose of via an appropriately licensed waste disposal site</p> <p><u>Small Spill</u></p> <p>1) Stop leak without risk.</p> <p>2) Move containers from spill area</p> <p>3) Absorb with an inert material and place in appropriate waste disposal container.</p> <p>4) Determine flammability and if required use spark-proof tools and explosion-proof equipment.</p> <p>5) Dispose of via an appropriately licensed waste disposal site</p> <p>Oils and hydraulic fluids to be disposed off in accordance with Environmental legislation.</p> <p>First aid officer on site during working hours.</p> <p>Adequate first aid equipment available.</p> | | |



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| Water | Dams | Environmental Issues; Water contamination. River Ecology. | Quarry effects on groundwater levels negligible. | Environmental Measures; Water samples tested monthly around site. | Worker 1 Environment 21 | Individual catchments analyzed for best fit water management plan. Four surface water monitoring locations, and 6 groundwater monitoring locations for monthly testing. Site soil analysis carried out to determine soil characteristics including erodibility. | Worker 1 Environment 18 | Quarry Manager |
| | River System | | | Annual monitoring of Swamp to survey water quality and ecology. Additional annual testing carried out on quarry catchments. | | Inspections carried out fortnightly and after heavy rainfall events to examine the soundness of water management systems. Diversion drains constructed around the quarry, diverting clean runoff from upslope catchments around the quarry. | | |
| | Rainfall | | | Monthly bore water monitoring conducted for groundwater level and quality. | | Increase freeboard of the main freshwater dam to 2.0m to allow for additional water storage above the industry standard. Desilt primary sediment ponds and diversion drain for improved efficiency of sediment capture. In the case of water breach Contingency Plan to be implemented, as per PIRMP. Periodic removal of consolidated sediment from the Quarry Road sediment basins. | | |



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| | Groundwater | | | | | <p>Water management systems will employ regular maintenance to ensure effectiveness. Including regular inspections and cleaning of under road storm water pipes.</p> <p>Runoff from all disturbance areas is directed to silt dams and sedimentation dams.</p> <p>Water levels monitored and pumped from sediment dams to storage dams to ensure sufficient capacity in the event of significant rain event. Install freeboard markers in ponds for ease of reference on site.</p> <p>Annual Report submitted to Council with a summary of water monitoring results, as well as diversion drain and quarry water management condition.</p> <p>Prior to ground disturbance activities upslope diversion banks and downstream sediment retention implemented.</p> | | |



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| Fire | Plant/Mobile Plant. | <p>Worker Health Issues; Burns to employees. Smoke inhalation</p> <p>Environmental Issues; Flora and Fauna destruction. Bushfire.</p> | | <p>Worker Health Measurement; Incident and Near Miss reports. Environmental Measures; Local fire department fire hazard level monitoring.</p> | <p>Worker 22 Environment 22</p> | <p>Ensure hot work is conducted in a designated hot work area and Hot Work Permit/JSA/SWMS to be completed and filed.</p> <p>Only competent/trained personnel to carry out hot work.</p> <p>Screens in place to segregate work area.</p> <p>Equipment to be in good condition and suitable for the task.</p> <p>Electrical equipment must be tested and tagged in accordance with AS3760.</p> <p>Fire fighting equipment fitted to all mobile plant.</p> <p>Employees to be trained in first attack fire fighting.</p> <p>Use of flame retardant material to cover susceptible equipment.</p> <p>Adequate fire extinguishers located throughout site.</p> <p>Use of correct PPE for the task/job.</p> <p>Periodic testing of Fire extinguishers is conducted by an external service provider.</p> <p>First aid officer on site during working hours.</p> <p>Fire warden present on site during work hours.</p> <p>Adequate first aid equipment available.</p> <p>Bush fire emergency procedure in place.</p> <p>All Hy-Tec mobile plant used on site fitted with fire suppression technology.</p> | <p>Worker 15 Environment 22</p> | <p>All Fire Wardens;</p> |
| | Bushfires. | | | | | | | |
| | Electrical Fires. | | | | | | | |
| | Power Tools | | | | | | | |
| | Hot Work | | | | | | | |



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| Biodiversity Destruction | Land clearance | Environmental Issues; Loss of local flora and fauna. | | Environmental Measures; Annual swamp ecology survey carried out by external company. Monitoring of areas to be felled for endangered flora and fauna. | Worker 1 Environment 23 | Vegetation Management Plan in place with both immediate and long term plans. All bund wall areas are rehabilitated with native flora. Long term objectives include post quarry life plans to ensure after life quarry footprint is minimal. | Worker 1 Environment 18 | RH/LA |
| | Ecosystem Contamination | | Flora and Fauna surveys conducted across all parts of quarry lease area. Flora and Fauna species catalogued annually to determine biodiversity fluctuation. Any threatened species identified and plans put in place for protection. | | | | | |

Penrose Quarry - Risk Register

This contents of this risk assessment will be reviewed when new risk identified, procedural review and/or risk / controls not adequate

| Risk Identification | | | Risk Score Without Controls (Inherent Risk) | | | Control | | | Risk Score with Controls (Residual Risk) | | |
|---------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------|------------|---------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------|------------|---------------------|
| Work Activity | Risk relating to activity | Causes (What can cause the hazard to occur) | Consequence (Catastrophic = Principal Hazard) | Likelihood | Inherent Risk Score | Principal Hazard (if Applicable) Control / Management Plan | Control Description | Highest Control Level Achieved (Hierarchy of Controls) | Consequence (Catastrophic = Principal Hazard) | Likelihood | Residual Risk Score |
| Electrical - Low Voltage Electrical Installations | Electric shock, burns, heart attacks/arrhythmia | > Low Voltage | Serious | Possible | 13 | Electrical Engineering Control Plan | <ul style="list-style-type: none"> > Low Voltage Electrical Installations standard (STD 2) developed by qualified Electrical Engineer. > All electrical works carried out by a qualified trades person. > All electrical installations installed to comply with relevant Australian Standards (AS/NZS 3000-2020, AS3007, AS1769 & AS4024). > Ground mounted switchboards installed in outdoor areas at suitable height to prevent corrosion and have weatherproof covers > Safe access required for any electrical installation more than 1.8m off the ground that requires a person to work on it. > Electrical installations requiring work must be in compliance with AS3007.2 for protection against direct contact. > Electrical installations must comply with AS1768 Lightning protection. > Cables to comply with relevant requirements and AS3008 for applicable installations. > Switchgear to be built to comply with AS3439 Low Voltage Switch Gear and Control Gear Assemblies. > All components to be rated to withstand the fault level at the point of distribution network where they are installed. > Indoor electrical installation must be rated to IP23 > Outdoor electrical installations must be rated to IP56 > All electrical breakers and isolators should have a means to lock them in the off position, no person can be exposed to live wires when locking breakers/isolators. > Type 2 co-ordination required in selection of contactors/overloads/fused circuits breaker combinations to ensure proper operation at the specified fault level. > VOLT and Amp meters need an associate phase selector switch. ? Labelling in accordance with Australian Standards > Operating devices, test buttons, resets & meters accessible without removing covers > control/protection circuit fuses, links, wiring, protection relays, control relays, contactors and resistors/current transformers requiring cleaning and maintenance only accessible by authorised persons > Access to exposed conductors must be interlocked with main circuit breaker or accessed with a tool. ELV equipment should be used for all field control where suitable. | Isolation | Negligible | Rare | 1 |
| Electrical - Generator Installation | > New plant / structures can bring new hazards to site. | > Equipment not fit for purpose. > Unsafe installation | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | <ul style="list-style-type: none"> > Generator Installation Standard (STD 1) developed by qualified electrical engineer, taking into consideration installation requirements for Standalone Generators upto 25kW, Standalone Generators Larger than 25kW, 3 Phase Generators integrated into Power Systems & Generators for welding purposes. > Requirements of WHS Regs must be adhered to including; <ul style="list-style-type: none"> -Electrical protection fitted to all circuits, designated to interrupt the supply when a fault occurs. -Protection devices designed to an appropriate standard -Suitable switchgear provided and provisions are made for the safe removal and restoration of power. -Effective earthing provided so risk from touch, transfer and step potential is minimised. -Appropriate signage, notice, plans and electrical diagrams are placed at electrical switchgear and other positions to warn of presence of electricity and advice on what to do in emergency situations. > Unsafe electrical installations are to be disconnected from electricity supply by a qualified electrical tradesperson and secured. > All generator shutdown devices are to have access considered during installation and to remain unimpeded. > No fuses or circuit breakers are permitted in earth to neutral connection circuit. > All generators are to have ingress protection rated for the environment and all outlets IP rating 56. > Earth leakage sensitivities and delays; earthing requirements, generator switchgear, labels & signage; security; testing interval requirements; generators connected to mains apparatus; commissioning and testing; inspection & maintenance' non compliance and decommissioning explained in STD 1 Generator Installation Standard. | Engineering / Redesign | Significant | Rare | 10 |

