PORT HEDLAND PORT AUTHORITY

High Voltage Access Procedure

PR-OT11

Document Users:

All Staff
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1. Objective

The purpose of the PHPA High voltage Access Procedure is to ensure the safety of all personnel on the PHPA sites from injury caused by exposure to High Voltage installations.

The procedures are designed to comply with Statutory Regulations and with PHPA Health and Safety Standards. This purpose shall be achieved by ensuring that where practicable Positive Isolation is used and where this is not practicable, operational controls that permit controlled movement are in place for the protection of personnel working under a system of isolation on PHPA sites.

2. Scope

These regulations outline the use of

- High voltage Vicinity Permits
- High Voltage Access Permits
- High Voltage Switching Programs
- Out of Service tags
- Commissioning & Testing tags

These regulations shall be followed exactly. If there is anything in these regulations that you do not understand, it is YOUR responsibility to clarify the item with supervisory personnel.

3. Associated Documents

- Isolation & Tagging Procedure PR-OT10
- High Voltage Access Permit
- High Voltage Vicinity Permit
- High Voltage Switching Program
- High Voltage Access Permit Point Lock
- High Voltage Access Permit Point Lock Tag
- High Voltage Lock Out Station
- Isolation Statement
- Authorised Persons Register
- Signature Lock or Tag Removal Authorisation
## 4. Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALARP</td>
<td><strong>As Low as Reasonably Practicable</strong> (<a href="#">ALARP</a>) defines that wherever there is a risk present to people it must be balanced against the sacrifice needed to eliminate or reduce the risk. In any assessment as to whether risks have been reduced ALARP, measures to reduce risk can be ruled out only if the sacrifice involved in taking them would be grossly disproportionate to the benefits of the risk reduction.</td>
</tr>
<tr>
<td>Area Owner</td>
<td>The Area Owner is the person responsible for the equipment or process at the time of isolation (usually the direct supervisor of the equipment operator).</td>
</tr>
<tr>
<td>Authorised Person</td>
<td>A person who has, to the satisfaction of the Registered Mine Manager or nominee, acquired through a combination of training, education and experience, sufficient knowledge and skill to enable him or her to perform specific tasks safely and correctly and has been given written permission to act as Authorised person.</td>
</tr>
<tr>
<td>Authorised Trainer</td>
<td>A person who has been deemed competent and authorised in writing by the Registered Mine Manager or nominee to perform High Voltage Isolation Regulation training</td>
</tr>
<tr>
<td>Authority</td>
<td>A written permission given by the Registered Mine Manager or nominee on matters relating to the Isolation Regulations.</td>
</tr>
<tr>
<td>Commissioning or Testing Tag</td>
<td>A tag to be used when it is not possible to lock in a de-energised state (Fault finding and Equipment under Test or testing).</td>
</tr>
<tr>
<td>Competent Person</td>
<td>A person who has, to the satisfaction of the Registered Mine Manager or nominee, acquired through a combination of training, education and experience, sufficient knowledge and skill to enable him or her to perform specific tasks safely and correctly.</td>
</tr>
<tr>
<td>Contractor</td>
<td>Any firm or any person not an employee of PHPA engaged / commissioned to do work on any PHPA site.</td>
</tr>
<tr>
<td>Contractor Supervisor</td>
<td>The competent person nominated to PHPA by a Contractor to accept responsibility for ensuring all Contractor’s personnel follow the Isolation Regulations, Rules and Procedures related to Permits and Isolations.</td>
</tr>
<tr>
<td>Control Point</td>
<td>The location of the operating controls for a piece of equipment. (Control points may occur at multiple locations).</td>
</tr>
<tr>
<td>Cyclone Tie-Down Coordinator</td>
<td>A person delegated as per the Utah Cyclone Tie Down Procedure.</td>
</tr>
<tr>
<td>Cyclone Recovery Coordinator</td>
<td>A person delegated as per the Utah Cyclone Tie Down Procedure.</td>
</tr>
<tr>
<td>Dead</td>
<td>Any Electrical Apparatus which is at earth potential.</td>
</tr>
<tr>
<td>De-Isolate / Re-energise</td>
<td>Reconnect or enable an energy source to equipment.</td>
</tr>
<tr>
<td>Earthed</td>
<td>Connected to the general mass of earth in such a manner so as to ensure at all times an immediate discharge of electrical energy.</td>
</tr>
<tr>
<td>Emergency</td>
<td>An emergency is an abnormal occurrence that can pose a threat to the</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>safety or health of employees, contractors, local communities, customers, or which can cause significant damage to assets or the environment.</td>
<td></td>
</tr>
<tr>
<td>Exclusive Control</td>
<td>Situations where one work group has overall control over the common work area and equipment.</td>
</tr>
<tr>
<td>Extra-Low Voltage</td>
<td>Not Exceeding 50 V a.c. or 120 V ripple-free d.c. (AS 3000: 2007 1.4.98).</td>
</tr>
<tr>
<td>Group Isolation</td>
<td>When equipment has been removed from service by an Authorised Isolation Officer to enable it to be worked on by more than one person.</td>
</tr>
<tr>
<td>Group Isolation Lock</td>
<td>Yellow lock used for security to lockout For the purpose of Isolation.</td>
</tr>
<tr>
<td>Group Single Point Isolation</td>
<td>An isolation that requires a single isolation point and up to 5 people working on the isolation.</td>
</tr>
<tr>
<td>Group Multi Point Isolation</td>
<td>An isolation that allows up to 12 people to lock on up to 15 Isolation Points.</td>
</tr>
<tr>
<td>6 Hole Hasp</td>
<td>A device used to allow multiple locks to be attached to a Single Isolation Point, with up to 6 holes available for locks.</td>
</tr>
<tr>
<td>12 Hole Hasp</td>
<td>A device used to allow multiple locks to be attached to a Single Isolation Point, with up to 12 holes available for locks.</td>
</tr>
<tr>
<td>Haulage</td>
<td>The movement of product or material from one point to another on designated roadways by Heavy Mobile Equipment (excluding dumping or tipping – see “Operating”).</td>
</tr>
<tr>
<td>HV – High Voltage</td>
<td>Voltage in excess of 1000 v a.c. or 1500 v d.c. (AS 3000: 2007 1.4.98).</td>
</tr>
<tr>
<td>High Voltage Access Permit Holders</td>
<td>A person nominated by the High Voltage Permit Officer to accept the responsibility for control of a High Voltage Access Permit</td>
</tr>
<tr>
<td>High Voltage Access Permit Officer</td>
<td>A person authorised to request, accept, transfer and relinquish High Voltage Access Permits once a letter of appointment has been issued.</td>
</tr>
<tr>
<td>High Voltage Access Permit Point Lock (White)</td>
<td>A set of locks uniquely keyed and identifiable for each uniquely identifiable High Voltage Lockout Station (white).</td>
</tr>
<tr>
<td>High Voltage Access Permit Point Tag</td>
<td>A tag with a black border used in conjunction with the High Voltage Access Permit Point Lock to identify apparatus, High Voltage Access Permit Number and High Voltage Lock Out Station number for each isolation point</td>
</tr>
<tr>
<td>HV Isolation Assistant</td>
<td>An individual trained and assessed as a competent High Voltage (HV) Isolation Assistant and authorised in writing by the Registered Mine Manager.</td>
</tr>
<tr>
<td>High Voltage Isolation Officer</td>
<td>A person Authorised to Isolate and De-isolate High Voltage Electrical Apparatus for the purpose of issuing or cancelling High Voltage Access Permits, and High Voltage Vicinity Permits under these Regulations. The Registered Mine Manager is required to appoint persons as High Voltage Isolation Officers on that mine site.</td>
</tr>
<tr>
<td>High Voltage Lock Out Station</td>
<td>A box containing High Voltage Access Permit Point Locks and Key, to prevent access to the High Voltage Access Permit Point Lock Key when a</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Permit is in force, locked by High Voltage Master Lock.</td>
<td></td>
</tr>
<tr>
<td>High Voltage Operator</td>
<td>An individual trained &amp; assessed as competent in the operation of high Voltage (HV) apparatus for the purpose of isolation.</td>
</tr>
<tr>
<td>High Voltage Vicinity Permit</td>
<td>A printed form generated under these Regulations which permits work / machine operation to be performed in the vicinity of High Voltage Electrical Infrastructure.</td>
</tr>
<tr>
<td>Information Tag</td>
