



Isolation and Lockout Procedure

Brief description

This Procedure defined the minimum requirements and methods used at Gladstone Ports Corporation (GPC) controlled sites to isolate all sources of hazardous energy that have potential to cause injury to persons, damage to equipment or damage to the environment, should they be left in an energised state when accessing plant and/or equipment for the purpose of maintenance, installation, inspection, modification or demolition tasks.

Document information	
Current version	#1774581 v2
First released	18 March 2022
Last updated	29 June 2022
Review frequency	Every 3 years or as required
Review before	29 June 2025
Audience	All GPC Employees / Contractors

Document accountability	
Role	Position
Owner	Asset Management & Project Services General Manager
Custodian	Reliability & Maintenance Manager

Endorsed by Reliability & Maintenance Manager on 18/03/2022

If you require any further information, please contact the Custodian.

This document contains confidential material relating to the business and financial interests of Gladstone Ports Corporation Limited. Gladstone Ports Corporation is to be contacted in accordance with Part 3, Division 3 Section 37 of the *Right to Information Act 2009* should any Government Agency receive a Right to Information application for this document. Contents of this document may either be in full or part exempt from disclosure pursuant to the *Right to Information Act 2009*.

The current version of this Procedure is available on GPC's Intranet.

© 2020 Gladstone Ports Corporation Limited ABN 96 263 788 242

Contents

1.	Terms, definitions and abbreviations	5
1.1.	Terms and definitions	5
1.2.	Abbreviations	8
2.	Introduction	9
2.1.	Purpose	9
2.2.	Scope	9
2.3.	Objectives	9
2.4.	Isolation principles	10
3.	Roles and responsibilities	10
3.1.	Isolation and Lockout System roles and responsibilities	10
4.	Isolation requirements	13
4.1.	General	13
4.2.	Isolation and Lockout Devices Equipment	15
4.3.	Tags	15
4.4.	Isolation tag	16
4.5.	Personal Lock Identification tag	16
4.6.	Out of Service tag	17
4.7.	Exclusive Control tag	18
4.8.	Lockbox tag	18
4.9.	Information tag	19
4.10.	Energised Work tag	19
4.11.	Locks	19
4.12.	Red Personal Lock	20
4.13.	Yellow Isolation Officers lock	21
4.14.	Black Lockbox lock	21
4.15.	Purple lock	22
4.16.	Lockbox	22
4.17.	Lockbox (12 hole)	23
4.18.	Lockbox (Lockable board)	23
4.19.	Hasps	24
4.20.	Lockout Hasp A	24
4.21.	Lockout Hasp B	25
4.22.	Other isolation and lockout devices	25
4.23.	Isolation plan	25
4.24.	Isolation Points and Isolation Control Points	26
4.25.	Exceptional circumstances	27
5.	Isolation and Lockout	28
5.1.	Isolation planning	28

5.2.	Isolation method selection	29
5.3.	Defining a Safe Isolation Boundary	30
5.4.	Creating a Safe Isolation Boundary	30
5.5.	Managing a Safe Isolation Boundary	31
5.6.	Performing work	31
5.7.	Single Point, Single Person Isolation (SPSP)	32
5.8.	Single Point, Multiple Person Isolation (SPMP)	33
5.9.	Multiple Point, Multiple Person Isolation (MPMP)	35
5.10.	Interlocking Lockboxes (linked isolations)	37
5.11.	Change of conditions	38
5.12.	Modifying an active Isolation Plan	38
5.13.	Suspend Isolation for temporary re-instatement	39
5.14.	Exclusive control	39
5.15.	Energised Work	40
5.16.	Critical plant or equipment	41
5.17.	Forced removal of a Lock	41
5.18.	Forced removal of a red Personal Lock	41
5.19.	Administrative removal	42
5.20.	Forced removal of a black Lockbox Lock, yellow Isolation Officer Lock or Purple Lock	42
5.21.	An Isolation Point cannot be locked	42
<hr/>		
6.	System Management	42
6.1.	High Voltage Isolation and Access procedure	42
6.2.	Management of Change	43
6.3.	Incidents and breaches	43
6.4.	Monitoring and review	43
6.5.	Training	43
6.6.	Auditing	44
6.7.	Records and archiving	45
<hr/>		
7.	Isolation and Verification methods	45
7.1.	Electrical Isolations for LV Electrical Work	45
7.2.	Electrical Isolations for Operational/Production purposes and Mechanical work	45
7.3.	Proving for electrical de-energisation	46
7.4.	Proving for electrical de-energisation (Operational / Mechanical Work)	46
7.5.	Phase Indication Lights	46
7.6.	Physical separation / disconnection	46
7.7.	Testing for Dead	46
7.8.	Radiation energy	47
7.9.	Mechanical isolations	47
7.10.	Stored Energy	47
7.11.	Tensioned conveyors	47

7.12.	Rotating equipment	47
7.13.	Springs	47
7.14.	Lifting and tensioning equipment	47
7.15.	Ropes under tension	48
7.16.	Mobile equipment	48
7.17.	Securing articulation points on mobile equipment	48
7.18.	Pressure	48
7.19.	Proving for mechanical de-energisation	49
7.20.	Piping and Process Isolations	49
7.21.	Double block and bleed	49
7.22.	Single block and bleed	50
7.23.	Spool removal and blank insertion	51
<hr/>		
8.	Appendices	52
8.1.	Appendix 1 – Related documents	52
8.2.	Appendix 2 - Isolation and Lockout flowcharts	54
8.3.	Appendix 3 – Revision history	66

1. Terms, definitions and abbreviations

1.1. Terms and definitions

In this Procedure:

“Authorised Person” means a competent person who has been appointed by the GPC to perform specific Isolation Lockout functions.

“Competent Person” means a person who has, through a combination of training, education and experience, acquired knowledge and skills enabling that person to perform a specified task correctly.

“Contractor” means any firm or person that is not an employee of the GPC, commissioned to do work in an area controlled by the GPC.

“Critical Safety and Environment System Register” means a list of all plant and equipment that performs a critical safety and environment functions on GPC sites.

“Custodian” means under the GPC governance structure, the Custodian is accountable for monitoring the application of the system and advising the Owner of the monitoring outcomes and is accountable for proposing system design or redesign and facilitation of conformance.

“De-energised” means all sources of energy removed and dissipated from the item, plant, equipment, or system process.

“De-isolate” means removal of an isolation

“Energised Work” means work that can be performed under controlled conditions on live plant or equipment that cannot remain isolated to complete the task.

“Energised Work Tag” means a tag that is attached to plant or equipment when there is a need to work under the Energised Work process.

“Exclusive Control” is where a restricted work group is authorised to have access to isolated plant or equipment that could be moved or energised by an energy source other than its own.

“Exclusive Control Tag” means a tag that is attached to an Isolation Point or Isolation Control Point to identify that the Isolation Point or Isolation Control Point is under Exclusive Control.

“Hasp” is a Lockout device used to extend a locking point for additional locks.

“High Voltage Isolation and Access Procedures (HVIA)” means the GPC process that is approved for entering the encroachment distance of an exposed high voltage part.

“Information Tag” means a tag that is attached to plant or equipment and used to record and communicate general or technical information about plant or equipment.

“Inherent” means existing as a natural and permanent quality of the plant or equipment.

“Isolate” means the act of controlling and securing Potentially Hazardous Energy Sources.

“Isolated” means a state of being disconnected from all possible energy sources to prevent inadvertent energisation of plant or equipment.

“Isolation Plan” is a documented process in the form of either:

- An Isolation Permit
- A Standard Isolation List

- A Safe Work Instruction
- An Isolation Tag

“Isolation Point” means the direct point which shall be controlled by an Isolation Lock and Isolation Tag to prevent the introduction of energy from a Potentially Hazardous Energy Source.

“Isolation Control Point” means the point where an Isolation Lock can be placed indirectly (e.g. Lockbox) to prevent the introductions of energy from a Potentially Hazardous Energy Source.

“Isolation Lock” means a lock that prevents a change of state of an Isolation Point. This shall be either a:

- Red Personal Lock
- Black Lockbox Lock
- Yellow Isolation Officer Lock

“Isolation and Lockout Device” means a GPC approved device that used positive means to hold an Isolation Points or Isolation Control Point in a safe position to prevent unexpected operation or energisation of plant or equipment.

“Isolation Officer” means a person who has been authorised to perform the required state change of a nominated Isolation Point.

“Isolation Officer Lock” means a yellow lock that is commonly keyed and used to secure and identify plant or equipment that has been isolated and verified for de-energisation.

“Isolation Planner” means a person who has been authorised to determine all the Potentially Hazardous Energy Sourced that may impact on a Scope of Work and prepare the required documentation to create the necessary Safe Isolation Boundary.

“Isolation Tag” means a tag attached to an Isolation Point or Isolation Control Point to indicate that is has been isolated and verified.

“Isolation User Group” means an appointed group of individual Lockout and isolation stakeholders who meet regularly to review the isolation procedure and documentation for compliance. The group also review the outcomes from system audits and recommends corrective actions for non-compliances in the application of the Isolation and Lockout Procedure.

“Isolation Verification” means a process where the isolation of plant or equipment is proven to be effective by using an appropriate testing method to verify that Potentially Hazardous Energy Sources have been controlled and cannot present a hazard.

“Lockbox” means an Isolation and Lockout Device used to control one or multiple Isolation Points or Isolation Control Points.

“Lockbox Lock” means a set of black Lockbox Locks which has only one key, and the key in contained within a Lockbox used to create a Safe Isolation Boundary.

“Lockbox Tag” is a purple and white tag that shall only be placed under the Purple Lock secured to the front of a Lockbox to provide sufficient information to locate the Person in Charge of Work (PICOW).

“Lockout” means an act of physically applying an Isolation and Lockout Device to secure an Isolation Point or Isolation Control Point in a safe position to prevent unexpected operation or energisation of plant or equipment.

“Out of Service Tag” is a yellow and black tag that is attached to plant or equipment that should not be started or operated, as this could result in damage to the plant or equipment or cause injury or harm to a person.

“Owner” means under the GPC governance structure, the Owner is accountable for approval and has the authorised discretion to implement or significantly change the system.

“Personal Lock” is a red lock used by authorised GPC employees and Contractors to maintain control of isolated plant, equipment or systems whilst they are working on that plant, equipment or system, to prevent unexpected operation or energisation.

“Personal Lock Holder” means a person who is authorised to place a red Personal Lock on plant, equipment or systems to prevent unexpected operation or energisation.

“Personal Lock Identification Tag” is a pink and white tag that may be used in conjunctions with a red Personal Lock to identify the Owner of the lock if it does not meet GPC requirements for a Personal Lock.

“Person in Charge of Plant (PICOP)” means the person that has current control over the plant or equipment required to be controlled under this Isolation and Lockout Procedure.

“Person in Charge of Work (PICOW)” means an Authorised Person that has accepted responsibility for ensuring a Safe Isolation Boundary for a work group.

“Potentially Hazardous Energy Source” means a source of energy or substance within existing plant or equipment that has potential to cause injury or harm or damage.

“Positive Isolation” provides an absolute separation between Potentially Hazardous Energy Source and people, regardless of a change in plant or equipment conditions. E.g. this can be achieved by an Isolation Officer racking out a circuit breaker, removing a fuse, unplugging a de-contactor, disconnecting a GTU, removing a valve or inserting a blank, blind or spade.

“Proven Isolation” is one that has been tested and confirmed as effective under current operating conditions to verify that the isolator does isolate the Potentially Hazardous Energy Source. E.g. this can be achieved by an Isolation Officer testing for dead or zero volts, phase indication lights, blocking and bleeding pressure from fluid, gas, air or steam.

“Purple Lock” is used to indicate the current status of a Lockbox.

“Safe Isolation Boundary” means the isolation of all inherent sourced of hazardous energy that are required to allow a Scope or Work to be safely completed.

“Scope of Work” means a description of the work that is required to be completed. The description shall have sufficient detail to enable the Safe Isolation Boundary to be defined

“Shall” indicates the statement is mandatory. May be interchanged with ‘must’ or ‘required’.

“Should” is used in an advisory or discretionary sense. The action is recommended or optional.

“Stored Energy” means energy within an isolated system that is required to be de-energised, dissipated, contained or controlled before work can be commenced safely.

“Verify” means a physical check to confirm that an action is correct and completed.

Terms that are capitalised and not otherwise defined in this Procedure are defined in the GPC Corporate Glossary Instruction (as listed in Appendix 1 – Related documents).

1.2. Abbreviations

“**AC**” means Alternating Current

“**DC**” means Direct Current

“**GPC**” means Gladstone Ports Corporation

“**GTU**” means Gravity Take Up

“**HVIA**” means High Voltage Isolation and Access

“**IUG**” means Isolation User Group

“**IO**” means Isolation Officer

“**IP**” means Isolation Planner

“**LV**” means Low Voltage

“**PICOP**” means Person in Charge of Plant

“**PICOW**” means Person in Charge of Work

“**PLH**” means Personal Lock Holder

“**PORT**” means **P**ause **O**bserve **R**isk Assess **T**reat Risk

“**SIL**” means Standard Isolation List

“**SPSP**” means Single Point, Single Person

“**SPMP**” means Single Point, Multiple Person

“**MPMP**” means Multiple Point, Multiple Person

“**SWI**” means Safe Work Instruction

2. Introduction

2.1. Purpose

The purpose of this procedure is to describe the minimum requirements and processes used at Gladstone Ports Corporation (GPC) controlled sites to isolate all inherent sources of hazardous energy that have potential to cause injury to persons, damage to Plant or Equipment or to the environment should they be left, or inadvertently, energised when accessing Plant or Equipment for maintenance and repair, installation, inspection, cleaning, modification or commissioning and demolition tasks.

All Potentially Hazardous Energy Sources created by the Scope of Work shall be managed by the risk assessments for the Scope of Work.

2.2. Scope

This procedure shall apply to:

- 2.2.1. All employees and Contractors
- 2.2.2. All Plant or Equipment at all GPC controlled sites unless exempt and in writing.
- 2.2.3. All Potentially Hazardous Energy Sources that have the potential to cause injury or harm.

Potentially Hazardous Energy Sources could include but are not limited to electrical, mechanical, hydraulic, pneumatic, chemical, compressed air and gas, energy stored by pressure, capacitors, vehicle batteries, tension in springs, chains, belts and ropes and the potential from suspended parts (gravity) and equipment due to its position.

- 2.2.4. Excludes Port Alma and Port of Bundaberg.

These facilities, due to the nature of their infrastructure, shall manage all potentially hazardous energy sources through the application of GPC's Safety Risk Management Procedure and the Electrical Safety Act for all electrical energy sources.

2.3. Objectives

The objectives of this Procedure are to ensure:

- 2.3.1. A safe, reliable and robust isolation process is in place to protect people, Plant or Equipment and the environment.
- 2.3.2. Statutory requirements are met.
- 2.3.3. Isolation and Lockout principles and practices are standardised across GPC controlled sites and complied with at all times.
- 2.3.4. All roles and responsibilities are clearly defined for the Isolation and Lockout System and that all persons involved in this process are trained, competent and authorised.
- 2.3.5. Audits are conducted to monitor compliance by site Authorised Personnel.
- 2.3.6. Any incidents or breaches of this procedure follow the GPC reporting and investigation processes.

2.4. Isolation principles

The Isolation and Lockout System is based on the following principles:

1. All Potentially Hazardous Energy Sources shall be identified, removed and/or isolated, and verified for de-energisation before commencing work.
2. All Isolation Points or Isolation Control Points that form part of the isolation shall be locked to prevent inadvertent operation or activation of the Plant or Equipment.
3. Only personnel who hold approved competencies and are authorised shall isolate a piece of Plant or Equipment.
4. No person shall commence work on isolated Plant or Equipment until face-to-face communication has been received by the Person in Charge of Work and they have applied their red Personal Lock to the isolation.
5. Red Personal Locks shall only be attached and removed by their Owner.
6. Two Authorised Person shall be involved in the design and creation of a Safe Isolation Boundary with the exception of a Single Point, Single Person Isolation Method.

3. Roles and responsibilities

3.1. Isolation and Lockout System roles and responsibilities

- 3.1.1. Protection by the Isolation and Lockout System relies on people being compliant with the requirements and application of the Isolation and Lockout Procedure.
- 3.1.2. All Isolation and Lockout roles shall only perform functions for which they have been trained and deemed competent and authorised for.
- 3.1.3. A person can fulfil multiple Isolation and Lockout roles as long as they are trained, competent and authorised. E.g. the one person could perform roles as an Isolation Planner, Isolation Officer, Person in Charge of Work and Personal Lock Holder

To assist GPC Representatives to better understand their responsibilities, key responsibilities and accountabilities are summarised below:

Role	Responsibilities
General Manager	<ul style="list-style-type: none">• Ensure the Isolation and Lockout Procedures meet or exceed GPC Standards and comply with the regulatory requirements.
Area Managers	<ul style="list-style-type: none">• Ensure subordinates have sufficient resources to fulfil their isolation role accountabilities.• Ensure the Isolation and Lockout System is audited, effective and compliant.• Authorise the forced removal of a red Personal Lock and ensure that a plan is in place to prevent the Personal Lock Holder from being able to access the Safe Isolation Boundary that was controlled by their red Personal Lock.

