Confined Space Risk Assessment

General Details

Space Name:		**Functional Loc No:**	
Site & Area:		**CS Register No:**	
Space Type:		**ID Team:**	
Space Location:		**Date of Evaluation:**	

Confined Space: (the top box must be ticked and at least one of the italics)	Enclosed or Partially Enclosed that is not intended or designed primarily for human occupancy, within which there is one or more of the following:	☐
	An oxygen concentration outside the safe oxygen range	☐
	A concentration of airborne contaminant that may cause impairment, loss of unconsciousness or asphyxiation	☐
	A concentration of flammable airborne contaminant that may cause injury from fire or explosion	☐
	Engulfment in a stored free-flowing solid or a rising level of liquid that may cause suffocation or drowning	☐
	Is this area considered a Confined Space?	**Yes** ☐ **No** ☐
	If Yes, Continue with the Assessment. If No, consider adding this to the Hazardous Area Register	
Reason why this is considered to be a hazardous area		

Nature of the space

Describe the space:				
Primary intent of the space:				
What is the space made of:				
Number and sizes of every entry point and ID Number if available:				
Chemicals that may be in space:	Diesel ☐	Methane ☐	Hydrogen Sulphide ☐	Natural Gas ☐
	Carbon Monoxide ☐	Flocculent ☐	Sulphuric Acid Vapour ☐	Ammonia ☐
	Chlorine ☐	Asphyxiants ☐	Radioactive Mineral Dust ☐	Carbon Dust ☐
	☐	☐	☐	☐
	☐	List:		

Photograph overview / Schematic plan of the space/ entry points

Confined Space Signage		
Does a legible Confined Space sign exist on this space?	**Yes** ☐	**No** ☐
Will this space need a new Confined Space sign?	**Yes** ☐	**No** ☐
Is there a legible Functional Location Number on this space	**Yes** ☐	**No** ☐

Most Probable Task			Is Entry Necessary?		Other Potential Methods
Inspection	**Yes** ☐	**No** ☐	**Yes** ☐	**No** ☐	
Cleaning	**Yes** ☐	**No** ☐	**Yes** ☐	**No** ☐	
Routine Maintenance	**Yes** ☐	**No** ☐	**Yes** ☐	**No** ☐	
Describe routine maintenance:					
Does a SWP, exist for the most probable task?			**Yes** ☐ **No** ☐		
If Yes, Document No.:					

Re-design Opportunities	
Can re-design of the space remove the need for entry?	**Yes** ☐ **No** ☐ **Not determined** ☐ - If Yes complete below
List the possible re-design solutions	

Inherent Hazards – Risk Assessment

Note: This risk assessment addresses hazards inherent to the space.

It does not take into consideration hazards resulting from tasks completed in or on the space. A task specific JSA is required before any work commences.

Inherent Atmospheric Hazards (During normal operation?)

Hazard	Risk Level (uncontrolled)					Controls
	N/A	Low	Mod	Sig	High	
Oxygen deficient or surplus	☐	☐	☐	☐	☐	
Combustible gases	☐	☐	☐	☐	☐	
Toxic gases	☐	☐	☐	☐	☐	

Potential Atmospheric Hazards (When shutdown what could enter the space?)

Hazard	Risk Level (uncontrolled)					Controls
	N/A	Low	Mod	Sig	High	
Contaminants in sludge	☐	☐	☐	☐	☐	
Contaminant in fittings	☐	☐	☐	☐	☐	
Oxidation, decomposition	☐	☐	☐	☐	☐	
Chemical exposure	☐	☐	☐	☐	☐	
Surrounding environment	☐	☐	☐	☐	☐	

Engulfment

Hazard	Risk Level (uncontrolled)					Controls
	N/A	Low	Mod	Sig	High	
Stored Product	☐	☐	☐	☐	☐	
Introduced Product	☐	☐	☐	☐	☐	
Product – Hang Up	☐	☐	☐	☐	☐	
Potential Bridging	☐	☐	☐	☐	☐	

External factors

List all external factors which may alter risk factors:

Inherent Hazards – Risk Assessment

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Other Inherent Hazards						
Movement of the space	☐	☐	☐	☐	☐	
Moving equip (in/outside)	☐	☐	☐	☐	☐	
Stored energy	☐	☐	☐	☐	☐	
Temperature extremes	☐	☐	☐	☐	☐	
Natural hazards, insects, vermin	☐	☐	☐	☐	☐	
Electrocution	☐	☐	☐	☐	☐	
Ergonomics, poor posture	☐	☐	☐	☐	☐	
Difficult access / egress	☐	☐	☐	☐	☐	
Fire, explosion	☐	☐	☐	☐	☐	
Radiation (UV, sunlight, other)	☐	☐	☐	☐	☐	
Slips /Trips /Falls	☐	☐	☐	☐	☐	
Hazardous chemicals	☐	☐	☐	☐	☐	
Excessive noise	☐	☐	☐	☐	☐	
Poor lighting	☐	☐	☐	☐	☐	
Dust	☐	☐	☐	☐	☐	
Remote Location	☐	☐	☐	☐	☐	
Poor communication	☐	☐	☐	☐	☐	
Rubber lined vessel	☐	☐	☐	☐	☐	
Linatex lined vessel	☐	☐	☐	☐	☐	

Minimum Mandatory Isolation, Gas Testing & Ventilation Requirements

Note: These are the minimum isolation, gas testing and ventilation controls required for the inherent isolation, gas or ventilation hazards of this space. Review the inherent hazard risk assessment and perform a task specific JSA to identify and control any additional or introduced hazards.