<td>A tag used to communicate a message about the conditions of entry, status of equipment or any other relevant information.</td>
</tr>
<tr>
<td>Isolate</td>
<td>Disconnect or inhibit all sources of energy to an item of High Voltage apparatus, inclusive of lock(s), tags and earths.</td>
</tr>
<tr>
<td>Isolated</td>
<td>A piece of equipment is deemed isolated when it has been de-energised, verified, locked, tagged and earthed.</td>
</tr>
<tr>
<td>Isolation</td>
<td>A means of preventing the transmission, build-up or unintentional release of pressure/energy/power by whatever means necessary to ensure that the plant or equipment is safe to work on.</td>
</tr>
<tr>
<td>Isolation Breach</td>
<td>Any non-compliance with the Isolation Regulations. The Incident Reporting system shall be used to report the isolation breach.</td>
</tr>
<tr>
<td>Isolation Designer</td>
<td>A subject area expert familiar with the equipment, layout and isolation points associated with the plant and necessary requirements involved in the isolation.</td>
</tr>
<tr>
<td>Isolation Design Checker</td>
<td>A subject area expert familiar with the equipment, layout and isolation points associated with the plant and necessary requirements involved in the isolation.</td>
</tr>
<tr>
<td>Isolation Earth</td>
<td>An earth, capable of withstanding fault currents, placed by a switching operator under the direction of a switching program.</td>
</tr>
<tr>
<td>Isolation Officer</td>
<td>A person who is trained and deemed competent and is appointed in writing by the RMM to undertake the duties of Isolation Officer in accordance with PHPA Isolation Regulations.</td>
</tr>
<tr>
<td>Isolation Point</td>
<td>An approved mechanism/device which controls the energy source for the purpose of isolating or de-isolating a piece of plant or system of plant.</td>
</tr>
<tr>
<td>Note: Devices such as emergency stops, pull wire switches or any other devices associated with control systems shall not be used as primary approved isolation points unless authorised by the RMM.</td>
<td></td>
</tr>
<tr>
<td>Isolation Regulations</td>
<td>A system of rules, procedures and principles, within Port Hedland Port Authority, that controls the isolation and lockout of potential sources of hazardous energy and hazardous substances prior to commencing work. Separate regulations are in place for:</td>
</tr>
<tr>
<td>Electrical, Mechanical, and</td>
<td></td>
</tr>
<tr>
<td>High Voltage Electrical Systems</td>
<td></td>
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<tr>
<td>Isolation Statement</td>
<td>A detailed plan of the isolation points needed to effectively de-energise or</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td>Isolation Tag</td>
<td>A printed tag which is attached to all Isolation Points identifying a Personal, Group or Major Isolation by lock box, lockout station or Major Permit number.</td>
</tr>
<tr>
<td>Isolation Verifier</td>
<td>A person who verifies the Isolation Point/s in accordance with the Isolation and Tagging Procedure.</td>
</tr>
<tr>
<td>JHA / JSA</td>
<td>Job Hazard Analysis / Job Safety Analysis</td>
</tr>
<tr>
<td>Job Hazard Analysis</td>
<td>A formal documented hazard assessment &amp; risk control management procedure for a specific task (refer to JHA procedure).</td>
</tr>
<tr>
<td>Lethal Current</td>
<td>Current in excess of 10mA AC, or 300mA DC, through the human body – as specified in AS/NZS 60479.2:2002</td>
</tr>
<tr>
<td>Live</td>
<td>Any Electrical Apparatus which is charged at a potential different from that of earth</td>
</tr>
<tr>
<td>Lock Box</td>
<td>A lockable box that shall be used in conjunction with a Group Isolation for personnel to lock onto.</td>
</tr>
<tr>
<td>LV – Low Voltage</td>
<td>Exceeding extra-low voltage, but not exceeding 1000 v a.c. or 1500V d.c. (AS 3000: 2007 1.4.98)</td>
</tr>
<tr>
<td>Major Permit of Isolation</td>
<td>A Major Permit of Isolation should generally be used for:</td>
</tr>
<tr>
<td></td>
<td>• Complex jobs where a greater degree of control is required</td>
</tr>
<tr>
<td></td>
<td>• Where the number of people working on a job exceeds 12 and / or</td>
</tr>
<tr>
<td></td>
<td>• The number of isolation points required exceeds 15</td>
</tr>
<tr>
<td></td>
<td>• Electrical work on high voltage equipment</td>
</tr>
<tr>
<td></td>
<td>• Access to high voltage apparatus and enclosures</td>
</tr>
<tr>
<td>Network Operator</td>
<td>The Supply Authority responsible for the transmission and distribution system in question</td>
</tr>
<tr>
<td>Nominee</td>
<td>A person authorised by the Registered Mine Manager.</td>
</tr>
<tr>
<td>Operating</td>
<td>The state in which plant and/or machinery is being used for the purpose it is designed for i.e. Crane set up and performing a lift (not in transit)</td>
</tr>
<tr>
<td>Out Of Service Tag</td>
<td>A tag used to identify equipment which is faulty and/or dangerous and shall not to be used or operated.</td>
</tr>
<tr>
<td>Permit Holder</td>
<td>A person who is trained and deemed competent, by the RMM to undertake the duties of Permit Holder under a Major Permit of Isolation.</td>
</tr>
<tr>
<td>Personal Danger Locks and Tag</td>
<td>A lock and tag applied by a person with the primary objective to provide personal protection to an individual working on plant and equipment. Must be removed at the end of each job or shift.</td>
</tr>
<tr>
<td>Personal Isolation</td>
<td>An Isolation for an individual provided there:</td>
</tr>
<tr>
<td></td>
<td>• is one person on the job,</td>
</tr>
<tr>
<td></td>
<td>• 6 or less isolation points,</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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</tr>
<tr>
<td></td>
<td>• the job will be completed within the current shift and; \</td>
</tr>
<tr>
<td></td>
<td>• the person is an authorised isolation officer for that equipment.</td>
</tr>
<tr>
<td>Personal Isolation Officer</td>
<td>An individual authorised to place a Personal Isolation Lock and Personal Danger Tag on a single piece of plant or equipment for the intention of isolating the plant or equipment for themselves only.</td>
</tr>
<tr>
<td>Personal Lock Holder</td>
<td>An individual competent and authorised to place a personal lock on a piece of equipment or lock box for the intention of working on that equipment / system. They have been trained in isolation regulations and competency test on an annual basis.</td>
</tr>
<tr>
<td>Point Isolation Locks (Blue)</td>
<td>Common keyed locks placed by an Authorised Isolation Officer, placed on an individual isolation points for the purpose of isolating a piece of plant or system of plant; usually Blue.</td>
</tr>
<tr>
<td>Port Authority</td>
<td>Port Hedland Port Authority and all owned sites, and leased areas</td>
</tr>
<tr>
<td>Positive Isolation</td>
<td>An isolation where physical barriers have been put in place to isolate all forms of energy irrespective of changes in conditions.</td>
</tr>
<tr>
<td>Powerline Corridor</td>
<td>The area of 10 metres on each side and above or below any overhead power line and 2 meters from identified underground distribution cables</td>
</tr>
<tr>
<td>Refresher Training</td>
<td>Refresher training on the Isolation and Tagging Procedure and systems to be undertaken yearly or at a relevant time designated by the RMM or nominee.</td>
</tr>
<tr>
<td>Registered Mine Manager</td>
<td>The individual registered with the Mines Act as being the Accountable person for mine site. (RMM)</td>
</tr>
<tr>
<td>Safe Approach Distance</td>
<td>The minimum safe approach distance that shall be maintained by an un-authorised person, mobile plant (including load) or any object from bare electrical apparatus. Up to 22kV – 2.3m</td>
</tr>
<tr>
<td>Safe Work Area</td>
<td>The defined working area made safe for a defined activity.</td>
</tr>
<tr>
<td>Safe Working Distance</td>
<td>The minimum approach distance for authorised personnel</td>
</tr>
<tr>
<td></td>
<td>Up to 22kV - 700mm</td>
</tr>
<tr>
<td>Safe Working Procedure</td>
<td>Written procedures approved by the Registered Mine Manager or nominee.</td>
</tr>
<tr>
<td>Self Propelled Mobile Equipment (SPME)</td>
<td>Diesel / electric driven equipment that is self propelled and Equipment (SPME) not connected by a cable to an electricity distribution system.</td>
</tr>
<tr>
<td>Shall</td>
<td>Indicates the requirement is mandatory.</td>
</tr>
<tr>
<td>Should</td>
<td>Indicates the requirement is recommended.</td>
</tr>
<tr>
<td>Special Event Isolation</td>
<td>An isolation used for preparation for pending site wide emergency where it is anticipated that all personnel will leave site.</td>
</tr>
</tbody>
</table>

