

Number	CSBP-GM-11-031-51				
Reasons for Creating or Amending Document	New or Amended Process				
Actual Change Details	Added note in Section 6.2.1 stating that each individual lock must be associated with an individual piece of equipment. Added notes in Section 6.2.1 and 6.3.1 stating that P&IDs must be a controlled document and revision number must be included. Added to Section 6.12 to expand on the process of commissioning. Added responsibilities of Commissioning Person in Appendix D.				
Version	28.1.0	Published	01/12/2025	Review Date	01/12/2026

PREFACE

The CSBP Kwinana Work Permit System is applicable to CSBP Kwinana Chemical Manufacturing, CSBP Kwinana Fertilisers and CSBP Country Works Fertilisers business units.

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1 PURPOSE

This procedure specifies the minimum requirements for CSBP Kwinana Work Permit System in order to eliminate harm to persons and protect materials, equipment and facilities from damage.

CSBP Kwinana Work Permit system controls high risk and/or non-routine work activities through assignment of responsibilities, required communication, and identification of hazards and application of appropriate risk controls prior to the commencement of work.

1.1 WORK PERMIT SYSTEM REVIEW COMMITTEE CHARTER

The objectives of the Committee are to:

- Ensure the Work Permit System provides a safe system of work.
- Ensure the Work Permit System is improved in line with striving to achieve best practice.
- Seek consistency within CSBP in the application of the Work Permit System.
- Optimise the resources required to operate the Work Permit System without exposing people and the business to undue risk, and
- Research the availability of new or improved tools to facilitate the Work Permit System.
- The committee comprises a Chairperson, Safety Advisors & Superintendent, Business unit Superintendents, Supervisors, Process Technicians, Mechanical Technicians, E/I Technicians and Engineering representatives.
- The committee will meet quarterly, items discussed will be tracked in a register.

2 SCOPE

This procedure shall apply to all CSBP Kwinana and CSBP Country Works areas and shall be applied to all elements of work including, but not limited to, the design, construction, operation, maintenance and modification of all plant, equipment and site services.

This procedure shall apply to all personnel and visitors at CSBP Kwinana.

3 SAFE SYSTEMS OF WORK

CSBP Kwinana risk assessment processes shall apply to all Work Permits and isolations. A JSA shall be conducted on site for every Work Permit.

Work Permits that have been issued shall be included on the Work Permit Register.

Safe Work /Procedures should be developed for repetitive tasks involving isolations.

Contractor's safe systems of work shall be reviewed by the CSBP responsible officer to ensure that they meet the requirements of this Procedure.

4 AREA OF RESPONSIBILITY

Each area shall be responsible for the issuing of Work Permits for work within their plant or area boundary.

The Work Permit system's main physical areas of responsibility are shown on a site plan called [Work Permit System – Kwinana Works - Main Areas of Responsibility \(CSBP-IF2494\)](#).

4.1 TRANSFER OF PRODUCTS

Where fluids (e.g. ammonia, acid, steam or condensate) are transferred between areas, the lines and associated equipment shall be the responsibility of the sender up to the building/plant boundary, responsibility then transfers to the receiving plant once inside the building/plant boundary.

Where lines and associated equipment can be fed across plant a Work Permit for the appropriate isolations shall be required from each plant. The plant/area in which the work is to be conducted or Downstream Plant shall issue the Work Permit for the work in which the Permit Holder and team member shall work from. This acts as the Permit holder's authority to work. The lines and associated equipment feeding the Downstream plant is known as Upstream Plant.

Where solid material (e.g. ammonium nitrate prill or fertiliser) is transferred between areas, the solids handling equipment (conveyors or transfer chutes) and materials shall be the responsibility of the sender until the material falls from the last conveyor or belt into the receiving area.

4.1.1 Transfer of Product Work Permit Issuing Process

The Transfer of Product Work Permit issuing process shall ensure that the below process is followed:

1. The upstream and downstream plants must:
 - a. Discuss and confirm work to be done.
 - b. Agree isolations required and develop separate Isolation Check lists confirming areas and extent of isolation responsibility.
2. The upstream plant shall develop an isolation checklist *refer to section 6.2 Isolation Checklist* and isolate relevant equipment *refer to section 6.4 Process of Isolation*.
3. The downstream plant shall develop an isolation checklist *refer to section 6.2 Isolation Checklist* naming the Upstream Work Permit Lock Box Work Permit number as an Isolation Point.
4. The downstream plant shall isolate relevant equipment *refer to section 6.4 Process of Isolation* placing an Isolation Lock and Work Permit Isolation tag on the upstream Work Permit Lock Box.
5. The downstream plant shall follow the Work Permit Process *refer to section 5 Work Permit Process*.

4.2 DAMPIER TO BUNBURY NATURAL GAS PIPELINE

The management of the Dampier to Bunbury Natural Gas Pipeline (DBNGP) pipe and corridor is prescribed by the Dampier to Bunbury Pipeline Act 1997.

The following restrictions shall apply:

1. Work shall not be permitted within the five (5) meter wide (2.5m either side) corridor without written approval from and supervision by DBNGP field officers.
2. Earth works involving heavy machinery and vibrating rollers or plate compactors shall not be allowed within twenty (20) meters of the DBNGP.

Any personnel required to carry out such activities within the above areas shall seek permission from Engineering Services and shall undergo DBNGP Authority Safety Induction. Engineering Services is responsible for gaining approval for the work from the Department of Regional Development and Land.

4.3 SITE CRITICAL SERVICES

Drawing [Kwinana Works Site Layout Critical Services Ownership Details 1100-0-0001/076](#) contains location and ownership details of site critical services. This drawing shall be referenced when issuing Work Permits on or near critical services to determine responsibility *refer to section 4 Area of Responsibility* and potential impact on service owner.

4.4 SECURITY SENSITIVE AMMONIUM NITRATE (SSAN)

In the ammonium nitrate business, Prill Plant 2, AN Emulsion, and AN Despatch are classified as SSAN areas. Additional security controls are in place to restrict unauthorised access to prilled ammonium nitrate and AN Emulsion. There are two approved access levels for SSAN areas: Supervised Access and Unsupervised Access.

4.4.1 UNSUPERVISED ACCESS

For unsupervised access, a person must meet the following requirements:

- a. **Completed Inductions:** General Site and AAN Area.
- b. **Valid Dangerous Goods Security Card (DGSC):** A current DGSC is required.
- c. **DGSC Documentation:** Once received, a copy of the DGSC must be scanned and uploaded to ELEVATE by submitting a JIRA request.
- d. **Approval:** Requires approval by the AAN Production Manager (Nominated Qualified Officer).
- e. **Record Keeping:** The DGSC and 'authorization approval' must be saved in ELEVATE by the Inductions team

4.4.2 Supervised Access (No Dangerous Goods Security Card)

Individuals must be inducted and approved by AAN Production. The following conditions apply:

- a. **Authorisation:** Can only be authorised by the Approved List of Delegates in the Security Plan.
- b. **Duration:** Maximum duration of access is 3 months (the only other option is 1 week).
- c. **Intended For:** New starters who are waiting for a DGSC card and short-term contractors who are not expected to return to PP2 regularly.
- d. **Delegates:** Delegates are not necessarily the RO or crew supervisor. The delegate should ensure supervision is provided.
- e. **Supervision Requirement:** Law requires direct, line-of-sight supervision when access to SSAN products is possible.

For all permitted work inside the SSAN area, at a minimum, the nominated DGSC Holder must have unsupervised access for the area. The nominated DGSC Holder shall ensure all team members with supervised access only are supervised at all times during work in the SSAN area.

5 WORK PERMIT PROCESS

The [Work Permit Form \(CSBP-PF2462\)](#) is the written authority to work issues under the Work Permit System. Current approved versions of the Work Permit and the associated Certificates and Isolation Checklists (including developed Standard and Common Isolation Checklists) shall be located on and accessed from the Document Management system.

As a minimum, a Work Permit shall be authorised by the Permit Authoriser, the Permit Authoriser and Permit Holder shall not be the same person (excluding country works).

A Permit Holder and Team Members shall only lock and sign on to one active permit at any time. Exceptions to this requirement may only be issued in writing by the area Production Manager or higher.

A Work Permit shall be established for every task unless it is on the work not requiring a permit list *Refer to Section 5.11 Work Not Requiring a Permit*. All Work Permits shall be produced in triplicate as describe on [Work Permit Form \(CSBP-PF2462\)](#), the Work Permit copies shall be distributed as follows:

- f. Permit Holder page (White) and any white copies of Certificates and the risk assessments shall remain with the Permit Holder at the worksite while work is in progress and then returned to the point of issue on completion of each Permit Holders shift.
- g. A board, or similar, shall be used to display copies (Yellow) of the active Work Permits and associated Certificates/documentation in the Area. This shall be located in a central, visible area in each Department and managed by the Permit Authoriser/Delegate.

- h. Permit Authoriser copy (Pink) and Signature Page (Blue) shall remain in the Permit Issuing Area.

5.1 WORK PERMIT SCOPE OF WORK

The scope of work shall:

- a. Be clearly defined by the Permit Holder in consultation with the Permit Authoriser and or Responsible Supervisor, shall be completed following an inspection of the area by the Permit Holder and the Permit Authoriser/Delegate.
- b. Estimated time for permit expiry.
- c. Provide detailed equipment information to enable identification of all energy sources that require isolations.
- d. Enable identification of which hazard controls are most appropriate.
- e. The scope should limit work to a single trade activity.

5.2 WORK PERMIT PREPARATION

- a. The Permit Authoriser shall prepare the Work Permit documents agreeing with the Permit Holder on the final set of hazard controls based on the Work Area Hazard Identification/Precautions section of Work Permit form and Pre-task risk assessment presented by the Permit Holder.
- b. The Permit Authoriser shall include additional controls considered necessary to cover the defined scope of work.
- c. The Permit Holder shall initiate the implementation of workplace hazard controls as identified in the Work Permit and associated documentation.
- d. Hazard controls shall be implemented according to their respective procedures.

Note: In the event that a Work Permit has been:

- Prepared or partially prepared.
- Has not been issued.
- Is no longer required.

The Permit can be cancelled by writing “Cancelled” diagonally across the page.

5.3 ISSUING PROCESS

The issuing process shall ensure that the below process is followed:

1. The equipment to be worked on by the work group shall be identified and confirmed by the Permit Holder and for contractors the CSBP Accountable Person.

