



VULCAN MINE

Standard Operating Procedure

TYRES, WHEELS & RIMS MANAGEMENT



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1. PURPOSE & SCOPE

The purpose of this Standard Operating Procedure (**SOP**) is to achieve an acceptable level of risk associated with Tyres, Wheels and Rim Management on wheeled mobile plant at the Vulcan Mine.

This SOP has been developed to comply with the *Coal Mining Safety Health Regulation 2017 (Section 72a)* which states 'a coal mine must have a Standard Operating Procedure for fitting, removing, testing, maintaining and repairing tyres and rims on fixed and mobile plant'.

This SOP was developed from the risk assessment **VUL-RSK-072a-Tyres, Wheels and Rims Management**, and aligns with the requirements **Recognised Standard 13 - Tyre, Wheel and Rim Management**.

The SOP applies to Coal Mine Workers (CMWs) engaged at Vulcan Mine in the process of:

- Procuring, transporting & storing
- Handling & lifting
- Deflating & Inflating
- Removing & fitting
- Testing (inspecting), and
- Maintaining and repairing tyres and wheel assemblies.

2. DEFINITIONS

Authorised Person	A person with the required competencies and who has been appointed by the Site Senior Executive, or their appointed representative to carry out a designated scope of duties.
CCTV	Closed Circuit Television.
CMSHA	Coal Mining Safety and Health Act.
CMSHR	Coal Mining Safety and Health Regulation.
CMW	Coal Mine Worker.
Cold Inflation Pressure	Inflation pressure of tyres before the vehicle is driven and the tyres warmed up.
Compatible components	Components intended to be assembled as per design; components of the same design from different manufacturers may not be compatible.
Competent Person	A person who is able to correctly perform a specified task, through a combination of training, education, experience, acquired knowledge and skills.
EEM	Electrical Engineering Manager.
Incompatible components	Components that are not intended to be assembled together as per their design and are known to create a mismatch (not a matching set).
HST	Health, Safety & Training
JHA	Job Hazard Analysis.
kPa	Kilopascal.
NDT	Non-Destructive Testing.
OEM	Original Equipment Manufacturer.
OTR	• 'Off the Road' or earthmover tyre. • Tyres and wheel assemblies 24" in diameter or greater
psi	Pound per Square Inch - a measurement of air pressure of in a tyre.
RII	RII Resources Industry Infrastructure



Rim	The assembly on which the tyre is mounted and supported. A typical rim comprises a number of components, (e.g.) back section, centre section and gutter section which are welded together to form the rim base and flanges, bead seat band and lock ring. A rim is mounted to a vehicle or plant by a system of wedges or cleats.
RSHQ	Resources Safety and Health Queensland.
SHMS	Safety and Health Management System.
Size (tyre, wheel, rim) - Earthmover	Rims/wheels fitted to earthmoving machinery.
Size (tyre, wheel, rim) - Large	Tyres, wheels, and rims that cannot be handled safely by manual means and are fitted to trucks, cranes etc. (tyre handlers, or forklifts are needed to handle them).
Size (tyre, wheel, rim) - Passenger or Light Truck	Tyres, wheels, and rims that can be manually handled and are fitted to passenger vehicles, light trucks, and machinery.
SOP	Standard Operating Procedure.
SSE	Site Senior Executive
SWP	Safe Work Procedure
TARP	Trigger Action Response Plan.
TKPH	Tonne, Kilometre Per Hour (duty cycle calculation or rating)
TNA	Training Needs Analysis
TMS	Tyre Management System.
TPMS	Tyre Pressure Monitoring System.
TTPMS	Tyre Temperature Pressure Monitoring System.
Tyre	A flexible structure filled with compressed air.
Wheel	A rotating load-carrying member between the tyre and axle. Usually consists of the rim base and wheel disc/nave plate that is mounted to vehicle or plant by nave plate and studs/nuts.
Wheel Assemblies	Wheel plus tyre. (i.e.) where the tyre is mounted onto a rim.

