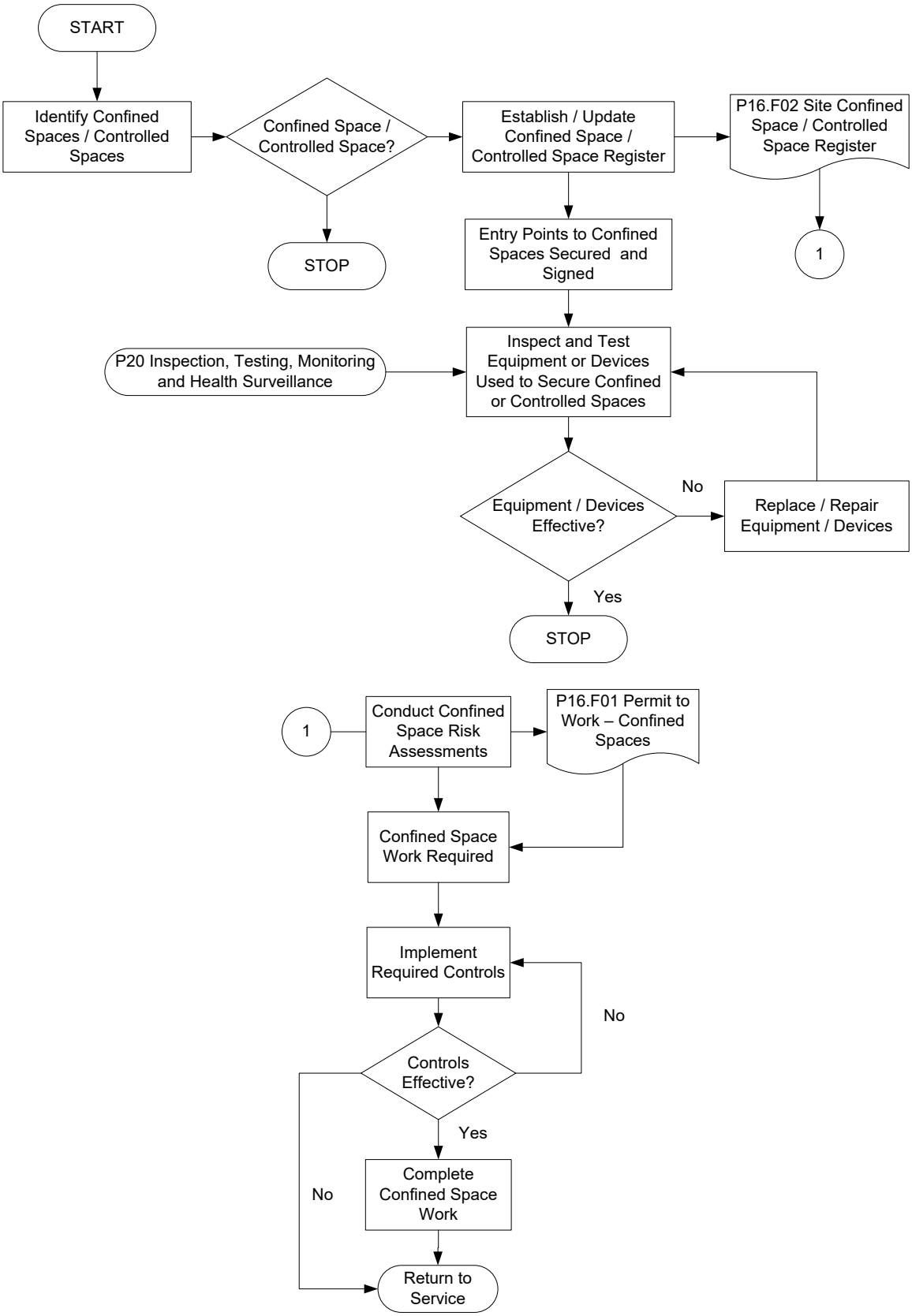
CONFINED SPACES

1.0 SUMMARY / FLOWCHART



2.0 RESPONSIBILITY

Organisational Level	WHS Responsibilities
Level 1 *(CEO, Directors)*	Provide adequate financial, physical and human resources to ensure that confined spaces in the workplace and spaces requiring controlled access are identified, signed, and recorded on the Site Confined Space and Controlled Access Register.
	Provide the required resources to ensure that confined spaces in the workplace are sealed to prevent inadvertent or unauthorised access.
	Ensure adequate resources are available to ensure that Confined Space Registers required within SCC controlled workplaces are reviewed every 5 years, or as required when circumstances change.
	Provide sufficient resources to ensure that All workers required to work in, on or in the vicinity of a confined space have been trained as evidenced by training records and certificates issued from external training organisations.
	Provide sufficient resources to ensure that SCC personnel required to supervise confined space work or purchase equipment to be used in confined space work have attended Confined Space Awareness training as evidenced by training records and certificates issued from external training organisations.
Level 2 *(Section Manager, Unit Manager / Unit Co-ordinator, Project Manager)*	Managers will ensure this procedure is implemented in their areas of control and adequate resources are available for undertaking and Confined Space work safely.
	Managers will determine if the need for entry can be eliminated or the frequency of entry reduced.
	Managers will ensure control measures are applied and documented before entry.
	Managers will ensure that all confined spaces and controlled spaces are identified, properly signed, and recorded on the Site Confined Space and Controlled Space Register.
	Ensure that Confined Space Risk Assessments are undertaken and Permits to Work are completed by a “competent person”.
	Maintain a list of persons deemed competent to undertake confined space risk assessments and to complete Confined Space Permits to Work.
	Ensure that Confined Space Permits to Work are approved by persons competent to do so (Authorised Person).
	Ensure that confined space rescue procedures are practised