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Review date: 19/08/2012
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Requirements Permit</td>
<td>The document used to authorise work of a nature recognised in the PHPA procedures that has the potential to be of a high risk to personnel – safety or operational risk.</td>
</tr>
<tr>
<td>Suspended Permit</td>
<td>Used when there is a requirement for equipment under test; ensures personnel do not lock on to suspended permit and lockbox. Allows for de-isolation to perform a test function and re-isolation without relinquishing a permit.</td>
</tr>
<tr>
<td>Switching Program</td>
<td>A document used by a switching operator which identifies the required steps for isolation, and placement of High Voltage Access Permit Point Locks, Tags, and Isolation Earths.</td>
</tr>
<tr>
<td>Task Supervisor</td>
<td>The person responsible for the safe execution and completion of the work. Typically a tradesperson or supervisor.</td>
</tr>
<tr>
<td>Transit</td>
<td>Machinery travelling between two points with no operational equipment activated. e.g. Hiab Truck with legs packed up and boom tied down.</td>
</tr>
<tr>
<td>Visitor</td>
<td>A person not intending to perform work. Visitors must be supervised by a person trained in Isolation &amp; Tagging Procedures.</td>
</tr>
<tr>
<td>Working Earth</td>
<td>An earth connection, close to and in full view of a Working Party, installed between the Working Party and one or more points of Isolation, to limit any rise in potential at the worksite.</td>
</tr>
<tr>
<td>Working Party</td>
<td>One or more individuals entering the Work Area and signing onto a High Voltage Access Permit, High Voltage Test Permit, or High Voltage Vicinity Permit.</td>
</tr>
</tbody>
</table>
5. General Safety

The primary objective is to provide personal protection to persons working on plant and equipment. A secondary consideration is the prevention of damage to equipment and environment. The procedure applies equally to servicing, repairs, inspections, testing and adjustments, cleaning and pre-start checks.

In all of these instances the Isolation and Tagging Procedure shall be followed.

REMEMBER: FAILURE TO FOLLOW THE PROCEDURE COULD RESULT IN DEATH, DISABLEMENT, PERSONAL INJURY OR DAMAGE.