3. Selection and Procurement

The selection and procurement of tyre, wheel and rims shall be made by authorised personnel, who are suitably qualified and competent to do so.

The site Tyre and Rim Register is to be utilised for procuring tyre, wheel and rims used on Vulcan Mine to ensure specifications are appropriate for the intended application for each asset. (i.e., 'fit for purpose,' capable of performing the task safely).

The selection and procurement must be conducted in accordance with ***VUL-SWP-072a-001- Selection & Procurement***.

4. Handling & Transportation and Receipting.

Risk Assessment shall be conducted to identify the controls for transporting and handling Tyres, Rims & Wheel Assemblies and in accordance with ***VUL-SWP-072a_002- Handling & Transportation and Receipting***.



5. Storage of Tyre, Wheel and Rim and Assemblies

Heavy, medium and light vehicle tyres, rims and wheels shall be stored in approved designated storage areas and in accordance with ***VUL-SWP-072a-003-Storage of Tyres, Wheel and Rim Assemblies***.

The storage areas shall be clear, level, well drained, adequately lit, free of flammable materials, petrochemicals or corrosive compounds. The storage areas are NOT to be positioned in close proximity to electrical equipment that produces ozone. Grass/vegetation shall be kept clear of tyre storage area and hydrocarbons must not be stored in Tyres, Rims and Wheels storage areas.

The designated storage area shall be of an appropriate size to enable a tyre handler to operate safely and efficiently, away from traffic to prevent interaction or damage.

Firefighting equipment must be within or near the designated area to react to fire hazards in a quicker manner.

First aid kit must be made available at the storage area.

Precautions should be in place to prevent theft.

These measures are designed to provide a safe and clean environment to protect the tyres and prevent them from getting damaged.

5.1. Storage Methods

Tyres must be stored in a safe and compliant manner, so they do not limit access to the storage area and are stable, so they are prevented from moving unexpectedly in accordance with ***VUL-SWP-072a-003-Storage of Tyres, Wheel and Rim Assemblies***.

5.2. Designated Storage Areas Inspections

Periodic inspections shall be conducted on the designated storage areas to ensure the tyres are stored correctly and in a safe and compliant manner.

The periodic inspections will also ensure all tyres, rims and other components must be inspected for corrosion, contamination or other damage are marked/tagged for further inspection and or scrapping.

6. COMPETENCIES & AUTHORISATIONS

The Vulcan mine ***VUL-PLN-082-Training Plan and Training Needs Analysis (TNA)***, includes competencies in line with the current Resource & Infrastructure Industry Training Standards, including assessment requirements such as performance and knowledge evidence.

Task competencies shall be dependent on the equipment to be utilised, e.g., truck mounted handler.

Only suitably qualified personnel and authorised by the Vulcan Mine SSE are permitted to operate equipment for tyre fitting, and or conduct maintenance activities on tyre, wheel and rim assemblies

Regardless of tyre size, only CMWs with the appropriate competencies may:

- Inspect Tyres
- Assemble or disassemble tyres on/off rims; or
- Fit or remove wheels from plant.

Training in the appropriate competencies will be provided to personnel required to assemble or disassemble tyres on/off rims and fit or remove wheels from heavy plant.

7. Contractors Equipment

All contractor supplied equipment must comply with the requirements in this SOP and in accordance with ***VUL-PLN-001-Contractor Management***.



8. Establishment of Work Zones

Establishment of Work Zones shall be conducted in accordance with ***VUL-SWP-072a-004-Establish Work Zones.***

9. Jacking and Supporting of Machine

All plant and equipment must be supported on certified, purpose-built jacks and/or stands before any attempt is made to remove the rims, wheels or tyres in accordance with the following SWPs:

- ***VUL-SWP-072a-005- Jacking and Supporting of Machine – Rear Dump Trucks.***
- ***VUL-SWP-072a-006- Jacking and Supporting of Machine – Grader.***
- ***VUL-SWP-072a-007-Jacking and Supporting of Machines – Loader.***

Alternative Jacking and Supporting methods must be risk assessed and approved by the Maintenance/Asset Manager.