| | | | | | | | | | | | |
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| Electrical - Component Lifecycle Management | > Electrical equipment develop risk which can caused hazard to workers. | > Electrical components can fail due to the amount of use and age. | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | > Electrical component to be replaced as per OEM, Australian Standards or Mine Design Guidelines recommendations. > Schedule for replacement to be managed via gearbox. > Repaired or replaced as per maintiance inspection, safety alerts or information from industry or regulator. > Electrical installation locations are to be determined in consultation with an electrical engineer or nominated qualified electrical tradesperson. | Engineering / Redesign | Significant | Rare | 10 |
| Electrical - Contractor Management | > Competence of contractors completing work at quarry. | > Electrical work / engineering work is outsourced to a contractor(s). | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | > All plant and equipment to be designed and maintained to the appropriate Australian standards. > All electrical contractors are to have applicable trade certificates or appropriate engineering documentation. > Electrical tradesperson is nominated to NSW regulator. > All contractors must have appropriate insurances managed by site pass. > Quarry Manager to shall check and maintain a records for the competency of all contractors who complete maintenance works. > Electrical engineer required when total connected power exceeds 1,000 kilowatts or if high voltage is utilised. > Electrical Engineer must hold an electrical engineer manager practicing certificate > Site must maintain an electrical tradesperson register | Engineering / Redesign | Significant | Unlikely | 14 |
| Electrical - Equipment to test electrical equipment. | Electric shock from using electrical test equipment. | > Failure of equipment. > Incorrect equipment used. > Exposed live electrical points. | Significant | Possible | 18 | Electrical Engineering Control Plan | > All electrical test equipment must be designed for testing the level of voltage anticipated. > Voltage tester must not expose workers to the risk of electric shock. > Test leads and testing devices should be provided with over current protection. > Be free from damage and cracks in insulation. > Safe Work Procedure Use of Electrical Test Equipment (EECP SWP 2) developed by qualified electrical engineer. | Isolation | Serious | Unlikely | 9 |
| Electrical - Isolation, Dissipation and Control of all electrical energy sources from electrical plant or installation. | > Inadequate isolation resulting in unplanned movement and or electrocution | > Equipment not isolated adequately due to lack of understanding, inproper installation procedure or maintenance. | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | Provisions for isolation and control of electrical energy are detailed in, Electrical Test Equipmetn (SWP 2); Removal and Resotration of Power (SWP4); Low voltage electrical installation standards (STD 2); Site Generator Installation Standards (STD 1); Portable Electrical Equipment Standard (STD 4); Overhead Powerline Standard (STD 5) & Site Isolation Maps. | Administrative | Significant | Rare | 10 |
| Electrical - New electrical installations to site. | > New plant / structures can bring new hazards to site. | > Unknown / unforeseen risks / processes | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | > All new electrical components brought onto the quarry to have design risk review completed, prior to construction / instalation. > All new electrical systems brought onto site to have commissioning plan develop and be A/S compliant and tested for continuity of earth, insulation resistance, polarity, correct circuit connections, earth fault-loop impedance and RCD operation. > All new electrical components to have an management of change completed, reviewed by either the OEM or qualified engineer. > A operational risk assessment (pre start up safety review) to be completed on all new electrical components to look for new introduced risks. > All new electrical components to be designed and built as per Australian standards. > Electrical installation locations are to be determined in consultation with an electrical engineer or nominated qualified electrical tradesperson. > All buried services will be surveyed and recorded in quarry plans. > New generators to be installed in line with Generator Installation Standard (STD 1) > Software management to ensure newly installed programs do not cause miscommunication or hazards with existing equipment, EECP STD 7 Software Change Standard. | Engineering / Redesign | Significant | Rare | 10 |

| | | | | | | | | | | | |
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| Electrical - Portable powered tools | Electric shock from using tool | > Poorly maintained tool. > Tool being used beyond its capacity. | Significant | Possible | 18 | Electrical Engineering Control Plan | > Use battery powered tools as oppose to electrical tools. > tagged and tested and inspected by a competent person. > All electrical tools must be protected by a RCD outlet prior to use must be inspected prior to use. > All electrical tools must have an RCD fitted for use. > Standard for Portabel Electrical Equipmetn (STD4) developed by Qualffied Electrical Engineer > Electrical leads and tools are not to be used in wet or damp conditions unless designed for those conditions. > If RCDs, circuit breakers or other over current protective devices including fuses are triggered, ensure circuits are not re-energised until cause is determined by Qualified Electrical Tradesperson > RCDs to be regularly tested > Extension leads must have min IP56 rating with screwed plugs and sockets, lock rings tensioned to ensure rating is maintained, extension leads checked and to AS/NZS3012, max length 30ms, run off ground using suitable stands/hangers. > Power boards must have indivudal switches, when possible be mounbted off the floor, IP56 or greater to be used outdoors or in dusty environments, must not be setup in cascading sequence, double adapters not permitted onstie, not used in wet areas, regularly checked. > Maintenance and testing requirements stipulated in STD 4 | Substitution | Serious | Unlikely | 9 |
| Electrical - Restoration of Power | Electrocution from restoration of power | > Daily starting of generator | Significant | Possible | 18 | Electrical Engineering Control Plan | > Prestart inspection to be completed prior to starting generator for the day. > Procedure and training for starting of generator. > Generated started with out people working within vicinity. > Provisions for restoration of electrical energy are detailed in, Removal and Resotration of Power (SWP4) | Engineering / Redesign | Serious | Unlikely | 9 |
| Electrical - Restoration of Power | Electrocution from restoration of power | > Blown fuse | Significant | Possible | 18 | Electrical Engineering Control Plan | > Reset only complete if the fault is known, if fault is unknow then electrician shall complete reset. > If trip occurs second time electrician shall investigate trip. > Lock Out / Tag Out shall be used for replacement of fuses. > If fuse switch is to be replaced electric power is to be removed upstream from the fuse swithc prior to operating the fuse switch or replacement of fuse. > If upstream electric power cannot be removed, PPE as per Arc Flash Label associated with the fuse swtich MUST be used. > Provisions for restoration of electrical energy are detailed in, Removal and Resotration of Power (SWP4) | Engineering / Redesign | Serious | Unlikely | 9 |
| Health Effects - Biological Health | > Health effects due to virus. | > Unknown sources. > Water contamination. | Catastrophic (Principal Hazard) | Possible | 22 | Health Control Plan | > Follow recommendation from state and federal governments and world health organisation. > Risk assess any global/local health pandemics. > Bottle /filtered water for drinking and tank water utilised for hand washing etc. > In times of poor rain fall, bore water in use and annual testing of water quality. > Process water regularly used to prevent stagnate water. > Electrical installation locations are to be determined in consultation with an electrical engineer or nominated qualified electrical tradesperson. | Isolation | Catastrophic (Principal Hazard) | Rare | 15 |
| Electrical - Restoration of Power | Electrocution or burns from restoration of power | > Arc Flash > multi-meter not rated for system voltage > multi-meter on wrong setting > dropped or misplaced tools > Drilling itno busbar > Pimproper maintenance > Moisutre or vermin > Corrosion or Dust > Mechanical or insulation failure | Significant | Possible | 18 | Electrical Engineering Control Plan | > Arc Flash Study conducted by qualifiued electrical engineer. > Circuit breakers considered low risk when, equipment is installed, used and maintained to OEM and applicable industry codes/standards. Equipment Doors are closed and secured. Equipment covers are in place and secured. No evidence of impending failure such as arcing, overheating, loose or bound equipment parts, visible damage or deterioration. > Provisions for restoration of electrical energy are detailed in, Removal and Resotration of Power (SWP4) > Heirarchy of cotnrols to protect against Arc Event in STD 9 Arc Flash Management | Engineering / Redesign | Serious | Unlikely | 9 |

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| Electrical - Switchboards and Distribution Boards | > Worker entering switchboard or distribution board in which they are not permitted to access. | > Workers are unaware they are not to access board. > Signage and notices inadequate to identify risks. | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | > All boards must be locked preventing worker access. > Only authorised persons are able to access boards. > Access to cables behind boards are only permitted when competent and with a clearance to work permit. > Signage in place to warn of electrical installations and access is restricted. > Signs relating to risks of electrical plant and installations are managed by Electrical Lifecycle Management Plan (LCMP); Low Voltage Electrical Installations Standard (STD 2); Signage at Electrical Installations (STD 3) > Safe Work Procedure developed for Access to Electrical Operating Areas (EECP SWP 1) > | Isolation | Significant | Rare | 10 |
| Electrical - Use of Lasers and Fibre Optic Equipment at the Quarry | Installation of required equipment not to relevant standard | > Incorrect standard/procedure followed for installation. > Unqualified person installing and or maintaining laser or optic equipment | Serious | Possible | 13 | Electrical Engineering Control Plan | Use of lasers and optic fibre is managed by the Laser Management Standard (STD 10). | Engineering / Redesign | Minor | Unlikely | 5 |
| Electrical - Construction installation and maintenance of battery powered vehicles and battery charging stations on site | Installation of required equipment not to relevant standard | > Incorrect standard/procedure followed for installation. > Unqualified person installing and or maintaining battery powered vehicles and or charging stations | Serious | Possible | 13 | Electrical Engineering Control Plan | Not applicable at Penrose Quarry | Elimination | Negligible | Rare | 1 |
| Electrical - Supply of electricity in Hazardous Atmospheres | Fire or Explosion | > Incorrect standard/procedure followed for installation. > Unqualified person installing and or maintaining areas with dangerous atmospheric conditions | Serious | Possible | 13 | Electrical Engineering Control Plan | Not applicable at Penrose Quarry | Elimination | Negligible | Rare | 1 |
| Electrical - Site Requirements for electrical planning, designing, constructing, commissioning, operating and maintaining electrical equipment. | > Injury caused by direct/indirect contact with electricity > Unintended initiation of gas or dust explosions > Unintended or unsafe use of electrical plant > Occurrence of uncontrolled fires | > The lifecycle management aspects for electrical plant and installations > The reliability of electrical safeguards that protect people from hazards that can be caused by faulty electrical plant > Electrical engineering practices > Safe electrical work practices > Competency of workers to work safely on electrical plant and installations | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | > Electrical Engineering Control Plan prepared by a qualified and experienced electrical engineer. > Only competent people to perform electrical works > Fit for purpose equipment used > Safe work practices used on site > Preventative Maintenance systems used > Adequate supervision and hazard reporting on site > Circuits protected by appropriate rated fuse or circuit breaker to prevent overloading > Electrical cables, plant and leads installed to ensure they are not damaged whilst in service. > Check and test electrical equipment prior to use > Defective electrical equipment tagged out for repair or removed from site. > Software management to ensure newly installed programs do not cause miscommunication or hazards with existing equipment, EECP STD 7 Software Change Standard. | Administrative | Significant | Unlikely | 14 |
| Emergency Response - emergency situation arising from any number of onsite/offsite incidents | Miscommunication or insufficient training of emergency procedure leading to delay in emergency response actions | > Lack of training. > Inadequate response plan considering potential incidents. > Miscommunication | Catastrophic (Principal Hazard) | Possible | 22 | Not Applicable | > Emergency Response Plan developed covering multiple scenarios. > Bush Fire & Lightning response Plan Developed and relevant personnel trained > Fire Response Training conducted annually > Area Wardens in place and Emergency Assembly Points signposted with all inducted on site aware of their location. > First Aid kits available throughout site, (Offices, Control Rooms, LVs, Crib Rooms). > Fire Extinguishers installed throughout site and inspected 6 monthly > Emergency Drill conducted annually. > Emergency response and site hazardous substances/mobile plant communicated to local fire service. > Quarry Pit must maintain minimum of 2 emergency exits. > Site must maintain and have access to PPE resources for all emergency types. | Administrative | Significant | Possible | 18 |
| Health Effects - Psychosocial Hazards | > Physiological hazards for workers. | > Work / Job Stress > Non work related factors | Significant | Possible | 18 | Health Control Plan + Airborne Contaminates Management Plan | > Employee assistance program available for workers and promoted. > Workers have access to support through different levels of management. > Regular reviews with workers on performance and expectations. > Speak Up initiative to encourage employees to report misconduct. > Bullying Training carried out annually. > Regular anonymous cultural surveys conducted nationally to determine job satisfaction and areas of improvement. covering Learning & Development; Culture; Leadership; Alignment & Involvement and Enablement > Additional training available for mental health champions. | Administrative | Significant | Rare | 10 |

