Confined Space Work Process

Document Number	HSEQ-PRS-0014
Process Type	HSEW
Process Owner	GM-HSEW
Business Owner	HSEW
Document Version	2.1
Date Created	**24/11/2020**
Date Effective	**27/11/2020**
Date of Next Review	**27/11/2020**

Document Change History

Version	Date	Name	Reason
1.0	3/12/2013	Peter Munt	Initial release
1.1	21/07/2015	Chris Grant/Kelly Lovely	Legal compliance updates: • Section 2.2.2 - Confined space criteria table added • Section 2.2.3 – Risk assessment added: – *All risks associated with ignition sources to be eliminated or minimised so far as reasonably practicable where the confined space contains a hazardous atmosphere.* – *Control measures used to control the risks associated with confined spaces must be reviewed prior to works (and during/post if required) and if necessary amended to minimise the risk to workers.*
1.2	29/07/2015	Peter Munt	Hazard process owner review
2.1	27/11/2020	Paul Pyatt	Rebrand and review completed

Document Location

https://baicommunications.sharepoint.com/sites/BAIGRP-Intranet_SWS/SitePages/Confined-space.aspx

Approval

Name	Role	Signature	Approval Date
Peter Munt	Confined Space Hazard Process Owner		27/11/2020
Nick Watts	GM – HSEQ		27/11/2020

Definitions

Term	Definition
HSEW	Health Safety Environment Welbeing
LEL	**Lower Explosive Limit** Atmospheres with a concentration of flammable vapors at or above 10 percent of the lower explosive limit (**LEL**) are considered hazardous when located in confined spaces. However, atmospheres with flammable vapors below 10 percent of the **LEL** are not necessarily safe. Such atmospheres are too lean to burn.
CSE	Confined Space Entry

Table of Contents

1. INTRODUCTION

1.1 Purpose and Scope

To set out the requirements for managing the risks associated with working in confined spaces in accordance with AS/NZS 2865 and the Model Code of Practice 2014. This procedure applies to all BAI Communications Australia workplaces where confined space work is undertaken.

1.2 Relevant Standards

- AS 2865 2009; Safe working in a confined space
- AS/NZS 1715:2009 - Selection, use and maintenance of respiratory protective equipment
- Confined Spaces Model Code of Practice 2014

1.3 Definitions

Confined Space: A confined space is determined by the hazards associated with a set of specific circumstances and not just because work is performed in a small space.

A confined space means an enclosed or partially enclosed space that:

- is not designed or intended primarily to be occupied by a person; and
- is, or is designed or intended to be, at normal atmospheric pressure while any person is in the space; and
- is or is likely to be a risk to health and safety from:
    - an atmosphere that does not have a safe oxygen level, or
    - contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion, or
    - harmful concentrations of any airborne contaminants, or
    - engulfment.

Confined spaces are commonly found in vats, tanks, pits, pipes, ducts, flues, chimneys, silos, containers, pressure vessels, underground sewers, wet or dry wells, shafts, trenches, tunnels or other similar enclosed or partially enclosed structures, when these examples meet the definition of a confined space in the WHS Regulations. (Model Code of Practice 2014)

Note: for the purposes of this procedure, a person has entered the confined space when their upper body or head are within the space. Many trenching and drainage operations are confined space works.

Competent Person: A person who has, through a combination of training, education and experience, acquired knowledge and skills enabling that person to perform correctly a specified task. A certificate issued by an Registered Training Organisation (RTO) for Confined Space Entry (CSE) training is evidence of competence.

Standby person: A competent person assigned to remain on the outside of, and in close proximity to, the confined space and is capable of being in continuous communication with, and if practicable to observe those inside.

Hazardous Atmosphere: An atmosphere that may expose workers to the risk of acute illness, injury, death, incapacitation, or impairment to self-rescue from one or more of the following causes:

- Flammable gas, vapour or mist in excess of 5% of its Lower Explosive Limit (LEL)
- Airborne combustible dust at a concentration that meets or exceeds its LEL
- Atmospheric oxygen concentrations below 19.5% or above 23.5% by volume
- Atmospheric concentrations of any substance for which a dose or a permissible exposure limit is established and that could result in exposure in excess of that limit
- Any other atmospheric condition that is immediately dangerous to life or health

2. METHOD

2.1 Confined Space Work Overview

2.2 Activity Description

2.2.1 Identify Confined Space

All Managers/Supervisors shall identify (wherever reasonably practicable) every likely confined spaces in their area of responsibility.

For the task identifying likely confined spaces, use the flowchart in the Model Code of Practice – Confined Spaces 2014 reproduced below. If the Manager/Supervisor is unsure, as to whether a place constitutes a confined space they should identify the space and have it assessed by a CSE competent person.

The Manager/Supervisor must ensure a CSE competent person documents a risk assessment on each place before any person enters the space and the place is recorded within the site risk register.