Jacking equipment must be fit for purpose, e.g., must be suitably rated for the plant/vehicle and that allows the Tyre Fitter to be outside the exclusion zone while the plant is being lowered.

A staged jacking technique will be used if the lift is greater than 200mm is required.

Bottle and screw jacks are acceptable only for non-OTR light vehicle work and only if the long handle extensions are used for lowering the vehicle, these jacks must not be used on medium or heavy plant.

Attention will be given to the contact point on the plant/vehicle and its load bearing capability and stability. An OEM specified point should be used. Where this is not practical, a JHA is required.

Jacks must be positioned in such a way that, whilst operating the lowering controls, the Tyre Fitter is not in the exclusion zone specified for inflation.

For wheels less than 24", the OEM procedures are the be followed.

10. Tyre Deflation and Inflation

Tyre deflation for wheels greater than 24" shall be conducted in accordance with ***VUL-SWP-072a-008-Tyre Deflation & Inflation - OTR.***

Alternative inflation and deflation methods must be risk assessed and approved by the Maintenance/Asset Manager.

Tyre deflation for wheels for non-OTR Tyres shall be conducted in accordance with ***VUL-SWP-072a-008-Tyre Deflation & Inflation -non-OTR.***

11. Demounting and Mounting

The fitting of a wheel or rim assembly to a vehicle or plant, assembling wheel or rim components and mounting a tyre to a wheel or rim varies depending on the type and size of the tyre, wheel and rim.

As such, each vehicle, type of tyre, wheel and rim, application and size present a different risk profile (e.g.) earthmover, large, light truck and passenger vehicle.

Refer to ***VUL_SWP-072a-009 Demounting & Mounting.***

11.1. Disassembly of Tyres, Rims and Wheels

Before removing tyres from rims, the CMW shall remove the stored energy (i.e.) pressure in the tyre – reference to deflation ***VUL-SWP-072a-008-Tyre Deflation & Inflation.***



11.1.1. Post Disassembly

Both after disassembly and prior to assembly, the Axial Hub, as well as the Tyre and all Rim components, are to be inspected.

- Check components for fitting and wear tolerance compliance. If out of tolerance, discard or recondition where applicable. Any items that may be unsafe for reassembly must be marked; even if going to scrap.
- Used rim components must never be mixed with new or newly inspected components.

If the pressure was below 70% of normal cold pressure, the tyre pressure prior to deflation is to be chalked onto the sidewall to alert the tyre fitter/repairer of possible defects.

11.1.2. Selection and Inspection of Components

All rim components and mating surfaces (including those on the plant) are to be inspected prior to assembly for cleanliness and correct fit.

Unclean components and mating surfaces must be cleaned (includes excess paint) and re-inspected.

Restraining components (studs, nuts, wedges and the like) will be inspected for condition. Components found to be in poor condition must be replaced.

Components of multi-piece rims, from different manufactures must not be mixed.

The Locking Ring shall be clean, crack free and not deformed. The ends of the ring should touch or be slightly overlapping but not apart.

The age of locking rings must be confirmed. Used locking rings **MUST NOT** be fitted to/used with younger rims. The age of the ring will be determined by the operational hours since new or last crack inspection, whichever is the lesser value.

If there is doubt about the age of a locking ring, it is to be cut in half and discarded:

- The age and history of the tyre should be confirmed.
- if assessed by a competent person as not presenting a risk to CMWs, tyres displaying signs of damage that have been repaired may be used in non-steer positions (e.g.) cord, sidewall or tread damage. Any such damage will be recorded on the **VUL-SOP-072a_F3-Daily Tyre Change Record**.
- There must be no debris inside the tyre when it is assembled.

