

Fatal Risk Procedure

Confined Space

(HSE)

Document Number: A4303370



Excellence



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Courage



Caring

Confined Space Procedure

Health, Safety, & Environment (HSE)

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Confined Space Procedure

Health, Safety, & Environment (HSE)

1. Objective

This procedure documents the requirements for the management of risks associated with Confined Space activities at Goulburn-Murray Water's (GMW) controlled work sites.

2. Scope

This procedure provides practical direction on how to manage health and safety risks associated with confined spaces. This procedure applies to all GMW employees, visitors, contractors (where practicable) and labour hire personnel that undertake works that involve Confined Spaces on GMW controlled worksite.

3. Procedure

Confined spaces at GMW work sites must be managed appropriately to ensure the highest level of safety to workers and members of the public. To manage confined space risks, GMW will:

- Identify confined spaces and sign accordingly;
- Conduct confined space risk assessments to identify risks and hazards;
- Only permit competent workers to enter confined spaces;
- Maintain equipment in accordance with manufacturer's requirements,
- Equipment will be maintained by competent workers and GMW will retain maintenance history;
- Implement a system requiring Permits and Safe Work Method Statements (SWMS); and
- Implement LOTO when isolating infrastructure.

Where GMW shares a workplace or site with a third party contractor or other business operator, GMW will ensure the required level of consultation occurs to ensure all required confined space arrangements and requirements are in place and effective.

3.1 What is a Confined Space

The OHS Regulations defines a confined space as a space in any vat, tank, pit, pipe, duct, flue, oven, chimney, silo, reaction vessel, container, receptacle, underground sewer or well, or any shaft, trench or tunnel or other similar enclosed or partially enclosed structure, if the space:

- (a) is, or is intended to be, or is likely to be, entered by any person; and
- (b) has a limited or restricted means for entry or exit that makes it physically difficult for a person to enter or exit the space; and
- (c) is, or is intended to be, at normal atmospheric pressure while any person is in the space; and
- (d) contains, or is intended to contain, or is likely to contain—
 - (i) an atmosphere that has a harmful level of any contaminant; or
 - (ii) an atmosphere that does not have a safe oxygen level; or
 - (iii) any stored substance, except liquids, that could cause engulfment—

but does not include a shaft, trench or tunnel that is a mine or is part of the workings of a mine.



3.2 Determining whether a space is a Confined Space

A confined space is determined by the structure and a specific set of circumstances. In order to meet the definition of a confined space, each space must satisfy all the above stated criteria.

Any space that may meet the definitions of a Confined Space will be assessed and where it is determined that the space does meet the definition, it will be added to the Confined Space register.

Additional spaces that do not meet all requirements to be determined as a confined space may become a confined space dependent on the nature of the work being conducted. The introduction of fumes from welding, cutting, the use of adhesives or cleaning products may change the space to such a point that it needs to be treated as a confined space. Prior to any works being conducted in spaces that meet the following;

- is, or is intended to be, or is likely to be, entered by any person; and
- has a limited or restricted means for entry or exit that makes it physically difficult for a person to enter or exit the space; and
- is, or is intended to be, at normal atmospheric pressure while any person is in the space

An assessment of the works including materials and methods must be conducted to ensure that any activities do not create;

- an atmosphere that has a harmful level of any contaminant; or
- an atmosphere that does not have a safe oxygen level; or
- any stored substance, except liquids, that could cause engulfment

Where it is identified that the work activity will create these conditions, the space will be identified, signed and treated as a confined space for the duration of the works.

Control measures such as providing temporary ventilation or achieving a satisfactory pre-entry gas test will not change the classification of a confined space.

Note: Entry to a confined space occurs when a part of the body enters the space and there is a risk the person may be overcome or incapacitated by the conditions within the space

3.3 Confined Space Signage

For GMW sites, all confined spaces must be permanently identified with confined space signage. Signage can be achieved either through attachment of signs to the space or in the case of pits, manhole covers etc., through the application of confined space markings using paint and a template.