	when scheduled and that any improvement opportunities identified are actioned within specified timeframes.
Level 3 *(Coordinator within a Unit, Team Leader, Supervisor, Ganger or Leading Hand or Operator)*	Supervisors and Coordinators will develop, implement and monitor safe work documents and ensure there is a safe work system in place.
	Identify immediate and ongoing training requirements for personnel under their control and ensure Confined Space medical examinations are current.
	Supervisors are to ensure that workers are instructed in the requirements of this procedure and any other relevant procedure or Safe Work Method Statement relevant to their area of work.
	Identify requirements for safety equipment, including rescue equipment.
Level 4 *(Team Member, Operator Attendant, Trainee, Apprentice)*	Workers required to undertake work in or on a Confined Space are to comply with the requirements of this and other relevant procedures.
	Workers will notify their coordinator or supervisor of any deviation from this or other relevant procedures.
	Inspect and, if required, test their Confined Space equipment and personal protective equipment prior to each use.
	Follow any reasonable instructions from the authorised person or standby person on site.
Level 5 *(Volunteer, Contractor, Other)*	Workers required to undertake work in or on a Confined Space are to comply with the requirements of this and other relevant procedures.
	Workers will notify their coordinator or supervisor of any deviation from this or other relevant procedures.
	Inspect and, if required, test their Confined Space equipment and personal protective equipment prior to each use.
	Follow any reasonable instructions from the authorised person or standby person on site.
	Participate in Confined Space emergency rescue exercises, as required, and provide any relevant feedback to improve rescue procedures.
Authorised Person	Consult with the Site Manager or Supervisor prior to commencing work.
	The Authorised Person will complete and sign the permit to work. This involves; • allowing entry to trained persons when satisfied that all necessary control measures have been implemented. • verifying entry and exit sign offs for the Confined Space

	entry team. • authorising controls that require sign off or confirmation, such as, isolations or air quality. • developing and authorising the Confined Space emergency rescue plan. • completing or finalising the permit once the job is complete and ensuring the work site is returned to a safe condition.
	The Authorised Person will ensure all workers are inducted onto the worksite.
	The Authorised Person has the authority to deny entry to any person, or entry into any Confined Space, where they are of the belief the risk associated with the person or site has not been adequately controlled and in the event of an evacuation of a Confined Space, the coordinator or supervisor and manager will be notified immediately.
	The Authorised Person may also act as the standby person when deemed appropriate by the risk assessment process including consideration of; • the experience and competence of the person acting in both roles. • the person is able to carry out both functions in accordance with the requirements of this procedure and NSW WHS Regulation 2017.
	The Authorised Person has the authority to order work to cease and for those workers working within the Confined Space to exit if a hazardous condition affecting safety is suspected or if control measures can no longer be maintained.
Standby Person	The Standby Person is responsible for monitoring of the wellbeing of workers inside the space.
	The Standby Person is responsible for initiating rescue procedures *(Part B of the Permit to Work)*, when required, and notifying the Authorised Person in the event of an evacuation of a Confined Space.
	The Standby Person is responsible for maintaining communication with workers and, if practicable, observe the work being carried out in the space.
	The Standby Person will monitor the atmosphere in and around the Confined Space and maintain the Atmospheric Testing Log *(Section 11 of the permit)* as required by this procedure and the risk assessment.

	The Standby Person will maintain the Confined Space Entry / Exit Log *(Section 5 of the permit)* ensuring only competent persons listed on the permit enter the space.
Controlled Space Responsible Person	Identify the space as a 'Controlled Space' using the provided checklist in Table 1 of this procedure.
	Develop a written authorised plan for safe entry of the space including completing a written risk assessment for the job.
	If the works is classified as 'high risk construction work' in accordance with clauses 289 and 291 of the NSW WHS Regulation 2017, for example, a shaft or trench with excavation depth greater than 1.5 metres, the Controlled Space Responsible Person will also complete Safe Work Method Statements (SWMS) for the work.
	Maintain continuous communication with persons working in the space, monitor the space until the work is completed and, if required, initiate the emergency rescue plans / procedures.

3.0 PURPOSE & SCOPE

3.1 PURPOSE

3.1.1 The purpose of this procedure is to provide for the Work Health and Safety of all Workers and others who are required to enter, work in, or near a confined space.

3.1.2 The procedure describes the processes for the prevention, elimination or mitigation of exposure to hazards which may otherwise be experienced when entering, working in the vicinity of a confined space, preventing collapse, injury, illness or death resulting from exposure to these hazards.