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| Health Effects Air Quality & Dust - Workers exposed to dust working onsite (Crystalline Silica). | > Dust onsite due to mining operations, effecting workers health. | > Washing operations. > Conveyor transport. > Movement of vehicles around site. > Wind. | Catastrophic (Principal Hazard) | Possible | 22 | Health Control Plan | > Site completes annual dust exposure monitoring of work groups (SEGs). (frequency of testing may vary due to exposure). > Silica content of product known (product has high silica content). > Workers complete 5 yearly health Surveillance for silica exposure health effects. (frequency of surveillance may vary due to exposure). > Water used within processes to reduce airborne dust (Watercart / stockpile sprays / sprinkler systems). > All vehicles onsite shall have an enclosed cabin, with air condition and adequate door seals. > Regular / inspections maintenance to take place on all equipment seals and filtration systems (OEM recommendations). > Operations to stop if the dust can not be controlled on windy days. > Workers walking around site have respirators available. > Workers are trained in silica and exposure risks. > Workers must wear respirators when on primary / secondary plant while plant is operating >Occupational hygiene monitoring is completed for respirable dust as well as crystalline silica, by a competent occupational hygienist that follows the testing/sampling requirements of the latest Work Health and Safety (Mines) Regulation and Workplace Exposure Standards for Airborne Contaminants. > Sampling requirement from a period of at least 5 hours to minimum of 80% of a shift. >Any exceedances of monitored airborne hazardous substances or incidents must be reported to the mines regulator as per Section 124 of the latest Work Health and Safety (Mines and Petroleum Sites) Regulation 2022 | Isolation | Significant | Unlikely | 14 |
| Electrical - Maintenance | > Electrical equipment develop risk which can caused hazard to workers. | > Electrical components can fail due to the amount of use and age. | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | Regular maintenance shall be completed ensuring: > Operation of electrical installation and not impaired by interference, damage or wear. > Live parts are insulated and workers are protected from inadvertent contact. > Earth leakage systems operates effectively. > Not exceeding operating limits. > The installation does not have the potential to start a fire. > Safety integrity limits (SIL) are maintained. > Standard for Portabel Electrical Equipmetn (STD4) developed by Qualfiied Electrical Engineer > Electrical leads and tools are not to be used in wet or damp conditions unless designed for those conditions. >If RCDs, circuit breakers or other over current protective devices including fuses are triggered, ensure circuits are not re-energised until cause is determined by Qualified Electrical Tradesperson > RCDs to be regularly tested >Extension leads must have min IP56 rating with screwed plugs and sockets, lock rings tensioned to ensure rating is maintained, extension leads checked and to AS/NZS3012, max length 30ms, run off ground using suitable stands/hangers. > Power boards must have indivual switches, when possible be mounbted off the floor, IP56 or greater to be used outdoors or in dusty environments, must not be setup in cascading sequence, double adapters not permitted onstie, not used in wet areas, regularly checked. >Maintenance and testing requirements stipulated in STD 4 | Isolation | Significant | Rare | 10 |
| Electrical - Restoration of Power | Electrocutation from restoration of power | > Overload trip > Short Circuit trip > Circuit breaker reset | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | > Reset of power to be completed by an electrician after, fault is identified and repaired. > further tests also carried out to determine it is safe to start-up. > Started with out people working within vicinity. > If trip occurs second time electrician shall investigate trip. >Provisions for restoration of electrical energy are detailed in, Removal and Resotration of Power (SWP4) | Engineering / Redesign | Serious | Unlikely | 9 |
| Fixed Plant & Structures - Crushers | High pressure injections from hydraulic systems | > Failure of hoses and seals. | Significant | Unlikely | 14 | Mechanical Engineering Control Plan | > All high pressure hydraulic components that propose a potential risk have burst protection in place or guarding. > Lock Out, Tag Out for all worker working on hydraulic systems. | Engineering / Redesign | Serious | Rare | 6 |
| Fixed Plant & Structures - Conveyors | Debris falling from conveyor, impacting worker. | > Overloading conveyors. > People accessing conveyor at incorrect place. | Serious | Possible | 13 | Mechanical Engineering Control Plan | > Largest size rock around 350mm with minimum potential fall height. Workers do not need to access between boot and tertiary crusher, post tertiary crush maximum rock size is 20mm. > Workers wear hard hats when outside walking around site. > Workers to only pass under conveyor system under designated walkways. > Skirt rubbers at transfer points, skirt rubbers centralise rocks onto centre of the conveyor. > Guarding cages in place to prevent unauthorised access to dangerous areas. | Substitution | Minor | Rare | 3 |

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| Health Effects Air Quality & Dust - Human movement generating dust. | > Workers inhaling silica dust when within vehicle cabin. > Dust within offices / lunchrooms, continuing worker exposure during break times. | > Areas where people enter / exit vehicles having product build up. > Workers have dirty / muddy boots. | Catastrophic (Principal Hazard) | Possible | 22 | Health Control Plan | > Vehicles are not to be swept out, however vacuumed out and wiped down with a damp cloth. > Rooms have doors seals. > Rooms have air-conditioning which are regularly serviced. > Rooms shall be vacuumed weekly to prevent dust build up and all surfaces wiped down. | Engineering / Redesign | Serious | Unlikely | 9 |
| Road Vehicle Operations - Operating vehicle in poor visibility conditions | > Collision with other Vehicle, structure or pedestrian. | > Night, > Smoke, > Fog. | Catastrophic (Principal Hazard) | Possible | 22 | Roads and Other Vehicle Operating Areas Management Plan | > Vehicles are fitted with head lights and tail lights. > All vehicle have flashing lights. > Reflective tape, signs and clothing. > Consider halfling speed limits when low visibility. > Communicate traffic condition through toolbox and site meeting | Engineering / Redesign | Catastrophic (Principal Hazard) | Unlikely | 19 |
| Health Effects Air Quality & Dust - Primary crusher | > Worker needs to access primary crusher to turn the primary crusher on. | > Primary crusher generates dust when crushing rock. | Catastrophic (Principal Hazard) | Unlikely | 19 | Health Control Plan | > Work sequence the crusher is not crushing rock when the operator needs to access it. > Extraction fans on crusher do expel dust on start up away from the operator. > During operation worker is within vehicle cabin, which is air conditioned and sealed. > Crusher exhaust keeps dust away from work areas, on foot worker areas. | Isolation | Significant | Rare | 10 |
| Fixed Plant & Structures - Boot (Bin) | Worker falling into the bin. | > Workers needs to access bin area or unintentional access of bin area. > Haul truck / Loader falling into bin. | Significant | Possible | 18 | Not Applicable | > Pedestrians to not access boot unless under Clearance to work permit. > Haul Truck Drivers are not to leave cabin when parked at the boot. > Tyre bump stop in place to prevent truck falling into the bin (Boot) | Engineering / Redesign | Significant | Rare | 10 |
| Fixed Plant & Structures - Boot (Bin) | Rocks spilling out of the bin, causing injury to worker below the bin. | > The bin can be over full, > Larger load of rock to go into bin. | Significant | Possible | 18 | Mechanical Engineering Control Plan | > Boot (bin) has edge spillage boards which are 1800mm higher than the boot. > Every 5 years a mechanical engineer completes inspections of all plant and structures for signs of fatigue. > Workers are not to be within 6 metres of the bottom of the boot when loads are being tipped into the bin. > Haul truck sizes are designed in accordance with volume of material the boot can handle. > All workers wear hard hats when outside of vehicles within quarry. | Isolation | Significant | Rare | 10 |
| Health Effects Air Quality & Dust - Public exposed to Silica from Quarry. | > Dust onsite due to mining operations, effecting public | > Washing operations. > Conveyor transport. > Movement of vehicles around site. > Wind. | Catastrophic (Principal Hazard) | Possible | 22 | Health Control Plan | > Site completes monitor of any dust leaving site. > No public facilities near the quarry. > Product being sand does not stick to vehicle tyres, therefore, not being transferred to public road. > Site is a wet process, and does not generate dust through dredge and washing operation (furthermore, product is not crushed down so does not normally form a fine powder). | Isolation | Significant | Unlikely | 14 |
| Ground & Strata Management - Highwall Failure | > Failure of highwall (Wedge / Slop failure). | > Incorrect slop angle, too steep. > Loose material on highwall. > Excessive highwall face height. > Undercut of Highwall. | Catastrophic (Principal Hazard) | Possible | 22 | Ground Control Management Plan | > Decrease slop angle shall be consider whilst undertaking geotechnical slope design. > Workers shall not be within the toe of the highwall, highwalls which have poor strata shall exclusion zones will apply. > Daily visual inspection looking for evidence of ground stability or strata failure. | Engineering / Redesign | Catastrophic (Principal Hazard) | Unlikely | 19 |
| Road Vehicle Operations - General Vehicle Movements | > Collision with person. | > Unknown vehicle movement, > Unable to see other person | Significant | Possible | 18 | Roads and Other Vehicle Operating Areas Management Plan | > Designated walk ways for pedestrians, pedestrians not to walk around moving heavy vehicles. > Pedestrians where high visibility clothing. > All mobile plant must be fitted with reversing beepers. > All public road going vehicles, must meet road worthy inspections for NSW. > All Off Highway vehicles must comply with maintenance as prescribed from regulator and OEM. Front-end loaders, graders and bulldozers shall travel with their buckets/blades/rippers down towards the ground. | Isolation | Significant | Rare | 10 |
| Road Vehicle Operations - General Vehicle Movements | > Collision with other Vehicle, structure or pedestrian. | > Driver not fir for work (fatigue or drugs / alcohol). > Distracted mobile phone (personal device). | Catastrophic (Principal Hazard) | Possible | 22 | Roads and Other Vehicle Operating Areas Management Plan | > No mobile phones to be used while operating with in vehicles >4.5T GVM. > No vehicle <4.5T GVM drivers are permitted to use mobile phones when driving on a quarry site, hands free or otherwise. > When required to answer a phone call, vehicle must come to a stop in a safe position prior to taking the call > Drivers trained in fatigue management and have regular breaks. > All persons onsite must be free from the effects of drugs or alcohol. > Onsite random drug and alcohol testing. Front-end loaders, graders and bulldozers shall travel with their buckets/blades/rippers down towards the ground. | Administrative | Catastrophic (Principal Hazard) | Rare | 15 |