Where the risk assessment reveals there are confined space hazards associated with entering the space;

- The Manager/Supervisor must ensure appropriate control measures are implemented, and
- The space is to be clearly labelled at each possible entry point stating “Confined Space – permit required before entry” or similar standard sign.

2.2.2 Confined Space Criteria

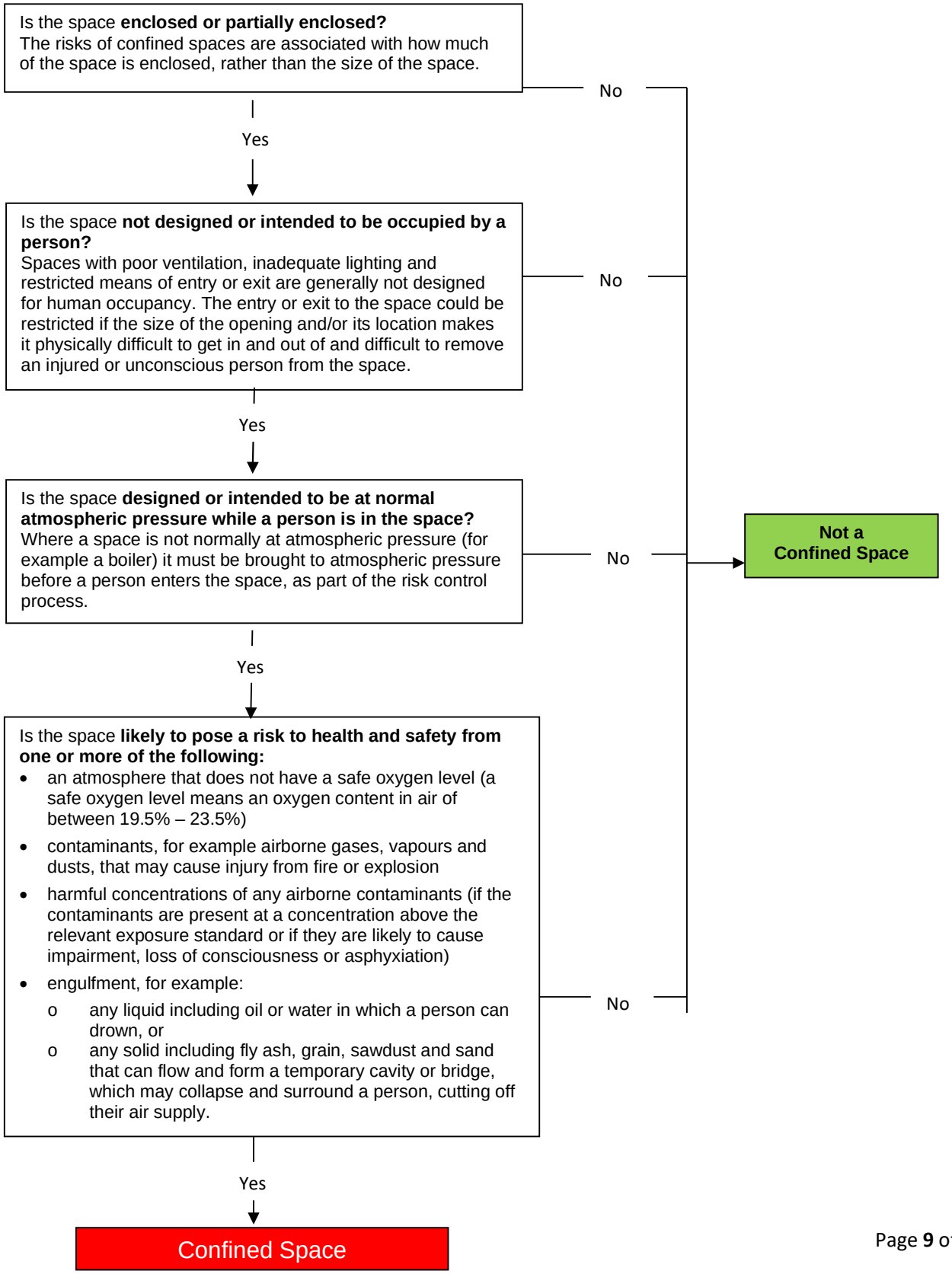
The Confined Spaces Code of Practice can be used to assist in identifying a confined space. Further information can be found at the below link.