This procedure is required to protect individuals or groups of personnel from physical injury or through contact with or exposure to the following types of energies:

- Chemical (corrosives, gases, toxic materials)
- Electricity
- Radiation (induction sources, lasers)
- Mechanical (e.g.: kinetic)
- Pressure
- Gravitational
- Thermal
- Stored Energy

5.1 Fundamental Principles

The High Voltage Isolation Regulations are based on the following key concepts:

- All potentially hazardous energy sources are to be isolated before commencing work;
- Only competent and authorised personnel are to perform isolations;
- No person shall commence work on isolated High Voltage Electrical Apparatus until they have applied their Personal Lock to the High Voltage Lockout Station and signed on to the relevant High Voltage Access Permit;
- Personal Locks shall only be removed by their owner;
- Only competent and authorised personnel are to perform de-isolations & restorations;
- The concept of a Personal Isolation as described in the Port Hedland Port Authority Isolation and Tagging Procedures 2011 shall not be used to control access to High Voltage Electrical Apparatus.

5.2 High Voltage Isolations for Electrical Access

No person shall make personal contact, either directly or through any conducting object with any high voltage conductor believed to be dead, unless the conductor has been effectively earthed and short-circuited and is complying with all the requirements of High Voltage Switching Procedure.

High voltage apparatus, which is to be earthed and short-circuited, shall be proven to be dead and safe for earthing and short-circuited by use of equipment specifically designed for the purpose and used in accordance with the manufacturer’s instructions.

5.3 Competency for Isolation

Only persons who have completed the appropriate level of isolation training and have been assessed and deemed competent and authorised under the PHPA Isolation Officer training are able to perform isolations.

5.4 Powerline Corridor Access

Where access to a Powerline Corridor for work or machinery operation is required, a High Voltage Isolation Officer shall be contacted and a High Voltage Vicinity Permit issued.
5.5 High Voltage Vicinity Permit

A High Voltage Vicinity Permit is required for any work to be performed or machinery to be operated either in a Powerline Corridor or in close proximity to High Voltage Electrical Apparatus.

5.6 High Voltage Access Permits

A High Voltage Access Permit is required in all cases where work is to be performed on or in close proximity to High Voltage Electrical Apparatus where the Safe Working Distance cannot be maintained.

5.7 Low Voltage, Mechanical and Other Work requiring Isolations under a High Voltage Access Permit

The High Voltage Access Procedure is intended to complement the PHPA Isolation and Tagging Procedure. Other forms of isolation contained in the PHPA Isolation and Tagging Procedure can operate in parallel with the High Voltage Access Procedure.

For example, A High Voltage Access permit may be necessary to disconnect a high voltage installation. Low voltage electrical, mechanical or other non electrical work may be required elsewhere on the same installation but is reliant on the HV access permit to provide a source of isolation for that work.

For circumstances where the isolation points under the High Voltage Access Permit is used as an isolation point for other non electrical work not requiring a High Voltage Access Permit, the following shall apply:

1. The Low voltage / mechanical isolation is conducted as per the PHPA Isolation and Tagging Procedure.
2. The Low Voltage / Mechanical Isolation Officer receives permission from the High Voltage Isolation Officer to place point locks and tags on the High Voltage Lockout Station and, confirms the suitability of the High Voltage Isolation for the scope of work contained on the Low Voltage / Mechanical Isolation Statement.
3. The Low Voltage / Mechanical Isolation Officer places the blue point lock and blue point isolation tag on the HV lockout station
4. The Low Voltage / Mechanical Isolation Statement number is recorded on the sign on area of the High Voltage Access Permit.
5. The Isolation or Major Permit is issued as per the PHPA Isolation and Tagging Procedure.

When de-isolating the Low Voltage / Mechanical Isolation, the following shall apply:

1. The Low Voltage / Mechanical Isolation Officer removes the blue point lock and blue point isolation tag from the High Voltage Lockout Station
2. The Low Voltage / Mechanical Isolation Officer records the Low Voltage / Mechanical Isolation Statement number on the sign off area of the High Voltage Access Permit.

The Low Voltage / Mechanical Isolation Officer continues with energising as per PHPA Isolation and Tagging Procedure.
5.8 **Isolation of High Voltage Motors where there is no potential for contact with High Voltage Apparatus**

For circumstances where a high voltage motor is isolated to conduct mechanical work or cleaning on non electrical components (for example mechanical work or cleaning of Utah conveyors), a High Voltage Access Permit is not required.

Such isolations are to be conducted as per the PHPA Isolation and Tagging Procedure.

5.9 **Training**

All persons who are required to administer the permits & procedures described herein shall be trained and be assessed competent in these High Voltage Isolation Regulations. The relevant letter(s) of appointment signed by the Registered Mine Manager will be issued upon successful completion of this training.

These regulations shall be followed exactly. If there is anything in these regulations that you do not understand, it is YOUR responsibility to clarify the item with supervisory personnel.
6. **General Requirements**

Only a Western Australian Licensed Electrician authorised as HV Operators are to conduct all isolations requiring the operation of a HV device.

Personnel trained and assessed as competent HV Isolation Assistants may participate in isolations of HV Motors for mechanical work and cleaning only.

The Authorised Isolation Officer / High Voltage Operator shall conduct isolations as per relevant statutory requirements.

At least 2 Authorised HV Operators are to participate in HV switching operations, with the option for a 3rd party observer to participate if they are a task supervisor under the Permit of Isolation.

When conducting HV switching operations, the Authorised Isolation Officer / High Voltage Operator shall:

- Wear appropriate PPE as prescribed in the HV switching instruction
- Ensure only required personnel are in sub station
- Operate HV equipment as per isolation statement/HV switching instruction.

### 6.1 Levels of Authority

These High Voltage Isolation Regulations are based on a number of separate levels or authority:

- Personal Lock Holders
- High Voltage Permit Officer
- High Voltage Isolation Officer

**Note:** Authority Levels are only valid for the site that they were issued on

#### 6.1.1 Personal Lock Holders

All persons signing onto a High Voltage Access Permits under these Regulations shall be in possession of, and authorised to use, a Personal Lock.

Persons trained and determined as competent under the Isolation & Tagging Procedure shall be deemed as an authorised Personal Lock Holder for the purposes of these regulations.

Personal Lock Holders are not authorised to Isolate or De-isolate equipment.

A Personal Lock Holder shall only attach a Personal Lock to a High Voltage Access Permit Lock Out Station for work on or, in close proximity, to exposed high voltage components or conductors. (Refer to Introduction – Isolation Regulations – if Major Permit is in place).

If a Personal Lock Holder cannot demonstrate understanding of the safe area of work to the satisfaction of the High Voltage Permit Officer the Personal Lock Holder shall not place a lock and commence work, and their Supervisor shall be notified to decide on a course of action.

#### 6.1.2 High Voltage Permit Officer

High Voltage Permit Officers shall be trained in the High Voltage Isolation Regulations and be issued with an appointment letter from the Registered Mine Manager.

High Voltage Permit Officers shall undertake approved High Voltage Switching Training.