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| Electrical - General Electrical Risks | > Electric shock / electrocution to workers. | > Workers touching electrical components they do not understand. > Poor or dangerous wiring. | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | > Only trained and competent workers are to touch electrical components, people approved to work on electrical components must be authorised by the Quarry Manager or delegate. > Isolation points to great physical breaks in power to complete tasks, lock out tagged out. > Routine inspection and testing of electrical equipment. > Inspections and testing completed on electrical components. > Electrical components shall be fitted with residual current devices. | Engineering / Redesign | Significant | Rare | 10 |
| Electrical - High Voltage work | Electrocution | > High voltage | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | > Site does not have high voltage electrical. | Elimination | Negligible | Rare | 1 |
| Electrical - Power Distribution | Electrocution from powerlines | > In ground powerlines > Over head powerlines | Significant | Possible | 18 | Electrical Engineering Control Plan | > Equipment traveling under powerline must lower attachment to stay under required distance. > Clearance work permit to be completed if working near overhead power lines or excavating near powerlines on site. > Powerlines onsite shall be known and clearly identified. > Signage in place to indicate height of powerlines, vehicle clearance. | Elimination | Significant | Rare | 10 |
| Electrical - Switchboards and Distribution Boards | Fire on switchboard / distribution board. | > Dust and heat causing overheating of distribution boards. | Significant | Possible | 18 | Electrical Engineering Control Plan | > Boards are contained in sealed room free from dust and contaminants. > Multiple exit points from power distribution rooms, and easy to get away from boards. > No combustible material stored in distribution rooms > Signage indicating controls. | Engineering / Redesign | Minor | Unlikely | 5 |
| Electrical - Work on live electrical circuits | Electrocution | > Live electrical work | Catastrophic (Principal Hazard) | Possible | 22 | Electrical Engineering Control Plan | > ABL employees and contractor are not permitted to work on live circuits. | Elimination | Negligible | Rare | 1 |
| Fire - External fire event potentially affecting the site. | > Workers being stuck onsite due to fire risk. > Fire fighting agencies accessing site being unaware of risk. > Workers on site to protect | Fire event onsite due to offsite fire event (bush fire). | Catastrophic (Principal Hazard) | Possible | 22 | Fire Prevention and Protection Management Plan | > Emergency management plan for external fire event. > Emergency rations to be onsite for minimum 5 days (including food and water). > The site shall develop a fire plan for the specific fire event, ensuring water carts etc. have water to extinguish spot fires. > Site shall have tools in place for external communication during a fire event and utilise government websites to manage approaching fire and weather conditions. | Isolation | Catastrophic (Principal Hazard) | Rare | 15 |
| Fire - External fire event potentially affecting the site. | > Fire to assets / people. | Fire event onsite due to offsite fire event (bush fire). | Catastrophic (Principal Hazard) | Possible | 22 | Fire Prevention and Protection Management Plan | > Site shall have emergency management plan developed. > Fire management plan shall be available and visible within site. > Maps in place of the site. > Engage with fire authority, to show site and discuss fire plans, prior to incident. | Isolation | Catastrophic (Principal Hazard) | Rare | 15 |
| Fire - Hot Work | Fire as a result of hot work outside of workshop. | > Unknown hazards due to hot work. | Catastrophic (Principal Hazard) | Unlikely | 19 | Fire Prevention and Protection Management Plan | > All hot work outside of the workshop must be completed with a hot work permit. > Fire extinguishers must be in place for hot work, as well as wetting areas when outside with combustible material. > Hot works are not permitted outside during total fire bans. | Administrative | Catastrophic (Principal Hazard) | Rare | 15 |
| Fire - Management of fire equipment | Failure of fire equipment when needed. | > Poorly maintained or incorrect fire equipment. | Catastrophic (Principal Hazard) | Possible | 22 | Fire Prevention and Protection Management Plan | > All fire equipment must be inspected as per OEM recommendations or Australian Standards. > Workers must be trained in fire equipment. > Suitable volume and type of fire equipment must be in place for each different emergency type. | Engineering / Redesign | Serious | Possible | 13 |
| Fire - Plant / Mobile Plant | > Fire while people are in or operating mobile plant. | > Malfunction within machine. | Catastrophic (Principal Hazard) | Rare | 15 | Fire Prevention and Protection Management Plan | > Machines are inspected pre shift for any signs of potential faults. > All machines on site are inspected and maintained as per OEM recommendations. > Machines are fitted with fire extinguishers enabling workers to escape machinery. > Machines are easy to escape from or have multiple evacuation methods. | Engineering / Redesign | Serious | Rare | 6 |
| Fire - Pressurised gas cylinders | Pressurised gas cylinders failing causing risk. | > Fire spreading to cylinder storage. > Failure of gas cylinder causing flammable risk. > Storage of non compatible material | Significant | Possible | 18 | Fire Prevention and Protection Management Plan | > All cylinders must be stored upright, and chained, in designated storage area. > All cylinders must be inspected to ensure they are free from damage and compliant to Australian standards. > Cylinders are exchanged through supplier, ensuring they are compliant. > SDS must be consulted with to ensure non compatible items are not stored together. > All gas cylinders shall be isolated from areas, by either one-hour firewall or by minimum of three metre distance. | Isolation | Serious | Possible | 13 |
| Fire - Refuelling of vehicles | Vehicle catching fire due to being on during refuelling. | > Vehicle being on during refuelling. > Ignition sources within refuelling area. | Catastrophic (Principal Hazard) | Unlikely | 19 | Fire Prevention and Protection Management Plan | > All refuelling to occur in designated refuelling areas. > All vehicles refuelled onsite are diesel not unleaded petrol. > Closed systems for refuelling, minimal oxygen within fuelling areas. > Vehicles must be turned off during refuelling, unless completed under specific risk assessment. > No ignition sources are permitted within refuelling areas. > Fire extinguishers / fire protection systems. > Daily pre start inspections on vehicles. > All refuelling equipment, purpose built and inspected. | Engineering / Redesign | Significant | Rare | 10 |
| Fire - Spontaneous Combustion | > Site has no risk of spontaneous combustion | | Negligible | Rare | 1 | Principal Hazard However Not Present on Site | > Nil no risk present | Elimination | Negligible | Rare | 1 |