Role	Responsibilities
Safety & Training Manager	<ul style="list-style-type: none"> • Provide assistance to implement and sustain the Isolation and Lockout Procedure. • Provide curriculum, training, assessment and records management to support the Isolation and Lockout Procedure.
Area Superintendents	<ul style="list-style-type: none"> • Ensure Employees and Contractors comply with the Isolation and Lockout Procedure. • Ensure there are sufficient competent people to fulfil Isolation and Lockout roles. • Authorise Energised Work to be undertaken. • Compile audit findings from their work area each month and submit key learnings to the Isolation User Group. • Ensure that appropriate investigations are conducted into breaches of the Isolation and Lockout Procedure. • Ensure corrective actions from incident breach investigations are implemented.
Area Supervisors	<ul style="list-style-type: none"> • Ensure employees are trained in the correct use and are competent with the Isolation and Lockout Procedure. • Authorise employees and Contractors to perform functions under this procedure. • Ensure the Isolation and Lockout Procedure is being used effectively and the requirements are being met. • Ensure that Isolation and Lockout hardware is readily accessible to all employees. • Authorise alternative control measures when critical Plant or Equipment is isolated. • Authorise the forced removal of black Lockbox Locks, yellow Isolation Officer Locks or Purple Locks.
GPC Safety Team	<ul style="list-style-type: none"> • Keep abreast of legislative requirements and standards relating to managing Isolation and Lockout and share relevant information to workgroups. • Monitor compliance to the Isolation and Lockout Procedure. • Support Area Supervisors in the interpretation of legislation and the application of the Isolation and Lockout Procedure.
Isolation Officer (IO)	<ul style="list-style-type: none"> • Performs isolations on Plant or Equipment in accordance to the requirements of the GPC Isolation and Lockout Procedure. • Proves Isolation Verification through an appropriate method. • Performs the de-isolation of Plant or Equipment. • Notify PICOP of Plant or Equipment availability.

Role	Responsibilities
	<ul style="list-style-type: none"> • Close out Isolation Permits.
Isolation Planner (IP)	<ul style="list-style-type: none"> • Consult, develop and approve documented Isolation Plans in accordance with the Isolation and Lockout Procedure for specific Plant or Equipment, or systems and areas for which they are authorised.
Person in Charge of Plant (PICOP)	<ul style="list-style-type: none"> • Authorises the release of Plant or Equipment from service for a nominated period of time.
Person in Charge of Work (PICOW)	<ul style="list-style-type: none"> • Verifies the Plant or Equipment for the Scope of Work to be carried out with an Isolation Planner so that the Safe Isolation Boundary can be determined, and the required Isolation Points or Isolation Control Points identified. • Identifies that all isolation requirements of an Isolation Plan are met for procedural compliance and accuracy. • Activates and controls a Lockbox controlling the isolation for a Scope of Work. • Communicates face to face with all Personal Lock Holders undertaking the work to ensure they are aware of the Scope of Work, Safe Isolation Boundary and provides permission for Personal Lock Holders to apply their red Personal Lock to an Isolation Point or Isolation Control Point and sign on the documented Isolation Plan. • Ensures that all Personal Lock Holders have removed their red Personal Lock from an Isolation Point or Isolation Control Point such as a Lockbox at the completion of work and have signed off the documented Isolation Plan. • Controls if other workgroups requiring the same access to an Isolation Point or Isolation Control Point for a different Scope of Work are permitted to do so. • Receipts and surrenders an Isolation permit.
Personal Lock Holder (PLH)	<ul style="list-style-type: none"> • Follows Isolation and Lockout Procedure by correctly applying their red Personal Lock to an Isolation Point or Isolation Control Point to work on isolated Plant or Equipment. • Communicate face to face with the Person in Charge of Work prior to applying their red Personal Lock to ensure they understand the Scope of Work, Safe Isolation Boundary and the Isolation Points or Isolation Control Points involved. • Understand the requirements of the Isolation Plan. • Sign on and off Isolation Plans. • Remove their red Personal Lock from any Isolation Point or Isolation Control Point when they have completed their work, absent for a significant period of time in relation to the

Role	Responsibilities
	<p>expected duration of the work, leaving site or when directed by the Person in Charge of Work.</p> <ul style="list-style-type: none"> • Advises the Person in Charge of Work of any abnormalities prior to the de-isolation of an Isolation Plan and ensures an “Out of Service” or “Information” tag is applied to the Isolation Point or Lockbox. E.g. work task not completed.
Isolation User Group (IUG)	<ul style="list-style-type: none"> • Provide leadership/technical assistance to Area Managers and subordinates to implement and sustain the Isolation and Lockout Procedure. • Review isolation incidents and audits related to the application of the isolation and Lockout process, ensuring approved recommendations are implemented effectively.

4. Isolation requirements

4.1. General

- 4.1.1. Any Potentially Hazardous Energy Source that could cause potential injury or harm when conducting inspection, cleaning, access, servicing, repairs, maintenance or modification shall be identified, isolated, verified for de-energisation and locked out before commencing work.
- 4.1.2. All Plant or Equipment required to be isolated and locked out shall be clearly labelled and each Isolation Point shall be uniquely identifiable for the plant, equipment, circuit, system or process for which they have direct control.
- 4.1.3. Any Plant or Equipment Isolation Points without a unique identifier shall have a work order generated in the Computerised Maintenance Management System to implement the necessary identification requirements.
- 4.1.4. All Plant or Equipment Isolation Points shall have the ability to be locked. Plant or Equipment unable to be locked out shall be managed through [Section 5.21 - An Isolation Point cannot be locked](#).
- 4.1.5. All Plant or Equipment whether purchased, constructed or modified as part of new or existing Plant or Equipment, shall follow a safe design approach in regard to Isolation and Lockout. This shall include:
- a) Ensuring effective isolation can be achieved, i.e. the Isolation Point can be tested to prove that the Potentially Hazardous Energy Sources has been controlled and cannot present a hazard.
 - b) Limiting the number and complexity of lockable Isolation Points.
 - c) A system to permanently label and uniquely identify all Plant or Equipment Isolation Points.
 - d) Direct linking of all Plant or Equipment unique identifiers and descriptions to site drawings.
- 4.1.6. All Plant or Equipment required to be isolated and locked out under this Isolation and Lockout Procedure shall have a documented Isolation Plan developed prior to isolation. Documented Isolation Plans shall exist under this Isolation and Lockout Procedure as one of the following:

- (a) An Isolation Permit.
 - (b) Pre-approved and authorised Safe Work Instruction.
 - (c) Pre-approved and authorised Standard Isolation List.
 - (d) Isolation Tag for SPSP and SPMP Isolation Methods
- 4.1.7. All Plant or Equipment required to be isolated and locked out shall be verified for de-energisation. Isolation Verification is a critical step in the isolation process. The isolation process is not complete or considered safe until verified.
- 4.1.8. All Plant or Equipment required to be verified for de-energisation under this Isolation and Lockout Procedure shall be communicated and authorised on an Isolation Tag.
- 4.1.9. All Plant or Equipment that performs a critical safety and environment function shall be identified in a register. Refer to [eDocs #1514975](#) Critical Plant or Equipment Register for Isolation and Lockout Reference.
- 4.1.10. Before implementing a critical Plant or Equipment isolation, alternative controls shall be identified and documented with relevant level of approval sought, prior to the isolation being performed. Critical Plant or Equipment examples include but are not limited to:
- a) Fire and Gas Detection and Suppression Systems.
 - b) Safety Protection Systems – safety eye wash or shower system.
 - c) Communications Systems - radios, phones.
 - d) Emergency Supply Systems – sump pumps, backup generator supply.
 - e) Security Systems.
 - f) Regulated Power Systems (RPS) or Uninterruptible Power Systems (UPS).
 - g) Environmental Control Systems – wharf slurry system
- 4.1.11. Where Plant or Equipment is required to be isolated as part of a current GPC approved permit, the Isolation Permit number shall be cross referenced on the approved permit. Approved permits include but are not limited to:
- a) Confined Space.
 - b) Excavation/Permit to Dig.
 - c) Floor Removal.
 - d) Hot Work.
 - e) High Voltage Isolation Access.
- 4.1.12. Isolating is the physical act undertaken to prevent the uncontrolled release of energy that may cause injury to personnel, damage to Plant or Equipment or the environment. Regardless of the energy type, all isolations shall involve some common steps for adequacy of protection. The means of achieving each step will vary according to the Plant or Equipment and energy source involved but the common steps are detailed below:
1. **PLAN** the Isolation (identification of all hazardous energy sources and Isolation Points).
 2. **RELEASE** the Plant or Equipment from service.
 3. **STOP** the Plant or Equipment prior to isolating.
 4. **ISOLATE** the Plant or Equipment from all Potentially Hazardous Energy Sources.
 5. **VERIFY** each Isolation Point for de-energisation.
 6. **LOCKOUT & TAGOUT** each Isolation Point or Isolation Control Point.

7. **DE-ISOLATE** the Plant or Equipment.
 8. **RETURN** the Plant or Equipment to service when safe to do so.
- 4.1.13. The only exception where Plant or Equipment is not required to be locked out under the Isolation and Lockout System is when the Plant or Equipment is physically disconnected from all Potentially Hazardous Energy Sources, and any connection point of the Plant or Equipment that may introduce a Potentially Hazardous Energy Source has suitable controls in place to prevent the unauthorised introduction of a Potentially Hazardous Energy Source.
- 4.1.14. Examples of work where no Lockout is required:
- a) Installing / erecting equipment or removing redundant Plant or Equipment that is not connected to any possible energy source where there can be no Isolation Point.
 - b) Working on portable electrical equipment with the plug pulled out of the socket and under direct control of the worker.
- 4.1.15. The control of Potentially Hazardous Energy Sources for a Safe Isolation Boundary may involve:
- a) Lockboxes controlling multiple Isolation Points or Isolation Control Points, and/or
 - b) Red Personal Locks applied directly to an Isolation Point.
- 4.1.16. Any tag or lock associated with a Safe Isolation Boundary shall be removed in a timely manner when it is no longer applicable.
- 4.1.17. No Isolation Lock shall be applied that consumes the last available position for an Isolation Lock (except where a Single Point, Single Person isolation is used).
- 4.1.18. All entries on forms and tags that are applied under these Isolation Procedures shall be completed in full and be clear and legible for others to read before being applied.
- 4.1.19. An individual shall only be permitted to use up to three (3) red Personal Locks to secure a Safe Isolation Boundary for a Scope of Work.
- 4.1.20. All work that requires any Potentially Hazardous Energy Sources not to be isolated shall have an appropriately documented and authorised risk assessment as per [Section 5.15 Energised Work](#).

4.2. Isolation and Lockout Devices Equipment


- 4.2.1. Isolation and Lockout Devices shall be used to secure an Isolation Point or Isolation Control Point in the isolated position and be provided where required.
- 4.2.2. Approved GPC Isolation and Lockout Devices are listed in [eDocs #1514594](#) Isolation and Lockout Devices register and shall only be used to hold an Isolation Point or Isolation Control Point in a safe position to prevent unexpected operation or energisation of Plant or Equipment.
- 4.2.3. All Isolation and Lockout Devices require approval from the Isolation User Group.

4.3. Tags

- 4.3.1. The primary purpose of a tag is to provide information and/or a warning. Tags shall only be used as administrative controls and shall only be considered as a means of providing information to others.
- 4.3.2. Tags shall only be applied by persons as outlined in this Isolation and Lockout Procedure.

- 4.3.3. All tags that are applied under the Isolation and Lockout Procedure shall be completed in full before being applied.
- 4.3.4. Tags shall be colour coded and consistent with the Australian Standard/Code of Practice. There are seven tags used in the GPC Isolation and Lockout System:
- Isolation Tags.
 - Personal Lock Identification Tags.
 - Out of Service Tags.
 - Exclusive Control Tags.
 - Lockbox Tags.
 - Information Tags.
 - Energised Work Tags.

4.4. Isolation tag

	Purpose	<ul style="list-style-type: none"> Indicates that an Isolation Point or Isolation Control Point has been isolated and verified for de-energisation by an authorised Isolation Officer
	Features	<ul style="list-style-type: none"> Red and white Labels – DANGER & ISOLATION TAG
	Has provisions for	<ul style="list-style-type: none"> Date If applicable, Permit Number Description of the Plant or Equipment being isolated Unique identifier of the Isolation Point being isolated Isolated Condition Reason for Isolation How the Plant or Equipment was proven for de-energisation Name of Isolation Officer(s) Isolation Plan Sign On, Sign Off section
	Who uses it	<ul style="list-style-type: none"> Isolation Officer
	Where placed	<ul style="list-style-type: none"> Isolation Points and Isolation Control Points

4.5. Personal Lock Identification tag


	Purpose	<ul style="list-style-type: none"> To identify a Personal Lock Holder if their red Personal Lock does not provide the users information required by the Isolation and Lockout Procedure
	Features	<ul style="list-style-type: none"> Pink and White Label - PERSONAL LOCK IDENTIFICATION TAG

	Has provisions for	<ul style="list-style-type: none"> Person's name Person's signature Contractor company name or work supervisor 24-hour contact number
	Who uses it	<ul style="list-style-type: none"> Personal Lock Holder
	Where placed	<ul style="list-style-type: none"> Isolation Points or Isolation Control Points with a red Personal Lock

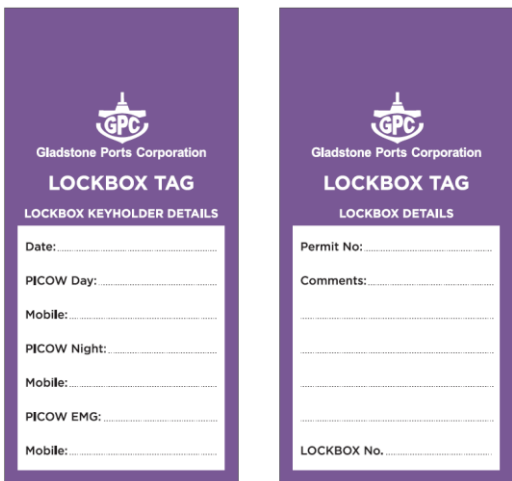
4.6. Out of Service tag

	Purpose	<ul style="list-style-type: none"> To visually indicate unserviceable Plant or Equipment due to a fault, damage or malfunction, or is unsafe to operate or start. Information shall communicate the status of the condition of the Plant or Equipment. Out of Service Tags shall be securely fixed and clearly visible to convey a clear "OUT of SERVICE" warning that failure to comply may result in damage to the Plant or Equipment or personal injury. Out of Service Tags shall only be removed by a person who is competent to determine that the item of Plant or Equipment is fit for service and only after verifying the Plant or Equipment is safe to be returned to service.
	Features	<ul style="list-style-type: none"> Yellow and Black Label – OUT OF SERVICE
	Has provisions for	<ul style="list-style-type: none"> Date Person's Name Company Plant or Equipment Description Reason for Tag Signature
	Who uses it	<ul style="list-style-type: none"> A Competent Person
	Where placed	<ul style="list-style-type: none"> Isolation Points if the Plant or Equipment is isolated Attached to a Lockbox Other Plant or Equipment control points


4.7. Exclusive Control tag

	Purpose	<ul style="list-style-type: none"> To visually indicate that Plant or Equipment could be moved or energised by an energy source other than its own even though all means of Positive Isolation have been implemented To warn against dangers that may be present due to external or potential energy sources that can exist even though all means of Positive Isolation have been implemented.
	Features	<ul style="list-style-type: none"> Blue Label – EXCLUSIVE CONTROL
	Has provisions for	<ul style="list-style-type: none"> Date Isolation Point Reason Name of Person in Control Person in Control Contact Details Lockbox Number
	Who uses it	<ul style="list-style-type: none"> PICOW
	Where placed	<ul style="list-style-type: none"> Isolation Points or Isolation Control Points for Exclusive Control Attached to the front of a Lockbox Other Plant or Equipment control points

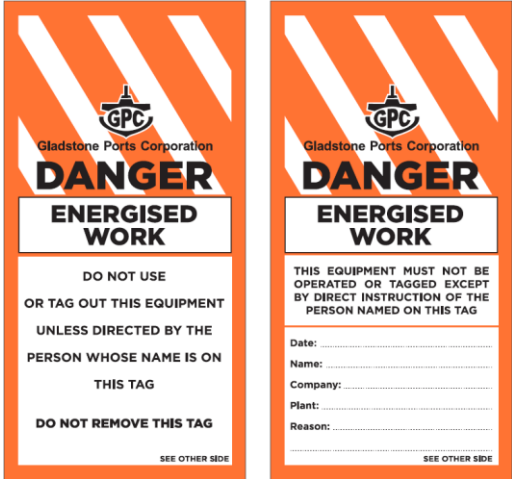
4.8. Lockbox tag

	Purpose	<ul style="list-style-type: none"> Secured to the front of the Lockbox with a Purple Lock to provide sufficient information to identify and locate the PICOW
	Features	<ul style="list-style-type: none"> Purple Label – LOCKBOX TAG
	Has provisions for	<ul style="list-style-type: none"> Date PICOW details 24-hour contact Permit Number Comments Lockbox Number
	Who uses it	<ul style="list-style-type: none"> PICOW
	Where placed	<ul style="list-style-type: none"> Front of a Lockbox

4.9. Information tag

	Purpose	<ul style="list-style-type: none"> To record and communicate general or technical information about Plant or Equipment to which it is attached
	Features	<ul style="list-style-type: none"> Green Label – INFORMATION
	Has provisions for	<ul style="list-style-type: none"> Date Person's Name Company Signature Details of the information to be conveyed
	Who uses it	<ul style="list-style-type: none"> Placed by a person Removed by any relevant person when the information is no longer relevant
	Where placed	<ul style="list-style-type: none"> On any place where the information is relevant

4.10. Energised Work tag

	Purpose	<ul style="list-style-type: none"> To alert people that Plant or Equipment that is being worked on is energised Identify the Plant or Equipment and Person responsible for the control of all activities and removal of the tag Communicates that no other work tasks on the same Plant or Equipment shall be conducted
	Features	<ul style="list-style-type: none"> Orange and White Label – ENERGISED WORK
	Has provisions for	<ul style="list-style-type: none"> Date Person's Name attaching the tag Company Plant or Equipment under Energised Work Reason
	Who uses it	<ul style="list-style-type: none"> Person in Control of Energised Work
	Where placed	<ul style="list-style-type: none"> Energised Work Control Points which may include Isolation Points and Isolations Control Points required for the Scope of Work

4.11. Locks

4.11.1. Only locks approved by the GPC shall be used for the Isolation and Lockout System.

4.11.2. All Isolation and Lockout System locks shall only be made available, applied and removed by Competent and Authorised Persons.

4.11.3. All locks shall:

- a) Be clearly identifiable and classified for its isolation type or purpose by colour or type.
- b) Be clearly identifiable by description, number or name.
- c) Be registered by description, number or name.
- d) Not be used for other general purposes.