Tyre fitting lubricants must be non-flammable, non-hydrocarbon and specifically made of tyre assembly.

Fit for purpose valve stems (inner and outer) will be used, the inner dual must have a valve extension fitted for accessibility.

11.1.3. Assembly of Wheels prior to fitting Plant

When using a tyre handling equipment, it shall be inspected prior to use to ensure it is fit for purpose.

If the tyre is too large to be inflated in cage, it shall be inflated to no more than storage pressure before being mounted on plant.

If the rim assembly includes a locking ring:

- After assembly, check that the ring is correctly in place prior to applying any air pressure by;
 - Tapping around the whole circumference
 - Checking the gap between the locking ring and gutter is no more than 1mm
 - Checking that the gap between the ends of the locking ring is as expected (different for different designs but ~2mm)



- After initial ring seating check, inflation of tyre to no more than 10 psi with the locking ring again being checked for proper seating before continuing the inflation. This is done by;
 - Tapping around its circumference in at least 8 locations.
 - Start opposite the ring gap and work both ways towards the gap

Where a tyre has been repaired, the repaired section must be fitted to the rim that allows for the repaired section to be facing inwards when fitted to the equipment.

Tyres that are limited to use in non-steer positions will be marked as such.

11.1.4. On-Machine Assembly

Tyre handling equipment is to be designed to prevent the tyre falling back (e.g.) tyre handler, tyre manipulator etc. If fall back arms are fitted, they will be used.

When a Tyres, Rims and Wheels are placed on the hub with a Handler/Manipulator it will be necessary for a CMW to go between the Handler/Manipulator and the plant to fit the locking ring, wedges or other fitment. Before entering the crush zone between the Handler/Manipulator and the hub, the CMW must ensure the Tyres, Rims and Wheels and Handler/Manipulator are secure - This is normally achieved by using the Tyre Handler/Manipulator to secure the Tyres, Rims and Wheels and then isolating the Tyre Handler/Manipulator.

11.1.5. Off-site Assembly

When assemblies have been fitted off-site, a fitment verification check must be conducted by an authorised and competent person:

- tyres should be at the site's nominated pressure 25-35psi (175-240kPa), prior to storage; and
- competencies of the person assembling the wheel or rim assembly.

If there is any doubt about the assembly or the qualifications of those that have done the assembly, it is to be removed, inspected and refitted.

12. Removal and Installation of Rim Assembly

Removal and installation of Rim Assembly shall be conducted in accordance with ***VUL-SWP-072a-010-Removal and Installation of Wheel Assembly***.

The SWP is based on working in a controlled environment (Designated Tyre Bay) and on OEM Machines. If the environment, tools, equipment changes and or a deviation from ***VUL-SWP-072a-004-Establishment of Work Zones*** and a new JHA must be created and approved by all workers conducting the task. Removal, Fit and Disposal of Tyres, Wheels and Rims.



12.1. Removal of Tyre, Wheel and Rims

Where there is evidence of cracking or movement of a wheel or rim assembly, the removal process (for single or dual fitment) should be stopped, and the tyre/s immediately deflated to zero.

Before removing wheels from heavy plant as well as removing tyres from rims, the CMW must minimise the stored energy (pressure in the tyre) prior to the removal of any restraints or fasteners.

Where dual wheels are used, the other tyre on the same hub must also be deflated to the same pressure as the tyre being removed.

Single Piece Nave Rims used on most road legal vehicle wheels may be removed without deflating the tyre.

For rims using stud/bolts and nuts, all cleats or wedges (this includes 'wedge ring' style mounting mechanisms) must be loosened whilst all the nut threads still engaged and before any nuts are removed.

With duals wheels, the inner tyre must be deflated before removing any restraints or fasteners on the outer tyre, even when the inner tyre is not going to be removed.

Ensure a sufficient number of fasteners are left on the assembly to prevent any uncontrolled movement of the assembly, until the assembly is held securely by mechanical means e.g., tyre handler.