The following criteria must be adopted for confined space signage:

- Padlocking entrances does not remove the requirement to have signs;
- Signs must be located at each possible entry point of the confined space;
- Prior to working in a confined space, ensure warning signs and barricades where necessary are in place to ensure that no interference with the safety of persons in the confined space is possible.

Confined space signage is to be regularly inspected and repaired, repainted or replaced as necessary.



3.4 Confined Space Register

Each site that is managed or controlled by GMW will develop and maintain a Confined Space register. The Confined Space register will identify each space, its location and the date that it was last assessed.

The Confined Space register will be provided to contractors and visitors where required.

3.5 Confined Space Training

Only persons that have up to date, accredited Confined Space Entry training are permitted to perform work in any identified confined space.

GMW employees and contractors required to work in a Confined Space or act as a CSE standby person must:

- Complete a confined space entry training course conducted by an accredited training provider and be assessed as competent.
- Participate in 3 yearly confined space refresher training programs at reasonably practicable intervals arranged by Learning and Development
- Complete a Level 2 First Aid course.

Records of employees who are trained and deemed competent will be recorded in the GMW Learning Management System (LMS).

In order to perform certain tasks, such as completing entry permits and acting as standby persons, GMW workers must also provide evidence that they are a 'GMW Authorised Person' with regards to confined space entry. This means that they have:

- Thorough training and/or experience acquired the knowledge and skills required to perform confined space tasks competently;
- Up-to-date confined space entry certifications, as per GMW minimum training requirements outlined above;

In order to perform certain tasks such as completing entry permits and acting as standby persons, GMW workers must have current Confined Space Entry qualifications and be authorised by GMW to undertake work involving confined spaces.

Proof of 'Recognised Training', issued by a Registered Training Organisation, must be provided by contractors who:

- Enter or work in confined spaces;
- Undertake hazard identification or risk assessment in relation to a confined space;
- Implement risk control measures;
- Issue and complete entry permits;
- Manage or supervise employees and other persons working in confined spaces;
- Act as a standby person or communicate with workers in a confined space;
- Monitor conditions while work is being carried out; and
- Design or lay out a work area that includes a confined space.



3.6 Confined Space Hazards

Identifying hazards involves identifying all aspects of the task, equipment and environment that could potentially cause harm. At GMW the following risks/hazards must be identified prior to confined space entry:

- Atmospheric hazards and engulfment hazards, including, but not limited to:
 - the presence of contaminants within the confined space;
 - hazardous services connected to the confined space;
 - the presence of free-flowing liquid stored in, or which could potentially enter, the confined space.
 - a reduction in oxygen concentration in the atmosphere of the confined space below 19.5 per cent by volume
 - an enrichment of oxygen above 23.5 per cent by volume;
 - the presence of airborne contaminants such as dust or fibers;
 - high or low temperatures resulting from the occupational environment or weather conditions.

Other risks and hazards associated with the space must be noted on the SWMS and appropriate controls documented and implemented prior to entry.

Note: Consideration must also be given to the interface implications of other tasks being conducted in the near vicinity of the confined space.

3.7 Confined Space Risk Assessment and Safe Work Method Statement (SWMS)

Where possible the risk of confined spaces should be eliminated. Where this is not possible suitable controls that will reduce the level of risk to an acceptable level shall be selected by the assessment team using the hierarchy of controls.

All spaces that have the potential to meet the definition of a Confined Space will be subject to a formal risk assessment and where the space is determined to meet the definitions, it will be signed accordingly and added to the confined space register.

A risk assessment must be conducted by the work team before the commencement of any tasks associated with the confined space.

The risk assessment must take into account:

- the hazards of the confined space;
- the tasks to be conducted, including the need to enter the confined space;
- the range of methods by which the tasks can be conducted;
- the hazards and associated risks involved with the method of work selected and the equipment to be used;
- emergency response procedures; and
- the competency of the persons conducting the tasks.

