

Objective

To minimize the risk of harm to personnel and the environment through the application of a process that confirms adequate controls are in place before work with inherent high-risk is authorized to proceed.

Audience

Personnel involved in the planning, execution and supervision of field-based work.

Note: This procedure also applies to contractors unless formally agreed to (and documented) through the Contractor Management Procedure (PET-SUP68-SU-PRD-00001).

Owner

Jason Flockton, Senior Personal Safety Advisor

Document Signatures (e-signatures are permissible)

	Business Role	Name	Signature
Approver	VP HSEQ Projects	Karelis Holuby	Signature on file – refer to Memorandum: Heritage BHP Petroleum HSE MS Post- Merger Update.

Disclaimer:

This document has been updated to meet post-merger requirements. Updates have been restricted to rebranding of logo, company name and revision number and date. Updates have not impacted the design or functionality, or taken away from original intent, of the document.

PET-HSE27-SF-PRD-00006

Process Summary



Procedure

Step 1. Determine if a Permit to Work is required

Work Planner to determine if a Permit to Work is required for the proposed scope of work by referring to Appendix 1.

Note: The Permit to Work process can be used for other activities outside of those mandated in Appendix 1 where supervision has determined that an additional level of work validation and authorization, other than normal supervision, is required.

Outputs 1. Decision on whether a Permit to Work is required

Step 2. Develop Safe Work Plan

- Work Planner to establish a Safe Work Plan by following the requirements in Table 1.
- Work Planner to commence drafting of Permit to Work template (PET-HSE27-SF-FRM-00012) once the Safe Work Plan has been documented.

Activity	Requirements
	 Use the Confined Space Entry Decision Tree (PET-HSE27-SF-FLD-00001) to determine if the space meets the requirements of a confined space.
	Note: In the USA, the Occupational Safety and Health Administration (OSHA) differentiate between a <i>Confined Space</i> and a <i>Permit Required Confined Space</i> . For the purpose of this Procedure, the Petroleum Deepwater <i>confined space</i> definition covers what OSHA defines as a <i>Permit Required Confined Space</i> .
	 Use the Confined Space Entry Certificate (PET-HSE27-SF-CER-00006) to prepare a safe confined space entry.
	 Where hazardous energy sources are identified, use the <i>Isolation Procedure</i> (PET- HSE27-SF-PRD-00005) to plan and establish isolations.
	 Document a confined space entry risk assessment and rescue plan using the Confined Space Entry Risk Assessment (PET-HSE27-SF-FRM-00015) to address the hazards of the space entry.
Confined Space Entry	 Complete a <i>Job Risk Assessment</i> to identify specific hazards and controls for the tasks to be completed within the space. A separate permit(s) may be required for work in the boundary of the confined space (e.g. hot work).
	 Identify an Entry Attendant, who must as a minimum:
	 be trained in the use of gas detectors, continuously monitor and periodically record test results on the Gas Test Log (PET-HSE27-SF-FRM-00014)
	 ensure personnel record entry/exit data on the Confined Space Entry Log (PET- HSE27-SF-FRM-00013)
	 confirm personnel who enter the space have been trained on confined space hazards and any specialized equipment (e.g. self-contained breathing apparatus)
	 not perform any other duties while designated as an Entry Attendant
	 not leave the confined space entry point whilst personnel are inside the space
	 never enter the confined space under any circumstance, even an emergency
	 know how to initiate the rescue plan in case of an emergency

	 Use the Hot Work Certificate (PET-HSE27-SF-CER-00003) to prepare the job site to safely perform hot work (open flame).
	 Where hazardous energy sources are identified, use the <i>Isolation Procedure</i> (PET- HSE27-SF-PRD-00005) to plan and establish isolations.
	 Monitor atmospheric gas and record on the Gas Test Log (PET-HSE27-SF-FRM-00014).
Hot Work (open flame)	 Identify a Fire Watch for the job, who must at a minimum:
	 be trained in the use of site gas detectors and firefighting equipment
	 not perform other duties while designed as Fire Watch
	 remain on location 30-minutes after completion of open flame activities
	 Complete a Job Risk Assessment (PET-HSE27-SF-PRD-00009) to identify hazard controls for the specific task.
	 Use the Hot Work Certificate (PET-HSE27-SF-CER-00003) to prepare the job site to safely perform hot work (non-flame).
Hot Work (non-flame)	 Where hazardous energy sources are identified, use the <i>Isolation Procedure</i> (PET- HSE27-SF-PRD-00005) to plan and establish isolations.
	 Monitor atmospheric gas and record on the Gas Test Log (PET-HSE27-SF-FRM-00014).
	 Complete a Job Risk Assessment to identify hazard controls for the specific task.
	 Use the Breaking of Containment Certificate (PET-HSE27-SF-CER-00005) to prepare for the safe execution of work that involves breaking containment.
Breaking Containment of	 Where hazardous energy sources are identified, use the <i>Isolation Procedure</i> (PET- HSE27-SF-PRD-00005) to plan and establish isolations.
Process Systems	 Determine gas test frequency and record on the Gas Test Log (PET-HSE27-SF-FRM- 00014).
	 Complete a Job Risk Assessment to identify hazard controls for the specific task.
Live Electrical Work	 Use the Live <i>Electrical Work Certificate</i> (PET-HSE27-SF-CER-00004) to prepare for safe work on electrical equipment. Arc Flash calculations for high voltage must be defined in accordance with local regulatory requirements (where local regulatory requirements do not exist, utilize OSHA requirements). All live electrical work must be carried out by a person qualified in accordance with local regulatory requirements.
	 Where associated hazardous energy sources are identified (other than the live electricity), use the <i>Isolation Procedure</i> (PET-HSE27-SF-PRD-00005) to plan and establish isolations.
	• Complete a <i>Job Risk Assessment</i> to identify hazard controls for the specific task.
	• Complete a Job Risk Assessment to identify hazard controls for the specific task.
Cold Work	 Where hazardous energy sources are identified, use the <i>Isolation Procedure</i> (PET- HSE27-SF-PRD-00005) to plan and establish isolations.
	 Use support tools, where relevant and available, for the given work scope (e.g. Ground Disturbance and Excavation Certificate (PET-HSE27-SF-CER-00001).