3.2 SCOPE

3.2.1 This procedure applies to all Shoalhaven City Council (SCC) workers and contractors and is applicable to any work requiring entry to all confined spaces identified and listed on SCC's Site Confined Space Registers and any temporary situations likely to become confined spaces that are not included in the register.

3.2.2 In this procedure, a person whose head or upper body is within a confined space is considered to have entered the confined space.

3.2.3 This procedure is not intended to prevent a worker inserting their hand or arm into a confined space, while holding a test instrument or probe, as part of the evaluation prior to entry.

3.2.4 This procedure does not apply to work that is carried out at other than normal atmospheric pressure.

4.0 PROCEDURE

4.1 DESIGN, MANUFACTURE, IMPORT, SUPPLY, INSTALL AND CONSTRUCT PLANT OR STRUCTURE

4.1.1 A Designer, Manufacturer, Importer or Supplier of the plant or structure, and a person who installs or constructs the plant or structure, will ensure that:

4.1.1.1 the need for any person to enter the space and the risk of a person inadvertently entering the space are eliminated, so far as is reasonably practicable, or

4.1.1.2 if it is not reasonably practicable to eliminate the need to enter the space or the risk of a person inadvertently entering the space:

a) the need or risk is minimised so far as is reasonably practicable, and

b) the space is designed with a safe means of entry and exit, and

c) the risk to the WHS of any person who enters the space is eliminated or minimized to so far as is reasonably practicable.

4.2 IDENTIFICATION OF CONFINED SPACES AND CONTROLLED SPACES

4.2.1 The person with management or control of a SCC workplace will identify all confined spaces and controlled spaces at the workplace.

4.2.2 The checklist given as Table 1 will be used to categorise spaces as either a Confined Space or Controlled Space.

4.2.3 The person with management or control of the workplace will establish and maintain a register of fixed confined spaces and controlled spaces within their operations using P16.F02 Site Confined Space / Controlled Space Register.

4.2.4 Entry points to a Confined Space will be clearly signed or, in the case of pits, marked around the pit opening. All signage installed will meet the requirements of AS 1319 Safety signs for the occupational environment. The Confined Space / Controlled Space unique register number will be marked on or near the entry to the space.

4.2.5 Where this is not possible/practicable the Confined Space / Controlled Space unique reference number will be recorded on the site plan kept in the register

4.3 RESTRICTED ACCESS TO CONFINED SPACES

4.3.1 Confined Spaces will be secured, as far as reasonably practicable, to prevent unauthorised or inadvertent access.

4.3.2 Any devices or equipment used to restrict access to a Confined Space will be subject to inspections and testing in accordance with P20 Inspection, Testing, Monitoring and Health Surveillance.

Table 1: Classification Checklist for CONFINED and CONTROLLED SPACES

'Space' Classification	NSW WHS Regulation 2017 – Confined Space Definition (A to F)						
	A	B	C	D	E	F	
	Is the space enclosed or partially enclosed space?	Is the space not designed or intended primarily 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?	Has the space got harmful airborne or flammable contaminants?	Is the atmosphere within the space at an unsafe oxygen level?	Is there a risk of engulfment?	
Confined Space	✓	✓	✓	✓	×	×	Yes – a Confined Space
				Note: One or more 'Ticks' in either boxes D, E, F of the above shown example - the space is classified as a 'Confined Space'.			
				D	E	F	
Controlled Space	✓	✓	✓	×	×	×	Yes – a Controlled Space
				Note: If ALL the boxes in D, E, F have a 'Cross' (×) in them as in the above shown example – the space is classified as a 'Controlled Space'. **NB.** If the atmosphere in the 'Space' changes due to task related or introduced hazards, and one or more of boxes D, E, F in the above example is now 'ticked', the space is now classified as a 'Confined Space'.			

4.4 CONFINED SPACE RISK ASSESSMENT

4.4.1 Confined Space risk assessments will be completed by an "Authorised Person", either alone or as a member of a risk assessment team, for each Confined Space. The risk assessment process will be conducted in consultation with the workers required to undertake the Confined Space work.

4.4.2 An "Authorised Person" is a competent person who has knowledge of the particular Confined Space being assessed, the work methods that will be used in the vicinity of the Confined Space, and the hazards associated with Confined Spaces and the appropriate control measures. Where practicable, the "Authorised Person" will be assigned to a Confined Space or group of Confined Spaces on P16.F02 Site Confined Space and Controlled Space Register.

4.4.3 Confined Space Risk Assessments will be documented in writing in the risk assessment sections of P16.F01 Confined Spaces – Permit to Work.

4.4.4 Where a number of Confined Spaces are similar in characteristics and similar work of identical risk/s is performed, a generic risk assessment may be appropriate.

4.4.5 The Authorised Person will review and, as necessary, revise the control measures in the risk assessment including the following circumstances:

4.4.5.1 the control measure does not control the risk it was implemented to control

4.4.5.2 a new relevant hazard or risk is identified, i.e. from the modification or installation of plant

4.4.5.3 changes in atmospheric conditions or working environment within the space

4.4.5.4 changes in work practices.