The Confined Space Entry Permit and a Confined Space Safe Work Method Statement (SWMS) must be completed and present at the worksite for all activities associated with the confined space.

The SWMS must be reviewed and revised whenever there is evidence to indicate that the level of risk has changed or that hazards are not controlled by the current controls.



3.8 Isolation

Methods of isolation must be prepared and developed by the appointed authorised person, and verified and reviewed by the permit issuer. For more details on the required process, refer to the Energy Isolation Procedure (A4065912).

3.9 Atmospheric Testing and Monitoring

Prior to any entry to a confined space, the atmosphere must be tested and deemed to be safe for entry. Any instance where testing shows that the atmosphere is not safe must be immediately escalated to the HSE team and all work associated with the space must be suspended.

Only competent persons who have been trained in confined space entry are permitted to monitor or test atmospheres. No person must enter a confined space to conduct initial atmospheric testing or monitoring.

Where the risk of a hot/ cold environment is identified, additional controls must be considered i.e. temperature monitoring, PPE etc.

Approved Confined Space Entry Permits for the purposes of atmospheric testing must comply with the risk control measures identified as necessary for safe testing. Records of the test results must be recorded on the Confined Space Entry Permit.

Atmospheric tests must include testing of:

- Oxygen concentration;
- Concentration of flammable airborne contaminants (i.e. flammable/explosive gases); and
- Concentration of other harmful airborne contaminants (i.e. toxic gases or vapors), such as carbon monoxide, carbon dioxide and hydrogen sulphide.

Upper explosive limits (UEL) and lower explosive limits (LEL) of known flammable contaminants can be obtained through *Australian Standard 60079 Explosive Atmospheres*.

The monitoring device must be maintained and serviced as per the manufacturer's requirements. The serial number of the device and the date of the next calibration must be recorded on the Confined Space Entry Permit.

Continuous monitoring must be conducted for the entire duration that the space is occupied. Re-testing is to occur prior to re-entry where a break in the work activity has occurred or where the space has been left unoccupied.

3.9.1 Where to Test

Initial testing needs to be done from outside the confined space. Contaminants can settle at different levels in a confined space so the top, middle and bottom areas of the space need to be tested (see figure 2).

Some gases (for example, hydrogen sulfide) are heavier than air and in unventilated areas typically settle to the bottom of the space, while other gases (for example, methane) are lighter than air and typically collect at the top of the space. Tests need to be made at a sufficient number of points to accurately reflect areas of the space that are likely to be accessed.



If it is necessary to enter the space to test remote regions away from entrances or access holes, then air-supplied respiratory protection equipment needs to be worn. The entry must be undertaken in accordance with the OHS Regulations using a confined space entry permit.

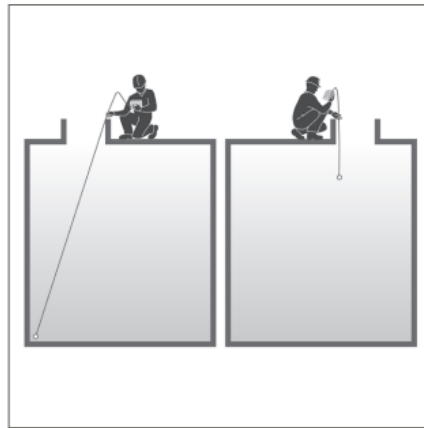


Figure 2 – Atmospheric testing of remote regions and different levels within a confined space

3.9.2 When to Test

Testing needs to be done before an entry permit is issued, immediately prior to entry, and continuously while the space is occupied. Continuous monitoring must be conducted for the entire duration that the space is occupied. Re-testing is to occur prior to re-entry where a break in the work activity has occurred or where the space has been left unoccupied.

Where there is a change to the scope of works or additional equipment such as welders or products such as adhesives are introduced, the SWMS must be revised prior to work continuing.