In the case where a new Registered Mine Manager is introduced to site, new High Voltage Operator and High Voltage Permit Officer appointment letters shall be reissued to relevant persons.

#### 6.1.3 High Voltage Isolation Officers

High Voltage Isolation Officers shall be trained in the High Voltage Isolation Regulations and be issued with an appointment letter from the Registered Mine Manager.

High Voltage Isolation Officers shall undertake approved High Voltage Switching Training.
High Voltage Isolation Officers shall only operate equipment for which they are authorised.

6.2 **High Voltage Isolation Regulation Training Process**

High Voltage Switching Training shall be provided by a recognised training provider and meet the legislative requirements for the area. High Voltage Switching Training does not require recertification unless deemed as appropriate by the Registered Mine Manager e.g. person has not been actively involved in High Voltage switching for a period exceeding two years. High Voltage Switching Training shall as a minimum address the following:

- Legislative requirements
- PPE requirements
- Effects of electricity on the body
- Potential hazards
- Switching program preparation
- High voltage isolation and access procedures
- Switching operator responsibilities
- Earthing and testing procedures
- High voltage operating and safety equipment
- High voltage switchgear
- Protection systems
- High fault currents

A site specific Competency Assessment shall be specific to the site and initially include a practical component of assessment.

Site specific competencies should address the following as applicable:

- Equipment
- Operating procedures
- PPE
- Tools
- Communication procedures
- Switching programs
- Earthing and testing
- Safe work areas

6.3 **High Voltage Switching & Isolation for High Voltage Access Permits**

The Electrical Supervisor shall be advised of all high voltage switching on the Port Authorities Transmission & Distribution network.

**Switching operations for High Voltage Access Permits shall only be performed by High Voltage Isolation Officers.**

The minimum clothing and PPE standard for performing all high voltage switching is defined in Arc Flash Hazards Users Guidelines.

No switching operations shall be performed for the purposes of isolations for High Voltage Access Permits without such operations being detailed on a Switching Program.

A High Voltage Isolation Officer who wants to place a High Voltage Access Permit Point Lock on an Isolation Point which has already been Locked Out shall be satisfied that the intended job will not adversely affect the work already in progress. The High Voltage Isolation Officer should contact the High Voltage Access Permit Holder/Contract Supervisor for the lock in question prior to placing another High Voltage Access Permit Point Lock.
A Permit Lock shall not be placed on an Isolation Point when the lockout mechanism is missing, damaged or not fully functional.

Each Permit Point Lock placed for the purposes of a High Voltage Access Permit shall be placed together with:

- A High Voltage Access Permit Point Tag, which details the associated High Voltage Access Permit number
- High Voltage Lockout Station Number
- Equipment Name
- High Voltage Permit Officers Name and the Date written in the spaces provided

For the purposes of Testing and Commissioning, a Testing and Commissioning Tag shall be placed, which details the associated equipment name, High Voltage Permit Officer's name and the date written in the spaces provided. A Safe Work Procedure shall be written for the purpose of Testing and Commissioning High Voltage Apparatus.

Where it is not possible to physically lock the isolation point e.g. expulsion drop out fuse then the fuses may be chained to the bottom of the pole from which they were removed to indicate that the removed fuses form part of a High Voltage Isolation.

### 6.4 High Voltage Switching Programs

The Switching Program format and definitions shall be as approved by the Port Authority Electrical Supervisor and Registered Mine Manager.

Switching Programs shall be written by a High Voltage Isolation Officer and Checked by a second High Voltage Isolation Officer.

Switching Programs shall be completed for every High Voltage Access Permit and address the following elements of the isolation;

- Switching to prepare for the isolation i.e. load shedding;
- Isolation - including operation of equipment, placement of High Voltage Access Permit Point Locks and High Voltage Access Permit Point Tag(s);
- Earthing - which includes proving that Electrical Apparatus is de-energized and placing of isolation earths;
- Issuing of High Voltage Access Permit;
- Relinquishment of High Voltage Access Permit;
- Cancelling of High Voltage Access Permit;
- Removal of Isolation Earths;
- De-isolation - including removal of Permit Locks and High Voltage Access Permit Point Tags;
- Reverse switching.

Completed Switching Programs and High Voltage Access Permits shall be returned to the Statutory Electrical Supervisor, who shall retain that program and any associated documentation for a minimum of 2 years.

### 6.4.1 Switching Program Definitions / Abbreviations

The abbreviations below are acceptable standards for use to promote uniformity when preparing Switching Programs.
6.5 Earthing of Electrical Apparatus for work

Where possible or practical, High Voltage Electrical Apparatus shall be proven de-energized at the proposed point of application of Earths using an approved voltage detector (e.g. Tested and Calibrated Modiwark or RMU LED phase indicators).

The connection to earth shall always be made before the connection to the de-energised High Voltage Electrical Apparatus.

High Voltage Electrical Apparatus shall not be earthed through fuses or circuit breakers unless the equipment has been designed specifically for such a purpose.

Single phase earths shall all be earthed to a common point.

Isolation Earths should be applied at all points of isolation. Where an overhead earth is not installed then Isolation Earths shall be applied at the point of isolation.
Working Earths shall be applied to overhead conductors at all points of supply and must be as close as possible to, and in full view of the Working Party.

Where Isolation Earths are in full view of the Working Party they may be deemed as Working Earths on the High Voltage Access Permit.

Isolation Earths shall only be placed by a High Voltage Isolation Officer.

Working Earths shall only be applied by a High Voltage Permit Officer, High Voltage Isolation Officer or under their direction.

Earths shall be in place on Electrical Apparatus prior to and during the placement and removal of test leads associated with equipment testing.

To protect from induced voltages and to ensure the operation of circuit protection, in the event of direct contact with live conductors, all SPME and scaffold shall be effectively earthed when used within an energized substation or switchyard.

6.6 **Locks Tags & Keys**

Locks used in association with these Regulations shall be of a type approved by the Registered Mine Manager (See Part F – Appendix).

Tags used in association with these Regulations shall be of a design approved by the Registered Mine Manager (See Part F – Appendix).

Personal locks and keys shall comply with the Port Authority Isolation and Tagging Procedures PR-OT10 (Electrical, Mechanical and Radiation).

**High Voltage Lock Out Station:**

a) The Electrical Supervisor at each site shall be responsible for all High Voltage Lock Out Stations,

b) Each Lockout Station shall contain a uniquely keyed lockset used in conjunction with a High Voltage Isolation. The only key for each set of locks is kept in the High Voltage Lock Out Station bearing the same identification number.

c) High Voltage Access Permit Point Locks and Keys shall be indelibly marked (e.g. engraved, stamped or labelled) with a unique identification that identifies the High Voltage Lockout Station to which they belong.