2. The Permit Authoriser/delegate and the Permit Holder shall ensure that the following criteria are met:
 - a. Scope of work has been agreed.
 - b. Hazards have been identified and controlled.
 - c. Equipment to be worked on has been positively identified.
 - d. Verify effectiveness of isolations before work commences infield at the work site, this may include:
 - i. Trying to physically start a piece of equipment from a control panel or local control station.
 - ii. Visualise relief valves, pressure indicators, drains, DCS to ascertain that energies have been removed.
 - iii. Verify a physical break in the electrical supply e.g. removal of fuses, visible break contactor or phase light.
3. Walk the job to ensure correct equipment is being worked on and hazards identified.
4. The Permit Holder shall ensure the JSA has been completed.
5. To ensure the Risk Assessment is adequate the Permit Authoriser must review the risk assessment before the issuing of the Work Permit.
6. Each Work Permit issued shall have its own Work Permit lockbox and documentation holder:
 - a. The risk assessment reflects the Work Permit hazard identification section and applicable certificate.
 - b. Applicable certificates have been completed correctly and their requirements have been met.
7. The Permit Authoriser shall nominate a Work Permit Lockbox by:
 - Filling in a Work Permit Isolation Tag with equipment description, the date and the Work Permit number.
 - Attaching the Work Permit Isolation tag to the Work Permit lockbox with a Permit Authoriser's Lock.
 - As a minimum noting the equipment description and the Work Permit number on the front panel of the Work Permit lockbox.
8. The Permit Authoriser shall brief the Permit Holder on the area hazard controls in place and how they shall be maintained.
9. A Work Permit shall be signed and then issued by the Permit Authoriser to the Permit Holder confirming that:
 - a. All area hazards have been identified and controlled.

10. The Permit Holder accepts the conditions of the Work Permit and associated documents by signing the blue copy of the Work Permit.
11. The Permit Holder shall strictly observe the hazard controls and brief all team members in the work permit requirements.
12. A signed copy of the Work Permit shall remain at the work area during the work activity.
13. Before commencing work, team members shall sign on to the blue copy of the Work Permit once, accepting the scope of work and conditions of the permit.
14. All team members authorised to work under the Work Permit shall lock their Personal Danger Lock with Personal Danger Tag attached on to the Work permit lockbox.
15. The Permit Authoriser shall update the Work Permit register as the status of each permit changes.

5.4 PERMIT EXPIRY PERIOD

Work Permits are issued for the expected period of time that the work team will be working this includes shifts that continue into the next calendar day.

Each Work Permit shall have a maximum expiry period of one calendar month.

At the end of the expiry period if the work is ongoing, the Work Permit shall be closed *Refer to section 5.9 Work Permit Closure* and a new Work Permit shall be initiated.

Area Superintendent may authorise the extension of the Work Permit expiry period beyond the one calendar month.

The word “Closed” shall be written diagonally across the page indicating the Work Permit is no longer active.

5.5 SUSPENDING A WORK PERMIT

Work shall cease immediately and the Permit Holder shall refer back to the Permit Authoriser including, but not limited to, the following circumstances:

1. At the discretion of the Permit Authoriser or the Area/Business Unit Manager.
2. Safety concerns with the task.
3. During an emergency situation and the site muster alarm has sounded.
4. On identification of uncontrolled hazards.
5. Any change in the scope of work.
6. When in a confined space and an undulating siren is sounded.

The Permit Holder shall return all documentation to the Permit Authoriser.

Work shall not recommence until the Work Permit has been revalidated by a Permit Authoriser with the necessary controls being in place and changes, if necessary, being communicated to the Permit Holder and all Team Members *Refer to section 5.7 Permit Revalidation.*

5.6 INCOMPLETE WORK

The following shall occur in the event that the work is incomplete and the Work Permit is to remain open:

1. The Permit Holder shall ensure the work site is left in a clean and safe state.
2. All team members remove their Personal Danger Lock with Tag from the Permit Lockbox.
3. The Permit Holder shall return the Work Permit and documentation to the Permit Lockbox.
4. The Permit Holder shall inspect the lock box for any team members remaining locks or tags, if personal danger locks and tags are still applied to the lock box *Refer to section 6.11 Removal of Personal Danger Lock and Tag.*
5. The Permit Holder shall remove their Personal Danger Locks with Tags from the Work Permit Lockbox.
6. The Permit Holder shall communicate the state of the job to the Permit Authoriser.
7. Permit holder shall sign the Permit Holder Work Incomplete sign off section on the blue copy of the Work Permit.

In the event work needs to continue once the permit issuing area has been closed the Permit Authoriser shall communicate the status of the work being performed in the area to the shift supervisor, the shift supervisor is to then act on behalf of the permit authoriser and follow the Work Permit process.

5.7 PERMIT REVALIDATION

Work shall not recommence until the Work Permit has been revalidated by a Permit Authoriser.

The Permit Authoriser/delegate will confirm all controls are in place and communicate any area changes to the Permit Holder.

The Permit Holder will communicate any area changes to the team members.

Work Permit shall be revalidated by the Permit Authoriser for the following circumstances:

1. Change of Permit Holder.
2. After the Site Muster Alarm has sounded and All-Clear is given.
3. At the commencement of the Permit Holders shift.
4. When a Work Permit is Suspended *Refer to section 5.5 Suspending a Work Permit.*

The Issuing Process steps 1 through to 2 will be followed before the Work Permit Form is initialled and dated by the Permit Authoriser in the revalidation section of the [Work Permit Form \(CSBP-PF2462\)](#) Refer to section 5.3 Issuing Process.

5.8 WORK COMPLETED

Upon completion of the work, the Permit Holder shall return all documentation associated with the task to the issuing area, once they have verified that:

1. All of the equipment and waste generated from the work has been removed and the area is left clean, tidy and in a safe condition to operate.
2. All Personal Danger Locks and tags shall be removed by the Team members from the Permit Board lock box.
3. The task has been completed and all appropriate documentation has been signed off.
4. A process is in place to manage any follow-up work, if required.

5.9 WORK PERMIT CLOSURE

Upon closure of the Work Permit, the Permit Authoriser shall ensure that:

1. All permits and documents associated with the task have been returned and signed off.
2. The Work Permit has been signed off by the Permit Holder.
3. A physical inspection of the work environment by the Permit Authoriser is conducted to ensure it is safe and in a state of readiness for normal operations, including the removal of hazard controls in place for the task.
4. The Permit Authoriser's lock and tag reference to the Work Permit is removed from the Lockbox.
5. The Permit Authoriser directs the Isolating Person to commence de-isolation and provides the isolation key(s) and Isolation Checklist to the Isolating Person. Refer to section 6.2.1.4 De-Isolation authorised.
6. The Permit Authoriser shall sign the Work Completed section of the Work Permit.
7. The Permit Authoriser shall update the Work Permit Register as the completion of each permit.
8. The documentation is recorded as per *Section 11 - Recordkeeping*.

5.10 COMMISSIONING EQUIPMENT WITH INCOMPLETE PERMIT

In the event the Work Permit has been discovered to have not been signed off as completed by the Permit Holder the following shall apply:

- The Permit Holder shall return, upon request, to review the Work Permit and sign off the Work Permit.

- If there is a need to commission urgently required equipment or the work Permit Holder is not contactable the Permit Authoriser will follow procedure [Authorisation Procedure and Record for Signing Off Work Permits \(CSBP-SF1777\)](#).
- An Incident Report shall be entered into the CSBP Cintellate Incident Reporting System.

5.11 WORK NOT REQUIRING A PERMIT

All work at CSBP Kwinana requires a Work Permit, other than work nominated by the Business Unit Manager as ‘work not requiring a permit.’ In order for a task to be approved a Pre-task risk assessment must be complete and entered in the document management system with the review period set at 36 months. Refer to STOP and Job Safety Analysis Risk Assessment WCEF-GM-HSE-0011.

An approved list of tasks that do not require a Work Permit shall be displayed in the area where permits are issued. The list is to be kept in the document management system with an annual review period with the relevant Business Unit Manager set as the document authoriser. It is essential these lists are reviewed annually through the document management system review process.

Although work on the ‘work not requiring a permit’ list does not require a Work Permit, verbal authorisation is required from the area Permit Authoriser.

If isolations are required for work not requiring a permit refer *section 6.10 Isolation for work not requiring a permit*.

5.12 VISITORS REQUIRED TO UNDERTAKE WORK

In the event a Visitor is required to undertake work, written approval shall be required from the Area Manager. The CSBP Accountable Person shall ensure that an as a minimum a Permit Holder escort is assigned to remain with the Visitor at all times whilst on site.

6 ISOLATION AND TAGGING

The objective of isolation is to create a state of zero energy.

Hazardous Energy	Description
Chemical Energy	The change in energy when a substance undergoes a chemical reaction or the toxic effects from a chemical.
Thermal Energy	The energy released from heat or cold.
Pneumatic Energy	Energy stored within pressurised air or gases.
Mechanical Energy	Energy contained in an item under tension or compression.
Electrical Energy	Energy stored within electrical components.
Radiation Energy	Energy from electromagnetic or radioactive sources.

Hydraulic Energy	Energy stored within pressurised liquid.
Gravitational Energy	Energy related to the mass of an object and its distance to the ground.

The process of isolation is the physical removal of energy sources and substances, which are potentially hazardous to any person performing work on equipment or being in the vicinity of work performed.

- a. All potential hazardous energy sources shall be identified and controlled.
- b. All isolations shall be planned and documented.
- c. All isolation points shall where practicable be uniquely and clearly labelled and lockable.
- d. Isolations shall always be applied to the energy source and it is not permitted to rely on control circuitry, push buttons, stop switches, interlocks, emergency stops, pilot circuitry lanyards, etc., shall not be used as a means of isolation.
- e. All confined spaces, common isolations and high voltage works shall have in field verification of isolations by a second authorised isolating person and documented on the Isolation Checklist.
- f. Where indicated in a risk assessment in field verification of isolations by a second authorised isolating person and documented on the Isolation Checklist.

Isolated plant and equipment may still contain stored energy. This energy shall be removed or placed in a controlled state that will not change whilst the defined work is being carried out. *Refer to section 6.5 Confirming zero energy*

All isolations shall be performed by an Authorised Isolating Person for the Area/Business Unit.

As a minimum, all isolation checklists including standard isolation checklist must be developed and reviewed by an Authorised Isolating Person.

All Isolations shall confirm zero energy to determine isolations are effective. *Refer to section 6.5 Confirming zero energy.*

6.1 LOCKS AND TAGS

All tags shall be completed in full.