3.9.3 Ensuring a Safe Atmosphere

During work in a confined space, employers must ensure, so far as is reasonably practicable, that the atmosphere in the space has a safe oxygen level and does not expose employees to an atmospheric concentration of a contaminant above the exposure standard.

A safe atmosphere in a confined space is one that:

- has a safe oxygen level
- is free of atmospheric contaminants or contains atmospheric contaminants below their exposure standard (if any)
- has a concentration of any flammable gas or vapour below five per cent of its LEL.

A safe atmosphere can be achieved within a confined space by using methods such as cleaning, purging and ventilation.)

Note: Normal entry should only be considered when the test results show the confined space is safe. Before you enter, during works / inspections and on exit.



3.9.4 Purging a Confined Space

Where necessary, the confined space must be cleared of contaminants by using a suitable purging agent. The purging agent or any gas used for ventilation purposes must not be pure oxygen or a gas mixture with an oxygen concentration of less than 19.5 per cent or more than 23.5 per cent.

Mechanical ventilation may also be used to purge a confined space. This can be achieved through the introduction of fans, blowers, or fume extraction systems that displace sufficient volumes of air to reduce contamination or bring the environment inside the space back into line with acceptable oxygen/contaminant levels. Where mechanical ventilation has been used to modify an atmosphere in order to achieve acceptable levels of oxygen or contaminants, that ventilation must be in place for the duration of the works and, if the ventilation malfunctions, all entrants must exit the space and activities be suspended until such time as suitable alternatives are available. Exclusion zones must be considered as part of the SWMS and consideration should be given to the erection of signage and barriers around vents and openings.

The following processes, activities, equipment or conditions that may exist in confined spaces require risk assessment and must be managed in accordance with the Confined Space Entry Permit System:

- cleaning a confined space;
- the location of contaminants;
- flammable contaminants;
- static electricity;
- ventilation;
- combustion engines;
- the location of exhausts;
- the control of mechanical ventilation equipment; and
- activities causing the generation of contaminants.

Note: A contractor must be engaged to perform work where the atmospheric or oxygen levels exceed tolerances at the point of entry and at any time during work of this nature.

3.10 Equipment for use in a Confined Space

- Instruments used for atmospheric testing must be calibrated in accordance with the manufacturer's guidelines and continually monitor the atmosphere whilst inside a confined space.
- Calibration results must be maintained in a local site file.
- Employees who test the atmosphere in confined spaces sites must be trained in the use of the equipment, correct sampling and testing methods.
- Equipment intended for use in a confined space must be fit for purpose and subject to a maintenance and inspection program in accordance with manufacturer's requirements. Records are to be retained in a local file.
- Portable electrical equipment and lighting for use in a confined space must be extra low voltage (equal to or less than 32 V AC or 115 V DC) (ELV) or protected by a residual current device (RCD).
- The ELV transformer or the RCD must be located outside the location and be connected to the electrical equipment with a heavy duty flexible supply cable complying with AS 3147.



3.11 Confined Space Rescue

Prior to works being conducted in any identified confined space, consideration must be given to the type of rescue that will be required. The two distinct types of rescue are:

- An entry rescue – where another person who is trained and has all the correct equipment will be required to enter the space to affect a rescue/recovery of the initial entrant,
- A non-entry rescue – where the person in the space can be recovered without the need for a second person to enter the space.

In the case on a non-entry rescue, hazards such as entanglement must be considered (i.e. if the confined space entrant will be out of site or has to climb over items when in the space, it will be difficult for them to be recovered without becoming entangled. Non entry rescues are most appropriate where a straight line pull can be affected to extract the person from the space.

In all instances where an entry rescue will be required, an external, specialist organization must be on standby to affect a rescue if required.

