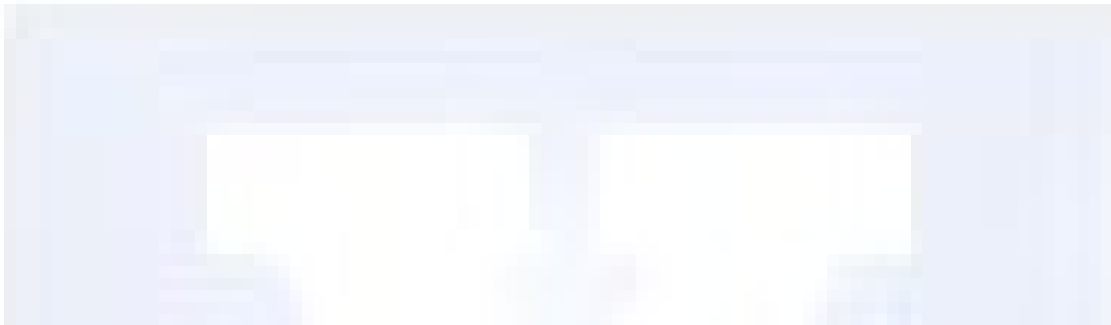




Standard Operating Procedure

Recovery of Equipment after an Accident or Incident





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1. PURPOSE

The purpose of this procedure is to describe the requirements and to effectively manage hazards and risks associated with the recovery of equipment after an accident or incident at the Vulcan Mine.

2. SCOPE

This procedure is applicable to all persons at the Vulcan Mine including employees, contractors and visitors.

The controls within this procedure are mandatory.

3. DEFINITIONS

Authorised Person	A person who has the required competencies and who has been appointed by the Site Senior Executive to carry out a designated scope of duties.
CMSHA	Queensland Coal Mining Safety and Health Act (1999).
CMSHR	Queensland Coal Mining Safety and Health Regulation (2017).
CMW	Coal Mine Worker.
Competent Person	Competence for a task at a coal mine is the demonstrated skill and knowledge required to carry out the task to a standard necessary for the safety and health of persons.
OCE	Open Cut Examiner.
HSET	Health, Safety, Environment and Training.
SHMS	Safety and Health Management System.
SOP	Standard Operating Procedure.
SSE	Site Senior Executive.
SWL	Safe Working Load.
Take 5	Personal Risk Assessment.

4. PROCEDURE

4.1. Response to Accidents

In any High Potential Incident (HPI) involving plant, the plant must not be moved (except where action takes place to save life or prevent further harm), without permission of the SSE.

If applicable, the incident reporting and investigation process shall be followed as per the following:

- VUL-FRM-05-01-Incident Notification
- VUL-FRM-05-02-Incident Report

4.2. Exclusion Zone

An exclusion zone, including barricades and signage shall be set up around the incident site to prevent unauthorised entry. All non-essential persons must remain a minimum of 50m from the recovery area. Access to the area may only be granted by the OCE and/or Supervisor in charge of the recovery.

No persons shall enter into the line of fire of any potential stored energy (ie, recovery equipment under tension).



4.3. Risk Assessment and Recovery Plan

Prior to commencement of recovery of plant after an accident or incident, a recovery plan in the form of a JHA, should be developed in consultation with appropriate stakeholders including but not limited to:

- Supervisor, OCE and equipment operator(s);
- Maintenance supervisor or personnel;
- HST superintendent or department; and
- Other specialists (internal or external) as considered relevant, e.g. shotfirer, Engineer , etc.

The recovery plan shall take into account environmental risks and means of stopping, containing and cleaning up any spillage of fuel, oil or other hazardous or damaging materials. Refer to VUL-SOP-056-Hazardous Substances and VUL-PLN-005-Environmental Management Plan.

Where lifting or dogging of loads is required as part of the recovery process, ensure all requirements of VUL-SOP-072e-Lifting Operations are followed.