4.11.4. The forced removal of any lock shall be deemed a breach and shall only be forcibly removed under the Forced Lock Removal Process.


4.11.5. An Isolation Lock shall secure an Isolation Point or Isolation Control Point against alteration to provide a safe, secure position to prevent accidental or inadvertent movement of the Plant or Equipment, or system it has control of.

4.11.6. Isolation and Lockout System locks used under this procedure shall be:

- a) Red Personal Lock.
- b) Yellow Isolation Officer Lock.
- c) Black Lockbox Lock.
- d) Purple Lock.

4.11.7. No lock shall be applied that occupies the last available lock position on an Isolation Point or Isolation Control Point (except where a Single Point, Single Person isolation is used).

4.12. Red Personal Lock

	Purpose	<ul style="list-style-type: none"> • To protect a Personal Lock Holder when locking onto an isolation
	Features	<ul style="list-style-type: none"> • Red • Label – DANGER LOCKED OUT • Sufficient information to contact the PLH • Uniquely keyed
	Who uses it	<ul style="list-style-type: none"> • Personal Lock Holder
	Where placed	<ul style="list-style-type: none"> • On a hasp on an Isolation Point or Isolation Control Point • On the side of a Lockbox • Directly on the Isolation Point (no hasp) for Single Point, Single Person isolation

Notes:

The red Personal Locks shall contain sufficient information to enable the person who placed the lock to be immediately identifiable. Personal Locks that do meet these attributes shall be used in conjunction with a Personal Lock Identification Tag.


A red Personal Lock shall only be applied by an Authorised Personal Lock Holder to an Isolation Point or Isolation Control Point prior to commencing a task.

All Authorised Personal Lock Holder can be issued up to three Red Personal Locks. Where there is a requirement for more than one Red Personal Lock, a documented process and supervisor's approval will be required.


Red Personal Locks shall be removed when a Personal Lock Holder:

- Has completed their work,
- Is leaving site,
- Will be absent for a significant period of time in relation to the expected duration of the work,
- Is instructed by the Person in Charge of Work.

4.13. Yellow Isolation Officers lock


	Purpose	<ul style="list-style-type: none">• Lock an Isolation Point or Isolation Control Point for a Single Point, Multiple Person isolation method• Secure black Lockbox Lock key in the Lockbox and lock the isolation documentation holder to the Lockbox
	Features	<ul style="list-style-type: none">• Yellow• Label – DANGER LOCKED OUT• Keyed alike for authorised Isolation Officers
	Who uses it	<ul style="list-style-type: none">• Isolation Officers
	Where placed	<ul style="list-style-type: none">• With a Lockout hasp on an Isolation Point or Isolation Control Point• On the side of a Lockbox with an isolation documentation holder

4.14. Black Lockbox lock

	Purpose	<ul style="list-style-type: none">• Lock an Isolation Point or Isolation Control Point for a Multiple Point, Multiple Person isolation method• Secure black Lockbox Lock key in the Lockbox and lock the isolation documentation holder to the Lockbox
	Features	<ul style="list-style-type: none">• Black• Label – DANGER LOCKED OUT• Lockbox number written on lock• Registered• Keys – one key for lockset with each lock in the Lockbox keyed alike
	Who uses it	<ul style="list-style-type: none">• Isolation Officers

	Where placed	<ul style="list-style-type: none"> • With a Lockout hasp on an Isolation Point or Isolation Control Point • On the front of a Lockbox with an Isolation Tag when the Lockbox Interlocking process is used
<p>Notes:</p> <p>A black Lockbox Lock shall always be applied with an Isolation Tag or a DNOT tag under the HVIA procedure.</p>		

4.15. Purple lock

	Purpose	<ul style="list-style-type: none"> • To communicate the status of a Lockbox
	Features	<ul style="list-style-type: none"> • Purple • Label – DANGER LOCKED OUT • Uniquely keyed • Uniquely named, numbered and associated with the corresponding Lockbox
	Who uses it	<ul style="list-style-type: none"> • PICOW
	Where placed	<ul style="list-style-type: none"> • Inside a Lockbox – Lockbox not currently in use • Unlocked on side of a Lockbox – A Safe Isolation Boundary has been established and ready for use by the PICOW; or PICOW has relinquished control of the Lockbox and no longer possesses the Purple Key • Locked on side of a Lockbox – Under control of the PICOW but not available for use • Front of a Lockbox – Under control of a PICOW

4.16. Lockbox

4.16.1. A Lockbox is a common term used for all types of Lockboxes and Lockboards and shall be a type approved by the GPC and consist of the following items:


- a) A lockable box or board,
- b) Lockout hasps,
- c) A set of black Lockbox Locks associated to the corresponding Lockbox, and
- d) A Purple Lock associated to the corresponding Lockbox.

4.16.2. A Lockbox used as an Isolation Control Point for one or multiple Isolation Points shall:

- a) Be uniquely named, numbered and registered,
- b) Have the provision to attach an Isolation Permit to it,
- c) Have the provision to verify that the key is secured within the Lockbox, and


- d) Provide a mechanical interlock, so the placement of any single lock, in any location, shall prevent access to any key controlled by the Lockbox.
- 4.16.3. Only the following items are permitted to be attached to the front of a Lockbox using a hasp:
- a) A Purple Lock with Purple Lockbox Tag.
 - b) Black Lockbox Lock with Isolation Tag.
 - c) Exclusive Control Tag, Out of Service Tag or information tag when required.
- 4.16.4. Where a Lockbox provides the main Isolation Control Point for a Scope of Work, the Isolation Permit shall be attached to the side of the Lockbox using a yellow Isolation Officer Lock.
- 4.16.5. The Purple Lock is used to communicate the status of a Lockbox and shall be either attached to:
- a) The front of a Lockbox, in a locked state with a Purple Lockbox Tag attached indicating that the Lockbox is under the control of a PICOW and is subject to the conditions stated on the Purple Lockbox Tag.
 - b) The side of a Lockbox in an unlocked state indicating that the Lockbox is not under the control of a PICOW.
 - c) The side of a Lockbox in a locked state with the appropriate tag indicating that the Lockbox is under the control of a PICOW but is not currently activated for Personal Lock Holders.
- 4.16.6. When a workgroup is under the protection of a Lockbox, the Purple Lock key shall be under the control of the PICOW.

4.17. Lockbox (12 hole)

	Purpose	<ul style="list-style-type: none"> • Lockable box that is used as an Isolation Control Point for single or multiple Isolation Points or Isolation Control Points
	Features	<ul style="list-style-type: none"> • Red • Each Lockbox is registered and numbered • Lockable latch on front of Lockbox • Have the provision to verify that the key is secured within the Lockbox
	Who uses it	<ul style="list-style-type: none"> • PICOW
	Where placed	<ul style="list-style-type: none"> • Worksite or prescribed location

4.18. Lockbox (Lockable board)

	Purpose	<ul style="list-style-type: none"> • Lockable board that is used as an Isolation Control Point for single or multiple Isolation Points or Isolation Control Points
--	---------	---


	Features	<ul style="list-style-type: none"> • Red • Each Lockbox is registered and numbered • Have the provision to verify that the key is secured within the Lockbox
	Who uses it	<ul style="list-style-type: none"> • PICOW
	Where placed	<ul style="list-style-type: none"> • Worksite or prescribed location

4.19. Hasps


4.19.1. Hasps shall be of a type approved by GPC and:

- a) Prevent the operation of the Isolation Point or Isolation Control Point when a single lock is attached to any locking point on the hasp.
- b) Provide a tamper proof locking facility that stays locked until all red Personal Locks are removed.
- c) Cannot be removed from an Isolation Point or Isolation Control Point whilst it has a lock attached.
- d) Used to extend additional locking points for an Isolation Point or Isolation Control Point.
- e) Shall not cause damage to the Isolation Point or Isolation Control Point if the hasp is fully populated with locks.





4.20. Lockout Hasp A

	Purpose	<ul style="list-style-type: none"> • Used on the front of a Lockbox to secure the Purple Lock or a Black Lockbox lock used as an interlock • Used on Isolation Points and Isolation Control Points to extend locking positions for multiple locks
	Features	<ul style="list-style-type: none"> • Red
	Who uses it	<ul style="list-style-type: none"> • PICOW to lock the Purple Lock onto the front of a Lockbox • Isolation Officer • PLH's
	Where placed	<ul style="list-style-type: none"> • On the front of a Lockbox • Isolation Points • Isolation Control Points • Side of a Lockbox

4.21. Lockout Hasp B

	Purpose	<ul style="list-style-type: none"> Used on Isolation Points and Isolation Control Points to extend locking positions for multiple locks
	Features	<ul style="list-style-type: none"> Red
	Who uses it	<ul style="list-style-type: none"> PICOW to lock the Purple Lock onto the front of a Lockbox Isolation Officer PLH's
	Where placed	<ul style="list-style-type: none"> Isolation Points Isolation Control Points Side of a Lockbox
<p>Note: Shall not be used as the primary Hasp on the front of a Lockbox</p>		

4.22. Other isolation and lockout devices

Purpose	Designed to secure various Isolation Points
Features	<ul style="list-style-type: none"> As per approved EDOCS #1514594 Isolation and Lockout Devices Register Prevents alteration of a Point of Isolation
Who uses it	Isolation Officers
Where placed	Isolation Points or Isolation Control Points as required
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Plug Lockout</p> </div> <div style="text-align: center;">  <p>All Purpose</p> </div> <div style="text-align: center;">  <p>Cable Lockout</p> </div> <div style="text-align: center;">  <p>Valve Lockout CB</p> </div> </div>	

4.23. Isolation plan

4.23.1. An Isolation Plan is a document that shall always be created as part of the following:

- a) An Isolation Permit.
- b) Pre-approved and authorised Safe Work Instruction.
- c) Pre-approved and authorised Standard Isolation List.
- d) Isolation Tag for SPSP and SPMP Isolation Methods

4.23.2. An Isolation Plan shall identify:

- a) The Plant or Equipment to be worked on,
- b) The Scope of Work,
- c) The Isolation Point or Isolation Control Point for each Potentially Hazardous Energy Source and the state of the controlling device at each Isolation Point,

- d) Any additional requirements for creating a Safe Isolation Boundary for the documented Scope of Work.

4.23.3. An Isolation Plan that exists as an Isolation Permit shall as a minimum document the following information:

- a) Isolation Permit number,
- b) Scope of Work to be performed under isolation,
- c) Details of Plant or Equipment to be isolated to create a Safe Isolation Boundary,
- d) Details of authority to isolate,
- e) Details of all Isolation Points or Isolation Control Points for each Potentially Hazardous Energy Source including;
 - (i) A unique identifier if available,
 - (ii) The state of the controlling device for each Isolation Point or Isolation Control Point,
 - (iii) Verification for de-energisation.
- (e) Details of Isolation Permit issue,
- (f) Personal Lock Holders name, sign on date and signature, sign off date and signature,
- (g) Details of Isolation Permit surrender.

4.23.4. Additional Forms for Isolation Permits shall be made available for:

- a) The continuation of Personal Lock Holders signing on and off the Isolation Permit.
- b) The continuation of documented Isolation Point or Isolation Control Point list details.

4.23.5. Isolation Plans that exist as part of a Safe Work Instruction or completed on an Isolation Tag shall only be used when the workgroup completing the isolation is completing the task and shall include the following requirements:

- a) Date,
- b) Reason for isolation,
- c) Details of Plant or Equipment to be isolated,
- d) The state of the controlling device for each Isolation Point or Isolation Control Point,
- e) Verification for de-energisation,
- f) Isolation Officer authorisation,
- g) Isolation Plan Sign On, Sign Off.

4.24. Isolation Points and Isolation Control Points

4.24.1. All Isolation Points or Isolation Control Points shall be secured to provide personal protection and prevent the inadvertent alteration of the point.

4.24.2. All Isolation Points shall be clearly and uniquely labelled.

- 4.24.3. An Isolation Point without a unique identifier shall have a work order generated in the Computerised Maintenance Management System to implement the necessary permanent identification requirements.
- 4.24.4. Common types of Isolation Points at GPC which can be controlled to prevent the introduction of a Potentially Hazardous Energy Source can include:
- a) Circuit breaker, isolating switch, fuse or de-contactor,
 - b) Manual valves,
 - c) Mechanical clamps, restraining chains or chocks, blocks and blinds that renders energy incapable of being made live or operational,
 - d) Battery isolators on mobile equipment (controlling 12v or 24v electrical energy).
- 4.24.5. Common types of Isolation Control Points at GPC which can be controlled to prevent the introduction of a Potentially Hazardous Energy Source can include:
- a) Lockboxes,
 - b) Rail Track Gates,
 - c) GTU Ropes,
 - d) Cabinet doors,
 - e) Battery isolators on mobile equipment (controlling the equipment start circuit).
- 4.24.6. Devices that shall not be used as a means of isolation include but not limited to:
- a) Local Stop/Start push buttons,
 - b) Emergency stops,
 - c) Pull wires/tripwires,
 - d) Control circuitry including Interlocks,
 - e) Control valves, non-return valves, pressure relief valves,
 - f) Contactors.
- 4.24.7. Isolation Points for light vehicles with no battery isolator require no Lockout as long as the ignition key is held by the person working on the vehicle.
- 4.24.8. All other vehicles shall have a battery isolator and locked as per the Isolation and Lockout process.
- 4.24.9. Isolation Points or Isolation Control Points used for isolations shall be assessed as secure and capable of providing the required isolation. The integrity of isolations shall be proven for de-energisation. Where de-energisation cannot be proven, refer to section [4.25 Exceptional Circumstances](#).
- 4.24.10. Isolation is incomplete until proven to be safe and effective by using an appropriate testing method to prove that Potentially Hazardous Energy Sources has been controlled and cannot present a hazard. Refer to approved [Isolation Verification methods in Section 7](#).

4.25. Exceptional circumstances

- 4.25.1. Any isolation that cannot be completed and verified in accordance with this procedure is considered an exceptional circumstance.

- 4.25.2. Where an exceptional circumstance occurs, an alternative method of isolation shall be investigated and applied. Where this is not practicable a risk assessment shall be developed and approved by the manager to provide a safe method of completing the task.

5. Isolation and Lockout

5.1. Isolation planning

- 5.1.1. The Isolation Planner that is responsible for the development of a documented Isolation Plan shall review the Scope of Work to determine all the Potentially Hazardous Energy Sources necessary for creating a Safe Isolation Boundary.
- 5.1.2. When developing an Isolation Plan, the Isolation Planner should consider the following:
- a) Potentially Hazardous Energy Sources inherent with the Plant or Equipment associated with the defined Scope of Work.
 - b) Duration of the Isolation.
 - c) Plant or Equipment identification.
 - d) Potential back feeds, Stored Energy, interaction with adjacent Plant or Equipment.
 - e) Complexity of isolation or the isolation type or method required.
 - f) Security of isolations.
 - g) Availability of Authorised Persons.
 - h) Whether the level of documentation and planning is appropriate to the potential consequences of the activity.
- 5.1.3. The Isolation Planner shall develop an Isolation Plan for a given Scope of Work by utilising the following options:
- a) Review pre-planned and authorised Standard Isolation Lists/templates or Safe Work Instructions for particular Plant or Equipment,
 - b) Review drawings,
 - c) Review available technical information of Plant or Equipment to be isolated,
 - d) Consult subject matter experts, PICOW's or other appropriate Authorised Persons,
 - e) Perform visual inspections and identify Plant or Equipment unique identifiers.
- 5.1.4. Copies of marked up drawings should, where practicable, be attached to the Isolation Plan identifying the unique identifiers for the Plant or Equipment to be isolated.
- 5.1.5. All Isolation Plans shall be checked and authorised by a second Isolation Planner (except for Single Point, Single Person Isolation Methods) to ensure that the Isolation Point(s) or Isolation Control Point(s) adequately provide a Safe Isolation Boundary for the Scope of Work.
- 5.1.6. Standardised terminology shall be used to describe the condition/state of the Isolation Points or Isolation Control Points for all Isolation Plans.

5.1.7. The state of the controlling device may include but is not limited to:

Isolated Condition	<i>De-isolated Condition</i>
Racked Out	Racked In
Open & Racked Out	Racked in & Closed
Open	Closed
Off	On
Fuse Removed	Fuse Inserted
Valve Opened	Valve Closed
Valve Closed	Valve Open
Stored Energy Released	
GTU raised and restrained	GTU Lowered and released
GTU disconnected	GTU connected
Belt Clamp Applied	Belt Clamp Removed
Earth Position	Service Position
Lockbox Interlocked	Unlocked
Shutters Locked	Shutters Unlocked

5.2. Isolation method selection

5.2.1. To cope with the varying complexity of work tasks and the number of people in a workgroup, GPC have three categories of Isolation Methods that are available to be used.

5.2.2. The Single Point, Single person (SPSP) isolation method allows an Isolation Officer working alone to isolate and work on Plant or Equipment where there is a single source of a potentially hazardous energy. This isolation method shall ensure that:

- a) There is only one Isolation Point controlled by the PLH's red Personal Lock.
- b) Only the Isolation Officer shall work under the isolation.

5.2.3. The Single Point, Multiple Person (SPMP) isolation method allows a workgroup to work on Plant or Equipment with a single Isolation Point. This isolation method shall ensure that:

- a) There is only one Isolation Point.
- b) Only the authorised workgroup shall work on Plant or Equipment under the isolation to perform a specific task.
- c) The direct Isolation Point is used to control the required isolation.

5.2.4. The Multiple Point, Multiple Person (MPMP) isolation method allows a workgroup, or multiple workgroups, to work on Plant or Equipment with one or more Isolation Points.

- a) Only the authorised workgroup shall work on Plant or Equipment under the isolation to perform a specific task.
- b) A Lockbox is the preferred method to be used to control the required isolations.

5.2.5. [Appendix 2](#) provides a process flow of the isolation method decision process.