Things to take into account when planning for emergency / rescue procedures:

- the nature of the confined space
- any hazards associated with the level of oxygen or atmospheric contaminants in the confined space
- the work to be done in the confined space (including the range of possible work methods and the work method chosen)
- any work done outside the confined space that may be associated with a hazard
- the means of entry to and exit from the confined space
- the method of continuous communication between people inside and outside the confined space and whether that method will enable communication in an emergency
- how emergency procedures can be initiated from outside the confined space
- the procedure in place which indicates that an employee has entered a confined space.

Rescue procedures must be reviewed in conjunction with the refresher training every 2 years to ensure that they are efficient and effective:

- An Emergency Rescue Plan must be completed, reviewed and understood by all members of the team prior to entry to the space.

Other considerations for planning emergency, rescue and first aid procedures – see below:

Note: 000 is not acceptable as an Emergency Plan



3.11.1 Rescue Equipment for use in a Confined Space Entry

Ensure that all equipment for a rescue is available prior to entering the confined space. All equipment available for a rescue must be inspected and maintained as per the compliance schedule / Maximo requirements.

Examples:

- Tripod with winch or pulley system and fall arrestor
- Full body harness
- Gas meter
- Ventilation system
- Life line (rope)
- Communication devices
- Helmet, headlamp, and torch
- Ear and eye protection
- First-aid kit
- Moveable fences, traffic cones, and other signage as required. Davit arms
- Harnesses
- Rescue lines

3.12 Confined Space Entry (Including Permits)

Prior to entry of a confined space, the following must occur:

1. Complete risk assessment (as detailed above);
2. A Confined Space Entry Permit must be issued by the authorised permit issuer. The Permit identifies the conditions for confined space entry, and outlines the following details (but not limited to):
 - Atmospheric testing;
 - Purging (if required)
 - Isolation, Lock Out Tag Out; and
 - Serviceability of all PPE used
3. Adhere to Confined Space SWMS.

Note: A permit is required each time a new confined space entry point is established.

3.13 Notification of Injuries, Incidents, and Hazards

Employees must report safety incidents immediately to their supervisor. An incident must be recorded in IRIS by the employee or supervisor. IRIS: Incident Reporting Information System: Our Intranet based system for recording incidents and hazards.

- The employee's manager or supervisor must report medical treatment injuries and Lost Time Injuries to the SWE Team as soon as possible.
- Lost Time Injuries must be notified by the employee's line manager to his or her General Manager by phone as soon as the manager is aware of the injury.
- Incidents requiring notification to WorkSafe must be reported to the Managing Director by the General Manager as soon as he or she becomes aware of the incident.
- Injuries requiring medical treatment at a clinic, doctor's surgery or a hospital must be reported OccCorp and the Return to Work Coordinator as soon as possible.



3.14 Documentation and Record Keeping

The following records must be kept for all confined spaces and confined space entries in a manner easily accessible for audit and review:

- Confined Space risk assessments
- Confined space registers:
- Completed Confined Space Entry Permits (onsite and/or held within GMW's electronic Management System – currently Objective);
- Confined space work training records (onsite /or held within GMW's electronic Management System – currently Objective) or LMS;
- Risk Assessment Reports (onsite /or held within GMW's electronic Management System – currently Objective)

4. Roles & Responsibilities

This Procedures applies to all activities involving Confined Spaces in circumstances where GMW has management and control of the work site.

Responsibility	Who
Approval	General Manager People, Culture & Safety
Ownership and implementation	General Manager PCS, WDS, WSS, SSP & BAF (IT)

Outlined below are responsibilities specific to Confined Space requirements at all GMW workplaces and controlled sites.

4.1 GMW Executive Leadership Team (ELT) and Senior Management Team (SLT)

GMW Executive and Senior Management (ELT and SLT) are responsible for overseeing and ensuring the implementation of the requirements of this procedure and related documents within their respective functional areas. This includes ensuring all sites are suitably risk assessed and have appropriate confined space resources to ensure that risks associated with confined spaces are adequately managed to minimise the risk of injury or harm to workers.