4.4.6 Confined Space Risk Assessments will consider the following hazards:

4.4.6.1 hazards associated with entering, working in, on or in the vicinity of the Confined Space or a person inadvertently entering the Confined Space.

4.4.6.2 the hazard associated with the concentration of oxygen or the concentration of airborne contaminants in the Confined Space and any change that may occur in that concentration.

4.4.6.3 sources of ignition arising from activities or equipment, i.e. sparks or flames

4.4.6.4 hazards associated with the work activity and the methods used to carry out that work.

4.4.6.5 the risk of infection from sewage, for example, and the control measures required.

4.4.6.6 the type of first aid and emergency procedures required.

4.4.6.7 specific to confined space work where there is a risk of a person falling more than 2 metres or work carried out in or near a shaft or trench with an excavation depth greater than 1.5 metres, a Working at Height Risk Assessment Checklist is not required as the associated hazards and controls are covered in this permit.

4.5 CONFINED SPACE ENTRY

4.5.1 Under no circumstances will a worker be required or requested to enter or work on a Confined Space unless the following conditions have been satisfied:

4.5.1.1 The workers have been trained in Confined Space work;

4.5.1.2 A Confined Space Risk Assessment is available, reviewed and appropriate control measures determined;

4.5.1.3 A Risk Assessment is included in the Permit to Work (P16.F01), a separate risk assessment is not required;

4.5.1.4 The Permit to Work is available, the work has been authorised by the assigned "Authorised Person", and the following sections of the Permit to Work have been signed by:

a) Section (9 by the Standby Person.

b) Section (10) by the Authorised Person (permit opened).

c) Section (13) by the Authorised Person/s, when job is finished (permit closed).

4.6 PERMIT TO WORK

4.6.1 A P16.F.01 Permit to Work - Confined Space, will be completed based upon the outcomes of the Confined Space Risk Assessment included in P16. F01 and documented as follows:

4.6.1.1 The Confined Space to which the permit relates and the space in which the work is to be undertaken.

4.6.1.2 the names of the person/s authorised to enter or work in / on the Confined Space, including the identity of the standby person.

4.6.1.3 the period of time during which the proposed work will be carried out (commencement and finish times).

4.6.1.4 the control measures to be implemented to control the risks identified.

4.6.1.5 Provide for the acknowledgement that the work in or on the Confined Space has been completed and that all persons have left the Confined Space.

4.6.1.6 Certification by the "Authorised Person".

4.6.2 The process of completing the Confined Spaces and Controlled Sites and Controlled Spaces Register requires the review of the following:

4.6.2.1 the need to isolate services connected to the Confined Space.

4.6.2.2 the requirement to provide ventilation.

4.6.2.3 the requirements for the testing or monitoring of the atmosphere within the space.

4.6.2.4 any additional requirements if hot work is to be undertaken within or on the Confined Space.

4.6.2.5 the requirement for a Standby Person/s, the method or methods of communication between standby persons and workers, and the method and equipment required to affect a rescue of the worker or workers from the Confined Space in the event of an emergency, incident or similar circumstance.

4.6.2.6 the requirements for equipment and personal protective equipment to be used or worn, for example, air supplied or self-contained breathing apparatus.

4.6.3 A new Permit to Work will be issued under the following circumstances:

4.6.3.1 change in the Authorised Person in direct control of the work.

4.6.3.2 the team exits the Confined Space and then re-enters at another location.

4.6.3.3 significant change is required to the scope of work.

4.6.3.4 the gas monitor has alarmed and the space is evacuated.

4.6.3.5 new hazards arise or are identified.

4.6.3.6 the Permit to Work – time and / or date expired.

NB. Section (11) of the Permit to Work (Revalidation of Permit) needs to be completed when there has been a break in the job exceeding 90 minutes, in that instance a review of the current Permit is required to ensure the details / conditions prescribed in the permit have not changed**.**

4.7 ENTRY INTO OR WORK IN VICINITY OF A CONFINED SPACE – PARTICULAR RISK CONTROL MEASURES

4.7.1 A competent person/s, in consultation with relevant workers, will identify and evaluate the following potential situations prior to entry into or work in or on a confined space:

4.7.1.1 flammable or explosive atmosphere

4.7.1.2 oxygen deficiency or enrichment

4.7.1.3 the presence of toxic or corrosive material.

4.7.2 The competent person will ensure that nobody enters a confined space or works inside, on the outside or in the vicinity of a confined space if:

4.7.2.1 there is a risk to the WHS of a person entering, occupying or working on the surface of the confined space, or

4.7.2.2 there is a risk of fire or explosion, and the risk has not been controlled using the confined space permit process.

4.7.3 The competent person will arrange for the completion of a P16.F01 Confined Spaces – Permit to Work prior to authorising work to commence.

4.8 ISOLATION OR CONTROL OF POTENTIALLY HAZARDOUS SERVICES – PARTICULAR CONTROL MEASURES

4.8.1 The competent person will ensure that nobody enters a confined space unless all potentially hazardous services that are normally connected to the confined space are isolated or otherwise controlled so as to prevent:

4.8.1.1 the introduction of any materials, contaminants, agents or conditions that may be harmful to a Worker or Other Person occupying the confined space, or

4.8.1.2 the activation or energisation, in any way, of equipment or services that may pose a risk to the health or safety of a Worker or Other Person inside the confined space.