(See Part F – Appendix)

6.7 **Use of Barriers & Signs to define Safe Work Areas for High Voltage Access Permits**

Barriers and signage shall be arranged so that the Safe Work Area associated with a High Voltage Access Permit is clearly defined and made inaccessible to unauthorised persons.

There shall be only one entry point to the Safe Work Area. The High Voltage Access Permit shall be displayed with the High Voltage Lockout Station at the entry point.

Barriers shall consist of a combination of the following:

- Permanent structures such as walls, fences and gates
- White barrier tape where a permanent structure does not exist, is impractical to use or not suitable as a barrier
- Signage indicating that the safe work area is subject to a High Voltage Access Permit

6.8 **Records**

The following appointments shall be registered in the Myosh Training Management database:
- High voltage Permit Officer
- High Voltage Isolation Officer

A register of authorised persons shall have the name of the person, date of examination, High Voltage Permit Officer and High Voltage Switching Competency expiry date.

High Voltage Operator and High Voltage Permit officer appointment letters shall be entered in the Electrical Logbook and applicable databases.
7. High Voltage Vicinity Permit

A High Voltage Vicinity Permit shall be issued for all work and all machinery operation in a Power line Corridor including underground distribution cables. Where minimum clearances are assured during machinery transit / haulage in a Powerline Corridor the Site Electrical Supervisor shall be notified and no High Voltage Vicinity Permit is required.

7.1 Rules for High Voltage Vicinity Permits

High Voltage Vicinity Permits shall only be raised and cancelled by a High Voltage Permit Officer.

A person accepting a High Voltage Vicinity Permit shall be responsible for ensuring all High Voltage Vicinity Permit procedures are correctly followed for High Voltage Vicinity Permits under their control.

No High Voltage Vicinity Permit shall be issued unless the receiving person can demonstrate that they fully understand:

- the work to be carried out under the High Voltage Vicinity Permit
- the limits of the safe working area
- the precautions to be taken

No High Voltage Vicinity Permit shall be altered once issued. If changes are required, the High Voltage Vicinity Permit shall be cancelled and a new High Voltage Vicinity Permit issued.

Cancelled High Voltage Vicinity Permits shall be returned to the Electrical Supervisor, who shall retain that Permit and any associated documentation for a minimum of 2 years.

A High Voltage Vicinity Permit will not be required where travelling along a designated road for haulage and transit of machinery where the Safe Minimum Approach Distance can be assured.

7.1.1 Raising a High Voltage Vicinity Permit

The person requiring a High Voltage Vicinity Permit shall request access from the Site Electrical Supervisor or their Nominee. The request shall be accompanied by Safe Working Procedure or Job Hazard Analysis.

The High Voltage Permit Officer shall enter the following information on the High Voltage Vicinity Permit:

a) The work authorised for the Working Party
b) The time and date for commencement of the High Voltage Vicinity Permit
c) The term for which the High Voltage Vicinity Permit shall remain valid

7.1.2 Signing On and Off a High Voltage Vicinity Permit

The High Voltage Vicinity Permit Holder shall ensure that all persons wishing to work in the area covered by the High Voltage Vicinity Permit sign onto the High Voltage Vicinity Permit before commencing work.

The High Voltage Vicinity Permit Holder shall instruct the Working Party on the limits of the safe working area, placing particular emphasis on locations of Live Electrical Apparatus. These instructions shall be incorporated in a Safe Work Procedure or Job Hazard Analysis.

7.1.3 Transferring a High Voltage Vicinity Permit

There is no provision for transferring a High Voltage Vicinity Permit.

7.1.4 Cancelling a High Voltage Vicinity Permit

The High Voltage Vicinity Permit Holder shall have all members of the Working Party stop work and sign off the High Voltage Vicinity Permit.
Members of the Working Party shall be instructed to leave the area.
The High Voltage Vicinity Permit Holder shall, if applicable, remove safety barriers.
The High Voltage Vicinity Permit Holder shall:
   a) Sign to relinquish the High Voltage Vicinity Permit
   b) Return the High Voltage Vicinity Permit to a High Voltage Permit Officer, and notify them that
      work is complete and the area is clear
The High Voltage Permit Officer shall sign to cancel the High Voltage Vicinity Permit and return all
paperwork to the Electrical Supervisor who shall retain the permit for a minimum of 7 years.

8. High Voltage Access Permits

A High Voltage Access Permit is required in all cases where work is to be performed on or in close proximity to
High Voltage Electrical Apparatus where the Safe Working Distance cannot be maintained or where deemed
required by a High Voltage Permit Officer.

8.1 Rules for High Voltage Access Permits

Personnel shall not commence work on isolated Electrical Apparatus until they have placed their Personal
Lock onto the High Voltage Lockout Station and signed onto the relevant High Voltage Access Permit.
An approved Switching Program shall accompany all High Voltage Access Permits.
Only High Voltage Permit Officers shall raise and cancel High Voltage Access Permits.
The High Voltage Isolation Officer and High Voltage Permit Officer shall not be the same person when
raising or cancelling a High Voltage Access Permit.
Only High Voltage Permit Holders shall accept High Voltage Access Permits.
No High Voltage Permit Holder shall accept a High Voltage Access Permit unless they fully understand the
work to be carried out under the High Voltage Access Permit, and have full knowledge of the equipment
being worked on.
The High Voltage Permit Holder shall be responsible for ensuring all High Voltage Access Permit procedures
are correctly followed for permits under their control.
Personnel shall make positive contact with the High Voltage Access Permit Holder before signing and
locking onto the High Voltage Lockout Station and High Voltage Access Permit.
No High Voltage Access Permit shall have isolation points added or removed after the High Voltage
Isolation Officer and High Voltage Permit Officer have signed to validate the High Voltage Access Permit
isolation. If changes are required the permit shall be cancelled and a new High Voltage Access Permit
raised.
The reverse side of the High Voltage Access Permit form shall be used to record special conditions relating
to the High Voltage Access Permit. All entries on the back of the High Voltage Access Permit form shall
have a date and time.
Isolation Earths may be removed under a High Voltage Access Permit to allow testing using non Lethal
Currents. The Isolation Earths shall only be removed for the duration of the testing and shall be in place
during the connection / disconnection of the test equipment. All personnel not involved in the testing shall
sign and lock off the High Voltage Access Permit for the duration of the test.

8.1.1 Raising a High voltage Access Permit

The High Voltage Isolation Officer shall obtain approval to take the equipment out of service from the
supervisory personnel responsible for its operation.
The High Voltage Isolation Officer shall prepare a new Switching Program which shall cover both the isolating and de-isolating of the High Voltage Electrical Apparatus listed on the High Voltage Access Permit.