There are seven (7) different safety tags that apply within the Work Permit System:

- Breaking In Location Tag.
- Commissioning Tag.
- Common Isolation Tag.
- Out of Service Tag.

- Personal Danger Tag.
- Testing, Jogging and Fault Finding Tag.
- Work Permit Isolation Tag.

There are seven different safety locks in the Work Permit System:

- Commissioning Locks (green).
- Electrical Out of Service Locks (orange).
- Fire Systems Locks (purple).
- Isolation Locks (blue).
- Permit Authorisers Locks (yellow).
- Personal Danger Locks (red).
- Radiation Locks (black with radiation symbol).

Refer to Appendix A – Lock and Tag Table.

6.2 ISOLATION CHECKLIST

All Isolations require an Isolation Checklist with the exception of Permit Holder Isolations.

All Isolation checklists shall have a unique identification number. Where an identification number is to be manually generated the following format shall be used, Date = DDMM, Time = 0000, Plant = 1111 Example: 1903 1101 1150.

Isolation checklist numbers shall be entered onto the Work Permit form.

The Isolating Person must be authorised by the Business Unit Manager.

All Isolation Checklists shall be reviewed and the Isolation Appropriate sections signed by an authorised isolating person to ensure the isolations listed are appropriate for the scope of work, this includes Standard Isolation Checklist.

The person signing the “Isolation Developed by” section on the isolation checklist cannot be the same person that has signed the “Isolation Appropriate” section on the isolation checklist.

Where process isolation involves purging, installing blanks, swinging spectacles or removing spool pieces, this work shall be carried out under a Work Permit separate to and before the initiation of process isolation.

6.2.1 Developing an Isolation Checklist

- a. An Isolating Person shall develop the Isolation Checklist applicable to the scope of work.

- b. The plant area equipment I.D and equipment description shall be entered onto the checklist.
- c. P&ID's, where possible shall be used to determine appropriate isolation points, the P&ID number and revision number shall be entered onto the Isolation Checklist. The P&ID used must be a controlled document and taken from the document management system (i.e. DOCOVA).
- d. The equipment tag number, description of the isolation point, the isolation method and any sequencing or other special instructions shall be detailed on the Isolation Checklist.
- e. Each individual lock must be associated with an individual piece of equipment and shown clearly as a separate line on the isolation checklist.
- f. The Isolating Person shall sign the Isolation Developed by section of the Isolation Checklist.

6.2.2 Reviewing Isolation Appropriate

- a. An Authorised Isolation Person shall verify that isolation of energies according to the requirements of the Isolation Checklist will generate a safe situation for the scope of work nominated.
- b. The plant area equipment I.D and equipment description is correct and applicable to the Scope of Work for the Isolation Checklist.
- c. P&ID's, shall, where possible, be used to verify appropriate isolation points, the P&ID number is entered onto the Isolation Checklist.
- d. The equipment tag number description of the isolation point, the isolation method and any sequencing or other special instructions are appropriate and detailed on the Isolation Checklist.
- e. The isolating reviewer shall sign the Isolation Appropriate section of the Isolation Checklist.

6.2.3 Isolation Authorised

- a. The Isolating Person shall request permission from the Permit Authoriser to go into the field and apply the isolations.
- b. The Permit Authoriser shall sign the Isolation Authorised section of the Isolation Checklist once it has been determined that the Isolation Checklist is appropriate for the scope of work and the plant is safe to apply the isolations.
- c. Isolating Persons then commence isolations as per the Isolation Checklist. *Refer to section 6.6: Process of Isolation.*

6.2.4 De -Isolation Authorised

- a. The Isolating Person shall request permission from the Permit Authoriser to go into the field and perform de-isolations.

- b. The Permit Authoriser shall sign the De-Isolation Authorised section of the Isolation Checklist once it has been determined that plant is safe to de-isolate.
- c. Isolating Person then commences to De-Isolate equipment to a safe position as per the Isolation Checklist.
- d. When all isolation locks / tags have been removed and the Isolation Checklist signed by the Isolating Person, the Isolation Checklist and lockset shall be returned to the Permit Authoriser.

The removal of isolation does not mean re-energising / re-commissioning the equipment. The re-commissioning process is a separate function and is controlled by the equipment owner.

6.3 STANDARD ISOLATION CHECKLIST

Where appropriate, Standard Isolation Checklists may be created as a permanent record of isolations required to safely isolate a specific piece of equipment.

Standard Isolation Checklists shall be developed following a risk assessment.

The developed Standard Isolation Checklist shall be authorised by a Process Engineer / Supervisor before being stored and controlled on document management system.

The Standard Isolation Checklist shall include isolation activities such as: decontamination, venting of stored energy, securing of rotor / fan blades, electrical isolation, disconnecting, blocking or bleeding of equipment or lines.

The Isolating Person must be authorised by the Business Unit Manager.

All Standard Isolation Checklists shall be reviewed and signed Isolation Appropriate by an Isolation Person to ensure the isolation is appropriate for the task.

The person reviewing the Isolation Checklist shall not be the same person as the person authorising the Standard Isolation Checklist.

If a Standard Isolation Checklist is modified in any format it is no longer a Standard Isolation and therefore must be processed as a newly developed Isolation checklist *Refer to section 6.2 Isolation Checklist*.

6.3.1 Reviewing Standard Isolation Appropriate

- a. An Isolating person shall verify that isolation of energies according to the requirements of the Standard Isolation Checklist will generate a safe situation for the scope of work nominated.
- b. The plant area equipment I.D and equipment description is correct and applicable to the Scope of Work for the Isolation Checklist.
- c. P&ID's, shall be used to verify appropriate isolation points, the P&ID number and revision number is entered onto the Standard Isolation Checklist. The P&ID used must be a controlled document and taken from the document management system (i.e. DOCOVA).

- d. The equipment tag number description of the isolation point, the isolation method and any sequencing or other special instructions are appropriate and detailed on the Standard Isolation Checklist.
- e. The Isolating person shall sign the Isolation Appropriate section of the Standard Isolation Checklist

6.3.2 Isolation Authorised

- a. The Permit Authoriser shall sign the Isolation Authorise section of the Standard Isolation Checklist once it has been determined that the Isolation Checklist is appropriate for the scope of work and the plant is safe to apply the isolations.
- b. Isolating Person then commences isolations as per the Isolation Checklist. *Refer to section 6.4 Process of Isolation.*

6.3.3 De-Isolation Authorised

- a. The isolating person shall request permission from the Permit Authoriser to go into the field and perform de-isolations.
- b. The Permit Authoriser shall sign the De-Isolation Authorised section of the Standard Isolation Checklist once it has been determined that plant is safe to de-isolate.
- c. Isolating Persons then commence to De-Isolate equipment to a safe position as per the Standard Isolation Checklist.
- d. When all isolation locks / tags have been removed and the Standard Isolation Checklist signed by the Isolating Person, the Standard Isolation Checklist and lock set shall be returned to the Permit Authoriser.

The removal of isolation does not mean re-energising / re-commissioning the equipment. The re-commissioning process is a separate function and is controlled by the equipment owner.

6.4 PROCESS OF ISOLATION

All isolation points will be locked with a blue Isolation Lock and have Work Permit Isolation Tags or Common Isolation Tags attached that reference the Work Permit number, date and the name of the Isolating Person.

The Isolating Person shall develop the Isolation Checklist *Refer to Section 6.2 - Isolation Checklist.* Or *Refer to Section 6.3 - Standard Isolation Checklist.*

Isolations cannot proceed unless:

1. The method of isolation and discharge of stored energy are agreed and executed by an Isolating Person.
2. Any stored energy is discharged.
3. A system of locks and tags is utilised at isolation points.

Note: Drain valves should be locked open whenever practicable and must always be included on Isolation Checklists (recorded as 'unlocked' or 'not required – valve to be removed' when not practicable etc.).

4. Identify and confirmed isolations are effective refer to section 6.5 Confirming Zero Energy.

6.4.1 Process of Initiating Isolations

1. Erect barriers around the area to prevent unauthorised access where required.
2. Identify and confirm energy source or hazardous materials, either directly or indirectly associated with the work to be performed; refer to *section 15 Appendix C Isolation Methods*.
3. Confirm those systems requiring isolation.
4. Physically verify isolation point before applying isolations.
5. All equipment is to be assumed hazardous until all energy sources have been positively isolated, discharged or stored energy released, confirmatory tests performed, locked and tagged, tested and proven dead.
6. A mechanical locking device suitably designed to control stored energy shall be fitted before attaching a lock, when there is potential for plant to hold mechanical or stored energy e.g. valve and pneumatic lockouts, cable lock out device, gate valve lockout.
7. The Isolation Lock and Tag *Section 13- Appendix A Lock and Tag Table* shall be attached to each of the nominated isolation points as per the Isolation Checklist.
8. The Isolating Person shall initial in the "Isolated Tag On" column on the Isolation Checklist as each of the nominated isolations is completed.
9. The Isolating Person shall check if there is a visual indication that the equipment has been de-energised. If there is a positive visual indication, the Isolating Person shall fill out the applicable tag and lock it to the isolation point. Where an isolation point is remote from the worksite, the Isolating Person shall document the Try Step/Test Step on the Isolation Check list and write their name with the name of the Isolating Person.
10. Where plant or equipment has multiple systems which may store energy, only the energy sources that have been confirmed as de-energised shall be documented on the Isolation/Standard Isolation Checklist.
11. Place in a controlled state, isolated plant and equipment that may still contain stored energy to ensure it will not change whilst the task is being carried out.
12. The Isolating Person shall confirm zero energy *Refer to section 6.4 Confirming Zero Energy* and complete the relevant sections on the checklist.

If the Isolating Person cannot confirm zero energy an additional risk assessment shall be completed.

13. An Isolating Person shall return the completed Isolation Checklist to the Permit Authoriser and place any isolation lock key(s) in the correctly labelled permit board lockbox. The isolating person is to verify with an initial that isolations are tagged and locked, tick the appropriate boxes referring to purging, flushing, try test, zero energy and sign the checklist confirming this is complete.
14. The Permit Authoriser shall ensure that all Isolation Key(s) are locked inside the Isolation Lockbox by placing a Permit Authoriser's Lock and Work Permit Isolation tag onto the Work Permit Lockbox.