4.9 PURGING PRIOR TO ENTRY

4.9.1 The competent person will ensure that where necessary, a confined space is cleared of all contaminants by use of a suitable purging agent (e.g. nitrogen), to displace harmful contaminants from the confined space before allowing anyone to enter the confined space.

4.9.2 The competent person will ensure that the purging or ventilation of a confined space is NOT done with pure oxygen or a gas mixture in a concentration of more than 21% of oxygen by volume.

4.10 CLEANING

4.10.1 Initial cleaning such as draining and removal of sludge, scale, rust, sediments and fats should always be done outside of the Confined Space and should continue until atmospheric contamination or other potential or known hazards have been reduced as much as possible.

4.10.2 If entry must be made for further cleaning appropriate control measures will be implemented and a Confined Space permit will be completed, prior to entry. The selected cleaning process can create hazards and potentially add to existing hazards by dislodging contaminants or raising temperatures.

4.10.3 All residue and waste will be disposed of safely and without causing harm to the environment.

4.11 SAFETY OF ATMOSPHERE – PARTICULAR RISK CONTROL MEASURES

4.11.1 The competent person will ensure that nobody enters a confined space unless the confined space contains a safe oxygen level, and

4.11.1.1 any atmospheric contaminants in the confined space meet the relevant exposure standards referred to below in "Atmospheric contaminants - particular risk control measures", and

4.11.1.2 the confined space is free from extremes of temperature, and

4.11.1.3 the concentration of any flammable contaminant in the atmosphere of the confined space is below 5% its Lower Explosive Limit (LEL).

4.11.2 Atmospheric testing will be undertaken around the outside of the Confined Space by the standby person prior to workers opening, entering or commencing work in the Confined Space. Atmospheric testing is carried out by using a suitable gas detector.

4.11.2.1 Gas detectors can be purchased through Shoaltech. All gas detectors will be returned to Shoaltech every 3 months for recalibration with known reference gases and battery checks.

4.11.2.2 A `Bump` test will be carried out on gas detectors prior to use on a Confined Space work site. Test results will be recorded on the Permit to Work. All testing will be carried out by a person trained in Confined Spaces. If the gas detector fails the Bump test, it must not be used and will be returned to Shoaltech. Backup gas detectors are available.

4.11.2.3 Prior to entry the Confined Space should be opened for the purpose of ventilation for a minimum period of 5 minutes. Any water or debris at the base of the Confined Space should be disturbed prior to entry to release any trapped gases. This may be done manually or mechanically by turning on pumps.

4.11.3 Prior to entry of a Confined Space, atmospheric readings will be taken.

4.11.3.1 Initial readings will be taken outside and around entry point, prior to opening entry point lid. After Confined Space has been ventilated, readings will be taken as a minimum at three 3 levels:

a) Top
b) Middle
c) Bottom

4.11.3.2 Once confirmed that atmospheric levels are safe to enter and prior to entry, the gas detector will be placed at within

the breathing zone or head height of the person working in the Confined Space. The gas detector will remain in the Confined Space until work is complete and personnel have exited the Confined Space. The gas detector will be used even if mechanical ventilation is operational. Lids and doors of a Confined Space will be secure prior to entry and always left open to allow ventilation and unobstructed exit.

4.11.3.3 Persons will not enter a Confined Space unless atmospheric readings are within the below listed safe level parameter;

a) Oxygen 19.5% – 23.5%
b) Flammables gases ,vapours or mist <5% LEL
c) CO 30 ppm or less
d) H 2 S < 10 ppm
e) Chlorine < 1 ppm

4.11.4 All gas detectors are fitted with alarms which give audible and visual indication at pre-set oxygen percentages. If the gas detector alarm sounds at any stage, the person working in the Confined Space will exit immediately. Re-entry is only permitted on the Authorised Person's authority, after the Confined Space has been revalidated and adequate controls are in place.

4.11.4.1 The competent person will ensure that all persons leave the confined space if a concentration of flammable contaminant in the atmosphere of the confined space is found to be more than 5% of its LEL and less than 10% of its LEL, unless a continuous monitoring, suitably calibrated flammable contaminant detector is used at all times while persons are present in the confined space.

4.11.4.2 The competent person will ensure that all persons leave the confined space if a concentration of flammable contaminant in the atmosphere of a confined space is found to be 10% or more of its LEL.

4.11.4.3 If a safe oxygen level cannot be provided or atmospheric contaminants cannot be reduced to safe levels in a confined space, persons may enter the space if equipped with suitable personal protective equipment (e.g. air supplied respiratory protective equipment). Approval from the Manager is required if entry is necessary using a respirator.

4.11.5 Persons with management or control of the workplace will provide warning signs where there are known atmospheric contaminants present in a confined space or wherever it is known that a confined space contains less than 19.5% oxygen.

4.12 ENTRY PERMITS – PARTICULAR RISK CONTROL MEASURES

4.12.1 The competent person will ensure that no person enters or works in or on a confined space unless authorised to do so under a completed P16.F01 Confined Spaces – Permit to Work and that the permit is approved by the Manager or Controller of the workplace of the workplace.