4.2 Managers/Coordinators

Managers/Coordinators in all operational areas and GMW worksites are responsible for ensuring the review and management of risks associated with confined spaces. This includes:

- Provision of a safe system for entry into, and the conduct of tasks within, confined spaces;
- Effective management of all activities associated with entry into, and exit from, confined spaces
- Provision of adequate resources for the appropriate training and refresher training outlined in this procedure.
- Providing time and resources for all workers to undertake training relevant to confined spaces.



4.3 Supervisors/Team Leaders

Supervisors and Team Leaders in all operational areas and GMW worksites are responsible for ensuring that risks associated with confined spaces are managed. This includes:

- Coordinating the planning, issue and return of Confined Space Entry Permits and other required permits;
- Ensuring competency of staff;
- Maintaining all records relating to entry into and activities conducted within confined spaces; and
- Ensuring they are readily available; and
- Where shift changes occur, establishing and maintaining processes for the effective and efficient transfer of information on outstanding permits and other relevant work activities.

4.4 Standby Person

The standby person has ultimate control over all confined space entry, exit and emergency processes. Before a worker enters a confined space, a standby person must be assigned to continuously monitor those inside the space. The standby person:

- Must receive accredited training and be assessed as competent in the application of the Confined Space Entry procedures in accordance with legislation;
- Must be a 'GMW Authorised Person' with regards to confined space work;
- Must participate in the SWMS process in preparation for the Confined Space Entry Permit;
- Must participate in the development of the Emergency Response Plan for the confined space activity;
- Must understand the Confined Space Entry Permit process;
- Has the authority to order workers to exit the space if any hazardous situation arises;
- Must be competent in the application of emergency response procedures and must initiate appropriate emergency procedures when it is required;
- Must be competent in the preparation and operation of rescue and breathing equipment, if it is required;
- Must remain at the work site monitoring staff movements into and out of the confined space, including approving and controlling access;
- Must keep in communication, according to the agreed-upon protocol, with those having entered the confined space; and
- Must never enter a confined space to attempt rescue.

4.5 Rescue Person(s)

The Rescue Person(s) must:

- Participate in the SWMS process in preparation for the Confined Space Entry Permit;
- Participate in the development of the Emergency Response Plan for the confined space activity;
- Understand the Confined Space Entry Permit process;
- Receive accredited training and be assessed as competent in the application of the Confined Space Entry procedures in accordance with legislation (including appropriate Emergency Response and First Aid training);



- Remain in the vicinity of the confined space activity so available for emergency rescue response if required;
- Be competent in the application of emergency response procedures; and
- Be competent in the preparation and operation of rescue and breathing equipment, if it is required.

4.6 Workers

All workers must ensure that they:

- Participate in the SWMS process in preparation for the Confined Space Entry Permit;
- Participate in the development of the Emergency Response Plan for the confined space activity;
- Understand and follow the Confined Space Entry Permit process;
- Receive accredited training and be assessed as competent in the application of the Confined Space Entry procedures in accordance with legislation;
- Follow the requirements of this Confined Space SOP and related procedures;
- Only use GMW owned and approved equipment – inclusive of hired equipment required for work being conducted
- Confirm with the supervisor of the work that it is safe to start work;
- Confirm with the standby person that they can enter a confined space; and
- Be competent in the preparation and operation of rescue and breathing equipment (where required).

4.7 Contractors

At all times when performing work on a GMW site or for/on behalf of GMW, contractors must have available the relevant confined space documentation or comply with GMW's confined space management requirements detailed in this and related procedures and report all incidents to the relevant GMW Manager and to their employing / contracting agency.

5. Definitions

Confined Spaces: Under the OHS Regulations, a confined space means a space in any vat, tank, pit, pipe, duct, flue, oven, chimney, silo, reaction vessel, container, receptacle, underground sewer or well, or any shaft, trench or tunnel or other similar enclosed or partially enclosed structure, if the space -

- is, or is intended to be, or is likely to be, entered by any person; and
- has a limited or restricted means for entry or exit that makes it physically difficult for a person to enter or exit the space; and
- is, or is intended to be, at normal atmospheric pressure while any person is in the space; and
- contains, or is intended to contain, or is likely to contain—
 - an atmosphere that has a harmful level of any contaminant; or
 - an atmosphere that does not have a safe oxygen level; or
 - any stored substance, except liquids, that could cause engulfment—

but does not include a shaft, trench or tunnel that is a mine or is part of the workings of a mine.