5.3. Defining a Safe Isolation Boundary

- 5.3.1. The Isolation Planner for any given Scope of Work shall clearly understand the Scope of Work to the extent that the required Safe Isolation Boundary can be agreed with the person requesting the isolation.
- 5.3.2. The Isolation Planner shall determine all inherent Plant or Equipment Potentially Hazardous Energy Sources that may impact on the Safe Isolation Boundary for the Scope of Work and develop an Isolation Plan to manage them.
- 5.3.3. A second Isolation Planner shall review, clearly understand and where appropriate approve the Isolation Plan as being adequate for providing a Safe Isolation Boundary for the Scope of Work.
- 5.3.4. The second Isolation Planner shall not be mandatory where a Single Point, Single Person isolation method is used.

5.4. Creating a Safe Isolation Boundary

- 5.4.1. Plant or Equipment shall only be isolated when permission has been received from the PICOP.
- 5.4.2. When an Isolation Officer receives notification from a PICOW that an isolation is required for a Scope of Work to be performed, the Isolation Officer shall only implement the isolation when the following can be verified:
 - a) Plant or Equipment has been released from service and has been stopped in a safe position to isolate.
 - b) The Isolation Plan meets all the requirements of [Section 4.23](#)
 - c) Where more than one Isolation Plan requires the same Isolation Point or Isolation Control Point at the same time, verify that permission has been received from each PICOW to ensure that each Scope of Work will not impact each workgroup.
 - d) No Exclusive Control Tags or Energised Work Tags exists on the Isolation Point or Isolation Control Point to be isolated.
- 5.4.3. An Isolation Officer shall implement an Isolation Point by completing the following steps:
 - a) Place the documented Isolation Point into the required state
 - b) Prove the action has been effective in providing the required control of energy (Isolation Verification)
 - c) Secure the Isolation Point or Isolation Control Point against alteration. Isolation Locks that shall be used are:
 - (i) Red Lock for SPSP isolation method.
 - (ii) Black Lockbox Lock when a Lockbox is involved.
 - (iii) Yellow Isolation Officer Lock when a Lockbox is not involved.
 - d) The second Isolation Officer shall verify steps 1, 2 and 3 (the second Isolation Officer shall not be mandatory for the Single Point, Single Person isolation method)
 - e) As each Isolation Point or Isolation Control Point is isolated and verified, both Isolation Officers shall initial each Isolation Point or Isolation Control Point on the Isolation Plan as completed.

- 5.4.4. Where an Isolation Point is already locked out in compliance with this Isolation and Lockout Procedure, which prevents the testing of the effectiveness of the isolation, the Isolation Point shall be deemed to be proved effective. An Isolation Plan shall only be issued for use when the following conditions can be met:
- a) The PICOW reviews the Isolation Plan for procedural compliance and accuracy, ensures that the contents and requirements of the Isolation Plan are clearly understood before accepting the Isolation Plan by personally authorising the plan.
 - b) If a Lockbox is the Isolation Control Point, the PICOW ensures the Purple Lock and completed Lockbox Tag is attached to a hasp on the front of the Lockbox to activate the Lockbox and to communicate the current status of a Lockbox.
- 5.4.5. A Safe Isolation Boundary shall be deemed to be created for the Scope of Work when:
- a) All documented Isolation Points or Isolation Control Points have been implemented, and
 - b) All Isolation and Lockout Devices for all Isolation Points or Isolation Control Points are secured to prevent alteration, and
 - c) All documented instructions have been completed, and all relevant entries on the Isolation Plan have been completed.

5.5. Managing a Safe Isolation Boundary

- 5.5.1. A PLH shall obey the directions of a PICOW in regard to the placement or removal of their red Personal Lock from the Lockbox.
- 5.5.2. A PLH shall remove their red Personal Lock and complete all relevant documentation under any of the following conditions:
- a) The PLH has ceased their involvement in the work.
 - b) The PLH will be potentially absent from the Safe Isolation Boundary for a significant period of time in relation to the expected duration of the work.
 - c) Before leaving site.
 - d) Directed by the PICOW

5.6. Performing work

- 5.6.1. A PLH shall not perform any work unless:
- a) All Potentially Hazardous Energy Sources have been controlled for the Scope of Work, and
 - b) The PLH has been briefed about the Safe Isolation Boundary through face to face communication with the PICOW, and
 - c) All Isolation Points or Isolation Control Points for the Scope of Work have been secured by a PLH's red Personal Lock, and
 - d) All relevant documentation has been completed by the PLH.

- 5.6.2. When a Lockbox is used as an Isolation Control Point, a person cannot place a red Personal Lock on the Lockbox unless:
- a) A Purple Lock is secured to the front of the Lockbox, and
 - b) The PLH complies with the requirements of the Lockbox Tag attached to the Purple Lock, and
 - c) The PLH has permission through face to face communication with the PICOW in control of the Purple Lock key.

5.7. Single Point, Single Person Isolation (SPSP)

- 5.7.1. The SPSP isolation method allows an Isolation Officer to work under isolation of Plant or Equipment where there is a single source of a Potentially Hazardous Energy to perform a specific task and where no further locks shall be added to the Isolation Point. Appendix 2 [8.2.2](#) provides an overview of the process.
- 5.7.2. Where a Safe Isolation Boundary has been established for SPSP isolation it is the responsibility of the Personal Lock Holder to ensure their work area is managed.
- 5.7.3. The SPSP isolation method shall only be used when:
- a) There is only one Isolation Point, and
 - b) Only an Isolation Officer shall work under the isolation.
- 5.7.4. The SPSP isolation method typically involves work tasks on:
- a) Selected power, lighting and air conditioning circuits,
 - b) Fixed workshop Plant or Equipment such as lathes, drill presses, grinders, milling machines etc.
 - c) Mobile Plant or Equipment fitted with battery isolators,
 - d) Sump Pumps.
- 5.7.5. If a Standard Isolation List or Safe Work Instruction exists for a SPSP isolation, then this shall be reviewed prior to use.
- 5.7.6. The SPSP isolation method shall be implemented by the Isolation Officer carrying out the following steps:
- a) Risk assess the task & determine what Isolation Point is required.
 - b) Permission to access the Plant or Equipment has been received from the PICOP.
 - c) The Plant or Equipment has been stopped and is in a safe position to isolate.
 - d) Document the Isolation Point on documentation that is auditable e.g. Isolation Tag or Isolation Permit.
 - e) The Isolation Point is isolated, and verified for de-energisation.
 - f) A red Personal Lock is secured directly to the Isolation Point (no hasp) with a completed Isolation Tag.
 - g) The Isolation Point is initialled on Isolation Plan.
- 5.7.7. When Plant or Equipment is ready to be returned to service, it shall be returned to service by the Isolation Officer by carrying out the following steps:

- a) The Plant or Equipment is safe and ready for return to service.
 - b) Remove red Personal Lock and Isolation Tag.
 - c) De-isolate the Plant or Equipment.
 - d) Verify that the Plant or Equipment is healthy and ready for return to service.
 - e) Inform the PICOP that the Plant or Equipment is ready for service.
- 5.7.8. Where the Plant or Equipment is not ready to be returned to service because work is incomplete or the work requires to be suspended, the Plant or Equipment shall be made safe to prevent damage to Plant or Equipment or environment or injury to a person, by the Isolation Officer by carrying out the following steps:
- a) Remove red Personal Lock and Isolation Tag,
 - b) Attach an Out of Service Tag to the to the Isolation Point,
 - c) Inform the PICOP that the Plant or Equipment is not ready to be returned to service.
- 5.7.9. Where work is to be recommenced, the Isolation Officer shall carry out the following steps:
- 5.7.10. Verify that the Plant or Equipment is still isolated,
- 5.7.11. Remove the Out of Service Tag from the Isolation Point,
- 5.7.12. Secure a red Personal Lock directly to the Isolation Point (no hasp) with a completed Isolation Tag.

5.8. Single Point, Multiple Person Isolation (SPMP)

- 5.8.1. The SPMP isolation method allows multiple persons to work under the isolation of plant and equipment where there is a single source of a potentially hazardous energy. Appendix 2 [8.2.3](#) provides an overview of the process.
- 5.8.2. Where a Safe Isolation Boundary has been established for a SPMP Isolation, it is the responsibility of the PICOW to ensure the work area is managed and control who has permission to apply a red Personal Lock.
- 5.8.3. A SPMP isolation is where an Isolation Point is directly isolated with a hasp and yellow Isolation Officers Lock. Red Personal Locks are applied directly to the hasp on the Isolation Point. If a Lockbox is required for an isolation then the Multiple Point, Multiple Person isolation method shall be used.
- 5.8.4. The SPMP isolation method may be used when:
- a) There is only one Isolation Point.
 - b) Multiple PLH's are to work under the isolation.
- 5.8.5. The SPMP isolation method typically involves routine work tasks where a select workgroup are required to work on a specific piece of Plant or Equipment.
- 5.8.6. If an Isolation Permit, Standard Isolation List or Safe Work Instruction exists for a SPMP, then this shall be reviewed prior to use.
- 5.8.7. The SPMP isolation method Isolation Plan can be documented on documentation that is auditable e.g. Isolation Tag or Isolation Permit.

- 5.8.8. When an Isolation Tag is utilised as the documented Isolation Plan under a SPMP isolation method, the authorised Isolation Officers shall be members of the workgroup that plan and implement the isolation for the scope of work.
- 5.8.9. A SPMP isolation method shall only be utilised when the following conditions can be met:
- a) Risk assess the task & determine what Isolation Point is required.
 - b) The Plant or Equipment has been released from service from the PICOP.
 - c) The Plant or Equipment has stopped and is in a safe position to isolate.
 - d) The Isolation Point for the Plant or Equipment to be worked on is identified and listed on the Isolation Tag or Isolation Permit.
 - e) The Isolation Point is isolated, and verified for de-energisation.
 - f) The Isolation Point is secured with a hasp, yellow Isolation Officers Lock, completed Isolation Tag and Isolation Plan holder if an Isolation Permit is being used.
 - g) Both Isolation Officers initial the Isolation Point on the Isolation Tag or permit to verify the isolation.
 - h) Where used, the relevant issue section of the Isolation Permit is signed and placed in the Isolation Plan holder.
 - i) The PICOW checks for procedural compliance and accuracy to ensure a Safe Isolation Boundary has been created.
 - j) The PICOW communicates face to face with all PLH's undertaking the Scope of Work to ensure they are aware of the Safe Isolation Boundary and provides permission for PLH's to apply their red Personal Locks to the Isolation Point and sign on the Isolation Permit.
- 5.8.10. When Plant or Equipment is ready to be returned to service the following conditions shall be met:
- a) The PICOW ensures the Plant or Equipment is ready to return to service once all red Personal Locks have been removed from the Isolation Point and all PLH's have signed off the Isolation Plan (Isolation Tag or Isolation Permit),
 - b) The Isolation Officer de-isolates the Plant or Equipment (If an Isolation Permit is used then the PICOW shall surrender the Isolation Permit),
 - c) The Isolation Officer verifies that the Plant or Equipment is ready for return to service,
 - d) The Isolation Officer informs the PICOP that the Plant or Equipment is ready for service,
 - e) Where used, the Isolation Officer closes out the Isolation Permit.
- 5.8.11. Where Plant or Equipment is not ready to be returned to service because work is incomplete or the work requires to be suspended, the Plant or Equipment shall be made safe to prevent damage to Plant or Equipment or environment or injury to a person. The process shall only proceed when the following conditions can be met:
- a) The PICOW ensures all red Personal Locks have been removed from the Isolation Point and all PLH's have signed off the Isolation Plan (on the Isolation Tag or Isolation Permit).

- b) The PICOW attaches a completed Out of Service Tag to the Isolation Point and removes the Isolation Tag when used as the Isolation Plan. Where an Isolation Permit is used the Isolation Permit remains attached to the Isolation Point.
- 5.8.12. Where work is to be recommenced, the process shall only proceed when the following conditions can be met:
- a) Where an Isolation Tag was previously used to plan the isolation, the process will commence as if it is a new isolation.
 - b) Where an Isolation Permit is in place, the PICOW verifies that all the requirements of the Isolation Permit are still established.
 - c) The PICOW removes the Out of Service Tag from the Isolation Point.
 - d) The PICOW checks the requirements of the permit for procedural compliance and accuracy to ensure a Safe Isolation Boundary has been created or is still established.
 - e) The PICOW communicates face to face with all PLH's undertaking the Scope of Work to ensure they are aware of the Safe Isolation Boundary and provides permission for Personal Lock Holders to apply their red Personal Locks to the Isolation Point and sign on the Isolation Permit.

5.9. Multiple Point, Multiple Person Isolation (MPMP)

- 5.9.1. The MPMP isolation method allows multiple persons to work under the isolation of Plant or Equipment where there can be one or more multiple sources of potentially hazardous energies.
- a) A Lockbox is the preferred method for MPMP isolation. Appendix 2 [8.2.4](#) provides an overview of the process using a Lockbox.
 - b) If a Lockbox is not used, then the isolation shall not exceed three Isolation Points before a Lockbox shall be used.
 - c) Work under MPMP isolation shall always be documented on an Isolation Permit as the Isolation Plan and this shall be reviewed prior to use.
- 5.9.2. Where a Safe Isolation Boundary has been established for a MPMP isolation, it is the responsibility of the PICOW to ensure the work area is managed. The PICOW that has control of a purple key is accountable to control who has permission to apply a red Personal Lock.
- 5.9.3. When the MPMP isolation method is used in conjunction with a Lockbox, the MPMP isolation process shall only be utilised when the following conditions can be met:
- a) PICOW to risk assess the task and Isolation Planner to determine what Isolation Points or Isolation Control Points are required to control all inherent Potentially Hazardous Energy Sources.
 - b) The Plant or Equipment has been released from service from the PICOP.
 - c) The Plant or Equipment has stopped and is in a safe position to isolate.
 - d) The Isolation Points or Isolation Control Points for the Plant or Equipment to be worked on are identified and listed on an Isolation Permit.
 - e) The Isolation Points or Isolation Control Points are isolated, and verified for de-energisation.

- f) The Isolation Points or Isolation Control Points are secured with a hasp and a black Lockbox Lock and completed Isolation Tag.
- g) Both Isolation Officers initial the Isolation Points or Isolation Control Points on the Isolation Permit to verify the isolation.
- h) The Isolation Officers remove the hasp, Purple Lock and yellow Isolation Officers Lock from within the Lockbox.
- i) The Isolation Officers place the black Lockbox Lock key inside the Lockbox.
- j) The Isolation Officers shall secure the Lockbox by attaching the Isolation Plan holder with the yellow Isolation Officers Lock on the side of the Lockbox.
- k) The Isolation Officers shall place the Purple Lock onto the side of the Lockbox in an unlocked state ready for the PICOW to issue the Lockbox for use.
- l) An Isolation Officer shall sign the relevant issue section of the Isolation Permit and place it in the Isolation Plan holder.
- m) The PICOW checks the requirements of the Isolation Permit for procedural compliance and accuracy to ensure a Safe Isolation Boundary has been created and accepts the Isolation Permit by signing in the receipt section of the Isolation Permit.
- n) The PICOW ensures the Purple Lock and completed Lockbox Tag is attached to the hasp on the front of the Lockbox to issue the Lockbox for use.
- o) The PICOW communicates face to face with all Personal Lock Holders undertaking the Scope of Work to ensure they are aware of the Safe Isolation Boundary and provides permission for PLH's to apply their red Personal Locks to the Lockbox and sign on the Isolation Permit.

5.9.4. When Plant or Equipment is ready to be returned to service the following conditions shall be met:

- a) The PICOW ensures all red Personal Locks have been removed from the Lockbox and all PLH's have signed off the Isolation Permit.
- b) The PICOW surrenders the Isolation Permit.
- c) The Isolation Officer de-isolates the Plant or Equipment.
- d) The Isolation Officer verifies that the Plant or Equipment is ready for return to service.
- e) The Isolation Officer informs the PICOP that the Plant or Equipment is ready for service.
- f) The Isolation Officer closes out the Isolation Permit.

5.9.5. Where Plant or Equipment is not ready to be returned to service because work is incomplete or the work requires to be suspended, the Plant or Equipment shall be made safe to prevent damage to Plant or Equipment or environment or injury to a person. The process shall only proceed when the following conditions can be met:

- a) The PICOW ensures all red PLH's have been removed from the Lockbox and all PLH's have signed off the Isolation Permit.

- b) The PICOW removes the Purple Lock from the front of the Lockbox and locks it on the side of the Lockbox indicating that the PICOW still has control of the Lockbox but it is unavailable for use, or
- c) The PICOW removes the Purple Lock from the front of the Lockbox and leaves it unlocked on the side of the Lockbox indicating that the PICOW has relinquished control of the Lockbox.
- d) The PICOW attaches a completed Out of Service Tag to the Lockbox.

5.9.6. Where work is to be recommenced, the process shall only proceed when the following conditions can be met:

- a) The PICOW verifies that all the requirements of the Isolation Permit are still established;
- b) The PICOW removes the Out of Service Tag from the Lockbox;
- c) The PICOW checks the requirements of the permit for procedural compliance and accuracy to ensure the Safe Isolation Boundary is still in place
- d) The PICOW locks the Purple Lock back on the front of the Lockbox and communicates face to face with all PLH's undertaking the Scope of Work to ensure they are aware of the Safe Isolation Boundary and provides permission for PLH's to apply their red Personal Locks to the Lockbox and sign on the Isolation Permit.

5.10. Interlocking Lockboxes (linked isolations)

5.10.1. When Lockboxes are required to be interlocked, the Lockbox interlocking process shall ensure that an Isolation Officer connects Lockboxes completing the following steps. (The Lockbox already in use or first Lockbox will be known as the primary Lockbox and the additional Lockbox will be known as the secondary Lockbox:

- a) Confirm with the PICOW of the primary Lockbox that there has been no changes to the isolation and that the Lockboxes can be interlocked.
- b) Take a black Lockbox Lock from the secondary Lockbox
- c) Attach the black secondary Lockbox Lock with a completed Isolation Tag to the hasp on the front of the primary Lockbox
- d) Complete additional isolations if required with black Lockbox Locks from the secondary Lockbox
- e) Remove the hasp, Purple Lock and yellow Isolation Officers Lock from the secondary Lockbox
- f) Place the black Lockbox Lock key inside the secondary Lockbox
- g) The Isolation Officer shall secure the secondary Lockbox by attaching the Isolation Plan holder with the yellow Isolation Officers Lock on the side of the Lockbox.
- h) The Isolation Officer shall place the Purple Lock onto the side of the Lockbox in an unlocked state ready for the PICOW to issue the Lockbox for use.