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| Fire - Storage Oils / flammables | Fire of oils / flammable liquids | > Fire spreading to oil / flammable storage. | Catastrophic (Principal Hazard) | Unlikely | 19 | Fire Prevention and Protection Management Plan | > All flammable material must be stored in flammable storage cabinets. > All chemicals must be labelled. > All chemicals shall be stored in suitable lidded containers. > SDS must be consulted to not store incompatible material together. > Flammable material must be stored away from ignition sources. | Isolation | Significant | Rare | 10 |
| Fire - Waste oils / flammables | Fire of waste oils / flammable liquids | > Poor housekeeping of flammable equipment leading to fire or making fire worse. | Significant | Unlikely | 14 | Fire Prevention and Protection Management Plan | > All rags must be disposed of correctly, and work areas cleaned at the end of the job. > All waste oil must be stored in designed oil storage containers. > Suitable fire extinguishers within areas to manage flammability risk. > Large volumes of flammable material not stored on site. | Administrative | Significant | Rare | 10 |
| Fire - Welders / cutters | Welding / cutting of material. | > Fire / explosion of welding equipment. | Significant | Unlikely | 14 | Fire Prevention and Protection Management Plan | > Regular inspections of all welding and cutting units. > All cables and leads must be kept free from grease and oil. > Flash back arrestors must be fitted to all welders / cutters. > Welding screens must be in place to prevent injuries to other workers. > All people welding must wear the correct PPE. > Fire extinguishers must be in place for welding / cutting. | Engineering / Redesign | Serious | Unlikely | 9 |
| Fixed Plant & Structures - Conveyors | Entanglement of operator within conveyor. | > Worker can access conveyor with potential to get entangled. | Significant | Possible | 18 | Not Applicable | > All conveyor are guarded to prevent access. > Work on conveyors to be done under a Clearance to work permit and lock out, tag out process. > LOTO in place to prevent unplanned plant movements. > Conveyor siren starts prior to conveyor start. > Conveyors are fitted with emergency stop lanyard. | Engineering / Redesign | Serious | Unlikely | 9 |
| Fixed Plant & Structures - Conveyors | Fires within bearing / rollers | > No grease within bearing causing friction fire to start. | Serious | Unlikely | 9 | Mechanical Engineering Control Plan | > Weekly inspection of whole tertiary, inspecting all elements. > Daily visual inspection of plant prior to start up. > Bearing temperature inspection > Weekly shutdown maintenance > Fire extinguishers on plant. > Workers operate within vicinity of operating plant. | Administrative | Serious | Rare | 6 |
| Fixed Plant & Structures - Conveyors | Failure of plant structures. | > Heavy corrosion of plant caused by dust and elements. | Catastrophic (Principal Hazard) | Unlikely | 19 | Mechanical Engineering Control Plan | > Every 5 years a mechanical engineer completes inspections of all plant and structures for signs of fatigue. > Weekly inspection of whole tertiary, inspecting all elements. > Daily visual inspecting of whole plant prior to start up. | Engineering / Redesign | Catastrophic (Principal Hazard) | Rare | 15 |
| Fixed Plant & Structures - Conveyors | Cuts and lacerations from conveyor belts. | > Conveyors can have sharp edges. | Minor | Probable | 12 | Not Applicable | > Workers generally do not need to handle conveyor belts. > Worker wear category 3 cut resistant gloves. | PPE | Negligible | Unlikely | 2 |
| Fixed Plant & Structures - Crushers | Falling into the crusher. | > Maintenance activities / inspections of crusher. | Significant | Possible | 18 | Mechanical Engineering Control Plan | > Guarding in place to prevent people falling into crusher, > Guarding inspected daily during prestart to ensure all guarding is in place. > Any other work bar inspection / top up oil requires clearance to work permit and working at heights permit. | Isolation | Significant | Rare | 10 |
| Fixed Plant & Structures - Crushers | Engulfment within crusher, during maintenance. | > Maintenance activities / inspections of crusher. | Significant | Unlikely | 14 | Mechanical Engineering Control Plan | > Lock Out, Tag Out for all worker to be completed where worker needs to access crusher. > Any other work bar inspection / top up oil requires clearance to work permit and working at heights permit. | Isolation | Minor | Rare | 3 |
| Fixed Plant & Structures - Crushers | Entanglement within crusher drive components. | > Maintenance activities / inspections of crusher. | Significant | Unlikely | 14 | Mechanical Engineering Control Plan | > Guarding in place to prevent people falling into crusher, > Guarding inspected daily during prestart to ensure all guarding is in place. > Guarding in place to ensure limb in unable to access moving parts. > Any other work bar inspection / top up oil requires clearance to work permit and working at heights permit. | Isolation | Significant | Rare | 10 |

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| Fixed Plant & Structures - Crushers | > Limb pinch between moving parts of machine. | > Maintenance activities / inspections of screens. | Serious | Unlikely | 9 | Mechanical Engineering Control Plan | > Guarding in place to prevent people falling into crusher, > Guarding inspected daily during prestart to ensure all guarding is in place. > Guarding in place to ensure limb in unable to access moving parts. > Any other work bar inspection / top up oil requires clearance to work permit and working at heights permit. | Isolation | Minor | Rare | 3 |
| Fixed Plant & Structures - Crushers & Screens | Fall into crusher or screen resulting in injury or fatality | Removing blockages from crushers and screens | Significant | Possible | 18 | Mechanical Engineering Control Plan | > Hand rails and suitable guarding in place to prevent accidental fall into danger areas > Warning signs in place to inform of inherent dangers. > 2 persons working in the area at all times | Engineering / Redesign | Significant | Rare | 10 |
| Fixed Plant & Structures - Crushers & Screens | Incident within confined space | Parts of the crusher are confined spaces for workers. | Significant | Possible | 18 | Not Applicable | > Only registered and qualified persons are allowed to conduct work in confined spaces in accordance with AS2865 - Safe work in a confined space. > A clearance to work and confined space permit must be used when entering confined space. > Air quality monitored during confined space activities, adequate ventilation must be present prior to entry. > Ensure sufficient ventilation is available before entry proceeds. (Extraction fans must be used if welding is being carried out) | Administrative | Significant | Unlikely | 14 |
| Fixed Plant & Structures - Screens | > Pinch between moving parts of machine. > Limb crush points | > Maintenance activities / inspections of screens. | Serious | Unlikely | 9 | Mechanical Engineering Control Plan | > Guarding in place to prevent people falling into screen, > Guarding inspected daily during prestart to ensure all guarding is in place. > Guarding in place to ensure limb in unable to access moving parts. > Any other work, bar inspection / greasing requires clearance to work permit and working at heights permit. | Isolation | Minor | Rare | 3 |
| Fixed Plant & Structures - Screens | Entanglement within screens. | > Maintenance activities / inspections of screens. | Serious | Unlikely | 9 | Mechanical Engineering Control Plan | > Guarding in place to prevent people falling into screen, > Guarding inspected daily during prestart to ensure all guarding is in place. > Guarding in place to ensure limb in unable to access moving parts. > Any other work, bar inspection / greasing requires clearance to work permit and working at heights permit. | Isolation | Minor | Rare | 3 |
| Fixed Plant & Structures - Screens | Engulfment within screens, during maintenance. | > Maintenance activities / inspections of screens. | Significant | Unlikely | 14 | Mechanical Engineering Control Plan | > Lock Out, Tag Out for all worker to be completed where worker needs to access screens. > Any other work, bar inspection / greasing requires clearance to work permit and working at heights permit. | Isolation | Minor | Rare | 3 |
| Fixed Plant & Structures - Tertiary crushing plant | Fall from heights - Parts of plant are elevated with the potential for workers to fall from heights. | > Completing pre start inspections and greasing moving parts. > Slips while on plant, due to wet surfaces | Significant | Possible | 18 | Mechanical Engineering Control Plan | > All plant is guarded to prevent workers fall from height, handrails. > Only workers with operational need access tertiary crusher platforms. > Any other work, bar inspection / greasing requires clearance to work permit and working at heights permit. > Workers wear lace up safety footwear. > Anti slip construction of walking surfaces on tertiary crusher plant. | Engineering / Redesign | Significant | Rare | 10 |
| Ground & Strata Management - Bench Failure | > Bench may fail causing injuries to workers below or workers on the bench. | > Bench may fail due to weathered material. > Pooling of water or rain event washing away material. > Undercut of highwall. | Catastrophic (Principal Hazard) | Possible | 22 | Ground Control Management Plan | > Workers shall not be within the toe of the highwall, highwalls which have poor strata shall exclusion zones as determined by an engineer. > Geotechnical studies undertaken of benches. > Daily visual inspection looking for evidence of ground stability or strata failure. > Drilling and operations completed as per pit design. > Catch benches in place. | Engineering / Redesign | Catastrophic (Principal Hazard) | Unlikely | 19 |
| Ground & Strata Management - Dumping | > Dumping over water or over a highwall. | > Movement of dump. > Incorrect position of vehicle to dump. > Debris from dumping not cleared. | Catastrophic (Principal Hazard) | Possible | 22 | Ground Control Management Plan | > Floor shall be slopping upwards. > The Quarry Manager or Supervisor shall determine safe distance from the tip edge, a minimum of 5 metres from windrow to be used. > The dozer shall remain on the dump at all time while tipping is occurring. > Should the dump / tip edge show signs of cracking, tipping shall stop and the face be reinspected. > All unsuitable material for this operation shall be diverted. | Engineering / Redesign | Catastrophic (Principal Hazard) | Unlikely | 19 |