4.12.2 The entry permits and risk assessments will:

4.12.2.1 be in writing, and

4.12.2.2 identify the confined space, and

4.12.2.3 clearly describe the work to be carried out in or on the confined space, and

4.12.2.4 set out risk control measures to be taken, and

4.12.2.5 record the names of all persons who may enter or work in or on the confined space, and

4.12.2.6 record the dates and times when the persons may enter or be in or on the confined space to carry out the work.

4.12.3 P16.F01 Confined Spaces – Permit to Work will be issued by a Manager or Controller of the workplace or facility, who has completed, at a minimum, a Confined Space Awareness course.

4.12.4 P16.F01 Confined Spaces – Permit to Work will be provided to the person responsible for direct control of the work to be done in or on the confined space.

4.12.5 The competent person will ensure that the Workers who are to carry out the work are informed of and comply with the requirements of the entry permit.

4.12.6 The competent person will ensure that before the confined space is returned to normal service, the person responsible for direct control of the work to be done in or on the confined space has completed and finalised the confined space entry permit.

4.12.7 The competent person will ensure that one or more standby persons are present outside a confined space when any Worker is inside the confined space.

4.13 EMERGENCIES – PARTICULAR RISK CONTROL MEASURES

4.13.1 Persons with management or control of the workplace will ensure that adequate provisions are made available for any emergency which may occur whilst working in, on or in vicinity of the confined space.

4.13.2 Entrants who get into difficulty will attempt to remove themselves from the confined space immediately. They will also notify the standby person of the immediate threat and advise them of any help that may be required.

4.13.3 The standby person will assist the entrant by any means possible without entering the space themselves and will only rescue the entrant from outside the confined space.

4.13.4 SCC will ensure that when workers are working in, on or in vicinity of the Confined Space, first aid and emergency procedures are established and documented in Part (B) on the Permit to Work. Entry into a Confined Space should never be made unless rescue procedures indicate a person entering can be rescued. The Standby Person will ensure that the emergency rescue procedures are initiated from the outside the Confined Space as soon as practicable in an emergency.

4.13.5 This may require additional resources, including personnel, breathing apparatus or emergency services to be available. The rescue response plan will be based on a risk assessment and clarify the roles and responsibilities of those involved.

4.13.6 Openings of Confined Spaces will not be obstructed and will be of adequate size to carry out rescue if required and be of adequate size to allow use of suitable rescue equipment. Rescue equipment will be available or easily accessible before entry to Confined Space.

4.13.7 Emergency Procedures contain sufficient detail relative to the task being performed. If a SWMS provides detail of a rescue procedure relevant to the site / task, reference would only need to be made to that document.

4.13.8 Supervisors and coordinators of Workers working in, on or in vicinity the Confined Space will ensure emergency response plans are established and practiced on a regular basis or as necessary to ensure that they are efficient and effective. Also an annual written audit report completed by third party will be conducted to assess the efficiency and effectiveness of the Confined Space emergency rescue plan. Alternatively a simulated rescue drill will be conducted as necessary to ensure that they are efficient and effective.

4.13.9 When developing an emergency response plan the following will be considered;

4.13.9.1 The roles of people inside the space, the Authorised Person and the Standby Person in an evacuation or rescue.

4.13.9.2 The first aid to be provided to a person inside the Confined Space or after the rescue. Never put yourself in danger from the hazards that overwhelmed the persons being rescued.

4.13.9.3 The evacuation route and the location of, and distance to, the exit points.

4.13.9.4 Hazards associated with the level (or change in level) of oxygen and or atmospheric contaminants in the space.

4.13.9.5 The likely conditions inside, the size, weight and number of affected people and how to rescue unconscious or injured people that are not near exits.

4.13.9.6 Back up communication methods.

4.13.9.7 Response time and accessibility for emergency services.

4.13.10 If an external rescue cannot be done, Emergency Services will be called for and the relevant Controller of the workplace of the workplace will be notified, (unless other rescue provisions are available and agreed to before entry).

4.13.11 When calling for the Emergency Services the standby person will:

4.13.11.1 dial 000 (or 112 from a mobile phone).

4.13.11.2 ask for the required service and clearly state the following:

a) their name

b) their location including the street which they are on and the nearest cross street (if known)

c) any other distinguishing features that may help the responding unit locate them

d) the nature of the situation (including the fact that the casualty is or was in a confined space) as well as any injuries which the standby person may be aware of.

4.13.12 The standby person will remain at the confined space opening and help the emergency services as instructed. The standby person will ensure so far as is reasonably practicable, in the event of a notifiable incident, that the site where the incident occurred, including the confined space, is not disturbed until a SafeWork Inspector arrives at the site or any earlier time that an Inspector directs.

4.13.13 The emergency rescue procedures will be practised at a minimum every 12 months to ensure that they are effective.

4.14 ENTRY PROTECTION – PARTICULAR RISK CONTROL MEASURES

4.14.1 The competent person will ensure that appropriate temporary signs are displayed, and protective barriers are erected to prevent unauthorised entry into a confined space.