Isolations

Isolations Required? **Yes** ☐ **No** ☐ - If Yes complete below

Isolations	Required		Comments / Details
Primary Isolation	**Yes** ☐	**No** ☐	
Secondary Isolation	**Yes** ☐	**No** ☐	
Additional Energy or Product Sources (Water, Sludge, Gas, Chemicals etc)	**Yes** ☐	**No** ☐	
Other	**Yes** ☐	**No** ☐	

Gas Testing

Gas Testing Required? **Yes** ☐ **No** ☐ - If Yes complete below

Gas Testing	Required		Comments / Details
Before Entry	**Yes** ☐	**No** ☐	
Continuous	**Yes** ☐	**No** ☐	
Determined by JSA due to introduced hazards	**Yes** ☐	**No** ☐	
Particle Exposure (silica, chrysotile)	**Yes** ☐	**No** ☐	

Ventilation

Ventilation Required? **Yes** ☐ **No** ☐ - If Yes complete below (If yes, Ventilation plan required)

Ventilation	Required		Comments / Details
Natural	**Yes** ☐	**No** ☐	
Forced Mechanical	**Yes** ☐	**No** ☐	
Extraction	**Yes** ☐	**No** ☐	
Diffusion	**Yes** ☐	**No** ☐	
Other	**Yes** ☐	**No** ☐	

For additional controls please refer to the inherent hazard risk assessment in the previous section. Then, in combination with these complete, a JSA specific to the task to be performed. This should then provide the overall risk and set of controls required for the task.

Base Ventilation Plan

Note: Detailed below is the minimum ventilation plan required for the inherent hazards of the space.
The plan shall be amended to address any additional ventilation requirements as identified in the task specific JSA for the task prior to work commencing.

List details below

System diagram

Base Gas Testing Plan

Note: Detailed below is the minimum gas testing plan required for the inherent hazards of the space.
The plan shall be amended to address any additional gas testing requirements as identified in the task specific JSA for the task prior to work commencing.

List details below

System diagram

Base Rescue Plan

Note: Detailed below is the minimum rescue plan for the inherent hazards of the space. The plan shall be amended to address any additional rescue requirements as identified in the task specific JSA prior to undertaking the task.

Emergency Response Team Requirements

First Aid	Rope Rescue	Breathing Apparatus	HAZMAT	Fire
☐	☐	☐	☐	☐

Response Requirements (When do Emergency Services have to know about the task?)

Contact ESOs prior to entry ☐	Contact ESOs upon emergency ☐	ERT at the space prior to entry ☐

Emergency Ph:		**Emergency Radio Channel:**	
Emergency Contact person			
Nearest pick-up point:			

Shut Down Team Equipment Requirements Prior to Work Commencing

Tripod / Scaffold Frame	☐	**Basket Stretcher**	☐	**O_2 Resuscitation Equipment**	☐
Rescue Master (3:1 Haulage)	☐	**Roll-up Stretcher**	☐	**Breathing Apparatus**	☐
6:1 Haulage Kit	☐	**Rescue Strap**	☐	**Emergency Lighting**	☐
Belay Kit	☐	**Polycarbonate Slide Sheet**	☐	**HAZMAT Chemical Suit**	☐
Harness (Attach at all times)	☐	**First Aid Kit**	☐	**Fire Equipment**	☐
Ferno KED	☐	**Other**			

Rescue Plan (Diagram and/or notes)

Stand-by person qualifications:

Specific actions of Stand-by person in an emergency:

Specific controls that must be used to assist any potential rescue (eg harness and life-line must be worn at all times)

Rescue team information:

Recommended extraction method

REHEARSAL REQUIREMENTS

Rehearsal frequency:	**6 monthly** ☐ **Annually** ☐ **2 Yearly** ☐	**Date of last rehearsal:**	

General notes: Ensure all equipment is tagged quarterly and inspected by a competent person.

In the event of any emergency the alarm MUST be raised immediately. Stand-by personnel must be prepared to initiate rescue procedures. DO NOT enter the space in an emergency, attempt to rescue from outside if possible, qualified first-aider must be available in the event of emergency. If trained and able to do so, attempt to extinguish a fire. If any situation is beyond control evacuate the area and wait further instructions.