Before fully removing any of the Tyres, Rims and Wheels restraints, must ensure the Tyres, Rims and Wheels cannot fall on the CMW. This may require the Handler/Manipulator to be positioned to prevent the Tyres, Rims and Wheels from falling.

12.2. Fitting of Tyre, Wheel and Rims

Only new tyres or tyres known to be within the first half of their expected life may be used as steering tyres.

Repaired tyres or tyres with cord, sidewall or significant tread damage may not be used as steer tyres.

The lowering of the wheel to the ground changes the stress distribution in the tyre and could initiate a failure. The CMW shall ensure that all are located outside the exclusion zone when the vehicle is lowered.

If the rim is secured by wedges, fitting procedures will include:

- a) Lightly tapping the wedges to ensure the rim is properly aligned.
- b) Tightening the nuts securing the wedges or cleats to finger tight and checking the rim for proper alignment and seating before progressively tightening with a calibrated torque wrench.

12.2.1. Dual Wheels

Dual tyre sets fitted to rear dump trucks are to be protected by rock ejectors.

Mismatched dual wheels will cause uneven loading and tyre heating therefore:

- Differences in tyre diameter should be within OEM recommendations; and
- Radial ply tyres may not be matched with a bias [cross] ply tyre.

12.3. Post-Fitment of Tyre, Wheel and Rims

When a tyre or wheel is fitted to plant, excluding light vehicles, a competent person is to perform a post-fitment inspection of the tyre/wheel and leave an Information Tag or Re-Torque Tag (as appropriate) tied to the key such that the Operator can easily see it.



The Tag will specify:

- Date work was done
- Plant hours/km when work was done
- What was done
- When re-torque(s) and/or pressure checks are required
- Name of CMW who fitted the tyre/wheel

The Operator will only operate the Plant at full capacity if the re-torque and pressure checks are carried out.

The CMW completing the re-torque and pressure checks are to record what they have done and when on the Information/Re-Torque Tag.

If an excessive number of re-torques (normally more than three is excessive) is required or the tyre pressure is not held, the assembly will be reassessed and investigated.

If a CMW changes their own Light Vehicle wheel, it must be driven directly to a workshop for the wheel fitment to be inspected and the wheel nut torques checked.

13. Inspections, Maintenance & Records

Tyres and Rims must be periodically examined for defects that could cause failure. A visual inspection of both the tyres and rims will be included in routine plant maintenance - usually at 250 hr intervals. Wear and damage are triggers for removal.

Documented frequency of inspections and recording and analysis of the results will assist in purchase of replacement tyres or confirm the choice of tyre in the application at the mine.

Tyre inspections are to be conducted in accordance with ***VUL-SWP-072a-011-Inspections & Maintenance***.

13.1. Non-OEM Specific Tyres and Rims

Any non-OEM spec tyres or rims on light Vehicles must be within the bounds of a "Minor Modification " as defined by the QLD Dept. of Transport and Main Road [*Vehicle Standards Instruction G19.1*].

Any non-OEM spec tyres or rims on a medium vehicle are allowed only if compliant with a Modification Plate.

- Note this is a Heavy Vehicle Modification code "E3"
- If this changes the vehicle mass ratings the code= "S1" and/or "S2" and/or "S3"

All non-OEM specific tyres and rims must be listed in accordance with ***VUL-MOP-071-Equipment Compliance***.

14. Repairs

Repairs shall be conducted in accordance with ***VUL-SWP-072a-012-Repairs***.

15. Disposal of Tyre, Wheel and Rims

Disposal of Tyres shall be conducted in accordance with ***VUL-SWP-072a-013-Disposal of Tyres, Wheels & Rims***.



16. Operation and Hazard Management

Operation and Hazard Management shall be conducted in accordance with ***VUL-SWP-072a-014-Operation and Hazard Management***.