The High Voltage Isolation Officer shall have the new Switching Program checked and signed by a second High Voltage Isolation Officer, verifying the correctness of the program.

High Voltage Access Permits shall only be raised by a High Voltage Permit Officer in conjunction with a High Voltage Isolation Officer.

The High Voltage Permit Officer in consultation with the High Voltage Isolation Officer shall ensure that the High Voltage Access Permit form is completed indicating the equipment to be isolated and purpose for which the access is required.

The High Voltage Isolation Officer shall select a High Voltage Lockout Station and the High Voltage Lockout Station identification number shall be written in the space provided on the Access Permit form.

The High Voltage Isolation Officer shall undertake the switching as required by the Switching Program, ensuring that the equipment is tested, proven dead, and required earths applied.

At each Isolation Point, a High Voltage Lock Out Station Point Lock and a High Voltage Access Permit Point Tag shall be applied.

Note: Each High Voltage Access Permit Point Tag required for the High Voltage Access Permit shall have the associated Isolation Statement number, HV Switching number, Lockout Station number, equipment name, High Voltage Permit Officer’s name and the date written in the spaces provided.

On completion of the Isolation, the High Voltage Isolation Officer shall verify the isolation by trying to operate the equipment or testing and proving dead, whichever applicable, to ensure that the isolation has been completed successfully.

Note: In the case of activities which interfere with the insulation integrity of High Voltage cables, unless positive confirmation of isolation can be achieved by testing at the point of work, the isolation shall be verified by spiking the cable prior to disturbing the insulation. Checks on the system shall be made once the cable has been spiked to ensure no protective devices have operated, to ensure positive identification.

The High Voltage Isolation Officer shall place the key for the High Voltage Access Permit Locks inside the selected High Voltage Lockout Station.

The High Voltage Isolation Officer shall lock the High Voltage Lockout Station with a High Voltage Master Isolation Lock.

The High Voltage Isolation Officer(s) shall sign to record:

a) that all isolations relevant to the Switching Program are complete
b) the number of locks and tags placed
c) the High Voltage Permit point Lock Key was placed in the correct High Voltage Lockout Station
d) the location and number of earths that were applied, and the number of working earths
e) the relevant Safe Work Area as designated by the isolation

The high voltage Permit Officer shall verify that the switching, locking, tagging, testing and earthing has been carried out at the nominated locations by the High Voltage Isolation Officer.

The High Voltage Permit Officer shall tick the designated boxes on the permit form to acknowledge he or she has:

a) verified the isolation of all of the nominated equipment
b) checked High Voltage Access Permit Point Tag(s) have been placed on the correct isolation point(s)

**NOTE:** An Isolation Point which is found to be already isolated, with a High Voltage Isolation Point Lock may be deemed to be verified when the isolation cannot be verified by normal means.

The High Voltage Permit Officer shall sign the High Voltage Access Permit form and fill in the date and time to acknowledge validity and acceptance of the High Voltage Access Permit.

The High Voltage Permit Officer shall:

a) ensure that Working Earths are placed as required

b) record on the High Voltage Access Permit the number of Working Earths and/or Isolation Deemed Working Earths placed

c) instruct the Working Party on the conditions of the Permit and Safe Working Areas

d) sign the Permit to confirm these steps are completed

**Note:** Where Isolation Earths are in full view of the Working Party they may be deemed as Working Earths. RMU isolations earths for insulated cable may be deemed as working earths once visual verification has been established.

The High Voltage Access Permit form shall accompany the High Voltage Lockout Station ready for personnel to place a Personal Lock and sign on.

**Note:** For clarification, if the High Voltage Permit Officer or High Voltage Isolation Officer intends to work on the job as a member of the Working Party, they shall inform the High Voltage Access Permit Holder, place their Personal Lock on the High Voltage Lockout Station and sign on to the High Voltage Access Permit as a member of the Working Party.

### 8.1.2 Signing On and Off a High Voltage Access Permit

Personnel who want to sign onto a High Voltage Access Permit shall:

a) obtain the permission of the High Voltage Permit Holder, who will instruct the individual or Working Party on the conditions of the High Voltage Access Permit

b) satisfy themselves that the relevant safety precautions have been taken

c) identify the location of points of supply and the proximity of any live Electrical Apparatus

d) demonstrate to the High Voltage Permit Holder a satisfactory understanding of the safe area of work covered by the High Voltage Access Permit

e) check that they are signing onto the correct High Voltage Access Permit and that the High Voltage Lockout Station number on the top of the permit corresponds with the High Voltage Lockout Station number to which they are to apply their Personal Lock

f) apply their Personal Lock to the High Voltage Lockout Station

g) sign onto the High Voltage Access Permit

When their work is complete, leaving site or at the end of their shift, members of the Working Party shall sign off the High Voltage Access Permit and remove their Personal Lock from the High Voltage Lockout Station.

### 8.1.3 Transferring a High Voltage Access Permit – new High Voltage Permit Holder present

The current High Voltage Access Permit Holder shall advise the new High Voltage Access Permit Holder of any special circumstances that apply to the High Voltage Access Permit at that time, and note such advice on the back of the High Voltage Access Permit under System Conditions.
Note: Any such conditions shall be dated with each entry on the back of the High Voltage Access Permit

The current High Voltage Access Permit Holder shall sign the High Voltage Access Permit form in the transfer space, to transfer control of the High Voltage Access Permit.

The new High Voltage Access Permit Holder shall print their name and shall sign the High Voltage Access Permit form to accept responsibility for the High Voltage Access Permit.

Note: Personnel are NOT required to sign off or remove their lock during this procedure.

8.1.4 Transferring a High Voltage Access Permit – new High Voltage Permit Holder not present

The current High Voltage Access Permit Holder shall ensure that all personnel sign off the High Voltage Access Permit form and remove their Personal Locks.

The current High Voltage Access Permit Holder shall place a comment on the High Voltage Access Permit form regarding any special circumstances relevant to the High Voltage Access Permit at that time. All such entries shall be on the back of the High Voltage Access Permit and have a date and time.

The High Voltage Access Permit Holder shall sign in the transfer section of the High Voltage Access Permit form to relinquish responsibility for the High Voltage Access Permit.

The High Voltage Access Permit Holder shall leave the High Voltage Access Permit form with the High Voltage Lockout Station.

Upon re-commencement of the job, the new High Voltage Access Permit Holder shall verify that the High Voltage Lockout Station number on the High Voltage Access Permit form corresponds to the High Voltage Lockout Station number to which the Personal Locks will be applied.