6.4.2 Process of De-Isolation

1. The Permit Authoriser shall follow *Section 5.8.1 – Work Completed*.
2. The Permit Authoriser shall authorise the de-Isolation once all personnel have been cleared from the area, ensuring all Personal Danger Locks and Tags have been removed from the lockbox. The Permit Authoriser shall initiate the requirement to remove the isolation and re-energise the plant/equipment.
3. The Permit Authoriser shall remove the Permit Authoriser lock from the Isolation lockbox and provides the isolation key(s) to the Isolating Person to de-isolate the equipment.
4. The Isolating Person shall remove all isolation lock / tag(s) and sign the Isolation Checklist as the isolations are removed.
5. An Out of Service Tag shall be attached to the individual Isolation Point should equipment need to be placed out of service, *Refer to section 5.6 Incomplete Work*.
6. The Isolating person shall verify the plant/equipment has been re-energised.
7. The Isolation Checklist shall be returned to the Permit Authoriser.
8. The Permit Authoriser shall close the applicable Work Permit(s) as per *Section 5.9 – Work Permit Closure*.

6.4.3 Changes to Isolations

Form “Isolation Checklist Record of Change” (SF2485) shall be used to authorise infield isolation changes. Only a Supervisor, Process Engineer or two Permit Authorisers (both competent and authorised by the business to isolate that equipment) are able to authorise a change to an isolation. This form is to be stored in the documentation sleeve with the other documentation for the Isolation Checklist.

In the event it is deemed necessary to alter established isolations under an isolation, the following process shall be followed:

1. Obtain authorisation to change the isolations from a Supervisor, Process Engineer or two Permit Authorisers (as above) on the Isolation Checklist Record of Change (CSBP-SF2485) form.
2. Suspend all Work Permits in the affected areas associated to the isolation. *refer to Section 5.5 Suspending a Work Permit*.
3. Ensure all personnel remove their Personal Danger Locks with Tags.
4. Clearly document, on the original Isolation Checklist, any isolation removals, changes or additions.
5. Work shall not recommence until the Work Permit has been re-validated refer to section 5.7 Permit Revalidation, by the Permit Authoriser with the necessary controls being in place and changes being communicated to all team members.

6. The completed Isolation Checklist Record of change form (CSBP-SF2485) shall be displayed in the relevant Isolation Checklist Lockbox.

6.5 CONFIRMING ZERO ENERGY

Confirmation of zero energy involves an Isolating Person physically witnessing and confirming that all energy sources have been removed from equipment associated with the task and verify that the isolation are effective.

6.5.1 Electrical Energy

Electrical zero energy is confirmed by “Proving” isolations to ensure the isolation is effective and “Trying to Start” to confirm all energies have been removed.

The following process shall be followed to confirm an electrical zero energy state exists:

- a. Proving the Isolation:
 - i. Proving an electrical isolation requires evidence of a physical break in the electrical supply. If the use of a de-contactor, removal of fuses, visible break contactor or phase lights is not possible, continuity testing by an electrician is required to establish proof of isolation or,
 - ii. Proving process isolation shall involve checking relief valves, pressure indicators, drains, DCS etc. to ascertain that energies have been removed.
- b. A ‘Try to Start’
 - i. Try to start will occur from trying to start the equipment from the DCS and or from a local control panel.

6.5.2 Kinetic, Potential and Chemical Energy

A zero energy state is determined to exist where the following criteria are met:

- a. There is no kinetic or potential kinetic energy present (e.g. releasing a spring mechanism).
- b. Stored pressure (hydraulic or pneumatic) is released.
- c. The temperature of the equipment or substance contained by the equipment is no less than -10°C and no greater than 60°C .
- d. Chemical energy has been isolated and drained. For the approved methods of isolation refer to Section 15. Appendix C – Isolation Methods.

Note: If the Isolating Person cannot Confirm Zero Energy an additional risk assessment shall be completed.

6.6 WORK PERMIT LOCKBOX

The Work Permit Lockbox is located in the permit control area and is used for displaying a copy of the Work Permit and associated documentation, the lockbox secures the isolation key(s), for attachment of Permit Authoriser's Lock and Personal Danger Locks with Tags.

Following the locking of the isolations; Isolation keys shall be placed in the lockbox associated with the Work Permit and secured with a Permit Authoriser's Lock and completed Work Permit Isolation tag.

Any person authorised to work under a Work Permit shall lock their Personal Danger Lock with Personal Danger tag attached on to the lockbox for the Work Permit they are working on regardless of whether there is an isolation lock key in the box.

The key to the Permit Authoriser's lock shall remain with the Permit Authoriser at all times. Each Permit Authoriser shall have a key to the common keyed Permit Authoriser's Locks.

The Permit Authoriser's Lock shall only be removed from the lockbox after:

- a. The area has been left safe and the equipment is safe to be returned to service or when managing changes to a Common Isolation.
- b. All Personal Danger Locks with Tags have been removed from the Work Permit Lockbox.
- c. All copies of the Work Permit and associated documents have been signed off as completed by the Permit Holder,

Each area should consider numbering the individual lock boxes for easy reference when multiple jobs are in progress.

6.7 COMMON ISOLATION SYSTEM

When a number of different tasks are being completed under separate Work Permits with all tasks sharing the same Isolation Checklist, a Common Isolation can be used.

Consideration needs to be given to dividing the plant up into logical, manageable sections, which will allow work in other areas to continue while ensuring the safety of those working in areas that are isolated under the Common Isolation Process.

A safe system of work which includes planning, equipment, people and change shall be considered when managing the Common Isolation process.

All Common Isolations shall be performed by an Authorised Common Isolating Person for the Area/Business Unit.

Where process isolations require removal of spools or swinging of blanks, this work shall be undertaken under a Work Permit separate to and prior to the initiation of the Common Isolation.

When developing a Common Isolation Checklist where practicable the spools and or blanks isolation points shall be included on the Common Isolation Checklist.

6.7.1 Installation of blanks/removal of spools

If the Common Isolation requires installation of blanks or removal of spool pieces the following shall occur:

- a. Isolation/Standard Isolation checklist is developed refer to Section 6.2 Isolation Checklist for the installation of blanks or removal of spool piece.
- b. A Work Permit shall be raised for the installation of blanks or removal of spools.
- c. The Work Permit shall then be returned to the Permit Authoriser.

6.7.2 Developing Common Isolation Checklist

The process of developing a Common Isolation Checklist is the same as set out in *refer to Section 6.2 Isolation Checklist* with exception to the tagging process; all Common Isolations shall have a Green Common Isolation tag attached.

6.7.3 Common Isolation Process

- a. An Isolation /Standard Isolation Checklist is created for the Common Isolation System to isolate plant/system *refer to Section 6.2 Isolation Checklist*.
- b. Isolate plant/system in accordance with the Isolation /Standard Isolation Checklist and attach a completed Green Common Isolation Tag to each Isolation point and Common Work Permit Lockbox.
- c. Secures an isolation lock and tag to the Common Isolation Lock Box for each Work Permit raised against Common Isolation.
- d. References the Common Isolation number on all Work Permits issued under the Common Isolation.

6.7.4 Removal of Common Isolation

Removal of any isolation points within the Common Isolation shall not start until all child Work Permits have been signed off by the Permit Authoriser. The only exception is when a change to a Common Isolation is required *refer to Section 6.7.5 Change of Common Isolations*.

6.7.5 Change of Common Isolations

Form “Isolation Checklist Record of Change” (CSBP-SF2485) shall be used to authorise changes. Only a Supervisor or Process Engineer or above is able to authorise a change to a common isolation. This form is to be stored in the documentation sleeve with the other documentation for the Common Isolation System.

In the event it is deemed necessary to alter established isolations under a Common Isolation, the following process shall be followed:

1. Obtain authorisation to change the isolations from a Supervisor, Process Engineer or above on the Common Isolation Record of Change (CSBP-SF2485) form.

2. Suspend all Work Permits in the affected areas associated to the Common Isolation. *refer to Section 5.5 Suspending a Work Permit.*
3. Ensure all personnel remove their Personal Danger Locks with Tags.
4. Clearly document, on the original Isolation Checklist for the common isolation, any isolation removals, changes or additions.
5. Work shall not recommence until the Work Permit has been re-validated refer to section 5.7 Permit Revalidation, by the Permit Authoriser with the necessary controls being in place and changes being communicated to all team members.
6. The completed Common Isolation Record of change form (CSBP-SF2485) shall be displayed in the Common Isolation Lockbox.

6.8 Electrical Disconnections

Regardless of the fact that adequate isolations will be in place, when electrical cables are disconnected from the receiving electrical equipment yet remain physically connected to the supply (>50v AV or >100v DC) the following must be completed by the qualified disconnecting electrician:

1. The exposed conductors on the receiving end of the disconnected cable are to be physically linked together in such a way that a circuit is created.
2. The linking must be sufficiently strong so that the conductors cannot be inadvertently separated.
3. The exposed conductors are to be placed into an adequate bag or container that will protect them from exposure to weather.
4. An Electrical Out of Service Lock shall be placed as per section 6.9.

6.9 ELECTRICAL OUT OF SERVICE LOCK

The Electrical Out of Service Lock is designed to prevent unauthorised commissioning or startup of out of service equipment that could potentially cause harm to personnel and/or damage to the equipment.

Only licensed electrical personnel shall apply and remove Electrical Out of Service Locks.

An Electrical Out of Service Lock shall not be applied as part of the Isolation/s to perform work.

The out of service equipment shall be isolated and tagged at the Work Permit Box, MCC or isolation point if equipment is left in an unsafe state for example cable disconnection. The equipment is to be locked out until an electrical person has deemed the equipment safe and removed the Electrical Out of Service Lock.

Once isolated, the local control panels start button and/or the DCS Stop / Start function shall be engaged to prove that the electrical drive has been de-energised. Testing for de-energisation shall be carried out with test equipment that meets relevant industry standards. When testing, test all exposed conductors to ensure that if group sources of supply exist, they have all been identified.

6.10 PERMIT HOLDER ISOLATIONS

This section describes the procedure to be followed to allow for small tasks that are best suited to have the isolations controlled by the Permit Holder. No other work shall be permitted on that equipment or adjacent to it.

6.10.1 Permit Holder Isolation Conditions

Permit Holders shall only be permitted to have five Personal Danger Locks *refer to section Appendix A Lock and Tag Table*.

Permit Holder isolations may only be performed by:

- a. A CSBP employee or contingent worker who is a competent and Authorised Isolating Person for the area and equipment.
- b. An external licensed contract electrician or plumber isolating a domestic service.
- c. An external contract air conditioning technician isolating air conditioning equipment excluding switch-room or MCC isolations.

6.10.2 Permit Authoriser Checks

The Permit Authoriser consults with the Permit Holder to answer the following questions, which must all be yes for the work to proceed under Permit Holder Isolations.