Major hazards associated with tyres; wheels & rims could include:

- Physical size
- Weight
- Complexity of multi-piece wheels and rims
- Stored pressure energy
- Potential for explosion; and
- Damage resulting from the arduous conditions to which they are subjected.

16.1. Managing Tyre Hazards and Emergencies

Hazardous tyre management must be risk assessed and supported by detailing the requirements for site to manage minimum exclusion zone (distance) and timeframe (hours) before tyre fitters are permitted to inspect the tyre, wheel and rim assembly.

Hazardous tyres, wheels and rims removed from operations and must be inspected by a competent person.

The area around the direct vicinity of the hazard shall be evacuated and a hazardous tyre exclusion zone established and managed by a competent person.

All incidents and emergencies must be facilitated in accordance with ***VUL-MOP-015-Incident Reporting and Investigating***.

Further information is provided in ***VUL-SWP-072a-014-Operation and Hazard Management***.

17. Specific Tooling

Tooling specific to Tyres, Wheels & Rims shall be in accordance with ***VUL-SWP-072a-015-Operation of Torquing Device***.

18. Contractor Accountabilities

All contractor personnel, Tyre Fitters, are required to provide the following information:

- Provide details of the status of tracked rims for plant mobilised for inclusion on the Tyre and Rim Register when it arrives on site and updates while it remains on site for each asset
- Ensure rims are clearly identified individually so they can be tracked
- Visually inspect rims for signs of damage when tyres are changed
- Arrange NDT testing for rims at intervals nominated by their system. If there is no system available, NDT testing will be undertaken in alignment. NDT testing frequency / dates to be provided by the Maintenance/Asset Manager or delegate.
- Ensure rims which have failed an NDT testing or reached the end of their nominated life as determined by the manufacturer are removed from service.
- Provide updates of the status of tracked rims for plant mobilised to Vulcan Mine for inclusion on the site Rim Register against the asset.

Effective tyre inspections are critical to the ongoing safe operation of tyred equipment at the mine.

Tyre condition monitoring shall be undertaken by a competent person and to include the following criteria:

- Regular visual inspections undertaken by vehicle operators
- Examination for separation, delamination, and cuts
- Routine tread wear measurements
- Thorough external and internal inspection by tyre technicians at each tyre change.



Wheels and rims to be inspected on a regular basis by completing the record of inspection on the Earthmover wheels and rims with damage or fatigue should be tested in accordance with **AS 4457.1**.

Wheels and rims must be checked to ensure fitting and wear tolerances in multi-piece wheels or rims are not exceeded.



19. ROLES AND RESPONSIBILITIES

ROLE	RESPONSIBILITY
SSE	Review and approve this procedure.
HST Manager	- Ensure that CMWs are familiar with and have access to procedure. - Provide training for this Standard Operating Procedure.
Maintenance/Asset Manager	- Ensure all provisions of this procedure are implemented, and compliance is achieved. - Manage the introduction to site process for site. - Maintain the Tyre and Rim Register. - Confirm tooling such as tyre gauges and Torque tooling are maintained and calibrated. - Facilitate supervision of this Standard Operating Procedure.
Supervisors	- 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.
All CMWs (including visitors and contactor)	Shall comply with the requirements of this procedure.