4.14.2 The Controller of the workplace will ensure that the access points to all confined spaces are prominently marked with safety signage.

4.14.2.1 The signs will:

a) identify the confined space, and

b) inform Workers that they will not enter the space unless they have a completed and authorised P16.F01 Confined Spaces – Permit to Work, and

c) be clear and prominently located next to each entry to the space.

4.14.2.2 Confined Space work sites accessed on a regular basis will have the below Danger Confined Space sign installed at each entry point.

4.14.3 The Controller of the workplace will ensure that the confined space is locked and secured, where practicable, between entries to prevent Other Persons inadvertently entering the confined space.

4.15 PURCHASE, INSPECTION AND TESTING EQUIPMENT

4.15.1 Purchase of specialist equipment (excluding gas detectors) used for Confined Space work will be through stores from the Authorised Purchase List maintained on the WHS website, as per the Purchasing Policy.

4.15.2 All equipment, including two way radios and mobile phones, will be checked by the user prior to entering a Confined Space. Records of equipment inspection are to be kept in accordance with section 4.20 - Records. Equipment will be inspected at least daily when Confined Space entry is required. If multiple entries on any one day are required, workers will undertake a visual check of equipment prior to each entry.

4.15.3 All equipment used in relation to Confined Space entry will be subject to inspection, testing and monitoring. Inspection and testing will be conducted by trained personnel. A schedule for the inspection and testing of Confined Space equipment will be maintained in ITM plan by the respective section Coordinator or Supervisor.

4.15.4 Any equipment that is deemed unserviceable, faulty or unsuitable for use will be taken out of service immediately and tagged. The coordinator or supervisor will be notified and make arrangements for a qualified person to inspect the item. Where the item is beyond repair, the item is to be returned to stores where it will be destroyed and / or rendered unserviceable. This information will be recorded in the relevant equipment database / register.

4.15.5 Assets such as anchor points are to be inspected on an annual basis and recorded by the responsible asset owner.

4.16 HOT WORKS

4.16.1 If Hot Works are required within the Confined Space, a P25.F01 Hot Work – Risk Assessment Checklist will be obtained from personnel in direct control of the worksite, who is suitably qualified to issue the Risk Assessment Checklist. Refer to P25 Hot Works Procedure for further information.

4.17 PERSONAL PROTECTIVE EQUIPMENT

4.17.1 PPE will be worn when undertaking Confined Space work.

4.17.2 The P16.F01 Confined Spaces – Permit to Work will identify the Personal Protective Equipment required.

4.17.3 PPE will be checked prior to every use.

4.18 TRAINING

4.18.1 All workers required to work in a Confined Space will have a certificate of competency issued by a Registered Training Organisation.

4.18.2 The training will meet the requirements specified in the NSW WHS Regulations 2017 clause 76. The training program includes instruction in the following:

4.18.2.1 the hazards of confined spaces,

4.18.2.2 risk assessment procedures,

4.18.2.3 risk control measures,

4.18.2.4 emergency procedures and first aid,

4.18.2.5 selection, use, fitting and maintenance of safety equipment.

4.18.3 Relevant training will also be provided for Workers who:

4.18.3.1 do risk assessments in relation to the safety of confined spaces, and

4.18.3.2 issue P16.F01 Confined Space - Permit to Work for work in confined spaces, and

4.18.3.3 design the layout of workplaces, and

4.18.3.4 manage or supervise (or both) Workers working in or near confined spaces, including any Contractor, and

4.18.3.5 maintain equipment used for and during entry to confined spaces, and

4.18.3.6 purchase, distribute, fit, wear or maintain personal protective equipment used in relation to the carrying out of work in confined spaces, and

4.18.3.7 are on standby in relation to work in confined spaces, and

4.18.3.8 are involved in rescue and first aid procedures in relation to work in confined spaces

4.18.4 The Controller of the workplace will ensure a written record of the following is maintained:

4.18.4.1 the confined space training provided, and

4.18.4.2 the persons to whom the confined space training is provided.

4.18.5 Refresher training will be delivered every three years from the initial training.

Table 2: Confined Space Training Requirements

Confined Spaces Training Course Module	Design of CS, asset or purchasing equipment	Authorised Person	Competent Person	Standby Person	Controlled Space Responsible Person
Issue Permits to Work		Compulsory			
Enter and Work In Confined spaces	Compulsory Awareness Session	Compulsory	Compulsory	Compulsory	Awareness Session
Gas Test Atmospheres				Compulsory	
Fire Extinguisher Use					
Apply first Aid				Compulsory	
Risk Management	Compulsory	Compulsory	Compulsory	Compulsory	Compulsory

4.19 HEALTH SURVEILLANCE

4.19.1 Employees required to work in a Confined Spaced during their course of employment with SCC, will undergo a Confined Space Medical with SCC's authorised medical provider every 3 years. The medical is organised by the employee's coordinator or supervisor. The medical provider will contact the employee's coordinator or supervisor to notify of Workers due for Confined Space medical.

4.19.2 Workers will inform their supervisor or coordinator if they become unfit for entry into a Confined Space before the date of their next medical assessment or prior to attending Confined Spaces training.

