



## CS ENERGY PROCEDURE FOR CONFINED SPACE DECLASSIFICATION CS-PTW-SOP-07

Responsible Officer: CS Energy PTW Administrator

Responsible Executive: EGM Production

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### DOCUMENT HISTORY

Key Changes	Prepared By	Checked By	Approved By	Date
Callide Overhaul document	D Hagenbruch	R Kinslow	P Michaud	31/06/2012
Integrated into CS Energy document	D Clarke	H&S Taskforce	A Brown	27/03/2013
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## 1 PURPOSE

This procedure details the process and criteria to modify the classification of a 'confined space' (under normal conditions) to a declassified 'non-confined space' or 'work area' whilst unit is offline and isolated during planned overhauls.

Key benefits of declassifying a confined space include:

- Reduced administration by proactively controlling the hazards before work commences; and
- Allow for work in a difficult environment to be completed in a safe but streamlined manner.

It is critical to follow the process and complete criteria checks to ensure the atmospheric and engulfment hazards of a confined space no longer exist.

## 2 SCOPE

This procedure relates to the management of declassifying confined spaces under the appropriate conditions. For more information relating to safe work in confined spaces, refer to ["B/D/11/39828"](#) - CS-PTW-HAZ-03 - Confined Spaces.

## 3 RESPONSIBILITIES AND ACCOUNTABILITIES

### 3.1 Management

Managers are responsible to:

- Implement this procedure; and
- ensure sufficient resources are provided to effectively implement this procedure.

### 3.2 Overhaul Superintendent/Manager or Outage Manager

The Overhaul Superintendent/Manager or Outage Manager is responsible to:

- Ensure confined space declassification meets requirements of this procedure; and
- All personnel working on the overhaul are aware of this procedure.

### 3.3 Officer in Charge (OIC)

The OIC is responsible for ensuring that:

- Whenever there is a change to a Permit, the risk assessment used to determine the declassified confined space is reviewed and the outcome is communicated to all work party members, Confined Space Coordinator and Overhaul Manager; and
- Any change or potential to change the environment within the confined space brought about due to any work practices is to be risk assessed, covered by the JSEA and communicated to the work party.



### 3.4 Confined Space Coordinator

The Confined Space Coordinator is responsible for ensuring that:

- All declassified confined space applications have been reviewed and comply with the requirements within this procedure; and
- Communication of any changes to the declassified confined space applications where they are reverted back to a normal confined space.

### 3.5 Permit to Work Officer (PTWO)/Overhaul PTW Coordinator

The PTWO or Overhaul PTW Coordinator is responsible to ensure:

- Applications requesting a confined space to be isolated allowing it to be declassified to a 'non-confined' space or 'work area' meet the requirements of this procedure;
- Isolation requirements of the confined space energy inputs are considered in the declassification risk assessment; and
- If liquids, gases or vapours can enter the confined space, the pipe work is to have a positive isolation – refer Section 4.3.

### 3.6 Employees & Contractors

Employees and Contractors are responsible for ensuring:

- Employees are responsible for ensuring that they understand and comply with the procedure and the Permit to Work (PTW) systems.

## 4 DECLASSIFYING A CONFINED SPACE TO NON-CONFINED SPACE

### 4.1 Steps to declassify Confined Space

To safely declassify a confined space, the following steps are to be completed:

1. Identify the confined space that will change (e.g. boxed open or have access doors cut) during overhaul or outage;
2. Locate the confined space in the site confined space register (refer to Appendix 1);
3. Risk assess the confined space or use a previous risk assessment to determine whether the confined space hazards and associated isolations can be controlled to a low or negligent risk;
4. The Overhaul or Outage team is to review and approve the control measures with advice from the site H&S team as appropriate;
5. Operations to apply a positive isolation to the energy inputs and verify;
6. Operations to ensure all associated PTW's are linked correctly;
7. PTW issued to OIC with a copy of the declassification risk assessment attached. OIC to manage PTW work as a normal 'work area';
8. Any changes that have the potential to affect atmosphere or engulfment in the space will require a review of the initial risk assessment.