20. RELATED DOCUMENTS

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- VUL-PLN-002-Change Management
- VUL-SOP-038-First Aid
- VUL-SOP-037-Action to be taken on discovery of Fire
- VUL-SOP-078-Isolation & Tagging
- VUL-SOP-073-Checking Mobile Plant
- VUL-SOP-073-Checking Mobile Plant
- VUL-SOP-076-Using Mobile Plant
- VUL-PLN-082-Training Plan
- VUL-MOP-071- Equipment Compliance
- VUL-SOP-094-Check, Examine and Restrict Work Areas
- VUL-MOP-144-Lighting
- VUL-SWP-072a-001-Selection & Procurement
- VUL-SWP-072a-002-Handling & Transportation and Receipting
- VUL-SWP-072a-003- Storage of Tyres, Wheels & Rim Assemblies
- VUL-SWP-072a-004-Establishment of Work Zones
- VUL-SWP-072a-005-Jacking and Supporting of Machine – Rear Dump Trucks
- VUL-SWP-072a-006- Jacking and Supporting of Machine – Grader
- VUL-SWP-072a-007- Jacking and Supporting of Machine – Loader
- VUL-SWP-072a-008-Tyre Deflation & Inflation
- VUL-SWP-072a-009- Demounting and Mounting Tyres
- VUL-SWP-072a-010-Removal and Installation of Rim Assembly
- VUL-SWP-072a-011-Inspections, Maintenance & Records
- VUL-SWP-072a-012- Repairs
- VUL-SWP-072a-013-Disposal of Tyre, Wheels and Rims
- VUL-SWP-072a-014-Operation and Hazard Management
- VUL-SWP-072a-015-Tooling
- VUL-SOP-072a-F1-Tyre and Rim Storage Audit
- VUL-SOP-072a-P1-Permit to Dispose of Scrap Tyres
- VUL-SOP-072a-F2-Disposal Tyre Storage Inspection
- VUL-SOP-072a_F3-Daily Tyre Change Record
- VUL-SOP-072a_R1- Tyre and Rim Register
- VUL-ATT-002-Tyre Size, Pressure and Torque Chart



21. REFERENCES

- AS 1271-2003 (R2016) Safety valves, other valves, liquid level gauges, and other fittings for boilers and unfired pressure vessels
- AS 1973-1993 Pneumatic tyres - Passenger car, light truck, and truck/bus - Re-treading and repair processes
- AS 4457.1-2007 Earth-moving machinery - Off-the-road wheels, rims & tyres - Maintenance & repair - Wheel assemblies & rim assemblies
- AS 4457.2-2008 Earth-moving machinery - Off-the-road wheels, rims & tyres - Maintenance & repair - Tyres
- AS/NZS 1680.0:2009 Interior lighting – Safe movement
- AS/NZS 2538:2004 Vehicle support stands
- AS/NZS 2693:2007 (R2017) Vehicle jacks
- AS/NZS 3788:2006 (R2017) Pressure equipment - In-service inspection
- Coal Mining Safety and Health Act 1999 (Qld)
- Coal Mining Safety and Health Regulation 2017 (Qld)
- RSHQ Recognised Standard 13 [Tyre, wheel and rim management](#)
- RSHQ Guidance Note 31 [Tyre, wheel & rim management](#)
- RSHQ Safety Bulletin 118 [Working safely with tyres: highway-style trailer haulage](#)
- RSHQ Safety Bulletin 47 [Tyre fires, pyrolysis and explosions](#)
- RSHQ Safety Bulletin 77 [Earthmover tyre and rim safety](#)
- [Safe Work Australia – Guide for split rims \(December 2015\)](#)

22. REVIEW

This document shall be reviewed at a minimum every three years or when, triggered by one of the following events:

- a) A site or external accident or incident directly related to the document contents;
- b) A legislated change directly related to the document contents;
- c) Requirements from directives issued orally or as Mine Record Entry by ae Resources Safety and Health Queensland (RSHQ) Mines Inspector or Industry Safety and Health Representatives or Site Safety and Health Representatives directly related to the document contents;
- d) Outcomes from inspections, audits, hazard identification, safety observations, risk assessments or other processes where the actions recommended are directly related to the document contents;
- e) A change required by the Vulcan Mine SSE;
- f) The passing of a review date on the document, set at 3 years for this document.



23. DOCUMENT CONTROL

Version	Date	Description	Document Controller
01	02/06/2020	Initial draft	Rachael Dacker
02	14/07/2020	Risk Workshop	Shane Johnson
03	23/04/2021	Review and formatting	Nicole Davey
04	31/08/2021	Review and formatting	Rachael Dacker
05	21/05/2023	Review and formatting	Allira Spencer