- a. Is this a single trade work group?
- b. Is the Permit holder also an authorised Isolating Person?
- c. The plant process will not be affected.
- d. The isolation does not isolate a plant process line (example acceptable isolation are; a control valve airline, analyser lines / transmitter lines etc.).

If the above conditions are all confirmed, the permit can be issued. Permit Holder isolation section ticked on the [Work Permit Form \(CSBP-PF2462\)](#) or if this is work on the 'work not requiring a permit' list verbal authorisation is required.

6.10.3 Process of Permit Holder Isolations

1. The employee shall carry out isolation of energies they are authorised to perform. Positive isolation of each isolation point must be confirmed by that Isolating Person (see *section 6.5 Confirming Zero Energy*).
2. The Permit Holder attaches their Personal Danger Lock and Personal Danger Tag to each isolation point. The key(s) shall be retained on the person of the employee at all times.
3. The Permit Holder ensures that any team members involved in the task shall attach their Personal Danger Lock and Personal Danger Tag to each isolation point.

4. If the task is incomplete or unsafe to continue and the employee leaves the work site, they shall remove their Personal Danger Lock and Tag and attaches a completed Out of Service Tag.
5. When returning to the work site, they shall confirm the isolation (refer Step 4. above) and attach their Personal Danger Lock and Personal Danger Tag.
6. If the Control Room Operator gives permission, the employee shall re-energise equipment following removal of their Personal Danger Locks and Tags. Otherwise, the equipment can remain isolated with an Out-of-Service tag in place.

6.11 ISOLATION FOR WORK NOT REQUIRING A PERMIT WORK

1. Work on the 'work not requiring a permit' list does not require a Work Permit, however, verbal authorisation is required and the following shall occur in order:
 2. The employee undertaking the work shall be a competent Isolating Person for that equipment / area.
 3. The employee seeks verbal permission to perform their own isolation from the relevant Control Room Operator (or equivalent in the case of Field Engineering).
 4. If work is safe to proceed, permission will be provided by the Control Room Operator (or equivalent).
 5. Note: Consider using the Isolation Checklist and / or a Standard Operating Procedure to document the isolations and methods of isolation required.
 6. The employee shall carry out isolation of energies they are authorised to perform. Positive isolation of each isolation point must be confirmed by that Isolating Person.
 7. Confirmation = Proving + Try Step:
 - a. Proving the isolation (to ensure the isolation is effective). Proving an electrical isolation requires evidence of a physical break in the electrical supply. If the use of a de-contactor, removal of fuses, visible break contactor or phase lights is not possible, continuity testing by an electrician is required to establish proof of isolation.
 - b. Proving process isolation shall involve checking relief valves, pressure indicators etc. to ascertain that energies have been removed.
 - c. A 'Try to Start' or 'Try Step' shall be used to fully confirm the isolation.
 8. The employee attaches their Personal Danger Lock with Personal Danger Tag to each isolation point. The key(s) shall be retained on the person of the employee at all times.
 9. The Permit Holder ensures that any team members involved in the task shall attach their Personal Danger Lock and Personal Danger Tag to each isolation point.
 10. If the task is incomplete or unsafe to continue and the employee leaves the work site, they shall remove their Personal Danger Lock and Tag and attaches a completed Out of Service

Tag. When returning to the work site, they shall confirm the isolation (refer Step 4. above) and attach their Personal Danger Lock and Personal Danger Tag.

11. If the Control Room Operator gives permission, the employee shall re-energise equipment following removal of their Personal Danger Locks and Tags. Otherwise the equipment can remain isolated with an Out-of-Service tag in place.

6.12 PROCESS OF COMMISSIONING

Prior to handing control of equipment to operations, testing and commissioning activities must be completed by the team responsible for the change. A Commissioning Lock and Tag must be placed on the isolation board or point(s) once plant tie-ins have been completed. To ensure deisolation cannot occur whilst concurrent activities are taking place, a Commissioning Lock and Tag may also be used when multiple scopes of work or departments (e.g. Shutdowns and Projects) are reliant on a shared isolation. Commissioning Locks must not be placed on common isolation lockboxes

When the use of a commissioning lock and tag is indicated:

1. The Commissioning Person must fill out a commissioning tag to include their name, contact number, signature and any other relevant information.
2. The Commissioning Person must attach a commissioning lock and the commissioning tag to the appropriate permit lockbox or isolation point(s) in the field.
3. The Commissioning Person may remove the Commissioning Lock and Tag as required for testing and commissioning activities. The Commissioning Lock and Tag must be placed back on the appropriate lock box or isolation point(s) once completed if the equipment is not ready for handover to operations.
4. If used on the lock box, the Commissioning Lock and Tag may not be placed on Common Isolations, it must only be applied to specific Work Permits.
5. The Commissioning Lock and Tag is removed by the Commissioning Person when control of the equipment is handed over to Operations.

When multiple scopes of works or departments are reliant on a shared isolation, the Commissioning Person must gain approval from the Permit Authoriser. The Commissioning Tag must be co-signed by the Permit Authoriser prior to attaching the Commissioning Lock.

The Commissioning Person is responsible for managing the key for the commissioning lock.

If immediate deisolation is required and a Commissioning Lock is in place, the process outlined in Section 5.10 Commissioning Equipment with incomplete Permit shall be followed.

6.13 FIRE SYSTEMS LOCK

The Fire Systems Lock is used to ensure that critical fire equipment that has been removed from service is fully reinstated by the fire systems specialist:

The lock is issued by the RO/AP to the fire systems specialist.

The lock is placed onto the lock box, along with the Personal Danger Lock, by the fire systems specialist.

Once the work is completed, the lock is removed from the lock box by the fire systems specialist.

The lock is returned to the RO/AP by the specialist as confirmation that the system is returned to service.

6.14 REMOVAL OF PERSONAL DANGER LOCK AND TAG

In the event a Personal Danger Lock and tag is discovered to have been left on or lost key, the [Authorisation Procedure and Record for the Removal of Personal Danger Locks and Tags \(CSBP-SF2495\)](#) shall apply. If the person is onsite but has lost their key, the personal danger lock can be removed (e.g. cut) providing that the person's identity can be verified.

6.15 LOST KEYS TO ISOLATION SETS

In the event that the key to an isolation set is lost, the spare key shall be used to remove all the locks and another lockset shall be used for the isolations. [Authorisation Procedure and Record for Obtaining a Spare Key to an Isolation Lock Set \(CSBP-SF2607\)](#) shall be followed.

An Incident Report shall be entered into the CSBP Cintellate Incident Reporting System.

7 EQUIPMENT TESTING JOGGING AND FAULT FINDING

This process shall be used for:

1. Testing when it is necessary to re-energise plant/equipment in order to Test its operation before final completion of the work.
2. Jogging when maintenance or calibration checks are required and there is a requirement to re-energise and then de-energise the equipment as a part of completing the work details.
3. Fault finding when it may be necessary to fault find a piece of equipment which may involve isolations and de-isolation of equipment.

7.1 PROCESS OF TESTING EQUIPMENT

Testing equipment process is used when it is necessary to re-energise plant/equipment in order to Test its operation before final completion of the work.

The Permit Holder for testing activities is required to be competent Isolation Person.

The Permit Holder shall place a Personal Danger Lock and a testing and jogging tag on the lockbox and de-isolated points whilst testing.

The Permit Holder shall ensure that any team members involved in the task attach their Personal Danger Lock and Personal Danger Tag to each isolation point.

When a piece of equipment is being tested under this procedure, no other work is allowed on that piece of equipment or associated equipment.

Testing of equipment can either be done locally or from a remote panel. A risk assessment identifying the hazards and controls must be in place prior to testing taking place. If the equipment does not pass the test a new isolation checklist must be raised as per *section 6.4 Process of Isolation*.

7.2 PROCESS OF JOGGING EQUIPMENT

To perform jogging of equipment it may be necessary for:

- The isolator in the switch room to be energised and/or,
- The flow through a pipe controlled by instrumentation to keep flowing.

For elevator or screen maintenance and inspection a 3-phase isolator and an independent run / safe maintenance switch are used for control.

For instrumentation calibration, control of the energy sources is achieved by valves on manifold blocks or associated with instrumentation lines.

The Permit Holder for jogging activities is required to be competent Isolation Person.

The Permit Holder must ensure that personnel in the immediate area are clear while jogging is performed.

All jogging isolation and de-isolation are to be carried out by the permit holder using personal danger locks *Refer to section 6.10 Permit Holder Isolation*.

The Permit Holder shall place a Personal Danger Lock and a testing and jogging tag on the lockbox and de-isolated points whilst jogging equipment.

The Permit Holder shall ensure that any team members involved in the task attach their Personal Danger Lock and Personal Danger Tag to each isolation point.

A risk assessment identifying the hazards and controls must be in place prior to jogging taking place.

7.3 PROCESS OF FAULT FINDING EQUIPMENT

When fault finding is being carried out on a piece of equipment, no other work is allowed on that piece of equipment.

The Permit Holder for fault finding activities is required to be competent Isolating Person.

The Permit Holder must ensure that personnel in the immediate area are clear while fault finding is performed.

All fault finding isolation and de-isolation are to be carried out by the Permit Holder under Permit Holder Isolation using personal danger locks *Refer to section 6.10 Permit holder Isolations*.

The Permit Holder shall place a Personal Danger Lock and a testing and jogging tag on the lockbox and de-isolated points whilst fault finding.

The Permit Holder shall ensure that any team members involved in the task attach their Personal Danger Lock and Personal Danger Tag to each isolation point.

A risk assessment identifying the hazards and controls must be in place prior to fault finding taking place.

8 WORK PERMIT SYSTEM MONITORING

The work permit system shall be regularly inspected. Each Business Unit shall develop a schedule for monitoring the Work Permit System, this is to include:

1. Review of the Work Permit documentation.
2. Confirm work is being performed consistent with the written scope of work.
3. Confirm that hazard controls are in place.
4. Confirm that Permit Users have read and understand the Work Permit; and
5. Confirm that work is being conducted according to the JSA/Safe Work Instruction.

9 AUDITS

The Work Permit system shall be audited as per the WesCEF Master Audit Plan and Assurance Map.

10 REPORTING

Breach of this Procedure and operational controls shall be recorded as an incident in Cintellate. Where a breach occurs, corrective actions shall be developed and implemented. Preventative actions shall be developed and implemented for near misses and both actual and potential breaches.

