

Mine Name	MineID	Operator	Activity Type	Activity Date
Jupiter Bulk Sample Pit	MI04148	Vulcan Mine Management Pty Ltd	Inspection	15/04/2021

Our Vision: **Zero Serious Harm**

Mine Record Entry

This report forms part of the Mine Record under s68 of the Coal Mining Safety and Health Act 1999. It must be placed in the Mine Record and displayed in 1 or more conspicuous positions at the mine in a way likely to come to the attention of workers at the mine.

Note that inspection or audit activities conducted by the Mines Inspectorate are based upon sample techniques. It remains the primary responsibility of Mine Personnel to identify hazards, and risks associated with Operations and ensure those risks are at an acceptable level.

Today the 15th of April 2021 Resources Safety and Health Queensland (coal) inspector Matt Kennedy travelled to Vulcan Open Cut mine to conduct an announced general inspection.

On arrival I participated in the alcohol testing program, and then proceeded to Mr Cavanagh's office where I completed a visitor's induction form.

Opening Meeting: -

An opening meeting was held with SSE Mike Cavanagh, Maintenance Manager Ben Kachel, Operations Manager Matthew McGregor, Superintendent Site Systems Nicole Davey.

Discussed regarding: -

Mr Cavanagh provided a slide presentation on the current status of the mine.

- Operations commenced in October 2020 – clear and grub, topsoil removal, civil and construction works.
- Currently constructing the ROM and working towards coal exposure – overburden removal underway.
- Coal expected late April or early May.
- Currently operating Hitachi 3600 digger, two Cat 789 haul trucks, two D10 dozers, Cat 775 water truck, Cat 16M grader, compactor.
- Other equipment onsite being prepared for operation includes additional 789s, 1800 digger, grader, loaders.
- Crush and screen and Sorterra Dryscan plant will be mobilised to site in the coming four to six weeks (subject to ROM completion and coal sales).
- Expect full production ramp up in coming months with eventual commencement of night shift before Christmas.
- Turners Engineering are the principal mining contractor.

Contractor Management:

- A big focus for HSET Department at the moment – focusing on refining interaction and compliance of principal contractor and putting better and more efficient systems in place for minor contractors.

Safety and Health Management Plans.

Emergency Response:

- Currently self-managed – advanced first aid courses for employees and contractors.
- Local emergency services have site location and details in the event that they are required.
- Currently reviewing resumes for full-time paramedic and ERT instructor.
- Calling for volunteers to join ERT and have had a good response from crews.
- Will commence training once instructor engaged.
- Have fire appliance/ERT truck on site and purchasing turn out gear.
- Have placed order for Troop Carrier and working with supplier on ambulance conversion.

- For emergency appliances site to consider as part of the design requirements of CSMHR - 74 - mobile plant used at a coal mine if the plant is assessed as being at risk of overturning or being struck by a falling object. The plant must be provided with a structure to protect a person using the plant from injury if the plant overturns or is struck by the object.
- Principal firefighting capacity at the moment is the Cat 775 and MR water truck with cannon.

I provided the mine with the following information

- Updates to the recognised standards for dust and of the imminent release of a recognise standard for Fluid Power Systems. CSMHAC has advised support for the draft hydraulic safety recognised Standard. The standard will now be prepared and submitted to the Minister for gazettal.
- There is a plan to introduce one for management structures.

Update to Australian standards have recently been revised and reissued.

- Earth-moving equipment access systems,
- AS 2671:2021 Hydraulic fluid power
- AS 2788:2021 Pneumatic fluid power
- AS 1418.1:2021 Cranes hydraulic and pneumatic safety
- AS 3450 standard for braking performance requirements is currently going through the process for approval and is being aligned to ISO standards.
- It is recommended that the SSE initiate reviews of the standards to ensure site meets or exceeds the standards requirements.
- Falls from height. HPIs related to coal mine workers falls through grid mesh floors continue to be reported to the Inspectorate. A safety bulletin related to recent incidents has been published.
- Falls from height CMW falls from a crane platform. Fatigue management for crane operators reporting of accidents statements and video evidence not correlating.

IOM Kennedy provided graphical information gathered over the last four years on fires reported from all surface coalmines.

Continuing and Emerging issues

- Dust
- Welding fumes Class 1 carcinogen

I provided a number of safety alerts and correspondence from RSHQ and a new reporting template and SEGs for quarterly respirable dust data to site

I spoke about OCE forums currently underway and gave an undertaken to follow up with the RSHQ to ensure Vulcan OC Mine are on relevant email lists.

MEM Forums are being run in July

Emerald	Wednesday 21 July 2021	Opencut
Toowoomba	Wednesday 28 July 2021	Opencut

Inspection of the operations

Pit Inspection

- Positive communications were observed throughout the pit inspection.
- Roads and RS 20 Mr McGregor provided an explanation on the current road conditions and building program in place
- Roads are currently being constructed and waiting on fill to build them up.
- Bunding is in place
- Drill exploration VIT007 - Atlas Copco Roc L 8

I spoke with a CMW regarding the following topics

- Prestart meeting information
- Prestart of plant
- Mining drill plans
- Identified hazards when drilling, dust mitigation
- Issues identified
- Hammer oil leaking over the engine bay components potential fire hazard
- Dust in cab observed in A/C vents

Mr Kachel gave an undertaking to investigate and implement appropriate controls

Administration and crew facilities with permanent toilet and cribbing facilities to meet hygiene requirements.

Full refurbishment of existing former BHP exploration field office buildings.

Electricity provided via two Cat DE 220 generators.

MIA – igloo with concrete floor erected and fit-out underway.

spoke about learnings from recent Igloo failures around the industry

I spoke with two electricians on the following topics

- Supervision
- Mine vehicle compliance requirements
- Prestart communications
- Installation of electrical works and commissioning requirements

Full workshop facilities for maintenance team.

- Traffic management plans, Mr Cavanagh is currently reviewing the layout for around the workshop facility.
- New fleet of Vulcan Mine owned light vehicles
- Tyre bay Facility
- RS 13 sub 24" tyres trolley tyres ride on mowers and wheelbarrow wheels should be considered in the risk management processes.
- Site needs to consider through the risk management process for how to manage tyres below 24" and on changing and fitment of tyres below 24"
- Site should conduct a gap analysis against RS 13 to the current sites standard.
- Site should ensure they have conducted gap analysis against all recognised standard's listed on the RSHQ website and conducted the appropriate risk assessments against the sites standards

Close out meeting

A brief close out meeting was attended by Mr Cavanagh, I thanked him and his team for their time today before leaving site.

A handwritten signature in black ink, appearing to read 'M Kennedy', followed by two dots.

Matthew Kennedy

Inspector of Mines