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| Ground & Strata Management - Fill areas / Overburden | > Subsidence / wash away of fill areas. | > Poor compaction of fill areas. > Water ingress into fill areas causing wash away. > Design failures / maintenance of dump areas. > Seismic event. | Catastrophic (Principal Hazard) | Possible | 22 | Ground Control Management Plan | > Filled areas shall be designed and compacted as per geotechnical report. > Daily inspections of working areas. > Water pressure & corrosion to be considered for design of fill areas. > Sumps to be in place. > Post a seismic activity, fills areas shall be inspected for possible failure. > Dump / fill areas should be no higher than 20 metres unless advised received from geotechnical advice. > Persons shall not access the toe of a dump on foot unless an inspection has been completed prior for loose material / rocks. | Engineering / Redesign | Catastrophic (Principal Hazard) | Unlikely | 19 |
| Ground & Strata Management - Highwall Failure | > Highwall may fail causing injuries to workers below or workers on top of the highwall due to water. | > Water pooling behind highwall. > Large weather event washing away parts of highwall. > Incorrect slop design (Too Steep). > Incorrect bench design (Too Narrow). > Ground water within pit. > Undercut of Highwall. | Catastrophic (Principal Hazard) | Possible | 22 | Ground Control Management Plan | > Decrease slop angle shall be consider whilst undertaking geotechnical slope design. > Workers shall not be within the toe of the highwall, highwalls which have poor strata shall exclusion zones as determined by an engineer. > Daily visual inspection looking for evidence of ground stability or strata failure. > Regular performance monitoring to be undertaken of highwalls. > Face height shall not exceed the Geotechnical report requirements. > Geotechnical Engineer shall be engaged as required to reassess mining methodology. > Faces of highwall to not exceed 15 metres, or higher than the loader / excavator can reach for the purposes of scaling. | Engineering / Redesign | Catastrophic (Principal Hazard) | Unlikely | 19 |
| Ground & Strata Management - Highwall Failure | > Highwall may fail causing injuries to workers below or workers on top of the highwall. | > Seismic activity | Catastrophic (Principal Hazard) | Possible | 22 | Ground Control Management Plan | > Decrease slop angle shall be consider whilst undertaking geotechnical slope design. > Workers shall not be within the toe of the highwall, highwalls which have poor strata shall exclusion zones as determined by an engineer. > Post a seismic activity, highwall shall be inspected for possible failure, daily inspections. > Face height shall not exceed the Geotechnical report requirements. > Blasting shall also be completed in accordance with the explosives control plan. | Engineering / Redesign | Catastrophic (Principal Hazard) | Unlikely | 19 |
| Ground & Strata Management - Highwall Failure | > Fracture of Highwall due to Blast. | > Blast onsite weakening strata and causing potential failure onsite. | Catastrophic (Principal Hazard) | Unlikely | 19 | Ground Control Management Plan | > Site is designed, for blasting activities to take place. > Comply with explosives control plan. > Post blast inspection conducted > Bunding built to capture loose rocks which could fall from highwall. > Scaling completed on highwalls to remove loose rock | Engineering / Redesign | Catastrophic (Principal Hazard) | Rare | 15 |
| Ground & Strata Management - Water Management | > Water may corrode / damage structure within the pit. | > Water pooling behind highwalls and road surfaces. > Large weather event washing away parts of highwall. > Ground water within pit. | Catastrophic (Principal Hazard) | Possible | 22 | Ground Control Management Plan | > Ground water shall be stored in a sump or pumped to a suitable area. > Water drainage paths shall be established around site, so water does not pool at the toe or crest of critical slops. > Decrease slop angle shall be consider whilst undertaking geotechnical slope design. > Daily visual inspection looking for evidence of ground stability or strata failure. > Regular performance monitoring to be undertaken of highwalls. > Face height shall not exceed the Geotechnical report requirements. > Geotechnical Engineer shall be engaged as required to reassess mining methodology. | Engineering / Redesign | Catastrophic (Principal Hazard) | Unlikely | 19 |
| Ground & Strata Management - Working near base of highwall | > Highwall may fail causing injuries to workers below highwall face. | > Failure of highwall | Catastrophic (Principal Hazard) | Possible | 22 | Ground Control Management Plan | > Decrease slop angle shall be consider whilst undertaking geotechnical slope design, and faces shall not exceed the geotechnical requirements. > Workers shall not be within the toe of the highwall, highwalls which have poor strata shall exclusion zones as determined by an engineer. > Catch benches shall be in place. > People and vehicles shall not be with 15 metres of the toe of a highwall unless they have a specific task to do | Engineering / Redesign | Catastrophic (Principal Hazard) | Unlikely | 19 |
| Health Effects Air Quality & Dust - Asbestos | > Inhalation of asbestos within workplace | > Asbestos in Buildings. > Asbestos naturally occurring. | Catastrophic (Principal Hazard) | Possible | 22 | Health Control Plan | > No Asbestos onsite. | Elimination | Negligible | Rare | 1 |
| Health Effects Air Quality & Dust - Dust generated from extracting product (Crystalline Silica). | > Workers inhaling silica dust when moving around the site. | > Dust generated from ripping with bulldozer. | Catastrophic (Principal Hazard) | Possible | 22 | Health Control Plan | > People shall not walk around quarry for general access, people shall be transported by vehicle to parts of the quarry. > All vehicles access the quarry shall have windows up at all times. > All vehicles accessing quarries shall have air conditioning, with air set to recycle. > All vehicles shall have door seals which are regularly inspected and replaced as per OEM recommendations. | Isolation | Serious | Unlikely | 9 |
| Health Effects Air Quality & Dust - Dust generated on roads from vehicles (Crystalline Silica). | > Workers inhaling silica dust when moving around the site. | > Vehicles on roads generating dust. | Catastrophic (Principal Hazard) | Possible | 22 | Health Control Plan | > People shall not walk around quarry for general access, people shall be transported by vehicle to parts of the quarry. > All vehicles access the quarry shall have windows up at all times. > All vehicles accessing quarries shall have air conditioning, with air set to recycle. > All vehicles shall have door seals which are regularly inspected and replaced as per OEM recommendations. > Water cart to wet active road, > Road to pit access sealed roads. | Isolation | Serious | Unlikely | 9 |
| Health Effects Air Quality & Dust - Dust generated from cutting / transporting sandstone logs | > Workers inhaling silica dust during cutting sandstone logs. > Workers interacting with saw cutting head. | > Log saw cutting generating dust, | Catastrophic (Principal Hazard) | Possible | 22 | Health Control Plan | > Cutting Excavator has windows closes and seals tested every 250 hours. > Mobile plant air conditioning filters are serviced / changed every 250 hours. > All mobile plant shall have door seals which are regularly inspected and replaced as per OEM recommendations. > All vehicles accessing quarries shall have air conditioning, with air set to recycle with windows up. > No persons on foot / unprotected while log cutting taking place. > Watercart available to wet bench if needed for log cutting. > Operating procedure for loading and transport of sandstone logs, develop with transport company and log cutting contractor. | Isolation | Serious | Unlikely | 9 |

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| Health Effects Air Quality & Dust - Dust in Workshop (Crystalline Silica). | > Dust and mud build up in workshop, exposure to workers when needs to be cleaned. > Dust in service area. | > Workers need to sweep up dust and mud in workshop. > Dust settles on equipment. > Dirt floor within service area. | Catastrophic (Principal Hazard) | Unlikely | 19 | Health Control Plan | > Dust is more of a sand based product and does not form clumps or easily transport on wheels / tyres. > Vehicles prior to entering the workshop / service yard shall be washed down and mud and dust removed from wheel areas etc. > Floors cleaned with wet processes or mopped out or hoses out. | Administrative | Serious | Rare | 6 |
| Health Effects on Body - Fume exposures | > Health effects due to fume exposure. | > Chemicals onsite. > Mobile plant / vehicles. | Significant | Unlikely | 14 | Health Control Plan | > All chemicals onsite are known and SDS is reviewed, dangerous inhalation risk chemicals are not required on site. > Chemicals are stored in well ventilated areas. > Vehicles operate outside in well ventilated areas. | Engineering / Redesign | Serious | Rare | 6 |
| Health Effects Air Quality & Dust - Wash plant | > Worker needs to access washing plant | > Dust generation on wash plant | Catastrophic (Principal Hazard) | Rare | 15 | Health Control Plan | > Wash plant is a wet process, sand is washed wet and therefore does not generate dust. > Crushing plant is located away from pedestrian trafficked areas with plant man to notify if there are elevated levels of dust > Work sequence the wash plant is not washing when the operator needs to access it | Isolation | Negligible | Rare | 1 |
| Health Effects on Body - Diesel powered vehicles and machinery. | > Inhalation of diesel particulate. | > Diesel powered vehicles can generate diesel particulate. | Catastrophic (Principal Hazard) | Possible | 22 | Health Control Plan | > Vehicles operate in open spaces and all vehicles operate with windows up, with air conditioning. > Vehicles are also fitted with particulate filters. > Workers do not work in diesel fume. > Diesel powered machinery maintained as per OEM recommendations. > Diesel exhaust to be away from open window and building windows | Isolation | Minor | Rare | 3 |
| Health Effects on Body - Ergonomics | > Musculoskeletal disorders | > Poorly designed equipment. > Hazardous manual handling. | Serious | Possible | 13 | Health Control Plan | > All equipment designed with ergonomic consideration. > All new machinery is risk assessed through our Change Management process. > Routine tasks have operating procedures and risk assessments in place. > Permit system in place for non routine task | Engineering / Redesign | Serious | Unlikely | 9 |
| Health Effects on Body - Fitness for work | > Fitness for work (fatigue) | > Insufficient time to recover between shifts. > Poor shift start and finish times. | Catastrophic (Principal Hazard) | Unlikely | 19 | Health Control Plan | > All personnel shall comply with ABL-HSE-GOS-29-02 Fatigue Management. > A site specific fatigue risk assessment shall be undertaken if an employee works more than 60 hours in a week. | Administrative | Catastrophic (Principal Hazard) | Rare | 15 |
| Health Effects on Body - Fitness for work | > Fitness for work (drugs / alcohol) | > Worker under the effects of drugs and/or alcohol. | Catastrophic (Principal Hazard) | Unlikely | 19 | Health Control Plan | > Workers shall tell their supervisor if they are on any prescription medication. > Random drug and alcohol testing of workers. > Workers shall have zero alcohol in their system. | Administrative | Catastrophic (Principal Hazard) | Rare | 15 |
| Health Effects on Body - Hazardous Substances | > Unknown health effects from being exposed to hazardous substances. | > Exposures to hazardous substances. | Catastrophic (Principal Hazard) | Possible | 22 | Health Control Plan | > Register onsite of all hazardous substances. > SDSs kept onsite and accessible. > For all chemicals brought onto site the SDS is reviewed ensuring any additional controls are implemented. > Attempt to replace dangerous chemicals with lower risk chemicals. > Workers are trained in the safe use and handling of the substances. > Signage in place for any specific chemical hazards. > All flammable goods stored in suitable storage locations. | Engineering / Redesign | Serious | Unlikely | 9 |
| Health Effects on Body - Hot Weather / High Humidity | > Heat stress / heat stroke. | > Hot weather / humidity. | Serious | Possible | 13 | Health Control Plan | > Mobile plant fitted with air conditioners, and all office spaces / building fitted with air conditioners. > Potential to increase breaks if needed or postpone work with no protection from heat. > Workers able to carry water with them, in vehicles / on job. > Workers have long pants, shirts, hat and sunscreen to protect them from UV. | Elimination | Minor | Unlikely | 5 |
| Health Effects on Body - Noise | > Industrial hearing loss. | > Continual noise over 85dBA | Serious | Possible | 13 | Health Control Plan | > Workers operate within vehicle cabins, vehicle cabins are designed to be under exposure standard. > Buy quiet, buying machinery which when in cabin operates at low decibels. > Workers isolated from noisy equipment and breaks taken away from noisy areas. > Noise survey monitoring completed on a 5 year basis. | Administrative | Serious | Unlikely | 9 |
| Health Effects on Body - Vibration | > Effects on body due to vibration | > Vibration while operating mobile plant. | Serious | Possible | 13 | Health Control Plan | > Workers operate within vehicle cabins, vehicle cabins and seats are designed to reduce / eliminated vibration exposure. > Maintenance on mobile plant as per OEM recommendations. > Incident / hazard reporting processes. > Roads to be maintained to reduce ergonomics impact on operators. | Engineering / Redesign | Minor | Unlikely | 5 |
| Inundation / Inrush - Gas | > Site is an open cut quarry and there is no risk of gas in workings. | | Negligible | Rare | 1 | Inundation and Inrush Management Plan | > Nil no risk present | Elimination | Negligible | Rare | 1 |
| Inundation / Inrush - Water offsite. | > Water from quarry affecting local community. | > Man made dams and rivers / lakes over flowing or giving way impacting local community. | Significant | Rare | 10 | Inundation and Inrush Management Plan | > Site is away from local community and possible flood risk from quarry. > Quarry is designed to only capture the water they are licenced to hold, in excessive rain event water will run off quarry in controlled manner. > Pumps able to move quarry water offsite in controlled manner | Engineering / Redesign | Serious | Rare | 6 |
| Inundation / Inrush - Water onsite. | > Water into workings putting worker at risk of drowning. | > Quarry water washing through site. | Significant | Rare | 10 | Inundation and Inrush Management Plan | > Water drains from product very slowly. > Pipelines and drains in place to divert the incoming water into the quarry sumps. > Sumps built to capture and store water. | Engineering / Redesign | Serious | Rare | 6 |
| Inundation / Inrush - Water onsite. | > Water into workings putting worker at risk of drowning. | > Man made dams and rivers / lakes above workings giving away, washing through site. | Significant | Rare | 10 | Inundation and Inrush Management Plan | > Sites designed with all dams at low points on the site, water washing through site. > Roads and areas where water pools is inspected post rain event and during daily inspections. > Diversion systems in place such as, overflow channels, direct water away from workings and structure of dams. > Regular inspections of dams and dam walls. | Isolation | Serious | Rare | 6 |
| Inundation / Inrush - Water onsite. | > Water into workings putting worker at risk of drowning. | > Ground water rising into workings. | Serious | Unlikely | 9 | Inundation and Inrush Management Plan | > Flow of ground water into working is very slow. > Inspection of quarry each day to ensure no excessive water. > Pumps in place to move water out of working areas. | Engineering / Redesign | Minor | Unlikely | 5 |
| Inundation / Inrush - Water onsite. | > Water into workings putting worker at risk of drowning. | > Significant rain event | Significant | Rare | 10 | Inundation and Inrush Management Plan | > Site work to stop in excessive rain events, as roads and visibility could be un safe. > Sites designed with all dams at low points on the site, water washing through site. > Roads and areas where water pools is inspected post rain event and during daily inspections. > Diversion systems in place such as, overflow channels, direct water away from workings and structure of dams. | Engineering / Redesign | Serious | Rare | 6 |
| Mine Shaft & Winding Systems | > No risk onsite. | > No risk onsite. | Negligible | Rare | 1 | Not Applicable | > No risk onsite. | Elimination | Negligible | Rare | 1 |
| Outburst - Gas | > Site is an open cut quarry and there is no risk of gas in workings. | | Negligible | Rare | 1 | Principal Hazard However Not Present on Site | > Nil no risk present | Elimination | Negligible | Rare | 1 |