11 RECORD KEEPING

The area responsible for the work shall ensure that Work Permit records and associated certificates are kept for the period of one (1) year from the Work Permit completion date and recorded as follows:











1. White, pink and blue copy of each completed Work Permit shall be retained.
2. Hard copy documentation shall be stored in a dry and secure location in the Area responsible.












12 EXEMPTIONS TO THE WORK PERMIT SYSTEM

Exemptions to this procedure can only be approved by the relevant Production Manager after the completion of a team based risk assessment. Refer to WesCEF Team Based Risk Assessment WCEF-GM-OHS-040-02.

13 APPENDIX A - LOCK AND TAG TABLE

<p>Break In Location Tag</p>	<p>Is attached to the break in location by the Permit Authoriser or Isolating Person at the exact location where the pipe is to be broken into. Must be witnessed and agreed to by the Permit Holder.</p> <p>The tag is to be used for all isolation and de-isolation break ins (e.g. spade installation and removal).</p>	
<p>Commissioning Lock</p>	<p>Used by commissioning personnel, attached to permit lock box or isolation points</p>	
<p>Commissioning Tag</p>	<p>Used in conjunction with a Commissioning Lock to indicate that the isolation has been completed and identifies the Commissioning Person.</p>	
<p>Common Isolation Tag</p>	<p>Used when a section of a plant is to be isolated under a Common Isolation.</p>	
<p>Electrical Out of Service Lock</p>	<p>Applied by authorised electrical personnel, applied to electrical equipment which is to be in a left out of service state and re-energisation may cause harm.</p>	
<p>Fire Systems Lock</p>	<p>Issued by the RO/AP to the fire systems specialist to ensure that critical fire equipment that has been removed from service is fully reinstated by the fire systems specialist.</p>	
<p>Hasp/Scissor Clip</p>	<p>Hasp/Scissor Clip-A scissor action device applied to an isolation point which allows for multiple isolations locks to be in place.</p>	
<p>Information Tag</p>	<p>Used to provide general information to others. All tags must be completed in permanent marker.</p>	
<p>Isolation Lock</p>	<p>Attached to an isolation point by an Isolating Person verifying that the isolation they have carried out is successful and has integrity for the task.</p>	
<p>Isolation Point</p>	<p>Points on equipment used to remove potential stored energy.</p>	

<p>Out of Service Tag</p>	<p>Used to place plant or equipment Out of Service when the operation of the plant or equipment may cause personal injury or damage.</p> <p>Can be applied by any personnel on site.</p> <p>An Out of Service Tag is affixed to equipment, indicating to the reader the equipment item shall not to be used until cleared for safe operation by a competent person.</p> <p>Personnel shall not de-isolate, use, operate or commission equipment or machinery, on which an Out of Service Tag remains attached.</p> <p>For the purposes of maintenance or repair, maintenance personnel shall make contact with the individual who placed the Out of Service Tag on the equipment. If the individual who placed the out of service tag on the equipment is not contactable a person with the same qualification may remove the tag pending verification of equipment.</p>	
<p>Process Protection Tag</p>	<p>Used by CSBP Process Technicians, without a lock, (only) to protect the operating process by indicating desired valve position i.e. applied to valves when isolations are applied to connected plant and process flows are potentially impacted.</p> <p>The tags are not to be used as part of an isolation to protect personnel. The tag must include:</p> <ul style="list-style-type: none"> Reason for application Name of the person placing to tag Date of application, and Work Permit number 	
<p>Permit Authoriser Lock (Yellow)</p>	<p>Applied to the Lockbox by the Permit Authoriser once confirming all conditions of the permit are in place.</p>	
<p>Personal Danger Lock (Red)</p>	<p>The Personal Danger Lock is used to protect the person by preventing removal of the isolation lock set key.</p> <p>When working under a Permit Holder Isolation the Personal Danger Lock is used to Isolate equipment.</p> <p>Contractors will be provided with locks as a part of being issued with a Work Permit. A Contract Personnel – Personal Dangers Locks Issue Register (SF2594) will be kept in Work Permit issuing area of the locks provided to Contractors by the Permit Authoriser. Once the Work Permit is completed the Contractors are to hand back the locks to the Permit Authoriser of the area.</p> <p>Under no circumstances shall any person carry out work under another person’s Personal Danger Lock.</p> <p>Personal Danger Locks shall:</p> <ul style="list-style-type: none"> Be CSBP issued. Be uniquely keyed. 	

	<ul style="list-style-type: none"> Uniquely Identified. Not be a combination lock. Not have an unauthorised second-party master override key; and Not be transferred to another person. <p>Personal Danger Locks and keys shall be under the control of the lock owner. The lock owner shall be the only person to place or remove their Personal Danger Locks. Maximum issue of Five (5) Personal Danger locks.</p>	
Radiation Lock	Is attached to the source control mechanism rotary bracket.	
Personal Danger Tag	Used in conjunction with a Personal Danger Lock. Personal Danger Tags are used to indicate which person/s is working on equipment.	
Testing, Jogging and Fault Finding Tag	Is attached to Work Permit Lockbox and isolations in the field that are under the control of the Permit Holder.	
Work Permit Isolation Tag	Used in conjunction with an Isolation Lock to indicate to all personnel the isolation has been completed and confirmed. It also identifies who the Authorised Isolating Person is and what Work Permit the isolations is associated to.	
Work Permit Lockbox	Safely secure and display information relating to a Work Permit and isolations and associated certificates.	

14 APPENDIX B - CERTIFICATES USED WITH WORK PERMITS

All certificates exist in triplicate (white, yellow, pink). The white copy shall be kept with the Permit Holder, the yellow copy on the Permit Board and the pink copy with the Permit Authoriser.

14.1 HOT WORK CERTIFICATE

Hot Work Certificates are required where there is a risk of igniting flammable materials or atmospheres and any Hot Work in a Restricted Area. The Certificate has a red edge and shall be obtained prior to the commencement of Hot Work.

14.1.1 SPARK POTENTIAL ONLY - NO FLAME OR SPARK PRODUCING HOT WORK

This section of the Work Permit form is used to record gas testing results for the authorisation of work that has spark potential only (flame or spark producing Hot Work will require a Hot Work Certificate) within restricted areas. Spark potential equipment is not certified safe for use in hazardous areas and requires adequate gas testing prior to use within Restricted Areas. Spark potential equipment must contain any potential ignition sources (spark) within the device/equipment itself and is limited to:

- Battery powered monitoring equipment.
- Cameras.
- Motor vehicles.
- Battery powered drills and screwdriver (unless on process pipelines).

For more information on Hot Work please refer to [Hot Work \(CSBP-GM-11-036-06\)](#).

14.2 CONFINED SPACE ENTRY CERTIFICATE

All Confined Spaces are identified and listed within the Area Confined Space Register. The list for each Area shall be displayed in the Control room.

All Isolations associated with the Confined Space shall have a second person verify in the field that the Isolations are correct; this verification shall be documented on the Isolation/Standard Isolation Checklist.

The Confined Space Entry Certificate has a green edge.

For more information on Confined Space please refer to [Confined Spaces \(CSBP-GM-11-031-52\)](#).

14.3 WORKING AT HEIGHT CERTIFICATE

Work at height is defined as whenever people are at risk of falling from, into or through one level to another.

The Working at Height Certificate has a grey edge.

To determine when a Working at Height Certificate is required please refer to [Working at Height \(WCEF-PD-R&S-0018\)](#).

14.4 HIGH VOLTAGE (HV) ACCESS AND TESTING CERTIFICATE

Only an authorised High Voltage Operator personnel shall isolate and/or earth High Voltage equipment.

A Work Permit associated with High Voltage electrical work shall always be accompanied by either a HV Access Certificate or a HV Test Certificate.

HV Certificates are administered by an Authorised High Voltage Operator.

HV Certificates are not required for isolation of high voltage motors performed by Restricted Authorised High Voltage Operators who have been given training and assessed as competent by an Authorised High voltage Operator and maintain their competency by annual refresher training.

A list of authorised HV persons shall be document controlled.

A High Voltage certificate has a purple or orange edge.

For more information on High Voltage Maintenance please refer to [Operation and Testing of High Voltage Equipment \(CSBP-GM-11-032-03\)](#).

14.5 EXCAVATION CERTIFICATE

Excavation Certificates are required for excavation work by hand or mechanical means that disturbs the soil or other surface to a depth greater than 150mm. This includes digging holes or trenches, driving piles, posts or spikes, cutting concrete or driving of earthing electrodes.

Excavation Certificates have a brown edge and are administered by Excavation Authorisers.

Care shall be taken in the planning of work within excavations. If they meet the criteria of a confined space, as defined within [Confined Spaces \(CSBP-GM-11-031-52\)](#), they will need to be managed under a Confined Space Entry Certificate.

For more information on excavations please refer to [Excavation procedure \(WCEF-PD-OHS-040-05\)](#).

14.6 PENETRATION CERTIFICATE

Penetration Certificates are required for penetration work including demolishing, removing, drilling, cutting or otherwise penetrating any floor slab, wall, ceiling, roof, partition or surface where the opposite side is not visible and which may contain electrical cables.

Penetration Certificates have a light green edge and are administered by Penetration Authorisers.

For more information on penetrations please refer to [Penetration Procedure \(WCEF-PD-OHS-040-06\)](#).

14.7 RADIATION CERTIFICATE

Radiation Certificates are required for any work involving the use, calibration and maintenance of devices that emit ionising radiation. This includes radiation gauges, associated pipe work, flanges, density meters and radioactive isotopes used for radiography.

Radiation Certificates have a yellow edge and are issued from the relevant permit issuing area and shall be signed by a licensed Radiographer or licensed radiation specialist. The Radiation Safety Officer may also issue and endorse Radiation Certificates. Permit Authorisers are not required to sign Radiation Certificates.

Radiation Certificates are not required for remote calibration.

14.8 ASBESTOS / FIBRO CEMENT SHEETING CERTIFICATE

Asbestos / Fibro Cement Sheeting Certificates are required for any work associated with handling, surface treatment or removal of asbestos cement building products.

Asbestos / Fibro Cement Sheeting Certificates are administered by Engineering Services and have a blue edge.

14.9 LIVE WORK ACCESS CERTIFICATE

Live Work Access Certificates are required for live electrical work on energised low and high voltage installations where the electric shock risk and arc flash hazard are assessed as Medium or High. Live Work Access Certificates have a dark blue edge. For more information on Live work please refer to [Live Work Guidelines \(WCEF-GM-ENG-0001\)](#).