https://www.safeworkaustralia.gov.au/doc/model-code-practice-confined-spaces

Confined Space Criteria

	Confined space criteria						Confined space?
Description of the space and activity	A	B	C	D			If the answer to A, B, C and at least one of D is yes, then the space is a confined space.
	Is the space enclosed or partially enclosed	Is the space not designed or intended to be occupied by a person	Is the space designed or intended to be, at normal atmospheric pressure while any person is in the space	Does the space present a risk from:			
				Harmful airborne or flammable contaminants	An unsafe oxygen level	Engulfment	
Sewer with access via a vertical ladder	✓	✓	✓	✓	✓	✓	Yes
Dislodging grain from a silo with sole access through a manhole at the top	✓	✓	✓	✓	x	✓	Yes
Cleaning spilled cadmium pigment powder in a shipping container	✓	✓	✓	✓	x	x	Yes
Inspecting a fuel tank in the wing of an aircraft	✓	✓	✓	✓	x	x	Yes
Dislodging a sludge blockage in a drain pit	✓	✓	✓	✓	✓	✓	Yes
Internal inspection of a new, clean tank prior to commissioning	✓	✓	✓	x	x	x	No
Internal inspection of an empty cement silo through a door at ground level	✓	x	✓	x	x	x	No
Stocktake using an LPG forklift in a fruit cool store	✓	x	✓	✓	x	x	No
Installing insulation in a roof cavity	✓	✓	✓	x	x	x	No

Identify Confined Space



2.3 Risk Assessment

The documented risk assessment conducted by the CSE competent person shall determine the level and types of controls required.

Project managers and persons in charge of workplaces are required to identify any confined space work and the hazards associated with working in those confined spaces. A competent person shall undertake risk assessments before carrying out work in a confined space. Where practicable work need to enter a confined space should be eliminated.
Places where there is very low potential for adverse atmospheric conditions or for the atmosphere to change during entry. For example, underground radio equipment shelters or drainage trenches with adequate natural ventilation, or gully pits and manholes <1.5 m deep without covers fitted.
The risk assessment needs to be in writing in accordance with the Risk Management procedure and consider:

- The nature of the confined space;
- The work required, including whether confined space entry is necessary;
- The range of methods by which work can be done;
- The hazards involved and associated risks;
- The actual method of work selected and plant proposed;
- Emergency and rescue procedures; and
- All risks associated with ignition sources are to be eliminated or minimised so far as reasonably practicable where the confined space contains a hazardous atmosphere.

Project managers/supervisors are required to eliminate or minimise the risks identified during risk assessments. This includes the isolation of potentially hazardous services and the clearing of contaminants.The following minimum controls are required:

- Visual monitoring of work area (if conditions change, upgrade to High risk);
- Minimum two person crew - CSE trained, one must remain outside confined space (Standby person), both first aid trained;
- Appropriate PPE for task (e.g. Harness/lanyard, breathing apparatus, head/eye/ear/hand protection, clothing, footwear etc.);
- Standby person to have immediate access to mobile phone or two way radio immediately available on site;
- A documented SWMS including emergency recovery and specific PPE; and
- First Aid and rescue equipment immediately available on site.

Control measures used to control the risks associated with confined spaces must be reviewed prior to works (and during/post if required) and amended if necessary to minimise the risk to workers.
Other control measures include atmospheric monitoring to ensure that oxygen levels are safe, atmospheric contaminants are below relevant exposure standards, the concentration of flammable contaminants is below 5% of its LEL and the space is free from extremes of temperature. Monitoring records shall be logged in the site register.

Workers are not to enter a space where the levels of atmospheric contaminants are not safe, unless they are equipped with suitable protective equipment. Standby person(s) are required for all confined space entry.

2.4 Training Competency

All workers involved in the following activities are required to be trained in confined space entry and rescue:

- Working within a confined space;
- Completing confined space risk assessments;
- Preparing and issuing Confined Space Permits to Work;
- Managing or supervising confined space entry; and
- Acting as standby person (sentry), or may be involved in rescue and first aid procedures.

For BAI Communications workers performing confined space activities, confined space entry and rescue recertification is required two years after the last permit authorising them to enter was used.

2.5 Physical Capability

All workers required to enter or work in a confined space, must be physically capable of doing all the required tasks. If there is any doubt about a worker's physical capability, the worker's supervisor shall not allow them to enter a confined space until a medical assessment deems the worker capable.

2.6 Safe Work Method Required

Develop and document a safe work method statement (SWMS), including an emergency plan, for all confined space work.

2.7 Confined Space Records

- **Confined Space Entry Permits to Work** - shall be kept with the project records for a minimum of 28 days from date of exit.
- **Risk Assessments -** shall be kept for five years with the project records.
- **Training records** - shall be recorded in Learn Central for the term of their employment.
- **Air Monitoring records** - results of air monitoring are recorded in the site folder/project folder and records are kept for 30 years after the date the record is made.

3. ROLES AND RESPONSIBILITIES

Role	Responsibility	Details:
Area Manager/ Project Manager	• Identify confined spaces in area of responsibility • Plan works so they do not require CSE • Keep CSE permits for the required time • Keep all confined spaces risk assessments • Implement all controls listed in risk assessments	Section: 2.2.1 – 2.2.7
Line Manager / Supervisor / Team Leader	• Ensure workers working in confined spaces have carried out all the necessary training and are competent. • Ensure CSE worker is physically capable of performing CSE work	Section: 2.2.2
Worker	• Do not enter a confined space without written permit. • Follow conditions of the permit	Section: 2.2.1 – 2.2.7