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| Plant & Structures - Maintenance of plant | > Unable to complete safe maintenance / servicing on | > Safety devices not fitted to plant. | Catastrophic (Principal Hazard) | Possible | 22 | Mechanical Engineering Control Plan | > All plant on site must be risk assessed ensure safety devices and warning signals are in place and in suitable positions. > Inspections in place to ensure safety devices are in working order, apart of pre start up inspection. | Engineering / Redesign | Catastrophic (Principal Hazard) | Unlikely | 19 |
| Plant & Structures - Maintenance of plant | > Injuries to person | > Release of energy | Significant | Possible | 18 | Not Applicable | > All plant to be designed to enable isolation of energy sources. > Lock Out / Tag Out and Clearance to work process. > Machinery Preventative maintenance and inspections. | Isolation | Significant | Rare | 10 |
| Plant & Structures - Boom Lift (Boom Length Greater than 11m) | > Person fall from boom lift | > Failure of boom lift | Catastrophic (Principal Hazard) | Possible | 22 | Mechanical Engineering Control Plan | > People using boom lift must have the applicable high risk work licence. > Boom lift must be fitted with crusher bar. > Boom lift capacity must not be exceeded. | Engineering / Redesign | Significant | Unlikely | 14 |
| Plant & Structures - Contractor Management | > Competence of contractors completing work at quarry. > Advising risky solutions | > Mechanical engineering work is outsourced to a contractor(s). | Catastrophic (Principal Hazard) | Possible | 22 | Mechanical Engineering Control Plan | > Mechanical engineer to complete 5 yearly inspection of all fixed plant and structures. > All plant and equipment to be designed and maintained to the appropriate Australian standards. > All mechanical contractors are to have applicable trade certificates or demonstrate minimum of 2 years working within industry, completing that style of task. > All contractors must have appropriate insurances managed by site pass. | Engineering / Redesign | Significant | Unlikely | 14 |
| Plant & Structures - Hirer Plant & Equipment | > Hirer plant and equipment used on site. | > Unknown / unforeseen risks / processes | Catastrophic (Principal Hazard) | Possible | 22 | Mechanical Engineering Control Plan | > All new plant brought onto the quarry to be risk assessed prior to use. > All hirer plant brought onto site, to used under clearance to work permit and any other applicable permits. | Engineering / Redesign | Significant | Unlikely | 14 |
| Plant & Structures - Inspections / Maintenance of plant | > Plant develop risk which can caused hazard to workers. | > Plant and structures can deteriorate over time and operation. | Catastrophic (Principal Hazard) | Possible | 22 | Mechanical Engineering Control Plan | > All plant is to be maintained as per OEM specifications, Australian Standards, Mine Design Guidelines and information from relevant safety alerts. > Life cycle of plant to also be establish as per OEM recommendations, and maintenance completed by qualified person(s). > All plant has a daily visual inspection, pre start-up inspection. | Engineering / Redesign | Significant | Unlikely | 14 |
| Plant & Structures - Ladders & Scaffolding | > Worker fall from ladder. | > Failure of ladder enabling worker to fall. | Significant | Possible | 18 | Mechanical Engineering Control Plan | > All ladders shall have a formal 3 monthly inspection completed. > All portable ladders shall Australian standards and be of industrial quality, capacity 150kg or greater. > All scaffolding shall be completed by a scaffolding company who has qualified scaffolders. | Engineering / Redesign | Significant | Unlikely | 14 |
| Plant & Structures - Lifting with cranes. | > Fall of load. | > failure of lifting equipment | Catastrophic (Principal Hazard) | Unlikely | 19 | Mechanical Engineering Control Plan | > No person to stand or be under suspended load. > All crane lifts must have a lift plan with clearance to work or procedure for lift. > Cranes must be compliance with Australian standard. | Isolation | Serious | Unlikely | 9 |
| Plant & Structures - New plant to site / Modification to plant | > New plant / structures can bring new hazards to site. | > Unknown / unforeseen risks / processes | Catastrophic (Principal Hazard) | Possible | 22 | Mechanical Engineering Control Plan | > All new plant brought onto the quarry to have design risk review completed, prior to construction. > All new plant brought onto site to have commissioning plan develop and executed to look for possible risk. > All new plant to have an management of change completed, reviewed by either the OEM or qualified engineer. > A operational risk assessment (pre start up safety review) to be completed on all new plant to look for new introduced risks. | Engineering / Redesign | Significant | Unlikely | 14 |
| Plant & Structures - Non Destructive Testing | > Plant develop risk which can caused hazard to workers. | > Parts of plant can fail due to the amount of use | Catastrophic (Principal Hazard) | Possible | 22 | Mechanical Engineering Control Plan | > Non destructive testing to be completed on equipment as per OEM, Australian Standards or Mine Design Guidelines recommendations. > Schedule for Non destructive testing to be managed via gearbox. | Engineering / Redesign | Significant | Unlikely | 14 |
| Plant & Structures - Pressure vessels | > Pressure vessel failure causing explosion. | > Not maintained or inspected. > Collision with pressure vessel. | Catastrophic (Principal Hazard) | Possible | 22 | Mechanical Engineering Control Plan | > All pressure vessel must be inspected annual, by an external qualified provider. > Pressure vessels must comply with Australian Standards. > All pressure vessels must be protected from collision with mobile plant. | Isolation | Serious | Rare | 6 |
| Plant & Structures - Vehicles with rubber tyres. | > Failure of Rim or tyres. | > Poor maintenance of rim or tyre enabling failure. | Significant | Possible | 18 | Mechanical Engineering Control Plan | > All rims to complete non destructive testing (10000 hours on new or 5000 hours on pre tested) as per OEM / Australian Standards. > Person who completes work on rims / tyres must be competent in rim management, with competence managed in site pass and preferable work for the OEM. | Engineering / Redesign | Significant | Unlikely | 14 |
| Plant & Structures - Vehicles with rubber tyres. | > Failure of Rim or tyres. | > Rubber tyre vehicles which have come into contact with electricity or heating. | Catastrophic (Principal Hazard) | Unlikely | 19 | Mechanical Engineering Control Plan | > Any rubber tyred vehicle which has come into contact with high voltage electricity or heating shall be isolated in a 300m exclusion zone for a minimum of 24 hours. | Isolation | Serious | Rare | 6 |
| Road - Bodies of Water | > Vehicle enter body of water. | > Unaware of body of water. | Catastrophic (Principal Hazard) | Possible | 22 | Roads and Other Vehicle Operating Areas Management Plan | > Barriers shall be erected within 5 metres of the sloping edge, not the waters edge. > Signage in place warning of locations of bodies of water. > Daily inspection completed on sloping edges | Isolation | Serious | Rare | 6 |
| Road - Design of roads within quarry | > Collision of vehicles. | > Poor roads / conditions enabling vehicle collision. | Catastrophic (Principal Hazard) | Possible | 22 | Roads and Other Vehicle Operating Areas Management Plan | > All two-way travel roads must be 3 times the width of the widest vehicle, if not possible road must include radio call point and vehicle passing points. > Ideally two way roads would have a centre berm to separate vehicles. > No road shall be narrower than 1.5 times the width of the widest vehicle which will travel along it. if not call point are enforced | Engineering / Redesign | Significant | Unlikely | 14 |
| Road - Interaction with Power Lines | > Vehicle collision with overhead powerlines | > Unknown vehicle height. > Unknown powerline height. | Catastrophic (Principal Hazard) | Possible | 22 | Roads and Other Vehicle Operating Areas Management Plan | > All powerlines on site shall be buried underground, to prevent possible collision. > If it is not possible signage must determine the location of powerlines and vehicle height restrictions must be in place. | Engineering / Redesign | Significant | Rare | 10 |
| Road - Maintenance of Roads | > Unplanned movement of vehicle travelling on roads, causing collision. | > Road condition deteriorates due to poor maintenance. | Catastrophic (Principal Hazard) | Possible | 22 | Roads and Other Vehicle Operating Areas Management Plan | > Road ways must be regularly graded and watered. > All workers must be notified at pre-start or toolbox talk, if roads are in poor condition or being maintained during shift. > Obstacles and debris shall be removed from road ways. > Road ways shall be inspected for cracking, sinking or slippages during / after any periods of heavy rain. | Engineering / Redesign | Serious | Unlikely | 9 |
| Road - Refuelling Stations | > Vehicle collides with re fuelling station | > Unplanned movement of vehicle, roll away. | Significant | Possible | 18 | Roads and Other Vehicle Operating Areas Management Plan | > Refuelling stations shall be listed on a sites traffic management plan. > Refuelling stations must be designed and constructed as per AS1940. > Physical barriers must be in place to prevent collision with refuelling stations. | Isolation | Serious | Unlikely | 9 |
| Road - Traffic Management | > Unplanned movement of vehicle travelling on roads, causing collision. | > Vehicle operators not aware of road rules. | Catastrophic (Principal Hazard) | Possible | 22 | Roads and Other Vehicle Operating Areas Management Plan | > All vehicles have two way radios to call operators who may be not following road rules. > All people are inducted to site and trained in traffic management rules. Plus annual refresher training of drivers. > Signage onsite directing vehicles, and signage is compliant to AS1744:1975. | Engineering / Redesign | Significant | Unlikely | 14 |
| Road Vehicle Operations - Access and Egress of all Mobile Plant. | > Fall while accessing or exiting mobile plant. | > Design of access / egress. > Damage to access / egress. | Serious | Possible | 13 | Not Applicable | > Three points of contact for accessing mobile plant. > Fall protection in place for mobile plant. > Review each piece of plant for access and egress, prior to introduction to site. > Mobile plant operators have appropriate PPE | Engineering / Redesign | Serious | Rare | 6 |
| Road Vehicle Operations - Collision with fixed plant | > Collision with fixed plant | > Machinery needs to access areas near fixed plant to tip / load. | Significant | Possible | 18 | Roads and Other Vehicle Operating Areas Management Plan | > Speed limits within congested 15km/h. > Signage reinforcing all site speed limits. > Reversing cameras in place. | Administrative | Serious | Possible | 13 |
| Road Vehicle Operations - Congested Work Areas | > Collision of vehicles within congested work zones Heavy Vehicle V Heavy Vehicle | > Certain work areas (Boot, Loader, Stockpile area, loading zones) have multiple vehicle | Catastrophic (Principal Hazard) | Possible | 22 | Roads and Other Vehicle Operating Areas Management Plan | > Speed limits within congested 15km/h. > Radio communication between vehicles > Signage reinforcing all site speed limits. | Isolation | Serious | Possible | 13 |
| Road Vehicle Operations - Congested Work Areas | > Collision of vehicles within congested work zones Heavy Vehicle V Heavy Vehicle | > Certain work areas Crib shed, weighbridge, workshop) have multiple vehicle movements. | Catastrophic (Principal Hazard) | Possible | 22 | Roads and Other Vehicle Operating Areas Management Plan | > Speed limits within congested 15km/h. > Radio communication between vehicles > Signage reinforcing all site speed limits. > Reversing cameras in place. | Isolation | Serious | Possible | 13 |
| Road Vehicle Operations - Congested Work Areas | > Collision of vehicles within congested work zones Heavy Vehicle v Light Vehicle | > Certain work areas (Boot, Loader, Stockpile area, loading zones) have multiple vehicle movements. | Catastrophic (Principal Hazard) | Possible | 22 | Roads and Other Vehicle Operating Areas Management Plan | > Speed limits within congested 15km/h. > Radio communication between vehicles, light vehicles must give way to all heavy vehicles. > Signage reinforcing all site speed limits. > Reversing cameras in place. | Isolation | Serious | Possible | 13 |