14.10 ONLINE SEALING CERTIFICATE

Online Sealing Certificates are required when applying temporary leak sealing methods on active leaks during plant operation. Online Sealing Certificates have a purple edge. For more information regarding online sealing please refer to [Online Sealing \(CSBP-DP-05-010-11\)](#).

15 APPENDIX C - ISOLATION METHODS

15.1 PROCESS ISOLATION METHODS

The four process isolation methods are:

- a. Physical disconnection or spool removal and fitting of blank flanges Insertion of fully rated spades or spectacle blinds.
- b. Double block and bleed.
- c. Single block proven to be holding via downstream drain; and
- d. Double positive isolation.

15.1.1 Physical Disconnection or Spool Removal and Fitting of Blank Flanges

Physical disconnection and fitting of blank flanges should be achieved whenever it is reasonably practical. Before breaking into a hazardous pipeline to remove a spool piece, ensure that valve isolation shall be in place and all valves have confirmed zero energy *refer to section 15.2.1 Valves*.

15.1.2 Insertion of Spades or Spectacle Blinds

Insertion of fully rated spades or spectacle blinds should be achieved whenever it is not reasonably practicable to achieve physical disconnection (15.1.1). Before breaking into a hazardous pipeline to insert a spade or swing a spectacle blind, ensure that valve isolation shall be in place and all valves have confirmed zero energy *refer to section 6.4 Confirming Zero Energy*.

15.1.3 Double Block and Bleed

The double block and bleed valve arrangement consists of two separate block valves in a line, with a bleed valve in the connecting line between them. The bleed shall be routed to a safe location but shall be visible and accessible to confirm an effective isolation. A double block and bleed shall be used were able to do so.

15.1.4 Single Block proven to be holding via downstream drain

Single block and bleed arrangement consists of single isolation valve with a downstream bleed. The bleed shall be routed to a safe location but shall be visible and accessible to confirm an effective isolation.

15.1.5 Double Positive Isolation

Double positive isolation arrangement consist of two separate block valves in a line Care should be taken to avoid trapping energy between block valves.

15.2 ISOLATION DEVICES

15.2.1 VALVES

Gate, knife, plug, globe or ball valves should be used for isolations of hazardous substances.

Modulating control valves and butterfly valves shall only be used for non-hazardous systems.

(Note: Pneumatically operated butterfly valves should be mechanically locked in the isolated position).

(Note: Triple offset butterfly valves that are rated to API 598 Zero Leakage Class may be used for isolation of hazardous substances).

Manual actuation is preferred with a lockable closed position and position indication.

Pneumatically actuated valves (not including modulating control valves) can be used for primary isolation purposes if their fail-safe position matches their isolation function. When used as an isolation valve, the instrument air supply shall be isolated and de-pressured to atmosphere.

When a power-actuated valve is to be used as part of isolation, the actuating mechanism power supply shall be isolated and disabled for the duration of the isolation.

Blowdown (fail open) valves require a reliable energy source to provide closure and should be mechanically locked in the isolated position. Their use must be carefully considered as part of the risk assessment.

Pressure safety valves, check valves or non-return valves, including latch swing check valves shall not be used as isolation.

Double wedge gate, parallel expanding gate or double seal ball valves, which provide a double seal in a single valve body with a bleed in between, can be used. However care should be taken in their application. Such valves should only be used in preference to a double block and bleed isolation method after increased risks have been considered in the risk assessment.

Metal seat valves are more reliable than plastic or elastomer but have a higher minimum leakage rate. Elastomeric valves or seats have a lower leakage rate when new but are not as reliable.

15.2.2 SPADES AND SPECTACLE BLINDS

Spades and Spectacle Blinds shall be of adequate design and manufacture.

They shall be clearly marked as to size and material together with the class rating for which they are suitable.

They shall be checked before use to ensure they are suitable for the isolation and in good condition.

Gaskets used shall be in good condition and correctly rated for the particular service.

When not in use they should be maintained in a controlled storage system.

While spades selected to perform positive isolation roles must be line rated, they may be installed for other purposes. Spades or covers may be used on occasions where the only requirement is to provide barriers between compartments at ambient pressure to prevent air movement within a system that has already been shut down and isolated. Spades / covers may only be considered for use in such close fitting situations if:

- The system extremities are isolated from all possible sources by line rated blinds.
- All purge connections and hoses are dismantled.

- The nature, location and use of the spade or cover are clearly noted on the Isolation Certificate and P&ID and these are identified within the relevant procedure.
- A simple system shall be used to differentiate between orifice plates and spades. A normal standard is for orifice plates to have one hole and is stamped with orifice size and direction. Orifice plate shall not be used as an isolation device. The pipe class rating is also marked on the tail and the tail shall be clearly visible to process/maintenance personnel.

15.2.3 BLANK FLANGE

Blank flanges shall be manufactured from material consistent with the service conditions and clearly marked with the system rating.

All blank flanges shall be applied within their line rating capacity.

Gaskets used shall be in good condition and correctly rated for the particular service.

15.2.4 PIPE PLUGS

Sufficient redundancy and independence should exist within or between plugs so that failure of a part of the sealing system does not cause total loss of sealing capability.

The location of plug(s) and sealing capabilities shall be monitored and care taken during plug deployment not to damage tethered control and signal lines.

Use of pipe plugs shall be clearly defined in a Team Based Risk Assessment (TBRA).

15.2.5 PIPE STOPPERS

Stoppers should be used:

- As a secondary containment role.
- Along with a valve or other means of isolation on in-service pipes or pipelines with the space between the stopper and the primary system vented to atmosphere or drained; and
- As a temporary plug to seal open pipe ends.

15.2.6 INFLATABLE BAGS

Inflatable Bags should be used singly or in pairs, along with other pipe isolation systems to isolate low-pressure gas lines. They shall be secured, constantly monitored using a pressure gauge for deflation or damage; and inspected and inflation tested before use.

Use of inflatable bags shall be clearly defined in a TBRA.

15.2.7 PIPE FREEZING KITS

Pipe freezing kits may be used to isolate non-hazardous water services (such as fire water, scheme water, bore water, and demineralised water) that are not part of plant processes, with water pressures within the kit's manufacturer specifications. They shall only be used on metal pipes up to

50mm in diameter. Pipe freezing kits shall be used in accordance with the manufacturer's procedures.

When using a pipe freezing kit, the nearest upstream isolation point shall be identified, and a suitable plug shall be taken as a back-up, so that failure of the kit does not result in a total loss in sealing capability. The pipe freezing kit should not be left unattended while functioning.

Pipe freezing kits are not used in below ground-level confined spaces, or other confined spaces in which water can be accumulated to a depth of greater than 150mm.

Use of pipe freezing kits shall be clearly defined in a TBRA.

15.3 ELECTRICAL ISOLATION METHODS

All electrical equipment and electrical circuits must be isolated from all sources of electrical supply before any work is started on the equipment and circuits.

Isolation of high voltage motors are performed by Restricted Authorised High voltage Operators who have been given training and assessed as competent by an Authorised High voltage Operator and maintain their competency by annual refresher training.

This will be achieved by operating the appropriate controlling device(s) and include:

- a. Opening switches, unplugging connections in the field or circuit breakers on the outside of switchboards.
- b. Opening circuit breakers; or removing fuses inside switchboards – licensed electrician only.
- c. Removal of circuit connections, after the power supply to the circuit connections has been isolated.
- d. Disconnection of battery.
- e. Discharging capacitors.

15.3.1 Opening switches and Opening circuit breakers

Isolator switch or Circuit breaker is used to ensure that an electrical circuit is completely de-energised for service or maintenance. This is done by opening switch to disconnect load from the source. Electrical Isolations and circuit breakers will have a locking device fitted when first isolated to allow work to continue. Zero energy shall always be confirmed prior to work commencing.

A plug or de-contactor in the field may be used as an isolation point. A Physical locking device shall be fitted to stop unauthorised energisation.

If it is required to open a switchboard to isolate, an Electrician will be required to perform the isolation and confirm zero energy. A physical locking device shall be fitted to stop unauthorised energisation.

15.3.2 Removal of circuit connections, after the power supply to the circuit connections has been isolated

Acts as a second layer of protection for the electrical person maintain the equipment. In all instances prior to removal of a circuit or connection being removed the supply has been disconnected from the source. If the use of a de-contactor, removal of fuses, visible break contactor or phase lights is not possible, continuity testing by an electrician is required to establish proof of isolation.

15.3.3 Disconnection of battery

Where a battery isolation device is installed, the device should be switched off and locked in the open position to isolate the battery power source before working on the circuits. When disconnecting a battery where one leg is earthed, always disconnect the earthed lead first then the un-earthed lead.

15.3.4 Discharging Capacitors

Capacitors store electrical energy and, to prevent the potential for an electric shock must be discharged before any work is carried out on circuits containing capacitors. i.e. power factor correction systems. Where an automatic capacitor discharge circuit is fitted to capacitive circuits, the discharge time, nominated by the designer, must be displayed on the enclosure cover or door used to access the capacitive circuits. The time period MUST be allowed to lapse before removing the cover or opening the door. Before work is carried out on circuits containing capacitors, a “Test Before You Touch” process is achieved by discharging residual capacitive energy by earthing the circuits with a suitably designed earthing discharge stick. All electrical isolation must be carried out through the operation of manually operated control devices that directly control the power source. Control circuits and control systems must not be used as a means of isolation, e.g. PLC systems, emergency stops, lanyard switches, etc.

15.4 MACHINE IMMOBILISATION

The following process shall be followed to ensure that energy is effectively immobilised before commencement of work on mobile equipment.

Machine immobilisation shall only apply to the following tasks:

- Pre-Start or in shift inspections.
- Servicing (fuel and lubrication services); and
- Machine inspections.

A machine shall only be considered immobilised if:

- It is safely parked.
- The engine transmission is in neutral.
- The park brake is applied.

- Ground engaging equipment is fully lowered (where applicable).
- The engine has been turned off from the cab (park-up only).
- Wheels placed in trench, across hump, or are wheel-chocked where appropriate at the time. (Wheeled machines only).
- The operator is not in the cab; and
- When performing the pre-start inspection the keys must be removed from the energy source and be in positive control of the person inspecting.
- When servicing is being carried out, the isolation lockout procedure for the equipment has been followed and a Personal Danger Lock and Personal Danger Tag attached to the designated isolation point.