**If not on the register, contact the site Health and Safety department who will arrange for an assessment to be undertaken in site format.**

## 4.2 Risk Assess Identified Confined Space

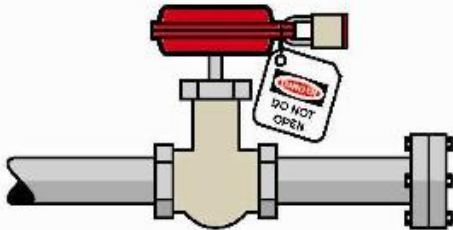
Risk assess the confined space to determine opportunity to declassify the space:

- Where possible the risk assessment shall involve the Area Coordinator or CS Energy equivalent who understands the scope of work to be undertaken in the space, and the PTW Coordinator to ensure isolation requirements for declassifying will be suitable for the risk assessment;
- Use the site Confined Space Risk Assessment Template (Callide example: "[C/D/11/26079](#)") to record this assessment;
- Review and endorsement of the risk assessment by site H&S coordinator/adviser;
- The Overhaul Manager or representative is to authorise the confined space declassification;
- All applications should be submitted and authorised prior to the commencement of the Overhaul to permit appropriate planning; and
- Applications can be submitted and will be reviewed as a continuous improvement opportunity for future Overhauls.

## 4.3 Isolation Requirements

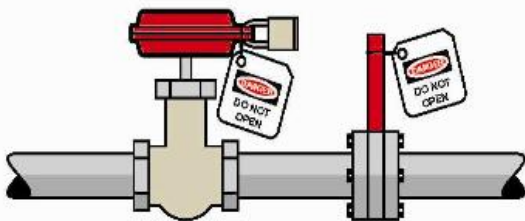
If liquids, gases or vapours can enter the confined space, apply positive isolation to the energy inputs. Methods of isolation must be in accordance with or better than one of the following methods:

- Removing a valve, spool piece or expansion joint in piping leading to the confined space and blanking or capping the open end of the piping. The blank or cap should be tagged to indicate its purpose. Blanks or caps shall be made of a material that is compatible with the liquid, vapour or gas with which they are in contact. The material should also have sufficient strength to withstand the maximum system design pressure.



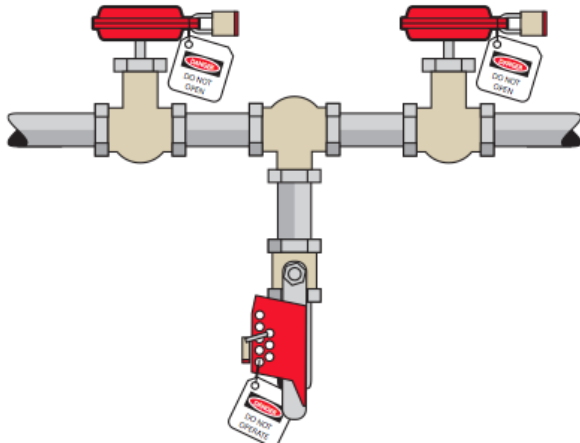
**Figure 1:** Open end of pipe capped. Nearest valve closed locked and tagged.

- Inserting a suitable full-pressure spade or blank in piping between the flange and as close as practicable to the confined space (see figure 2). The full-pressure spade or blank should be tagged to indicate its purpose. The material should also have sufficient strength to withstand the maximum system design pressure.



**Figure 2:** Insertion of full pressure spade or blank. Nearest valve closed, locked and tagged. Spade is also tagged to indicate its purpose.

- Closing, locking and tagging at least two valves in the piping leading to the confined space. A drain or vent valve between the two closed valves should be locked open to atmosphere as part of this method (see figure 3 – Double block and bleed).