4.19.3 The medical provider will inform the WHS Team of any worker who poses a risk to themselves or other workers.

4.20 RECORDS

4.20.1 Controller of the workplace will keep and maintain:

4.20.1.1 P16.F01 Confined Space – Permit to Work in relation to work in confined spaces for 30 years as SCC permits have incorporated atmospheric monitoring logs.

4.20.1.2 Records of training in relation to work in confined spaces for the term of employment of workers to whom the training has been provided.

5.0 REFERENCES & ASSOCIATED DOCUMENTS

5.1 Work WHS Act 2011

5.2 Work WHS Regulation 2017

5.3 How to manage work health and safety risks: Code of practice 2019

5.4 Confined Spaces: Code of practice 2022

5.5 P04 Document Control and Safety Records

5.6 P09 Safety Training

5.7 P20 Inspection, Testing, Monitoring and Health Surveillance

5.8 P16.F01 Confined Spaces – Permit to Work

5.9 P16.F02 Site Confined Space / Controlled Space Register

5.10 P25.F01 Hot Work – Risk Assessment Checklist

APPENDIX 1 DEFINITIONS

Atmospheric Monitoring	The continuous measurement of oxygen levels or selected atmospheric contaminants.
Atmospheric Testing	The short term testing, which is not continuous, of oxygen level and atmospheric contaminants.
Competent Person	A person who has, through a combination of confined space training, education and experience, acquired knowledge and skills enabling that person to perform correctly a specified task, risk assessment or entry. A competent person may be referred to as the entrant and the standby person.
Confined Space	An enclosed or partially enclosed space that: • is not intended or designed 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 WHS 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 Space – Permit to Work	A document which permits entry to or work in a confined space. The Permit to Work guides the Competent Person through a systematic evaluation of the space to be entered.
Contaminant	Any dust, fume, mist, vapour, biological matter, gas or other substance in liquid or solid form, the presence of which may be harmful to WHS.
Entry to a confined space	When a person's head, i.e. the breathing zone, or upper body is in the confined space or within the boundary of the confined space. NOTE: Inserting an arm for the purpose of atmospheric testing is not considered an entry to a confined space.
Exposure Standard	An exposure standard in the Workplace Exposure Standards for Airborne Contaminants. It represents the airborne concentration of a particular substance or mixture that must not be exceeded. The exposure standard can be of three forms: • 8-hour time-weighted average (TWA); • peak limitation ; or • short term exposure limit (STEL).
Flammable Range	The range of flammable contaminant (percentage by volume) in air in which an explosion can occur upon ignition. Expressed by lower explosive limit (LEL) and upper explosive limit (UEL).

Hot Work	Welding, thermal or oxygen cutting, heating, including fire-producing or spark-producing operations that may increase the risk of fire or explosion.
Intrinsically Safe	Protected by such means that any spark or thermal effect produced in the circuit or apparatus is incapable of causing ignition of an explosive mixture of methane or other flammable gases or vapours and air.
Lower Explosive Limit (LEL)	In relation to a flammable contaminant, the concentration of the contaminant in air below which the propagation of a flame does not occur on contact with an ignition source.
Manager	"Manager" task or responsibility designated in this procedure, a Manager is any position holder that manages SCC's workers and reports directly to a Director (may include positions titled "Coordinator" but excludes Directors' Personal Assistants.
Purging	Removing contaminants inside the confined space by displacement with air to achieve acceptable atmospheric levels.
Reasonably Practicable	Having regard to; • The likelihood of the hazard or risk concerned occurring; • The degree of harm that might result from the hazard or the risk, and what the person concerned knows, or ought reasonably to know, about the hazard or the risk and ways of eliminating or minimising the risk, and • The availability and suitability of ways to eliminate or minimise the risk, and • After assessing the extent of risk and the available ways if eliminating or minimising the risk, the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk.
Risk Assessment	The process of evaluating the probability and consequences of injury or illness arising from exposure to an identified hazard or hazards.
Safe Oxygen Range	A minimum oxygen content in the atmosphere of 19.5% by volume under normal atmospheric pressure (equivalent to a partial pressure of oxygen (PO2) of 19.8 kPa (148 mm Hg)), and a maximum oxygen content in the atmosphere of 23.5% by volume under normal atmospheric pressure (equivalent to a partial pressure of oxygen (pO2) of 23.8 kPa (179 mm Hg)). At pressure significantly higher or lower than the normal atmospheric pressure, expert guidance should be sought.
Standby Person	A competent person assigned to remain on the outside of, and in close proximity to, the confined space and capable of being in continuous communication with and, if practical, to observe those inside. In addition, where necessary, initiate emergency response

	procedures and operate and monitor equipment used to ensure safety during entry and work in the confined space.
Training	A structured system of training ensures individuals receive appropriate and relevant WHS information, instruction and supervision and are assessed as competent by a qualified person before they are expected to carry out the responsibilities of their job.
Upper Explosive Limit (UEL)	In relation to a flammable contaminant, the concentration of the contaminant in air above which the propagation of a flame does not occur on contact with an ignition source.
Ventilation	Continuous provision of fresh air into the confined space by mechanical means to maintain acceptable atmospheric levels.