- i) The Isolation Officer shall sign the relevant issue section of the Isolation Permit and place it in the Isolation Plan holder.
- j) The PICOW checks the requirements of the Isolation Permit for procedural compliance and accuracy to ensure a Safe Isolation Boundary has been created and accepts the Isolation Permit by signing in the receipt section of the Isolation Permit.
- k) The PICOW ensures the Purple Lock and completed Lockbox Tag is attached to the hasp on the front of the secondary Lockbox to issue the Lockbox for use.
- l) The PICOW communicates face to face with all PLH's undertaking the Scope of Work to ensure they are aware of the Safe Isolation Boundary and provides permission for PLH's to apply their red Personal Locks to the Lockbox and sign on the Isolation Permit.

5.11. Change of conditions

- 5.11.1. If a change in conditions could impact an isolation or the performing of a Scope of Work, then:
 - a) All work shall cease and the work area shall be made safe.
 - b) The PICOW shall be notified and the PICOW shall assess the risks, determine and implement any controls where necessary.
- 5.11.2. If an isolation is compromised or needs to be modified, an Isolation Planner shall review and replan the documented Isolation Plan which shall be reconfirmed by a second Isolation Planner.
- 5.11.3. If the work area and the isolation cannot be made safe under the changed conditions, then the work shall be postponed or cancelled.

5.12. Modifying an active Isolation Plan

- 5.12.1. When circumstances call for the minor modification of an active Isolation Plan, then the active Isolation Plan shall only be modified by carrying out the following steps:
 - a) The PICOW ensures all work activities are stopped and all PLH's have removed their red Personal Locks and have signed off the Isolation Plan to allow the isolation to be modified.
 - b) The Isolation Planner suspends the active Isolation Plan so that the Isolation Plan requiring modification can be amended to create a revised Isolation Plan to be issued.
 - c) All changes on the revised Isolation Plan shall be checked and authorised by a second Isolation Planner by adding their names and signatures to the planner section of the Isolation Plan along with the date, time and reason.
 - d) Any modified Isolation Points or Isolation Control Points shall be implemented by two Isolation Officers. Isolation Points or Isolation Control Points that have not been disturbed by any modifications do not have to be re-verified.
 - e) The PICOW ensures that the contents and requirements of the Isolation Plan are clearly understood and communicates any changes of the original plan to all PLH's

that would be affected by the modification of the Isolation Plan before recommencing work.

- f) Work will recommence following the requirements of section [5.6 Performing Work](#)

5.13. Suspend Isolation for temporary re-instatement

- 5.13.1. When an isolation requires alteration to allow Plant or Equipment energy sources to be temporarily and safely restored, pressurised, re-energised, moved or jogged for the purposes of testing, adjusting or repositioning, a temporary re-instatement process shall be followed. Refer to Flowchart in Appendix 2 [8.2.7](#)
- 5.13.2. No work shall be performed under the temporary re-instatement process.
- 5.13.3. The Temporary re-instatement form shall be utilised so that Isolation Points can be selected for removal and there is a validation between the Isolation Plan and the temporary re-instatement. (Refer Document [eDocs #1649206](#)) GPC Isolation & Lockout Temporary Reinstatement Form
- 5.13.4. The temporary re-instatement process shall be approved by a PICOW.
- 5.13.5. When Isolation Points are required to be de-isolated, the active Isolation Plan shall be suspended to allow for the temporary restoration, pressurisation or re-energisation of Plant or Equipment.
- 5.13.6. When an isolation is required to be suspended to allow an Isolation Point or points to be temporarily reinstated, the following process shall be followed:
 - a) The PICOW ensures all work activities are stopped and all PLH's have removed their red Personal Locks and signed off the Isolation Plan to allow the isolation to be reinstated.
 - b) The PICOW ensures that an Isolation Planner suspends the Isolation Plan.
 - c) The Isolation Planner identifies and documents the required Isolation Points to be de-isolated on a temporary re-instatement form.
 - d) The PICOW relinquishes control of the isolation and the Isolation Officer de-isolates the required Isolation Points.
 - e) The PICOW controls or conducts the inching, testing or repositioning.
 - f) Two Isolation Officers re-isolate the Isolation Points and attach new Isolation Tags.
 - g) Two Isolation Officers sign against each Isolation Point on the temporary re-instatement form.
 - h) The isolations are secured as per the initial set up.
 - i) The PICOW reissues Isolation Plan.

5.14. Exclusive control

- 5.14.1. Where Plant or Equipment under isolation requires to be moved or energised by an energy source other than its own, then the Exclusive Control process shall be used. The Exclusive Control process flowchart can be found in Appendix 2 [8.2.6](#).
- 5.14.2. Exclusive Control work shall always be controlled by a Lockbox.

- 5.14.3. When the Exclusive Control process is required to be used, a PICOW shall take control of the work area required to be under Exclusive Control and ensure that the following steps are carried out:
- a) Prepare a JSA as the minimum controlling document
 - b) Discuss the requirements of the Exclusive Control work with all affected persons prior to proceeding.
 - c) Ensure that any other workgroup PLH's not involved in the Exclusive Control work that may be impacted by the Exclusive Control work have no red Personal Locks attached to the current isolations required for Exclusive Control and that the single workgroup are the only personnel locked on.
 - d) Ensure Exclusive Control tags are applied to each Isolation Point or Isolation Control Point.
 - e) Ensure the area is barricaded if required.
 - f) Directly communicate the requirements of Exclusive Control with all PLH's involved with the Exclusive Control work.
 - g) Take Exclusive Control of the Lockbox to prevent other persons not involved in the Exclusive Control work to inadvertently lock on.

5.15. Energised Work

5.15.1. The Energised Work process shall never be used as a substitute when normal isolation and lockout is possible.

5.15.2. Energised Work shall only be performed under controlled conditions on live Plant or Equipment that cannot remain isolated to complete a task or for fault finding diagnosis work.

5.15.3. Each task required to be performed under the Energised Work process shall have an appropriately documented and authorised risk assessment such as a detailed JSA, SWI or procedure.

5.15.4. When Energised Work is required within the Scope of Work, a single person shall be responsible for the control of all activities.

5.15.5. The Energised Work process shall only be utilised when the following steps are followed:

- a) A thorough review of the work method has determined that Energised Work is unavoidable.
- b) Approval has been authorised from the appropriate level of authorisation as per the GPC Safety & Risk Management Procedure.
- c) An authorised single person responsible has control of all activities and personnel involved.
- d) An approved and authorised Energised Work JSA, SWI or procedure is completed.
- e) Plant or Equipment required to be isolated to perform the Energised Work is under isolation.
- f) An Energised Work Tag is attached to each control point, which may include Isolation Points or Isolation Control Points, required for the Scope of Work to communicate the Energised Work process.
- g) The area requiring Energised Work is barricaded off if required.

- 5.15.6. The responsible person shall have the authority to direct all PLH's that are:
- a) Involved in the Scope of Work requiring the Energised Work; or
 - b) Associated with any of the control points required for the Energised Work, with regards to their access to those control points.
- 5.15.7. All PLH's associated with a control point under Energised Work shall comply with any instructions as issued by the responsible person.
- 5.15.8. Access to Plant or Equipment that is not considered Energised Work shall be isolated and locked out prior to work commencing.

5.16. Critical plant or equipment

- 5.16.1. Where individual pieces of Plant or Equipment that perform a critical safety function (personal safety or process/environment safety) are to be isolated, the following process shall be followed:
- a) A procedure or SWI shall be written for the isolation (this may be a procedure specific or where warranted a generic procedure).
 - b) The procedure or SWI shall include alternative control measures to be put in place to ensure the safety of personnel or process/environment.
 - c) The procedure or SWI shall be approved by the Area Supervisor.
 - d) The commencement of the job shall be approved by the PICOW.

5.17. Forced removal of a Lock

- 5.17.1. Unauthorised removal of any red Personal Lock, Isolation Lock or Isolation and Lockout Device could result in serious injury or death, Plant or Equipment or environment damage and shall result in disciplinary action.
- 5.17.2. Two Authorised Persons shall be involved in the physical lock removal process to ensure that the correct lock has been removed.
- 5.17.3. An incident report shall be submitted where any lock has been forcibly removed under the Forced Lock Removal Procedure.

5.18. Forced removal of a red Personal Lock

- 5.18.1. Where a red Personal Lock key cannot be found, the red Personal Lock is faulty or damaged and cannot be removed, the lock Owner is no longer on site and cannot return in the required time, or an emergency requires the overriding of any red Personal Lock, then the relevant red Personal Lock shall only be forcibly removed when:
- a) The PICOW has made all reasonable endeavours to locate and contact the PLH or have the PLH return to site to remove their red Personal Lock in the required time, and
 - b) A Forced Removal of Lock Form has been completed and authorised by the Area Manager or responsible delegate, and

- c) The Area Manager or a responsible delegate has ensured that a plan is in place to prevent the PLH from being able to access the Safe Isolation Boundary that was controlled by their red Personal Lock.

5.19. Administrative removal

- 5.19.1. If a PLH has removed their red Personal Lock, but has not signed off the Isolation Plan, the PICOW or designee shall:
 - a) Verify that the PLH is unable to be contacted and not on site, or contacted and unable to return to site, and
 - b) Verify that the job is in a condition that is acceptable to proxy the PLH off the Isolation Plan, and
 - c) Proxy the Personal Lock Holder.

5.20. Forced removal of a black Lockbox Lock, yellow Isolation Officer Lock or Purple Lock

- 5.20.1. Where a black Lockbox Lock, yellow Isolation Officer Lock or Purple Lock key cannot be found or is damaged, then the relevant lock shall only be forcibly removed when:
 - a) All reasonable efforts have been made to locate the missing key for the black Lockbox Lock, yellow Isolation Officer Lock or Purple Lock key or that the lock is confirmed as damaged and cannot be removed, and
 - b) A Forced Removal of Lock Form has been completed and authorised by the Area Supervisor, and
 - c) The Area Supervisor arranges to tag the Lockbox out of service until the appropriate lock is replaced.

5.21. An Isolation Point cannot be locked

- 5.21.1. If an Isolation Point for Plant or Equipment cannot be locked in a position to prevent its state being altered, then:
 - a) Place the Isolation Point out of service until made lockable, or
 - b) If the Isolation Point is required to be utilised, refer to section [4.25 Exceptional Circumstances](#).
- 5.21.2. The Area Supervisor shall generate a work order in the computerised maintenance management system to implement the necessary locking mechanism

6. System Management

6.1. High Voltage Isolation and Access procedure

- 6.1.1. High Voltage Isolation and Access Procedures shall be complied with in addition to the Isolation and Lockout Procedure when access is required within the appropriate encroachment distance

of an exposed high voltage part as per [DOCSCQPA-#1092822-ESMS-13 HVIA - High Voltage Isolation and Access Procedure](#)

6.2. Management of Change

- 6.2.1. These Isolation and Lockout Procedures shall be reviewed as part of the Management of Change procedures whenever there is a:
- a) Change to process conditions
 - b) Purchase/installation of new Plant or Equipment
 - c) Any modifications to existing Plant or Equipment

6.3. Incidents and breaches

- 6.3.1. Any breach of this Isolation and Lockout Procedure shall be investigated and have an incident report raised and is subject to disciplinary action.
- 6.3.2. Any breach of this Isolation and Lockout Procedure shall be reported to the GPC representative of the person involved in the breach.
- 6.3.3. Corrective actions to address breaches of this Isolation and Lockout Procedure shall be reviewed periodically by the Isolation User Group.

6.4. Monitoring and review

- 6.4.1. Periodic reviews of the application of this Isolation and Lockout Procedure shall be undertaken to ensure the continuing suitability, adequacy and effectiveness of the isolation and Lockout processes.
- 6.4.2. The results of the reviews shall be documented and made available to all GPC workers.
- 6.4.3. All GPC workers shall have the right to review and challenge the Isolation and Lockout Procedure. Any challenge should be recorded and investigated, and changes made where deficiencies or improvements are identified.
- 6.4.4. Any revisions required as a result of a review shall be approved by the Isolation User Group and authorised by the Isolation and Lockout Procedure Owner.

6.5. Training

- 6.5.1. Any personnel who carries out work under this Isolation and Lockout Procedure shall be trained, competent and authorised at a level appropriate to their use of the Isolation and Lockout system.
- 6.5.2. Only trained, competent and Authorised Persons shall be permitted to carry out tasks required by this procedure. It is essential that these persons maintain appropriate knowledge, skills and abilities to perform isolation and Lockout activities whilst demonstrating a safety mindset throughout the process.
- 6.5.3. A competency-based training system shall be in place to approve personnel to perform a function under the GPC controlled site Isolation and Lockout System.
- 6.5.4. GPC site training and assessment packages shall meet or exceed the minimum standard set by industry to promote compliance with expected workplace performance under the current national units of competence relevant to the work processes.

- 6.5.5. The introduction of new or modified Isolation and Lockout Systems shall be accompanied by refresher and updated training, and re-assessment of competency as deemed necessary by the Isolation User Group.
- 6.5.6. Achievement and maintenance of competency requirements shall be managed through the site's training management system, including maintenance of formal records of training and assessment. A register of trained, competent and Authorised Persons shall be available and accessible to frontline supervisors and management.
- 6.5.7. Training and assessment shall only be conducted by an approved assessor or those that hold the train the trainer competency.
- 6.5.8. Only persons that have been trained and assessed as competent shall be able to be authorised and appointed by an appropriate level of authorisation as per GPC Safety & Risk Management Procedure. E.g. Area Superintendent or Supervisor and in writing.
- 6.5.9. Retraining shall be provided for individuals to ensure that they maintain knowledge of the purpose and process of the Isolation & Lockout procedure or when either:
- a) There is a change the Isolation and Lockout System procedure.
 - b) An inspection reveals, or the GPC has reason to believe, that there are deviations from or inadequacies in the employee's knowledge or use of the Isolation and Lockout System.
- 6.5.10. The Owner of this Isolation & Lockout procedure will be responsible for communicating any changes made to the Isolation & Lockout System to ensure the training material remains current.
- 6.5.11. Isolation and Lockout Training Requirements

Role for Training	Theory Component	Practical Component	Frequency
Personal Lock Holder (PLH) Initial - Face to Face & Online Refresher	Yes	Practical Demonstration	4 years
Isolation Officer (IO) Initial - Face to Face & Online Refresher	Yes	Yes	3 years
Isolation Planner (IP) Initial - Face to Face & Online Refresher	Yes	Yes	3 years
Person in Charge of Work (PICOW) Initial - Face to Face & Online Refresher	Yes	Plant Familiarisation	3 years

6.6. Auditing

- 6.6.1. The Isolation User Group shall perform audits of this procedure and its associated documents.
- 6.6.2. The Isolation and Lockout Procedures shall be included in the GPC internal audit schedule. Refer to [DOCSCQPA#1619638 Critical Control Verification - CTRL-0000675 Isolation System \(CCV-0000112/113\) - TEMPLATE](#). Auditors shall:
- a) Conduct the audit, mark up the audit document, and immediately debrief the people audited.
 - b) Brief the Work Area Superintendent/s on the results of the audit.

- c) Urgent breaches shall be reported to the Area Supervisors to have an incident raised within the Safety reporting tool.
- d) The work Area Superintendents shall compile any audit findings from their work area within each month and submit to the Isolation User Group highlighting key learnings.

6.7. Records and archiving

- 6.7.1. All documentation associated with the Isolation and Lockout Procedure shall be developed and maintained in accordance with the GPCs document control procedures, legislative requirements and subsidiary guidance material.

7. Isolation and Verification methods

The information in this section provides isolation strategies and standards for establishing Proven and Positive Isolation of hazardous energy.

Potentially Hazardous Energy Sources could include but are not limited to electrical, mechanical, hydraulic, pneumatic, chemical, compressed air and gas, energy stored by pressure, capacitors, vehicle batteries, tension in springs, chains, belts and ropes and the potential from suspended parts (gravity) and equipment due to its position.

As there are many types of Potentially Hazardous Energy Sources, there are several approved methods of Isolation Verification which can include:

- a) Test for Dead (50 V AC - 1000 V AC or 120 V DC - 1500 V DC)
- b) Phase indication lamps
- c) Physical disconnection
- d) Physical separation
- e) Zero pressure (gauges, draining, bleeding, purging, venting or removing any residual energy or harmful material remaining in the system for oil, air, water, gas, steam)
- f) An existing Isolation Lock and Isolation Tag is fitted to the Isolation Point or Isolation Control Point

7.1. Electrical Isolations for LV Electrical Work

(50 V AC – 1000 V AC or 120 V DC – 1500 V DC)

- 7.1.1. Due to the critical and significantly hazardous nature of electrical energy sources, Positive Isolation is the only acceptable method of isolation for work on and access to LV electrical apparatus. Test for Dead procedures shall be applied to all electrical isolations to prove the removal of electrical energy sources. Unproven electrical isolations shall not be used under any circumstances.

- 7.1.2. ALL LV EXPOSED ELECTRICAL PARTS SHALL BE REGARDED AS LIVE UNTIL ISOLATED AND PROVED DE-ENERGISED

7.2. Electrical Isolations for Operational/Production purposes and Mechanical work

- 7.2.1. Electrical isolations that are primarily applied to mechanical Plant or Equipment shall be proven utilising one of the approved methods for Isolation Verification. If de-energisation cannot be proven, then Test for Dead procedures shall apply.