**Figure 3:** Closing, locking and tagging at least two valves and having a drain or vent valve open between them

#### 4.4 Work within a Declassified Confined Space (non-confined space)

When working in a declassified confined space, ensure the following:

- Prior to first entry of the work space, an air quality test is to be done to confirm safe atmospheric conditions;
- Existing confined space signs at the entrance to confined space will need to be covered with signs showing they have been declassified;
- OIC and work party are to control all hazards relating to the work using a JSEA for the job;
- OIC is to ensure work party understand they are working in a declassified confined space and aware of the confined space risk assessment and controls in place;
- Use the Work Party Sign on/Sign off sheet to track who is working on the PTW and in the space;
- It is the responsibility of the OIC to ensure that every worker is signed on and off the Work Party Sign on/Sign off sheet at the start and end of the shift;
- Any change to the environment within the confined space brought about due to any work practices is to be risk assessed and covered by the JSEA (e.g. introduction of carbon monoxide source from diesel generator sets or mobile plant);
- Any change to the conditions of the declassified confined space will require a review of the initial confined space risk assessment; and
- All confined space signs are to be uncovered upon surrendering the PTW with the declassified confined space risk assessment attached. This returns the space back to confined space status.

Where the space no longer complies, the space is to be reclassified as a confined space and the normal confined space entry conditions are to apply.

#### 4.5 Declassification and Reclassification of the Confined Space

The process to declassify or reclassify a Confined Space will be undertaken using the same process described in the PTW Manual to Suspend to Alter Isolation.

At the request of an OIC or PTWO, a Permit can be suspended to Alter Isolation. This allows for altering (adding, restoring or changing) Isolation Points.

#### 4.6 Equipment in a Declassified Confined Space

Equipment used in a declassified confined space shall comply with the requirements of ["B/D/11/39828"](#) - **CS-PTW-HAZ-03 – Working in a Confined Space**:

- All portable electrical equipment shall be connected to, individually or collectively to a safety switch Residual Current Device (RCD), with the device located outside the space.
- No cylinder of compressed or liquefied gas, other than those used for self-contained breathing apparatus, shall be taken into the space. The gas supply shall be turned off at the cylinder valve when not in use. The gas cylinders shall be secured. Hoses supplying gas operated equipment, shall be inspected and tested prior to installation, and guarded to avoid accidental damage;
- All flexible cord temporary lighting (including emergency lighting) shall be protected against damage. Emergency lighting shall have battery back-up so that lighting remains on in the event of a power failure and the outlet shall be labelled to inform personnel that the power outlet shall not be disconnected and RCD protection must be provided. Sufficient battery-powered lighting shall be installed in stairways and passageways to allow safe access to and egress from the area if there is insufficient natural lighting. Emergency lighting at a minimum level of 20 lx shall be provided for a minimum of one hour following loss of normal lighting in the area. Emergency lighting shall be positioned so that persons can exit at each egress point.

#### 4.7 Records

A copy of the confined space risk assessments should be documented with the relevant confined space in the site confined space register.



## 5 DEFINITIONS

Term	Definition
PTW	Permit to Work
JSEA	Job Safety Environment Analysis
Positive Isolation	<p>Positive isolation is a method of Isolation where there is zero potential of energy. It includes:</p> <ul style="list-style-type: none"> <li>• All Hazardous Energy has been identified;</li> <li>• All are isolated at the source;</li> <li>• Residual Energy has been eliminated; and</li> <li>• Isolation type is verified effective.</li> </ul> <p><b>For more information refer to: Confined Space Code of Practice 2011</b></p>

## 6 REFERENCES

Reference No	Reference Title	Author
	Confined Space Code of Practice 2011	Qld Govt
	Work Health and Safety Legislation 2011	Qld Govt
<a href="#">"B/D/11/19579"</a>	Procedure - CS-PTW-02 - Permit to Work (PTW) Definitions	CS Energy
<a href="#">"B/D/11/19582"</a>	Procedure - CS-PTW-01 - Permit to Work (PTW) Manual	CS Energy
<a href="#">"B/D/11/39828"</a>	Procedure - CS-PTW-HAZ-03 - Working in Confined Spaces	CS Energy



## 7 ATTACHMENT / APPENDIX

### 7.1 Appendix 1 – Site Confined Space Registers

#### Callide A, B and C Confined Space Register - C/D/09/1499

- ["CSEP - Confined Space Register Callide A, B and C Station \[CURRENT\]"](#)

#### Kogan Creek Confined Space Register

- <To be inserted>

#### Wivenhoe Confined Space Register

- <To be inserted>

### 7.2 Appendix 2 - Confined Space Risk Assessment Template Example – C/D/11/26079

- ["CAL - Confined Space Risk Assessment Template - 18/08/2011"](#)