4.4. Hazardous Substances and Dangerous Goods

Where a vehicle involved in an incident is carrying Hazardous Substances or Dangerous Goods (e.g. explosives or chemicals), the requirements of the following must be observed:

- VUL-SOP-056-Hazardous Substances;
- VUL-SOP-116-(a,b,c,d,e,f) Transport, Storage & Handling Explosives
- VUL-SOP-116g- Charging and Firing Explosives
- VUL-SOP-116-(h,i) Dealing with and recording of Misfires
- VUL-PLN-005-Environmental Management Plan; and
- Seek specialist advice from relevant authorities and specialists in the development of the recovery plan.

4.5. General Precautions for Recovery of Equipment

Appropriate towing equipment shall be used when recovering equipment.

Measures shall be undertaken to lessen the towing force such as unloading the towed vehicle and digging ground to reduce pulling resistance.

The recovery of any item of equipment shall be subject to the application of the following rules:

- the recovery machine and equipment must be suitable for the task;
- the recovery machine is to be positioned so as to ensure a straight pull if practicable;
- anchorage to fixed and mobile plant shall be via approved lifting or towing points;
- check for ground and material stability e.g. walls, benches, stockpiles, dumps, etc;
- pedestrians shall move outside of the exclusion zone during recovery; and
- when recovered, the vehicle and the recovery gear are to be inspected for damage.

4.6. Recovery of Buried or Engulfed Equipment

If recovery of buried equipment is required, careful and immediate consideration needs to be given to preventing further collapse and/or destabilising of the burden above or around the equipment. In such an event, early consideration shall be given to stabilising or relieving the burden above the equipment, e.g. pushing material off, benching or battering.



4.7. Overturned Equipment Requiring Righting

In the event of overturned mobile plant, the following precautions shall be applied:

- secure equipment from uncontrolled movement during righting operations;
- push earth mound below equipment to reduce fall distance and shock loading;
- personnel to stand well clear while righting equipment;
- use equipment of correct SWL to secure, lift and right equipment (refer VUL-SOP-072e-Lifting Operations);
- turn off fuel supply and isolate fuel/oil leaks;
- hose down with foam if fire potential is imminent;
- isolate battery power supply and/or disconnect and remove batteries if safe and practicable;
- wait for components and fluids to cool to reduce burn potential;
- drain any residual pressure from radiator, hydraulics, etc.;
- secure stored energy sources or release if practicable, e.g. accumulators, hydraulic cylinders, etc.; and
- use mechanical means for lifting/handling recovery equipment.

The recovery plan shall be signed off by SSE or approved delegate prior to commencement of recovery.

5. ROLES AND RESPONSIBILITIES

SSE	Shall review and approve this procedure.
HST superintendent	Shall ensure that all provisions of this procedure are implemented, and that compliance is achieved.
Superintendents	Shall be responsible for their area of operations and the implementation and application of this procedure; Provide adequate training, information, structure and supervision to ensure that this procedure is implemented; Carry-out a periodic review of activities to ensure the appropriate application and understanding of this procedure; and Ensure immediate and appropriate steps are taken to investigate and rectify any risks to health and safety arising from these activities.
Supervisors	Ensure all CMWs are familiar with, have access to and comply with the requirements set out in this procedure.
All CMWs (including visitors and contactor)	Shall comply with the requirements of this procedure.

6. REFERENCES

- Coal Mining Safety and Health Act 1999 (Qld)
- Coal Mining Safety and Health Regulation 2017 (Qld)
- VUL-PLN-005-Environmental Management Plan
- VUL-SOP-056-Hazardous Substances
- VUL-SOP-072e-Lifting Operations
- VUL-SOP-116-(a,b,c,d,e,f) Transport, Storage & Handling Explosives
- VUL-SOP-116g- Charging and Firing Explosives
- VUL-SOP-116-(h,i) Dealing with and recording of Misfires

7. REVIEW

This document shall be reviewed at minimum two yearly, or as follows:

- when there is a change of method and/or technology and/or legal or other requirement that may affect the accuracy of this document;
- when operational changes occur that effect the currency of the document;
- when there has been a significant event to which this document was relevant; and
- as a result of relevant audit findings.



8. DOCUMENT CONTROL

Version	Date	Description	Document Controller
01	02/06/2020	Initial Draft	Rachael Dacker
02	25/06/2020	Risk workshop cross-section	Shane Johnson
03	31/08/2021	Review and formatting	Rachael Dacker
04	31/08/2023	Review and Update	Kelly Jensen