7.3. Proving for electrical de-energisation

(Electrical Work 50 V AC – 1000 V AC or 120 V DC – 1500 V DC)

- 7.3.1. Where the Scope of Work involves potential exposure to live components of a low voltage electrical circuit, a test for dead to prove the removal of an electrical energy source is required prior to work commencing.
- 7.3.2. Test equipment operation shall be checked before, and after, the performance of a test for dead. Testing which involves access within the encroachment limits of “the point to be tested” is considered electrical work.

7.4. Proving for electrical de-energisation (Operational / Mechanical Work)

- 7.4.1. Plant or Equipment that have an electrical energy source and are required to be isolated to perform Operational or Mechanical type work shall be achieved by one of the following methods:
- a) Phase indicator lights - observation of extinguishing on the opening of a circuit.
 - b) Physical separation/disconnection- visible physical break or visual air gap in the circuit (e.g. switch contacts open, isolating device withdrawn etc.)
 - c) Test for Dead - by licenced electrical worker for 50V -1000V AC or 120V -1500 V DC

7.5. Phase Indication Lights

- 7.5.1. When verifying **phase indicator lights** to prove for electrical de-energisation:
- a) Confirm Plant or Equipment is not running,
 - b) Identify the Isolation Point as per the Isolation Plan,
 - c) Ensure all phase indicator lights are illuminated before isolation,
 - d) Place the documented Isolation Point into the required state,
 - e) Confirm all phase indicator lights are extinguished after isolation.

7.6. Physical separation / disconnection

- 7.6.1. When verifying a **physical separation/disconnection** such as visible physical break or a visual air gap to prove electrical de-energisation:
- a) Confirm Plant or Equipment is not running,
 - b) Identify the Isolation Point as per the Isolation Plan,
 - c) Place the documented Isolation Point into the required state,
 - d) Verify that a gap exists for each phase.

7.7. Testing for Dead

- 7.7.1. When **testing for dead** to prove for electrical de-energisation:
- a) Confirm Plant or Equipment is not running,
 - b) Identify the Isolation Point as per the Isolation Plan,
 - c) Place the documented Isolation Point into the required state,

- d) Test for dead on the load side of the isolator.

7.8. Radiation energy

- 7.8.1. The isolating of radiation energy sources is only permitted by authorised Radiation Safety Technicians.

7.9. Mechanical isolations

- 7.9.1. Mechanical isolation is required for stored energies including but not limited to hydraulic, pneumatic, chemical, compressed air and gas, energy stored by pressure, tension in springs, chains, belts and ropes and the potential from suspended parts (gravity) and equipment due to its position.
- 7.9.2. Mechanical isolations are primarily applied to mechanical Plant or Equipment, piping and processing equipment.

7.10. Stored Energy

- 7.10.1. Stored Energy refers to energy that can cause equipment that can move from one point to another e.g. conveyors, mobile equipment and equipment that can rotate (motors, conveyor pulleys, etc.).
- 7.10.2. The installation of equipment isolation devices may require a separate isolation and trained and Competent Personnel e.g. Mechanical Fitter or Licensed Rigger.
- 7.10.3. Specific anchor points or lifting lugs used in isolating shall be certified, rated and regularly inspected.

7.11. Tensioned conveyors

- 7.11.1. Not all activities on a conveyor requires the de-tensioning of the conveyor, but a conveyor shall be de-tensioned where there is potential for movement due to Stored Energy when accessing major pinch points e.g. accessing conveyor pulleys.

7.12. Rotating equipment

- 7.12.1. Equipment with the potential to rotate due to Stored Energy shall be physically secured by certified securing device e.g. pins, slings and shackles. All anchor points shall be certified and regularly inspected.

7.13. Springs

- 7.13.1. There is potential for significant injuries if the Stored Energy is not carefully released.
- 7.13.2. Releasing Stored Energy must always be done in a controlled manner, using an engineered mechanical device to prevent the spring from being accidentally released.

7.14. Lifting and tensioning equipment

- 7.14.1. Personnel are not permitted to work under a suspended load.
- 7.14.2. Once equipment is positioned, it shall be supported by suitably rated and certified devices e.g. supported with stands, secured with slings and shackles or lifting chains and locked. All anchor points shall be certified and regularly inspected.

- 7.14.3. Chain blocks, com-a-longs and other similar lifting or pulling equipment, although rated, are not to be used as isolating devices. This type of equipment have internal clutch mechanisms that, if fail, render the equipment ineffective.
- 7.14.4. Hydraulic lifting equipment is not permitted to be used as an isolating or securing device. Hydraulic hoses and seals can fail under load.

7.15. Ropes under tension

- 7.15.1. Where personnel are accessing or working in or near ropes under tension, there is a risk of impact from:
 - a) The ropes,
 - b) Equipment connected to the ropes e.g. counterweights, pulleys or sheaves,
 - c) Flying debris created by the ropes failing.
- 7.15.2. Ropes shall be de-tensioned to a condition where the Stored Energy is dissipated.
- 7.15.3. Equipment connected to ropes under tension that have potential to move shall be secured (e.g. propped up with rated stands or secured with certified equipment such as slings and shackles or lifting chains).

7.16. Mobile equipment

- 7.16.1. Prior to isolating mobile equipment, ensure it is correctly parked to relieve or control all Stored Energy. Some examples of the energy and control strategy may include but are not limited to:
 - a) Front End Loader with park brake applied and bucket on the ground.
 - b) Grader with park brake applied and blade and ripping tines on the ground.
 - c) Trucks are parked with the park brake on and front or rear wheels in a ditch or on level ground with wheels chocked.
 - d) Forklift with park brake applied, tines on the ground and wheels chocked.

7.17. Securing articulation points on mobile equipment

- 7.17.1. Where personnel are exposed to potential harm from the movement of articulated pivot points on machines, the manufacturers approved method of securing the pivot point shall be used.

7.18. Pressure

- 7.18.1. Pressurised liquids, pneumatic and hydraulic Stored Energy may be contained in:
 - a) Cylinders.
 - b) Hoses and fittings.
 - c) Tanks.
 - d) Receivers.
 - e) Accumulators.
 - f) Tyres.
 - g) Hydraulic equipment.
- 7.18.2. The stored pressure must be released prior to personnel working on the equipment.

7.19. Proving for mechanical de-energisation

7.19.1. Mechanical Isolations shall provide an absolute separation between the Potentially Hazardous Energy Source and any PLH, regardless of the Plant or Equipment conditions.

7.20. Piping and Process Isolations

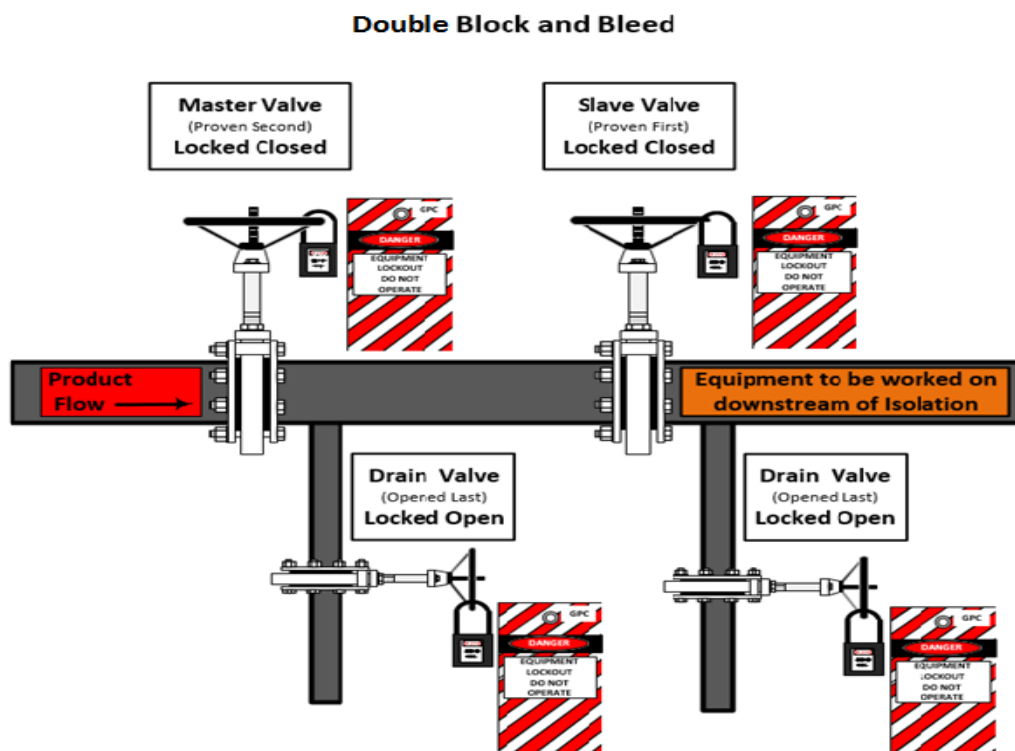
7.21. Double block and bleed

7.21.1. A Double Block and Bleed isolation is implemented by locking two valves upstream of the work area and releasing energy between the valves and the work area when a Positive Isolation is not practicable.

7.21.2. The steps for a double Block and Bleed are:

- a) Prove both drain valves are unblocked by cracking open the valves and observing flow,
- b) Close the slave valve (closest to the work area),
- c) Open and confirm drainage from the drain valve closest to the work area,
- d) Once proven, secure the slave valve (Isolation Point) against alteration with a hasp and attach the Isolation Tag and Isolation Lock in the open position,
- e) Close the master valve (upstream of the slave),
- f) Open the drain valve between the master and slave valves and witness drainage,
- g) Once proven, secure the master valve (Isolation Point) against alteration with a hasp and attach the Isolation Tag and Isolation Lock in the closed position,
- h) The second Isolation Officer has verified steps 1-7,
- i) Both Isolation Officers initial each Isolation Point on the Isolation Plan.

7.21.3. Double block and bleed infographic



7.22. Single block and bleed

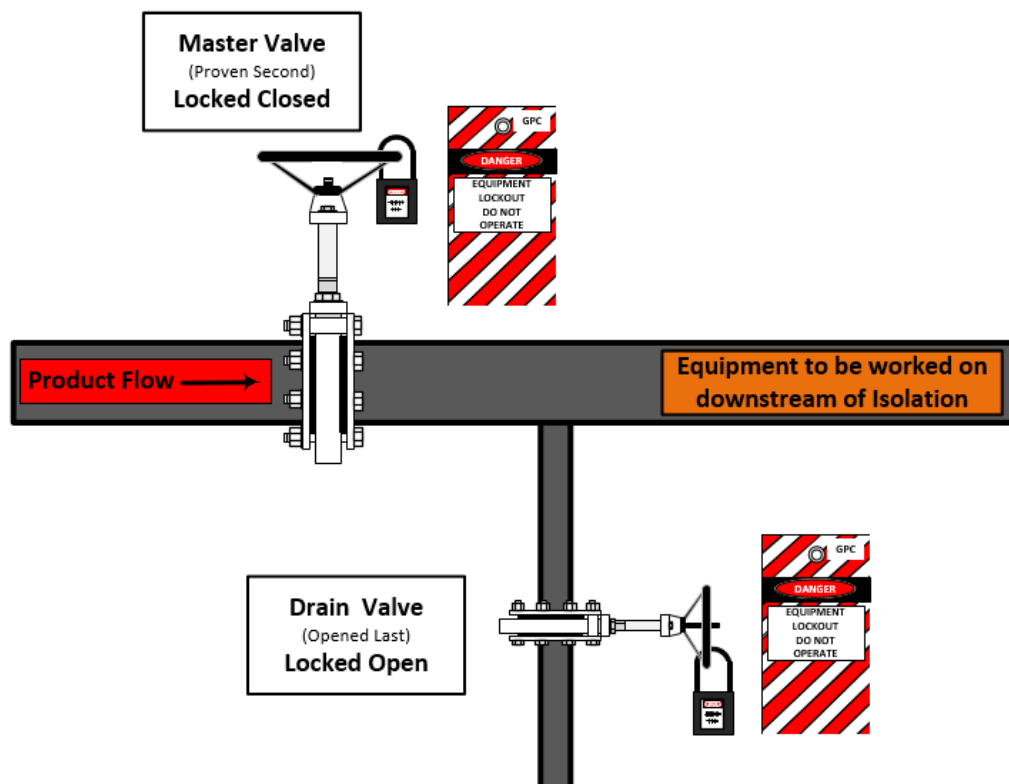
7.22.1. A Single Block and Bleed isolation is implemented by locking one valve upstream of the work area and releasing energy between the valve and the work area when double Block and Bleed is not practicable.

7.22.2. The steps for a Single Block and Bleed are:

- a) Prove drain valve is unblocked by cracking open the valve and observing flow,
- b) Close the master valve upstream of the work area,
- c) Open the drain valve,
- d) When the system is completely drained and flow through the drain has stopped, secure the drain valve (Isolation Point) against alteration with a hasp and attach the Isolation Tag and Isolation Lock in the open position,
- e) Once proven, secure the master valve against alteration with a hasp and attach the Isolation Tag and Isolation Lock in the open position,
- f) The second Isolation Officer has verified steps 1-6,
- g) Both Isolation Officers initial each Isolation Point on the Isolation Plan.

7.22.3. Single block and bleed infographic

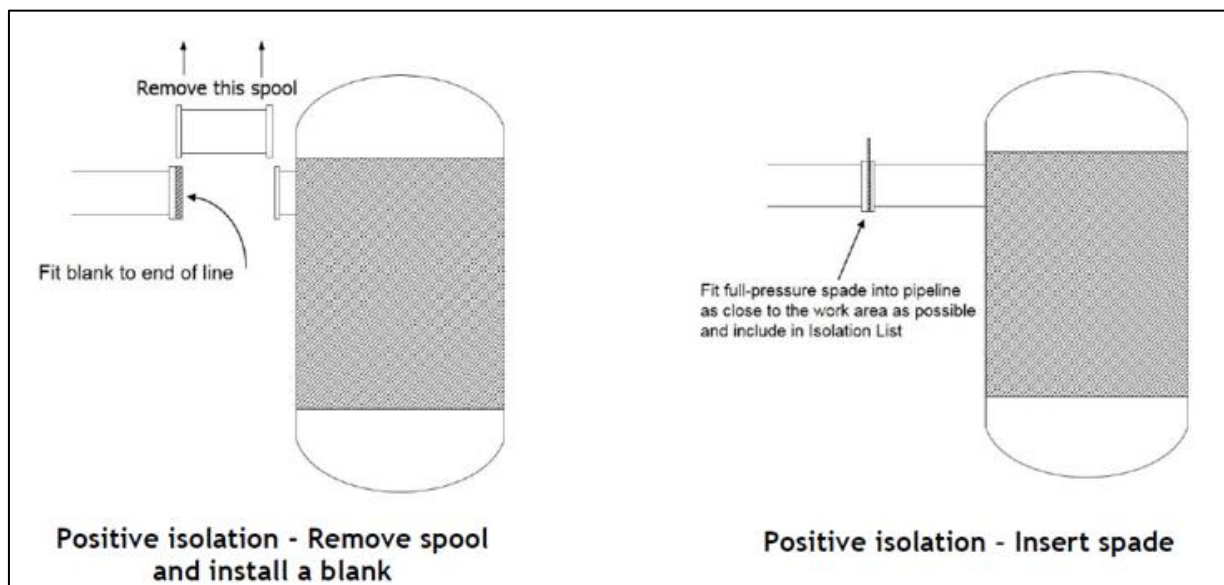
Single Block and Bleed



7.23. Spool removal and blank insertion

- 7.23.1. Spool removal consists of removing a designated spool, valve, expansion joint, etc. to completely isolate the equipment from the piping system. The open end of pipe leading to the equipment to be worked on shall be capped with a blank flange. The piping system will need to be isolated, depressurised and drained prior to removing the spool.
- 7.23.2. Blanks or spades can be inserted between flanges in piping systems providing a Positive Isolation. Thickness of blank material shall suit the design operating pressure of the pipe material specification. The piping system will need to be isolated, depressurised and drained prior to the blank being inserted or removed.