Table 1. Safe Work Plan development requirements

Outputs 1. Safe Work Plan and associated documentation for the defined scope of work.

Step 3. Review and approve Safe Work Plan and Permit to Work

- Permit Authorizer to review the Safe Work Plan for hazard identification, risk recognition and adequate controls:
 - if plan is not satisfactory, return the plan to the Work Planner with deficiencies identified
 - if plan is acceptable, Approve the *Permit to Work* (PET-HSE27-SF-FRM-00012) and move forward for work scheduling

Outputs 1. Approved Safe Work Plan, associated documentation, and Permit to Work.

Step 4. Issue Permit to Work

- Ultimate Work Authority to review overall work schedule and authorize work if there are no SIMOPS issues:
 - Ultimate Work Authority countersigns the permit
- Permit Issuer with the Permit Holder, to walk-down the job and verify controls in the Safe Work Plan are in place:
 - Permit Issuer signs the permit authorizing work to commence if controls are in place
- Permit Issuer (or qualified delegate) to periodically visit the job site to verify work and controls remain within the Permit
 parameters.
- Permit Issuer to register and display Permit to Work and associated documentation in accordance with locally
 determined practice, ensuring it is available to personnel involved in executing the work scope.

Outputs 1. Permit to Work issued to the Permit Holder for acceptance.

Step 5. Accept Permit to Work

- *Permit Holder* signs Permit to Work accepting accountability to work within the parameters of the permit.
- *Permit Holder* holds JRA discussion or Tool Box Meeting to discuss plan and expectations with work team.
- Permit Holder to stop work immediately and contact the Permit Issuer at any time the work scope changes or cannot be carried out in compliance with the permit conditions.

Outputs 1. Authorized Permit to Work accepted by the Permit Holder.

Step 6. Suspend / Re-Issue Permit to Work

Suspension

- Permit Holder to engage the Permit Issuer to suspend the Permit to Work under the following conditions:
 - work is not complete by the end of the shift but it is intended to restart
 - work scope changes or cannot be carried out in compliance with the permit conditions
 - a SIMOPs issue is identified that prevents the work scope being executed safely
- Permit Holder and Permit Issuer (or qualified delegate) to visit the job site and confirm it is left in a safe condition.
- Permit Issuer and Permit Holder sign the 'Permit Suspension' section of the permit and then provide it to the *Ultimate Work Authority*.
- Ultimate Work Authority initials the 'Permit Suspension' section and then returns the Permit to Work to the Permit Issuer and Permit Holder in preparation for when work recommences.

Note: *Permit Issuer* can extend a Permit to Work for up to 14 hours total without suspension if deemed safe.

Suspension for emergency

- Permit will automatically be considered suspended in the case of a site emergency:
 - Work team is to make the job site safe if they are not in imminent danger
- *Permit Issuer* with the *Permit Holder* to visit the job site and verify that controls have not been adversely affected by the emergency before authorizing work to restart.
- Permit Holder to hold a Tool Box Meeting to discuss restart considerations with the work team.

Reissue of Suspended Permit

- Permit Issuer and Permit Holder to walk-down the job site to verify conditions have not changed prior to authorizing
 work to begin at the next scheduled time:
 - Ultimate Work Authority to initial 'Permit Re-Issue' section of the permit if there are no SIMOPs issues
 - Permit Issuer to sign the 'Permit Re-Issue' section of the permit
 - *Permit Holder* to sign the 'Permit Re-Issue' section of the permit accepting accountability to work in compliance with the permit conditions
 - Permit Holder holds Tool Box Meeting to discuss plan and expectations with work team before restart
- Permit Issuer to periodically visit the job site to verify work and controls remain within the permit parameters.
 - **Note:** Permits have a maximum validity period of 14 cycles (based on a normal cycle being 12 hours), after which a new permit must be created for ongoing jobs.