16 APPENDIX D - ROLES AND RESPONSIBILITIES

Role	Responsibilities
Area Manager	<ul style="list-style-type: none"> • Ensure compliance with this procedure. • Ensure communication and training by a competent person is provided in relation to the requirements of this procedure. • Authorise competent personnel to be Permit Authorisers and Isolating Persons. • Ensure hardware is provided to enable Work Permit systems to be achieved. • Authorise Visitors to work.
Supervisor	<ul style="list-style-type: none"> • Ensure personnel undertaking Work Permit roles are competent with reference to training database. • Develop and review safe systems of work for tasks associated with Work Permits. • Supervise Work Permits tasks to ensure they are carried out in accordance with approved Procedures and Certificates.
Permit Authoriser	<ul style="list-style-type: none"> • Manage the Work Permit. • Determine if a Work Permit is required for the scope of work to be completed. • Ensure Work Permit form is completed as per this procedure. • Review the Work Permit and associated Risk Assessments to ensure all area hazards are identified, recorded on the Work Permit and captured within the Risk Assessment. • Verify all necessary Certificates are in place and any required actions have been implemented. • Inform all relevant parties that equipment or plant will be removed from service. • Monitor current Work Permit to ensure simultaneous operations are safely controlled. • Maintain competency. • May delegate part of a task where practicable, however responsibility still remains with the Permit Authoriser.
Isolating Person	<ul style="list-style-type: none"> • Verifying that isolation of energies according to the requirements of the Isolation Checklist has generate a safe situation for the scope of work nominated. • Determines the appropriate isolation method. • Fully complete the Isolation/Standard isolation checklist. • Communicate to the Permit Authorise on the capabilities and limitations of the isolations. • Maintaining competency.
Permit Holder	<ul style="list-style-type: none"> • Presenting to the Permit Authoriser a scope of work that includes what, where and how details of the task. • Completing and understanding the risk assessments. • Ensure all team members understand and agree with the content of the risk assessment. • Verify all team members are trained and competent to complete the task safely. • Ensure the equipment to be worked on is positively identified to the team members. • Check that tools and equipment are in a good condition and suitable for the task to be performed. • Identify other activities being conducted within the area and determine the potential impact to the work being conducted and communicate with other work groups. • Ensure the work undertaken remains within the defined scope of work. • Cease work and inform the Permit Authoriser if an unsafe condition becomes apparent.

	<ul style="list-style-type: none"> Inspect the worksite upon recommencing work and/or shift change and at the completion of work. Ensure a full handover is conducted to the new or oncoming Permit Holder if a change of Permit Holder is required. Ensure that the site is left in a safe state when work is suspended or completed. Check that all team members remove their Personal Danger locks with tags. Contact Team Members if they have not removed their Personal Danger locks.
Team Members	<ul style="list-style-type: none"> Understand and confirm the job scope of work. Participate in the review and development of the risk assessment and understand the hazards and controls required for the work. Confirm controls have been implemented for the defined work. Strictly follow the Work Permit and associated documentation and cease work if an unsafe condition becomes apparent. Shall not undertake any isolations. Inform the Permit Holder when any work conditions change. At suspension of the Work Permit or end of the job: <ul style="list-style-type: none"> Leave the work area in a clean and safe condition. Advise Permit Holder on completion of the job. Remove their Personal Danger Lock and Tag.
Responsible Officer	<ul style="list-style-type: none"> A selected company representative. Responsible for the day to day spend, compliance to the Supplier Policy and accountable for the overall duty of care of the contractors. Assesses the supplier's capability by refer to the WesCEF Activity Risk & Supplier Capability Matrix (WCEF-GM-RSK-0001). Ascertain all the responsibilities as noted in the WesCEF Commitments to Supplier Policy (WCEF-PO-S&A-010-01). Can nominate the Accountable Person.
Accountable Person	<ul style="list-style-type: none"> A selected company representative. Responsible for the supplier's infield duty of care and performance on a day to day basis. Can be a Responsible Officer.
Accountable Person Delegate	<ul style="list-style-type: none"> A selected Contractor that is trained, competent and authorised by the Business Manager to undertake limited infield verification tasks during high volume work periods. Does not replace the Responsible Officer of Accountable Person roles.
Commissioning Person	<ul style="list-style-type: none"> A representative responsible in changes to equipment. For major projects, the person must be approved by the Area Manager Name and authority must be captured on a list that is displayed in the relevant Work Permit issuing area. Facilitates testing and commissioning activities following changes to equipment. Manages the key for the Commissioning Lock Returns equipment control to Operations once work is complete and it is confirmed safe for deisolation

17 APPENDIX E - TRAINING AND COMPETENCY

17.1.1 Training

All users of the Work Permit system and all personnel involved in performing isolations shall receive structured training so as to achieve competency appropriate to the respective authority levels required.

All personnel involved in issuing and completing Work Permits and involved in performing isolations shall be appropriately qualified, trained and competent in those relevant tasks that they are assigned.

The training shall include:

- State and Federal legislative requirements.
- Industry and corporate guidelines and documentation.
- Objectives of the Work Permit System and knowledge of the written procedures.
- Requirements and procedures relevant to each role.
- Roles of individuals and approving authorities.
- Associated Permit types and Certificates.
- Validation and required signatories; and
- Restrictions.

Each level of Work Permit and Isolation training shall be a prerequisite for the eligibility of subsequent work permit competencies.

Standardised training modules shall be established for the following:

- a. Permit Authoriser.
- b. Isolating Person.
- c. Permit Holder and
- d. Team Member.

Team Member Training shall be required for all personnel qualified to conduct the required tasks under a Work Permit.

Team member Training shall qualify personnel to work under a permit for tasks which they are assigned and competent to perform. It shall include an overview of the Work Permit System and clearly define the responsibilities of a Team member and the different roles and responsibilities within the Work Permit System.

Permit Holder Training shall qualify personnel to manage the work being completed under the conditions of a Work Permit. It shall include how the Work Permit System relates to other certificates used on site and the different roles and responsibilities within the Work Permit System.

Isolating Person Training shall qualify personnel to place locks and tags onto a confirmed isolation point, confirm zero energy and to verify that the isolation points match the isolation Checklist and plant or equipment labelling.

Permit Authoriser Training shall qualify personnel to prepare, inspect, authorise and issue the Work Permit.

Personnel who work under, prepare or issue associated Certificates shall be appropriately qualified, trained and competent in those relevant tasks that they are assigned.

Only personnel who hold a current and appropriate Office of Energy Electrical Workers License shall be authorised to perform electrical work.

All personnel who undertake risk assessments relating to Work Permits and Isolations shall be competent to do so.

Training in the Work Permit System shall be arranged via the Training Department.

17.1.2 Verification of Competency

Personnel shall be verified as competent and entered into the training database against the above competencies which apply to their role.

To be verified as competent, personnel shall:

- Have completed a theory assessment to the satisfaction of a CSBP Assessor.
- Have completed a practical assessment to the satisfaction of a Subject Matter Expert and CSBP Assessor.

Competency records shall be provided to the Training Department for entry into the training database.

Permit Authoriser's shall be appointed in writing by the Business Unit Manager.

The Isolating persons shall be appointed in writing by the Business Unit Manager.

17.1.3 REFRESHER TRAINING

Employees are required to ensure their core safety and technical competencies are maintained and that their knowledge and skills remain current at all times. Refresher training and/or a verification of competency (VOC) should be completed prior to a competency expiring or at any lesser interval if determined necessary.

18. APPENDIX F – DEFINITIONS

Description	Definition
Authorised High Voltage Officer	An authorised person who has specifically been authorised to issue permits for entry to electrical operating areas.
Authorised Person	A person who has been granted permission by the relevant Manager or nominee to carry out specific tasks that they are competent to carry out.
Breach	Any mandatory process in this procedure that is not followed.
Competency Competent Competencies	Competence for a task is the demonstrated skill and knowledge required to carry out the task to a standard necessary for the safety and health of persons has completed the relevant training and familiarisation and has been assessed as competent.
Competent Person	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. For work certificates, the Competent Person cannot be the same person as the Permit Holder.
De-energised (dead)	Separated from all sources of supply but not necessarily isolated, earthed or out of commission.
Delegate	A person designated to act for or represent another part of a job role. The delegate will have to have as a minimum the required qualifications to perform that part of the task.
Electrical Equipment	Item used for generating, converting, transmitting, distributing or using electrical energy.
Electrical Work	Installing, repairing, testing or disconnecting electrical components of electrical equipment and electrical installations.
Energised (live)	Energised (live) means a conductor is energised at normal operating potential or energised to a potential from a source of supply not being its normal source of supply e.g. a test instrument, a generator, a back feed.
Hazardous Energy	These energy sources are one or more of; electricity, radiation, pneumatics, hydraulics, gases and liquids, chemical, gravity or any other energy source that has the potential to cause injury or damage.
Hazardous Materials	Materials that have the potential to pose a significant risk to the health and safety of people or the environment.

Description	Definition
Isolated	Disconnected or separated from all possible sources of supply by positive isolation.
Isolation Device	Equipment that is used to assist in isolation and facilitate the fitment of a hasp for personnel to lockout.
Isolation Checklist	A list describing all isolations by task requirements.
JSA	Job Safety Assessment which steps out tasks and identifies hazards and allocates the appropriate controls to ensure work is performed in an appropriate and safe manner.
Positive Isolation	Where a try step confirms isolation.
Risk assessment	Risk assessment is the process of risk identification, risk analysis and risk evaluation. Risk is measured in the terms of consequence and probability.
Shall	'Shall' denotes a requirement that is mandatory.
Should	The word 'should' is non-mandatory, advising or recommended.
Team Based Risk Assessment (TBRA)	Team Based Risk Assessment identifies the hazards associated with the task; assesses the risks and identifies the controls required to mitigate those risks.
Try Start	A test process to confirm that the harmful energy has been isolated effectively on all isolation points.
Visitor(s)	A person who is un-inducted to CSBP Kwinana Site or specific Areas on site.
Work Not Requiring a Permit	Approved routine operational tasks/inspections using approved Safe Work Instructions and/or Standard Operating Procedures, within environments that do not change considerably, identifying that a Work Permit is not required to enable a task to be performed.
Work Not Requiring a Permit List	A list, displayed in control rooms, of approved Tasks by the Area Manager that do not require a permit.

Description	Definition
Work Permit Register	<p>A register which tracks Work Permits that have been issued and signed off. The minimum standard for a Work Permit Register is CSBP-PF2224 and includes:</p> <ul style="list-style-type: none"> • Permit number • Issued by (name) • Date issued • Valid until • Scope of work • Closed by (name) • Date closed <p>If the register is digital, it must be stored in a location authorized by Health & Safety and access controlled.</p>