The new High Voltage Access Permit Holder shall read all comments on the High Voltage Access Permit form, verify points of isolation, and print their name and sign in the acceptance box of the transfer section of the High Voltage Access Permit. The High Voltage Access Permit form shall then accompany the High Voltage Lockout Station and is then ready for personnel to place Personal Locks and sign on.

8.1.5 Cancelling a High Voltage Access Permit

All members of the Working Party shall:

a) sign-off the High Voltage Access Permit in the column adjacent to their sign-on signature
b) remove their Personal Lock from the High Voltage Lockout Station

The High Voltage Access Permit Holder shall:

a) verify that all Personal Locks have been removed from the Lockout Station
b) inspect the High Voltage Access Permit form to confirm that all signatures in the sign-on column have a corresponding identical signature in the sign-off column
c) ensure all working earths have been removed
d) verify that the equipment is safe and ready for de-isolation, or that an Out-Of-Service Lock and Tag has been placed, or that the equipment is isolated for other work
e) cross out any blank sign-on columns to prevent further use of the High Voltage Access Permit
f) Sign the High Voltage Access Permit to relinquish the High Voltage Access Permit, and record the time and date
g) return the relinquished High Voltage Access Permit to a High Voltage Isolation Officer

The High Voltage Isolation Officer shall:
a) Remove all High Voltage Access Permit Point Lock Tags and High Voltage Access Permit Point Tags

b) Remove all High Voltage Access Permit Isolation Earths as per verified High Voltage Switching Program

c) Sign to cancel the High Voltage Access Permit, and record time and date

d) De-isolate the equipment in accordance with the relevant Switching Program

e) Return all High Voltage Permit Point Locks and Key to the High Voltage Lockout Station

f) Forward the completed Switching Program and cancelled High Voltage Access Permit to the Electrical Supervisor

Cancelled high voltage Access Permits shall be returned to the Electrical Supervisor who shall retain the permit for a minimum of 7 years.

8.1.6 Special conditions

**Sign On / Off section or Transfer section of High Voltage Access Permit becomes full:**

The High Voltage Permit Officer shall prepare a new High Voltage Access Permit listing the associated High Voltage Access Permit number, the Electrical Apparatus for access, the purpose for access and the lockout station number. The new High Voltage Access Permit shall have the original High Voltage Access Permit number referenced in the ‘Isolation Detail’ space.

The High Voltage Permit Officer shall place a comment on the back of both the old and new High Voltage Access Permit forms stating the use of new form for sign on and off extension purposes.

The High Voltage Permit Officer shall securely attach the new High Voltage Access Permit form to the old High Voltage Access Permit form.

The High Voltage Access Permit forms shall accompany the High Voltage Lockout Station ready for Personnel to place Personal Locks and sign on.

All additional personnel who want to work on the job shall place their Personal Lock on the High Voltage Lockout Station and sign onto the new High Voltage Access Permit.

Both High Voltage Access Permits shall be treated as a single High Voltage Access Permit.

**Non-continuous Jobs:**

When a job is not to be continued on the next shift but will be continued on a subsequent shift, the High Voltage Permit Officer shall either:

a) Cancel the High Voltage Access Permit

b) Leave the High Voltage Access Permit in place and follow the procedures for transferring the High Voltage Access Permit when the new High Voltage Permit Officer is not present

c) Leave the High Voltage Access Permit in place if the existing High Voltage Permit Officer is to continue the work on a subsequent shift. The High Voltage Access Permit Holder is responsible for placing the box in a location that ensures the security of the High Voltage Access Permit from inadvertent signing on

**Multiple High voltage Access Permits on one (1) Isolation:**

Where multiple High Voltage Access Permits are required on the same isolation, the issue and cancel of each permit shall be identified on the switching program.

**High Voltage Access Permit Holder Responsibility:**
The responsibility for signing personnel on and off an Access Permit may be transferred to a High Voltage Access Permit Holder. The High Voltage Permit Officer shall be satisfied that the High Voltage Access Permit Holder fully understands the limits of the safe work area and conditions of the High Voltage Access Permit. The High Voltage Access Permit Holder shall be present when a person attaches their Personal lock to the High Voltage Lockout Station and signs onto the High Voltage Access Permit.

The procedure for signing personnel on and off a High Voltage Access Permit will be as for C.3. The High Voltage Access Permit Holder is not able relinquish the High Voltage Access Permit and shall return the High Voltage Access Permit to the High Voltage Access Permit Officer at the end of the job or when requested.

9. Out of Service Tags

Any person familiar with the Out of Service Tag procedures may place an Out of Service Tag and take equipment out of operation.

Note: The services of an Authorised High Voltage Isolation Officer may be required to render the equipment inoperative.

The procedure for placing an Out of Service Tag and taking equipment out of operation are those contained within the Isolation & Tagging Procedure PR-OT10.

10. Isolation Error or Violation

Where isolation errors, violations, breaches or problems are encountered in the use of these Regulations, then the rules and procedures for dealing with those issues are as for those contained within the Isolation & Tagging Procedure PR-OT10.
11. Responsibilities

Registered Mine Manager  Responsible for Safety on the mine site according to MSIR.

Safety Manager  Responsible for the review and changes to this procedure

Line Managers  Responsible for ensuring their personnel are trained and competent in this procedure; responsible for enforcement of this procedure

All Staff  Responsible for ensuring they conduct their work in accordance with this procedure

12. Any questions or in case of emergency

In case of emergency, please contact:

- Electrical Supervisor
- Site Health & Safety Advisor
- Maintenance Supervisor
13. Appendices

Permits and tags:

a) High Voltage Access Permit
b) High Voltage Vicinity Permit
c) High Voltage Switching Program
d) High Voltage Access Permit Point Lock
e) High Voltage Access Permit Point Lock Tag
f) High Voltage Lock Out Station
### 14. Distribution List

A Distribution List page is required if the document is released outside PHPA.

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<thead>
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<th>Version</th>
<th>Recipient</th>
<th>Organisation</th>
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</thead>
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<td>1</td>
<td>Health &amp; Safety Advisors; Maintenance Supervisors Operations Manager; Operations Superintendent; Health &amp; Safety Advisors; Shift Supervisors</td>
<td>Cervan Marine; POAGS</td>
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</tbody>
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<th>Date approved</th>
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</tr>
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<tr>
<td>1</td>
<td>Registered Mine Manager; Maintenance Manager; Health &amp; Safety Manager</td>
<td>19/08/2011</td>
<td>RMM</td>
</tr>
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**Details of Revision Changes**

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<th>Old section reference</th>
<th>New section reference</th>
<th>Description of change and date when change was made</th>
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