Outputs 1. Permit suspended and re-issued in a controlled manner

Step 7. Permit Closure

- Permit Holder to conduct an After Action Review upon completion of work to identify learning opportunities.
- Permit Holder with Permit Issuer to walk-down the job site to confirm work completion is to plan and site is safe before signing the 'Permit Closure' section of the permit.
- Permit Holder to communicate Lessons Learned from the After Action Review to the Permit Issuer.
- *Permit Issuer* signs 'Permit Closure' section of the permit acknowledging that the job has been completed and the area left in a safe condition.
- Ultimate Work Authority is made aware of and signs 'Permit Closure' section of the permit when it is used to manage SIMOPs.
- Permit Issuer to archive the permit and supporting records in accordance with the Petroleum records retention schedule.
 - 1. Lessons Learned from the After Action Review for consideration in planning future work.
 - Outputs 2. Permit to Work signed off as 'closed'
 - 3. Closed Permit to Work and associated records archived.

Field Auditing

- Leadership to complete periodic and random field audits throughout the life cycle of the permit using the Control of Work Field Assessment (PET-HSE27-SF-FRM-00018). Frequency and quantity of audits are determined locally.
- Leadership to use Field Assessment outcomes to improve the Permit to Work process by closing non-conformance gaps and communicating design deficiencies to the Safety Manager Petroleum.

Outputs	1.	Completed Control of Work Field Assessments.
	2.	Assessment outcomes used to improve the Permit to Work process design and implementation.

Roles and Responsibilities

Role	Definition
Permit Authorizer	A nominated and trained individual who is the single point of accountability (SPA) for the safe execution and close-out of work within a defined work area:
	• Responsible for authorizing the Permit to Work before it is issued by the Permit Issuer.
	 Must have completed the Permit to Work Application training.
	 May also fill the Permit Issuer role and responsibilities for a given Permit, but not the Permit Holder role.
Permit Issuer	A nominated and trained individual with authority and responsibility to issue Work Permits, and verify conformance with permit conditions, for activity executed within their defined work area:
	 Responsible for confirming requirements of the documented Safe Work Plan are in place before issuing the Permit to Work to the Permit Holder.
	 Must have completed the Permit to Work Application training.
	 May also fill the Permit Authorizer role and responsibilities for a given Permit, but not the Permit Holder role.
Permit Holder	A nominated and trained work team leader where the task involves more than one person, or the individual performing the work for a single person task:
	 Responsible for the safe execution of the work scope, including adherence to the requirements of the documented Safe Work Plan and associated Permit to Work.
	 Must have completed the Permit to Work Application training.
	 Cannot fill the Permit Authorizer or Permit Issuer role for a given Permit to Work.
Work Planner	 Individual with sufficient knowledge of the Permit to Work process and supporting tools to build a Safe Work Plan.
Ultimate Work Authority (UWA)	 The onsite person who is accountable for managing SIMOPs. The UWA may also fill the role of Permit Authorizer or Permit Issuer.

Location	Activity
	Confined Space Entry: Entry of any part of a person's body across the entry plane of a confined space .
	<i>Hot Work (non-flame):</i> The use, or possible creation, of any source of ignition within a hazardous area. For example:
	 Non-intrinsically safe battery operated tools
	 Motor vehicle or mobile equipment entry within 35-ft (10.5-m) of live plant
	Opening live junction boxes
	<i>Hot Work (open flame):</i> The use or production of a flame, spark or other high-energy source of ignition that can ignite combustible materials within a radius of 35-ft (10.5-m) of live plant. For example:
	 Welding, cutting, brazing or burning with a torch, electric arc, soldering iron
All Locations	Breaking Containment: Breaking into the containment envelope of a hazardous process or system that could potentially cause a serious injury or fatality (e.g. process spools, valves, vessels). Does not include routine sampling or pressure gauge change-out.
	<i>Live Electrical Work:</i> Work on live electrical equipment or within the Arc Flash exclusion zones as defined by local regulatory entities (where no local regulatory requirements exist, utilize the OSHA requirements).
	Cold Work:
	 Simultaneous Operations (SIMOPs) that have the potential for a significant event, but do not fall under any of the other Permit required activities.
	 Ground disturbance or excavation inside the perimeter of a Petroleum Deepwater controlled location, excluding the exceptions defined in the Ground Disturbance and Excavation procedure (PET-HSE27-SF-PRD-00003).
	Diving operations
	 Use of explosives, except routine use of explosives in Drilling and Completions
	 Vessel bunkering of hazardous materials
Gulf of Mexico Production Units	 Working at height