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SAFETY MANAGEMENT SYSTEM

HTA-S-HSE-057

Hy-Tec Industries – Penrose Quarry

“Uncontrolled Copy When Printed”

Appendix 19B PPE Matrix

PERSONAL PROTECTIVE EQUIPMENT

Note: PPE use is a “minimum” risk control measure, however it can be used in conjunction with other safety controls.

LEGEND– M= Mandatory R = Recommended if required

SITE SPECIFIC RULES WILL DETERMINE WHAT PERSONAL PROTECTIVE EQUIPMENT (PPE) MUST BE WORN

| PPE Type Hazard/Activity | HEAD PROTECTION MUST BE WORN | HEARING PROTECTION MUST BE WORN | EYE PROTECTION MUST BE WORN | FOOT PROTECTION MUST BE WORN | PROTECTIVE CLOTHING MUST BE WORN | HAND PROTECTION MUST BE WORN | SAFETY VEST MUST BE WORN | HALF FACE MASK RESPIRATOR MUST BE WORN | FACE SHIELD MUST BE WORN | WELDING MASK MUST BE WORN | SAFETY HARNESS MUST BE WORN |
|-----------------------------|------------------------------|---------------------------------|-----------------------------|------------------------------|----------------------------------|------------------------------|--------------------------|----------------------------------------|--------------------------|---------------------------|-----------------------------|
| | Safety Helmet | Hearing Protection | Eye Protection | Safety Boots | Long Clothing | Hand Protection | Hi-Vis Clothing | Respiratory Equipment | Face Shield | Welding Mask | Safety Harness |
| Employees/visitors | M | R | M | M | M | | M | | | | |
| Plant Operation | M | M | M | M | M | R | M | R | R | | |
| Mechanical Maintenance | M | R | M | M | M | R | M | R | R | | R |
| Fabrication Work | M | M | M | M | M | M | M | R | R | R | R |
| Hazardous Substances | M | R | M | M | M | M | M | R | R | | |
| Workshop Activities | M | M | M | M | M | R | M | R | R | R | |
| Office Work | | | | M | M | | M | | | | |
| Working at Heights | M | R | M | M | M | R | M | R | R | R | M |
| Confined Spaces | M | M | M | M | M | R | M | R | R | R | R |
| Cleaning Activities | M | R | M | M | M | R | M | R | R | | R |
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Concrete & Aggregates

PIRMP Document Control

Penrose Quarry

"Uncontrolled Copy When Printed"

Pollution Incident Response Management Plan Review Sheet

| Plan | Revision No | Date | Review | Reviewed by |
|-------|-------------|------------|-----------------------------------------------------|-----------------------------|
| PIRMP | 1.0 | 08.03.2013 | Reviewed – no changes | D.Thiedeke |
| PIRMP | 1.0 | 15.05.2014 | Reviewed – minor changes made | D.Thiedeke |
| PIRMP | 2.0 | 04.05.2015 | Reviewed – update contacts | D.Thiedeke |
| PIRMP | 3.0 | 12.05.2016 | Reviewed – no changes | D.Thiedeke |
| PIRMP | 4.0 | 09.05.2017 | Reviewed – update contacts | D.Thiedeke |
| PIRMP | 5.0 | 11.05.2018 | Reviewed – no updates | D.Thiedeke |
| PIRMP | 6.0 | 08.03.2019 | Alterations to numerous sections | D.Thiedeke |
| PIRMP | 7.0 | 27.08.2019 | Format changes | D.Thiedeke |
| PIRMP | 8.0 | 23.10.2020 | PIRMP Review | D.Thiedeke |
| PIRMP | 9.0 | 04.05.2022 | Minor Format changes – update management details | D.Thiedeke |
| PIRMP | 10.0 | 22.12.2022 | Alterations to numerous sections | D.Thiedeke |
| PIRMP | 11.0 | 25.04.2024 | Reviewed – update management details, risk register | D.Thiedeke |
| PIRMP | 12.0 | 04.07.2024 | Reviewed – Post Pollution Incident | L Attard /M. Rixon /J. John |
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