7.23.3. Spool removal and blank insertion infographic



8. Appendices

8.1. Appendix 1 – Related documents

8.1.1. Legislation and regulation

Key relevant legislation and regulation, as amended from time to time, includes but is not limited to:

Type	Legislation/regulation/guidelines
Federal Acts	
State Acts	Work Health and Safety Act 2011 Work Health and Safety Regulation 2011 Electrical Safety Act 2002 Electrical Safety Regulations 2013
Other	Managing the risks of plant in the workplace Code of Practice 2013 How to manage work health and safety risks Code of Practice 2011 AS/NZS 3000:2007 Wiring Rules AS/NZS 1755:2000 Conveyors- Safety Requirements AS 4024.1603: 2014 Safety of Machinery - Design of controls, interlocks and guards - Prevention of unexpected start-up AS/NZS ISO 31000:2009 Risk management - Principles and guidelines. Relevant manufacturer's instructions and operator's instructions/manuals

8.1.2. Gladstone Ports Corporation documents

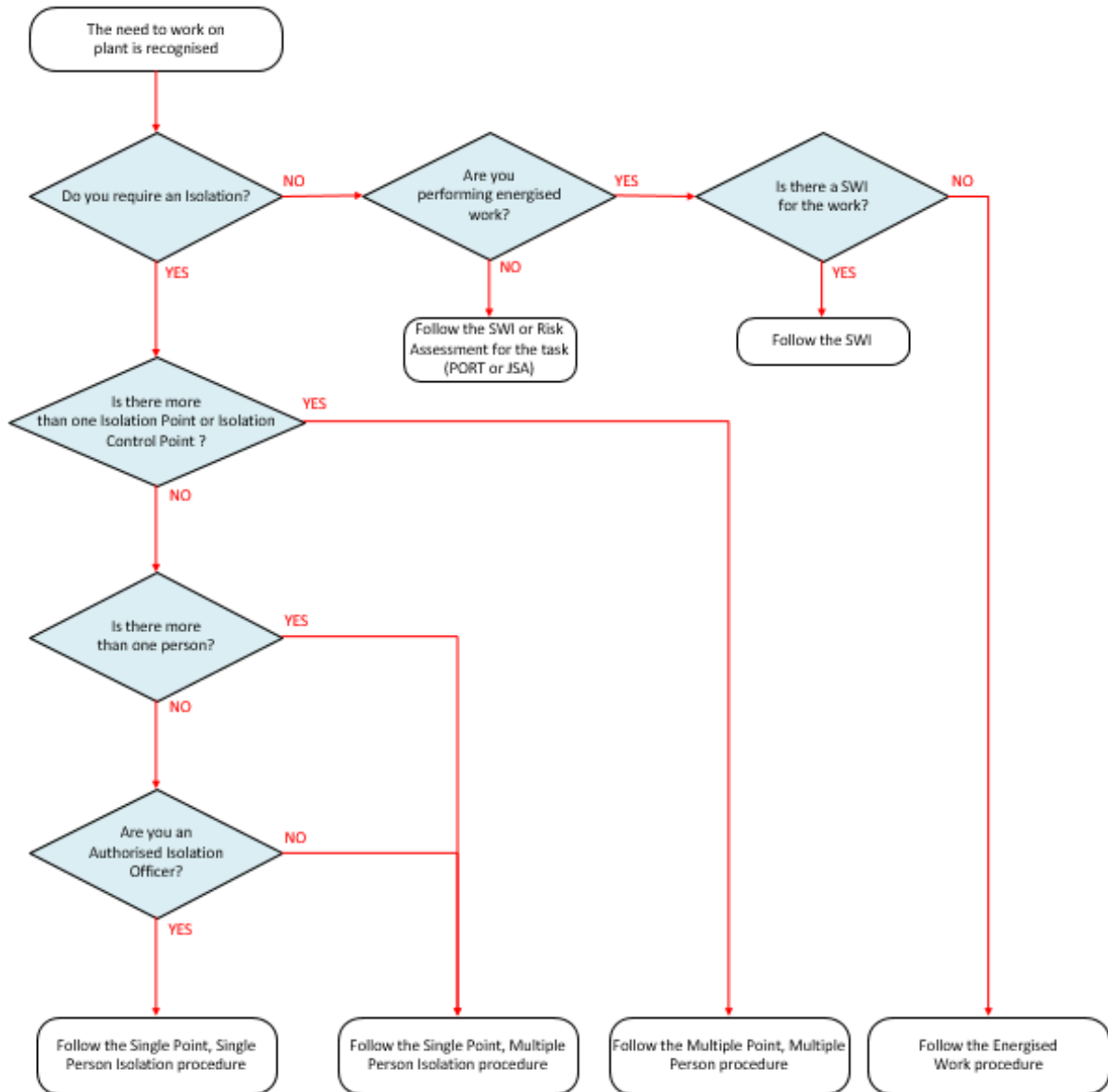
The following documents relate to this Procedure:

Type	Document number and title
Tier 1: Policy	#365624 Health and Safety Policy #924359 Risk Management Policy
Tier 2: Standard/Strategy	#854303 Safety Management Standard #829152 Risk Management Standard

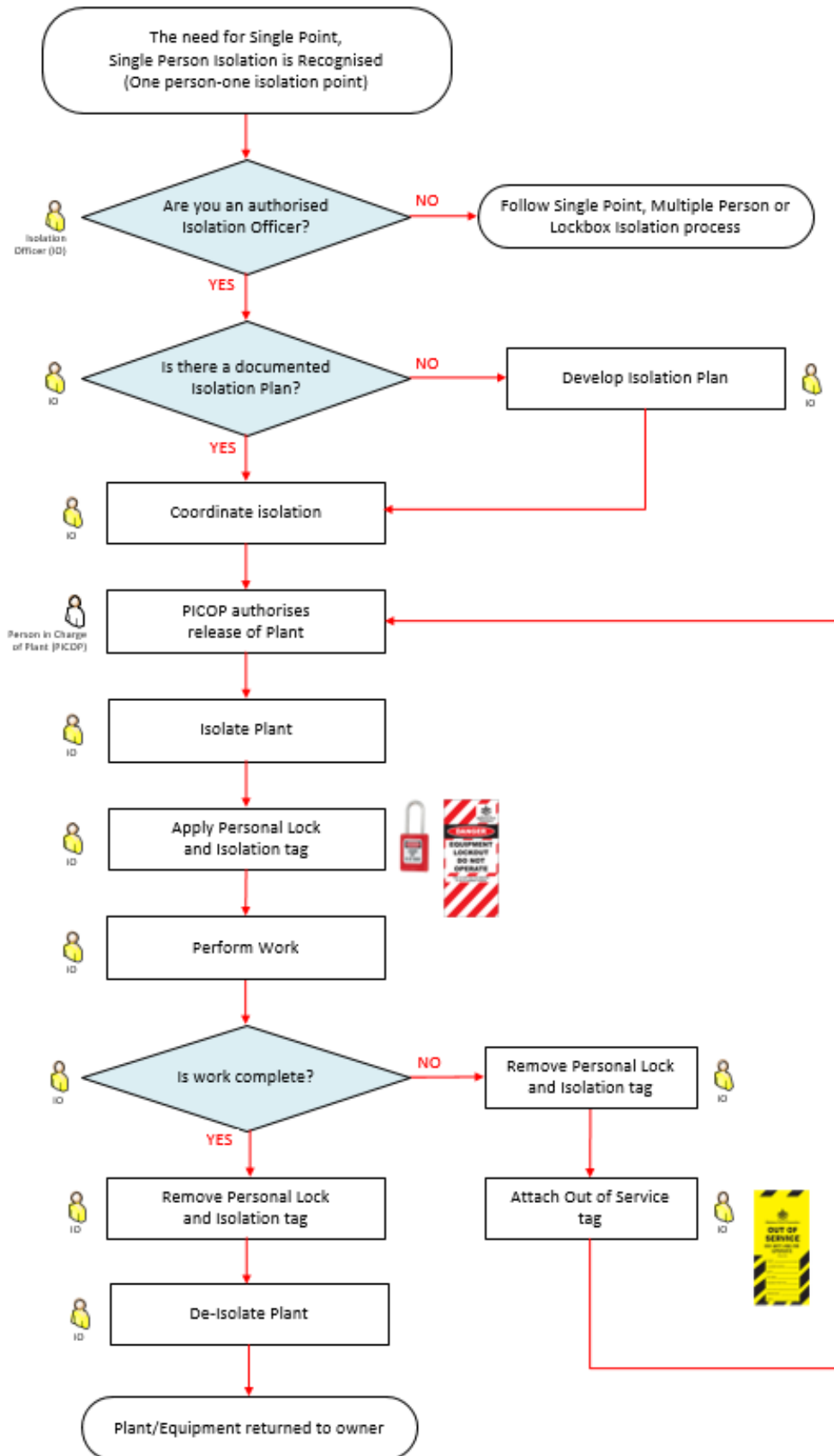
Type	Document number and title
	#995910 Contractors and Port Users Safety, Environment and Security Standard
Tier 3: Specification/ Procedure/Plan	#1075526 Incident Management & Investigation Procedure
Tier 4: Instruction/Form/ Template/Checklist	#1711610 Mobile Plant Energised Work Safe Work Instruction #120673 JSA Template Form #1640654 SWI Template Form #1533263 Isolation Permit Form #1649206 Temporary Re-instatement Form #1533263 Isolation Point Extension Form #1533263 Work Party Sign On Sign Off Form #1515072 Isolation and Lockout Audit Form #1649295 Forced Lock Removal Form #1712991 Application for Red Personal Lock Form #1621179 GPC Corporate Glossary Instruction
Other	#1514975 Critical Plant or Equipment Register #1514594 Approved Isolation and Lockout Devices Register #647005 Lockbox & Isolation Locks Register #1466585 Red Personal Locks Issued Register #1093893 Contractors Training Register #1466585 Incident Investigation Report Template #1156777 GPC Job Specific Mandatory Training Matrix

8.2. Appendix 2 - Isolation and Lockout flowcharts

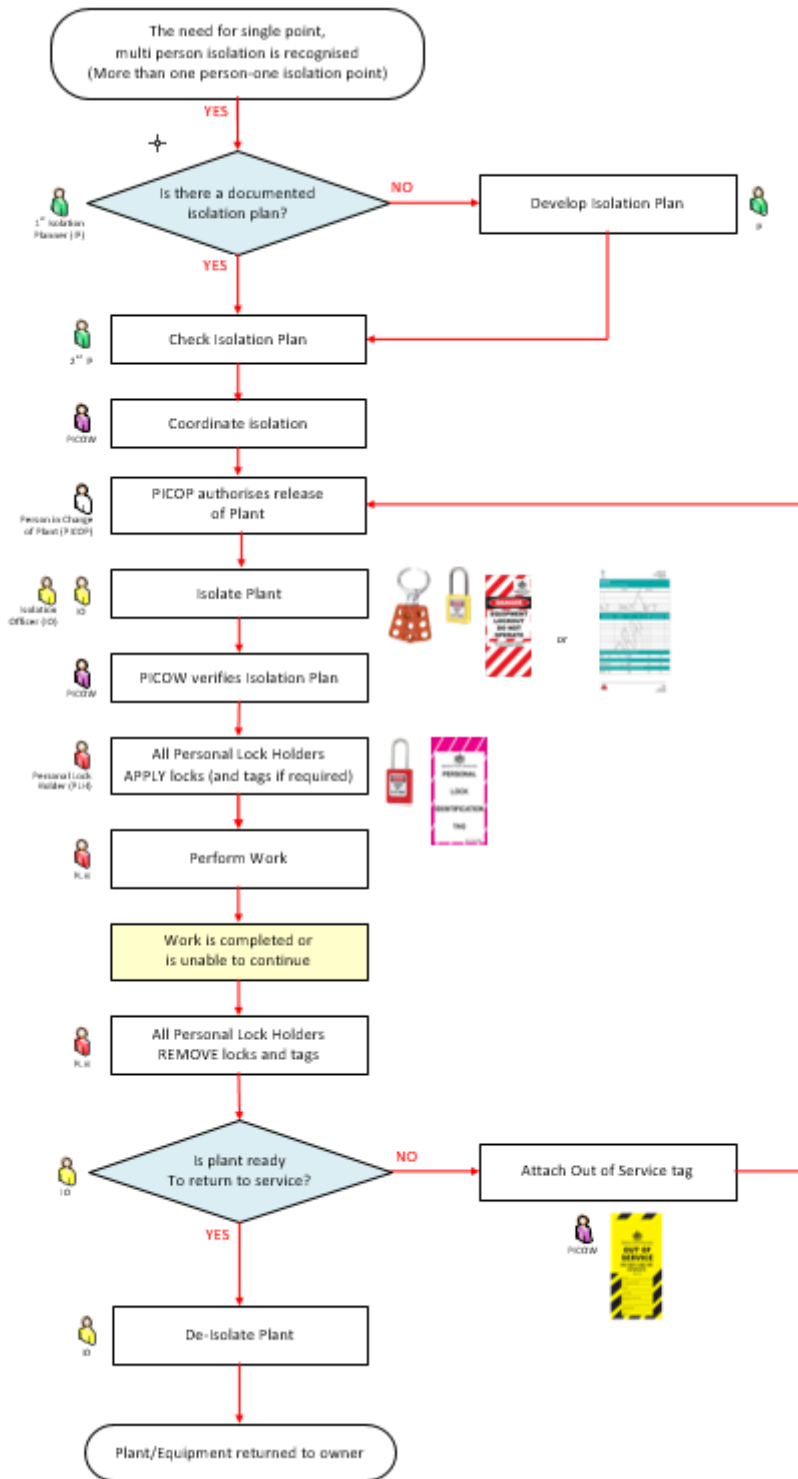
8.2.1. Isolation Type decision Flow



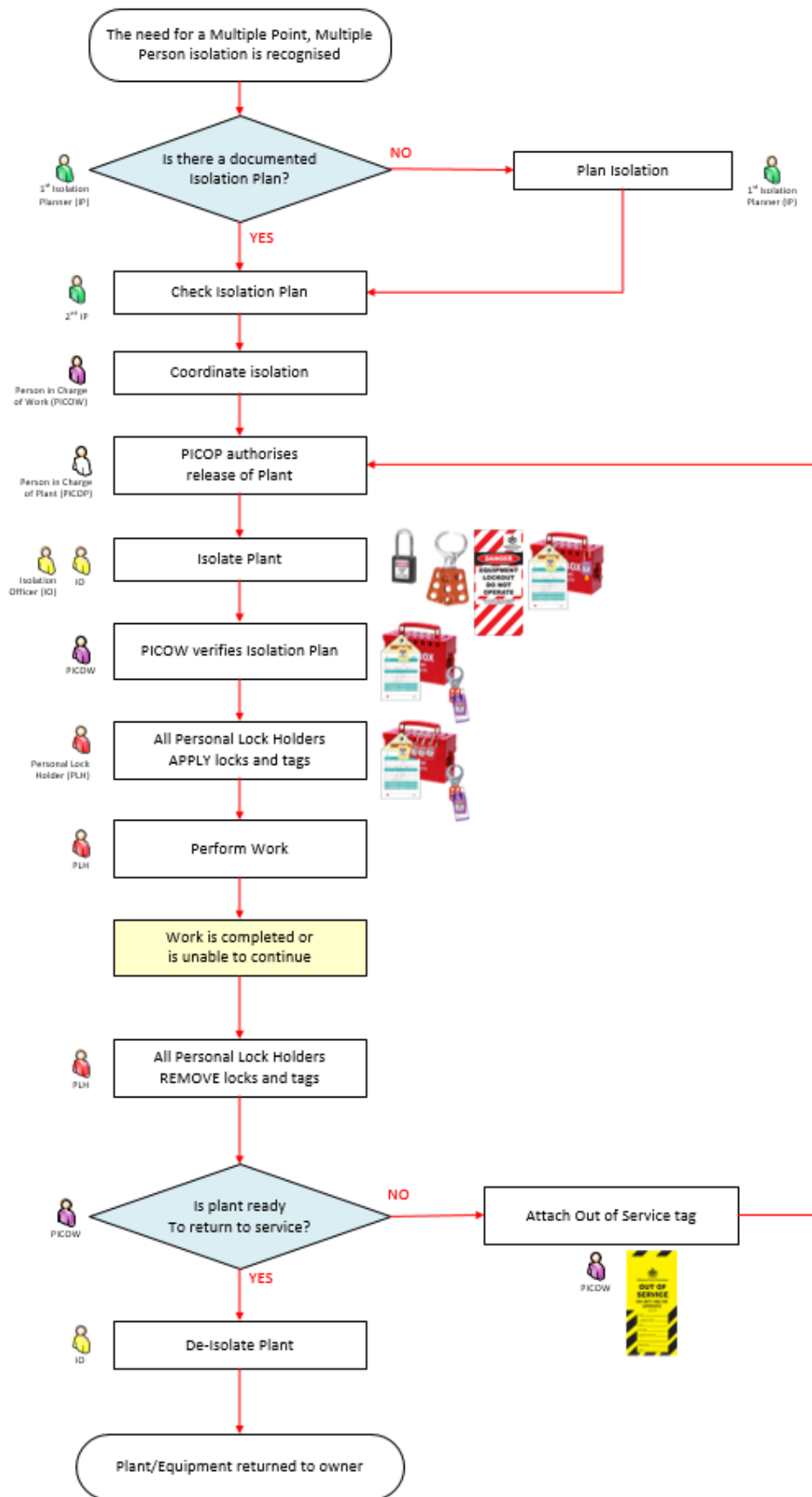
8.2.2. Single Point, Single Person (SPSP)



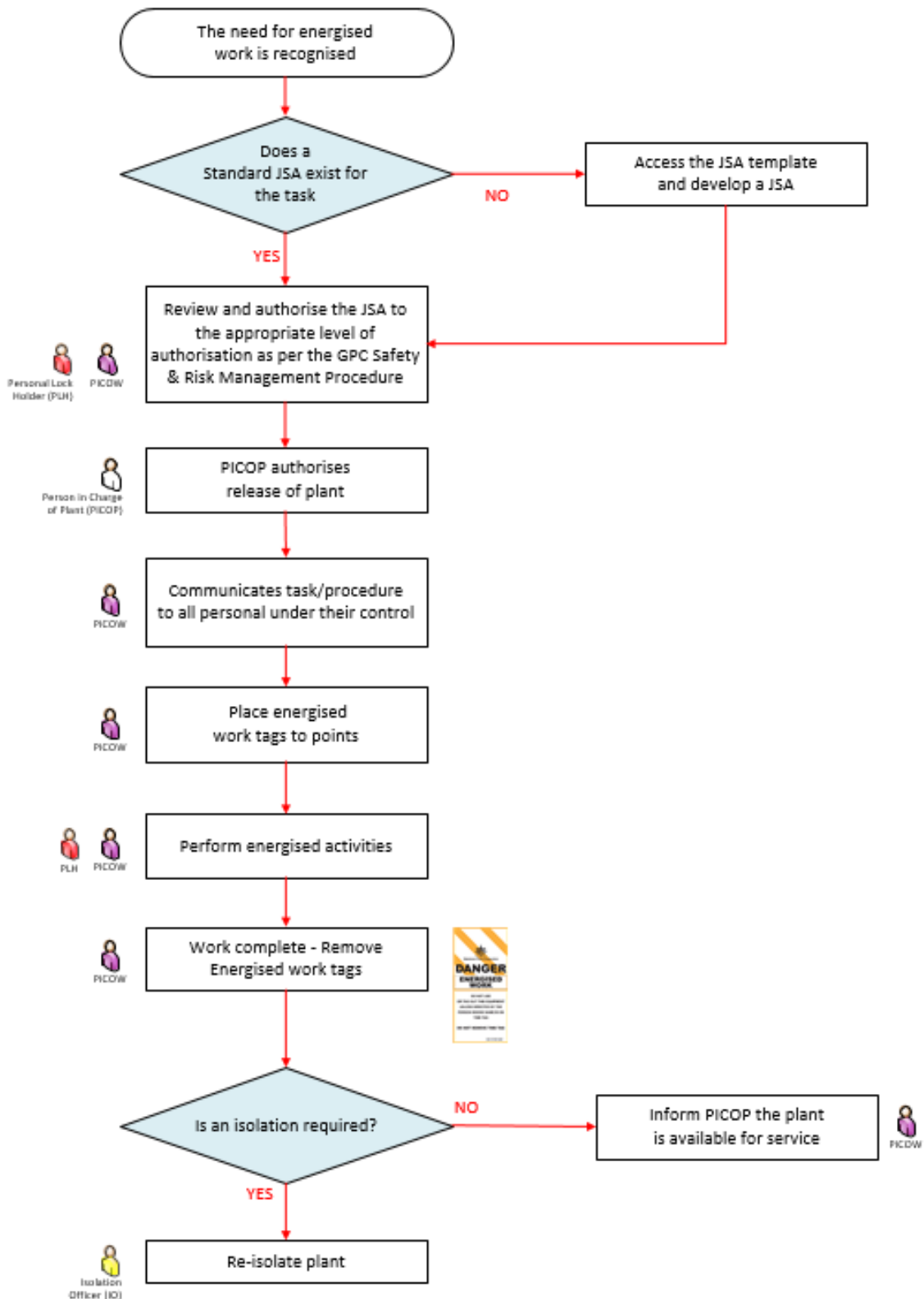
8.2.3. Single Point, Multiple Person (SPMP)



