



Mine Name	Mine ID	Operator	Activity Type	Activity Date
Vulcan Mine	MI04148	Vulcan Mine Management Pty Ltd	Subject Audit or Specific System Audit	17/11/2021

Mine Record Entry

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.

1.0 Introduction

Today Wednesday, 17 November 2021 arriving at 8:50am, I Richard Gouldstone Inspector of Mines, conducted a Structured Audit of the Mine's Emergency Management System. I was greeted by Mr Shane Walters (HSEC).

In addition to the audit, I took the opportunity to accompany Production Manager, Mr Matthew McGregor, on a brief surface inspection. I had not let the Mine know that this was my intention thus the inspection is classed as unannounced.

The audit was not 100% comprehensive but conducted by sampling aspects of the topic which are detailed in the MRE.

2.0 Emergency Management Response Audit (continued from inspection dated 10/11/21)

I had requested before the audit, and today was supplied with, relevant documentation and these were examined and discussed during the day. I later selected a sample of the documents and checked the contents against the legislative requirements.

2.1 PHMP Emergency Response – Mine provided documents

1. VUL-PLN-035-Emergency Planning and Response (currently under review)
2. VUL-PHMP-01-Explosives (currently under review)
3. VUL-PHMP-02-Vehicle Interaction
4. VUL-PHMP-03-Geotechnical

VUL-PLN-035-Emergency Planning and Response refer to sec10. 10. Annex B – Scenarios and Guidelines

2.2 TARP Emergency Response – Mine provided documents

VUL-TAR-002-Emergency Response

2.3 SOP Action to be taken in the event of fire – Mine provided documents

Refer to section 4.1 of VUL-SOP-037-Action to be taken on discovery of fire

2.4 Risk Assessment Tyres Overheating and Fires - Mine provided documents

1. VUL-RSK-035-Emergency Planning and Response
2. VUL-RSK-Action to be taken on discovery of fire
3. VUL-RSK-072a-Tyres, wheels and rims management

2.5 Level 1, 2 or 3 Emergency Exercise Reports 2021 - Mine provided documents -

ERT Exercises folder contained -

Level 3 - 27.07.21

Level 3 - 08.11.21

Level 2 - Dec – 2021 (planned)

2.6 Visitors process and induction – Mine provided documents

VUL-FRM-07-04-Visitor Induction

2.7 SHMS Training Requirements coal mine workers and personnel – Mine provided documents

Vitrinite - Vulcan - TNA – 211013 including - examples of '*Action to be taken in the event of...*' with evidence of training records from Training evidence folder.

3.0 Emergency Response Audit further documents provided today and after today's audit

3.1 Additional Audit reference items

REG 35 (1) & REG 63 (1)

Mr Cavanagh is the Emergency Response Hazard Management Plan owner. The document is actually called Plan – Emergency Planning and Response. The Mine has a current rescue plan.

REG 35 (2) a

A Broad Brush Risk Assessment was conducted on 31 October 2020 which included a representative cross section of coal mine workers.

All aspects of the on site activities were included –

i) ER Crew numbers

A minimum of two full time emergency response personnel are present each shift. This may be supplemented by more if deemed necessary for higher risk tasks being undertaken at the Mine.

ii) Response Equipment and Training Facilities

The Emergency Response Fire Fighting Appliance has been recently acquired. For this reason I chose not to inspect the current appliance but was assured it is fully equipped to deal with potential recognised emergencies.

It was explained that the strategy applied regarding Emergency Response is to deal with the situation to minimise harm, effect rescue but to then retreat with business interruption matters not a priority.

REG 35 (2) b

The Broad Brush Risk WRAC assessment has identified a number principal potential emergency situations for which controls have been developed. Appropriate resources have been provided.

Consideration is given to all persons who may be on site, staff, visitors and contractors of all sorts.

REG 35(2) d

I received a copy of the most recent completed exercises as listed at 2.5 above. There is a planned exercise for December 2021.

Subsidiary exercises are regularly conducted to satisfy level 4 but also as part of routine training for crews. There was evidence that lessons learned were applied

Consideration is being given to deal with IMT situations at distance using 'Teams' type conference systems to better deal with weekend or holiday timed incidents rather than to wait for key personnel to make their way to the Mine.

Examples of training provided was detailed in the list of documents provided.

REG 36 (a)

Visitors are required to complete a pro-forma in which they relate their fitness to work and declare any issue which may affect their ability to respond in an emergency. Visitors must always be accompanied thus making their guide responsible to direct them to safety.

REG 37 (1) a, b, c, d

All personnel receive practical and classroom training on fire prevention and

firefighting practices.

The risk assessments conducted demonstrate that extra controls are in place to address higher risk or consequences EG tyre fire precautions and firefighting practices.

REG 37 (2) a, b

The matter is satisfactorily covered in documentation viewed but I did not conduct an inspection of installations to verify positioning of equipment and its suitability should a fire break out. There are detailed maps of the strategically placed equipment which are physically inspected prompted by a work order system.

REG 37 & 37 (3)

The Mine has a SOP for action to be taken when a fire is discovered. Periodic inspections testing and recharging of all firefighting equipment including that on mobile plant. There is an array of procedures to deal with different potential fires eg tyres, explosives, electrical.

3.0 Close out comments for the audit

I was satisfied while at the Mine, by sample examination of headline documents and discussing the content that the Mine effectively covered the statutory requirements in relation to Emergency Response.

Later, on receipt additional documentation, I read a sample of them in detail which reinforced the conclusion I had drawn while at the Mine.

4.0 Unannounced Inspection

Items raised during the inspection were as follows.

4.1 ROM and Processing pad

I observed vehicle movements and listened to effective positive communications. Mr McGregor explained that traffic movements were under the control of the shovel operator directly. That is a better option than moving signs and rearranging traffic patterns. Thus, the shovel operator controls by direct personal supervision and positive communications and a second shovel driver does the same to receive and despatch material from stock. piles. My observation was that the method appears to work effectively and numbers of vehicles allowed on the pad is limited to two per shovel.

Permanent lighting towers were being erected to improve work in hours of darkness.

Dust control was good with a watercart in operation. The larger watercart is under repair.

I listened to communications all of which were satisfactory and included the OCE calling for the watercart at the overburden dig.

I viewed the excavator and two dump trucks on a short haul from dig to a modest tip head.

Accommodation is under construction to provide for full ER and training needs.

5.0 Close out Meeting

I conducted a brief close-out meeting with Mr Walters who undertook to provide a few more documents which are listed and commented upon in the MRE above.

I departed the Mine at 11:45am.

I read through a selection of documentation before drawing the conclusion that the Emergency Response Management system is adequate for the Mine size, level of activity, equipment in use and risk profile. However it is critical that the matter is regularly reviewed as the size and scope of activity grows.

A handwritten signature in black ink, appearing to read 'Richard Gouldstone', with a stylized flourish at the end.

Richard Gouldstone
Inspector of Mines