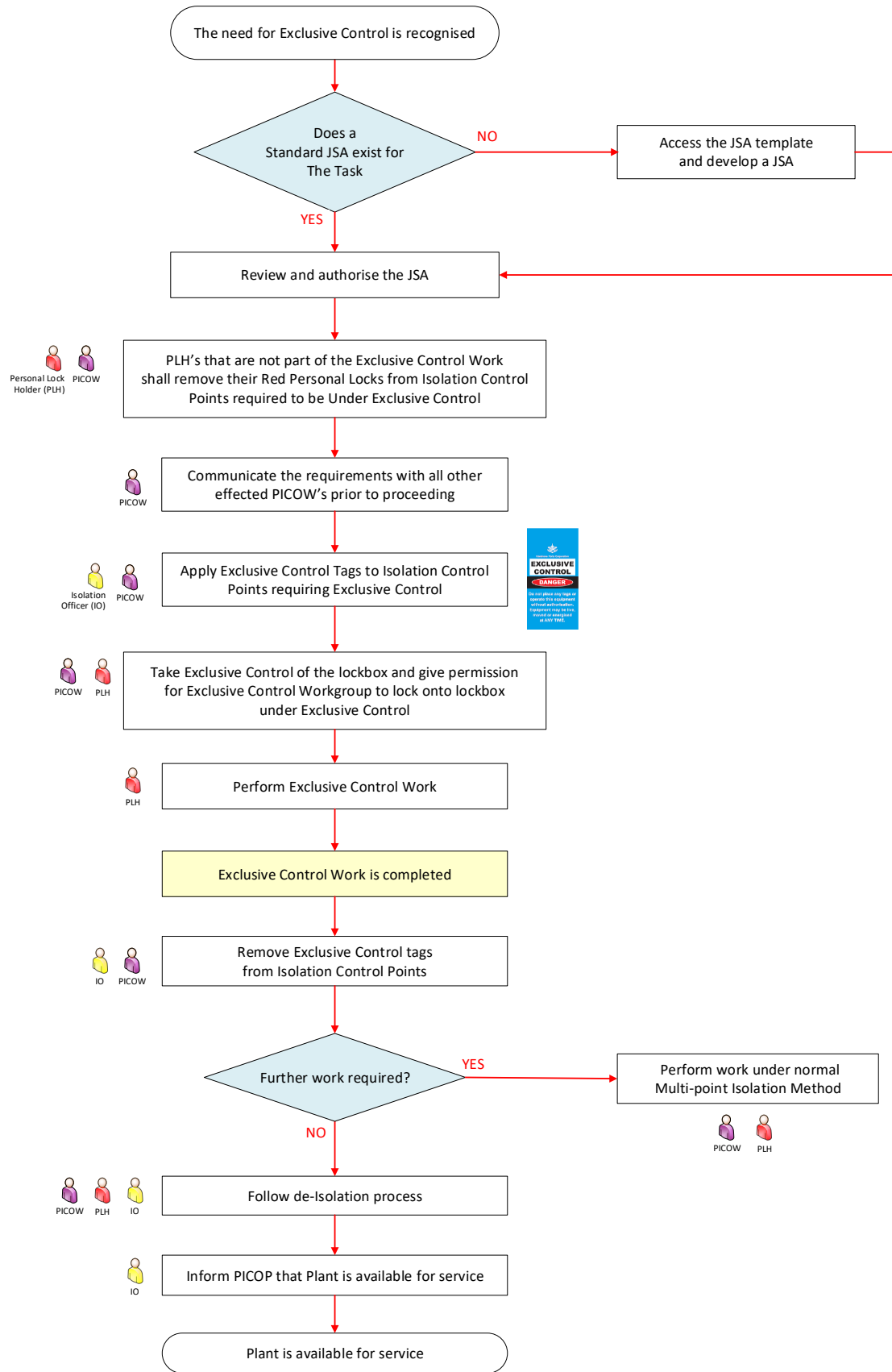
8.2.4. Multiple Point, Multiple Person (MPMP – utilising a Lockbox)



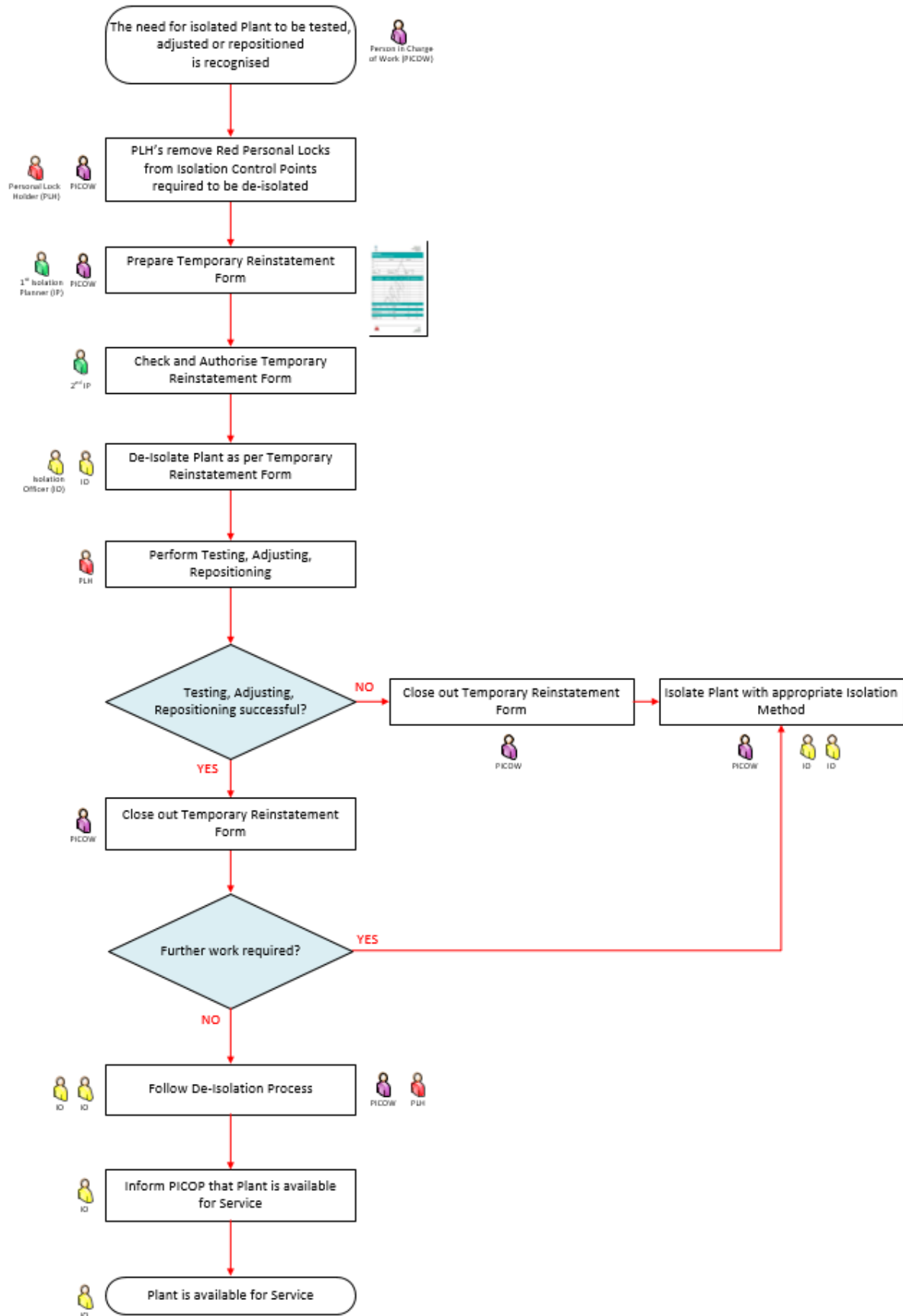
8.2.5. Energised Work




8.2.6. Exclusive Control




8.2.7. Temporary re-instatement



8.2.8. Temporary re-instatement form





TEMPORARY RE-INSTATEMENT FORM

PART A: DETAILS OF AUTHORISATION FOR TEMPORARY RE-INSTATEMENT (inching, adjusting, repositioning or testing)

Date:	Time:	If applicable Permit No:
Plant/Equipment Description:		
Reason:		

Controls Checklist	Yes	No	N/A	Comments
PICOW confirmed all work activities are stopped	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PICOW confirmed all PLH's have removed Red Personal Locks and signed off the Isolation Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PICOW confirmed PLH's understand reasons for temporary re-instatement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

I declare that the documented Isolation Points and/or Isolation Control Points are safe to temporarily De-isolate by the Authorised Isolation Officers for the purposes of inching, testing, adjusting or repositioning.

PICOW:	Signature:	Date:	Time:
ISOLATION PLANNER 1 :	Signature:	Date:	Time:
ISOLATION PLANNER 2:	Signature:	Date:	Time:

PART B: DETAILS OF ISOLATION POINTS TO BE DE-ISOLATED

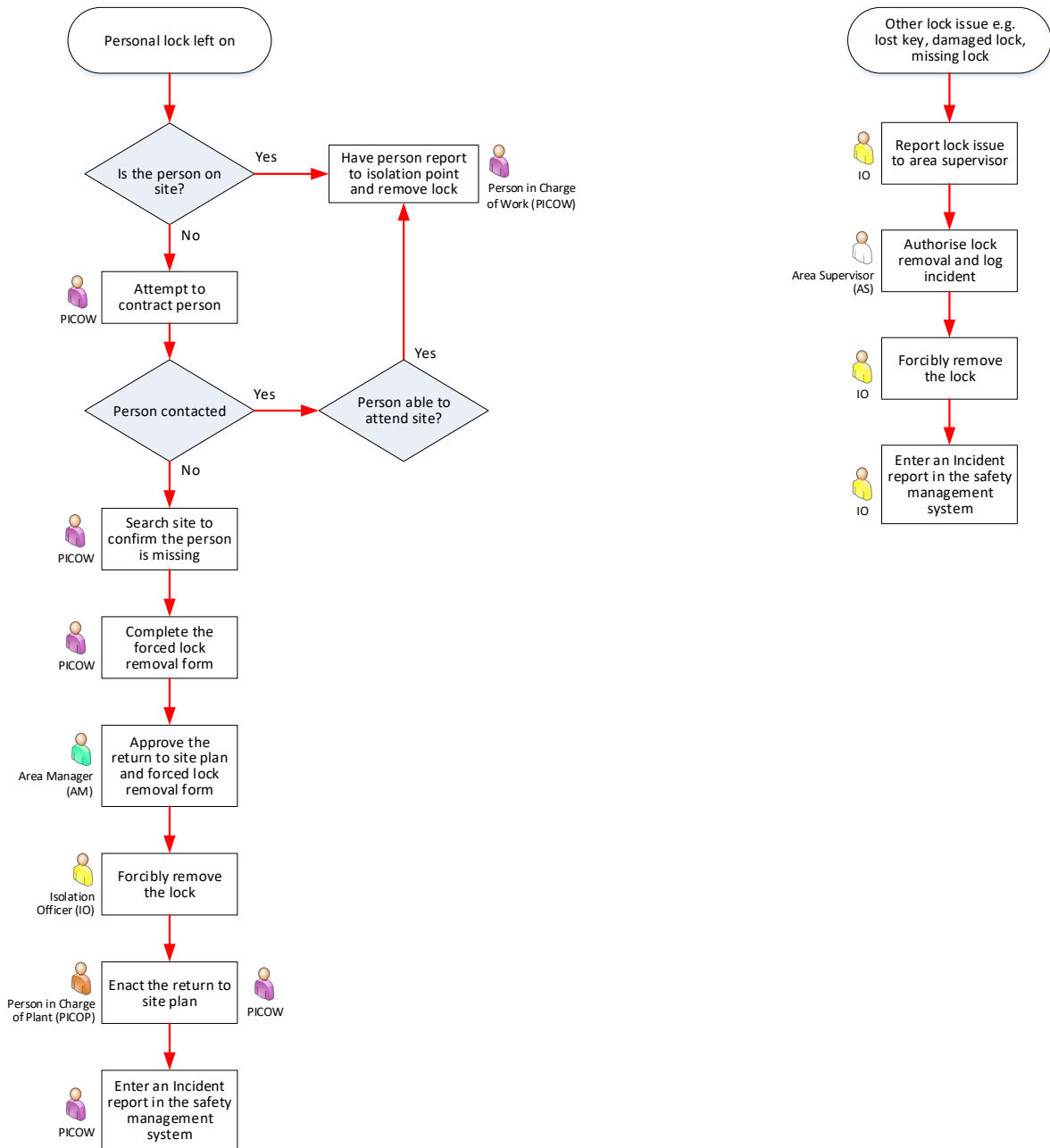
Lockbox ID:		Lockbox Location:			
Isolation Point ID	Plant/Equipment to be De-isolated	Isolation Point Location	De-isolated Condition	Isolation Officer 1	Isolation Officer 2

I declare that the documented Isolation Points and/or Isolation Control Points identified have been temporarily De-Isolated for the purposes of inching, testing, adjusting or repositioning.


ISOLATION OFFICER 1:	Signature:	Date:	Time:
ISOLATION OFFICER 2:	Signature:	Date:	Time:

Form: 1649206 TEMPORARY RE-INSTATEMENT FORM v1 24/08/2020
Page 1 of 2


8.2.9. Forced lock removal (red Personal Lock)



8.2.10. Forced removal of lock form



FORCED REMOVAL OF LOCK FORM



Growth, prosperity, community.

PART A: PLANNING FORCED REMOVAL OF RED PERSONAL LOCK

Date:		PLH Name:	
Time:		PLH Company:	
GPC PICOW:		PLH Contact No:	
Plant/Equipment secured by Lock:			

PART B: CHECKLIST

Controls	Yes	No	N/A	Comments
PLH who applied the red personal lock is not on site at this facility.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PLH who applied the red personal lock has been contacted and cannot return to site in the required time to remove their lock.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Area Manger or appointed delegate in the PLH's absence has ensured a plan is in place before the Forced Removal of Lock to prevent PLH access to the original Safe Isolation Boundary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Area Manger or appointed delegate has organised two Authorised Persons to ensure the correct lock removed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

PART C: AUTHORITY FOR FORCED REMOVAL OF A RED PERSONAL LOCK

Authority to Remove Red Personal Lock Acknowledgement

Name of Area Superintendent or Delegate:	Signature:	Date:	Time:
--	------------	-------	-------

PART D: COMPLETION CHECKLIST FOR FORCED REMOVAL OF RED PERSONAL LOCK

Completion Checklist	Yes	No	N/A	Comments
The removed Red Personal Lock returned to the Area Manager with a copy of the Forced Lock Removal Form.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
The GPC Representative of the person involved in the breach shall generate an incident report for investigation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Plan is in place to prevent PLH access to the original Safe Isolation Boundary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Appropriate corrective actions implemented to ensure the PLH action is not repeated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Unauthorised removal of any Red Personal Lock could result in serious injury or death, plant, equipment or environment damage and shall result in disciplinary action.

PART A: PLANNING FORCED REMOVAL OF A BLACK LOCKBOX LOCK OR A PURPLE LOCK

Date:		Lock Type:	
Time:		Lockbox No:	
PICOW:		Area Owner:	
Plant/Equipment secured by Lock:			

PART B: CHECKLIST

Controls	Yes	No	N/A	Comments
All reasonable efforts have been made to locate the missing key for the Lock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
The lock is damaged and cannot be removed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Area Supervisor or appointed delegate has organised two Authorised Persons to ensure that the correct lock is removed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Form: 1649295v1 FORCED REMOVAL OF LOCK FORM
Page 1 of 2



FORCED REMOVAL OF LOCK FORM

PART C: FORCED REMOVAL OF A BLACK LOCKBOX LOCK OR A PURPLE LOCK

Authority to Remove Black Lockbox Lock or Purple Lock Acknowledgement

Name of Supervisor or Delegate:	Signature:	Date:	Time:
---------------------------------	------------	-------	-------

PART D: COMPLETION CHECKLIST FOR FORCED REMOVAL OF BLACK LOCKBOX LOCK OR A PURPLE LOCK

Completion Checklist	Yes	No	N/A	Comments
The removed Lock has been returned to the Area Supervisor with a copy of the Forced Lock Removal Form.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Area Supervisor tagged Lockbox Out of Service until lock replaced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Area Supervisor has generated an incident report for investigation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

8.3. Appendix 3 – Revision history

Revision date	Revision description	Author	Endorsed by	Approved by
18 March 2022 v1	First published	Jason Holzberger – Isolation Systems Officer	Kevin Rayfield – Reliability & Maintenance Manager	Ged Melrose – AM&PS/OPS General Manager
29 June 2022 v2	Revised to new document template	Richard O'Driscoll – Maintenance Systems Specialist	Kevin Rayfield – Reliability & Maintenance Manager	Ged Melrose – AM&PS/OPS General Manager