Note: Entry to a confined space occurs when a part of the body enters the space and there is a risk the person may be overcome or incapacitated by the conditions within the space.



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Emergency Services: internally or externally provided emergency services including ambulance services, doctor/health clinic, Poisons Information Centre and fire and other emergency services.

First Aid: the immediate treatment or care given to a person suffering from an injury or illness until more advanced care is provided or the person recovers.

LOTO: Lock Out Tag Out.

SMS: Safety Management System.

SWMS: Safe Work Method Statement

OHS: Occupational Health and Safety.

6. Document history

Doc #	Date approved	Approved by	Approval #
A4303370	7 March 2022	General Manager, People, Culture & Safety	A4333686
A4303370	17 April 2023	General Manager, People, Culture & Safety	A4333686

7. Associated documents

Document name	#
Occupational Health and Safety Act (Victoria) - 2004	
Occupational Health and Safety Regulations (Victoria) - 2017	
WorkSafe Victoria - Compliance Code - Confined Space – (2019)	
Energy Isolation Procedure	A4065912
Confined Space Entry Permit	A4303366
Rescue Plan	A4083774
Confined Space Ventilation Guidance Document	A4303368
Confined Space Register	A111722



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8. Appendices

Appendix A - Procedural Overview / Toolbox

This Appendix is designed to provide an overview of the requirements of this procedure – it is to be used as an aid/refresher to the procedure, and is not to be used in isolation without prior training of the procedure. Section 4 – Responsibilities has not been included within this Appendix (Please see Procedure for respective details)

This procedure documents the requirements for the management of risks associated with Confined Space activities at Goulburn-Murray Water’s (GMW) controlled work sites.

Sect.	Requirement
3.1 What is a Confined Space	<ul style="list-style-type: none"> The OHS Regulations defines a confined space as a space in any vat, tank, pit, pipe, duct, flue, oven, chimney, silo, reaction vessel, container, receptacle, underground sewer or well, or any shaft, trench or tunnel or other similar enclosed or partially enclosed structure, if the space: <ul style="list-style-type: none"> (a) is, or is intended to be, or is likely to be, entered by any person; and (b) has a limited or restricted means for entry or exit that makes it physically difficult for a person to enter or exit the space; and (c) is, or is intended to be, at normal atmospheric pressure while any person is in the space; and (d) contains, or is intended to contain, or is likely to contain— <ul style="list-style-type: none"> (i) an atmosphere that has a harmful level of any contaminant; or (ii) an atmosphere that does not have a safe oxygen level; or (iii) any stored substance, except liquids, that could cause engulfment— but does not include a shaft, trench or tunnel that is a mine or is part of the workings of a mine
3.2 Determining whether a space is a Confined Space	<ul style="list-style-type: none"> In order to meet the definition of a confined space, each space must satisfy all the above stated criteria Any space that may meet the definitions of a Confined Space will be added to the Confined Space register Additional spaces that do not meet all requirements to be determined as a confined space may become a confined space dependent on the nature of the work being conducted: <ul style="list-style-type: none"> The introduction of fumes from welding, cutting, the use of adhesives or cleaning products may change the space to such a point that it needs to be treated as a confined space Where it is identified that the work activity will create these conditions, the space will be identified, signed and treated as a confined space for the duration of the works Control measures such as providing temporary ventilation or achieving a satisfactory pre-entry gas test will not change the classification of a confined space.
3.3 Confined Space Signage	<ul style="list-style-type: none"> For GMW sites, all confined spaces must be permanently identified with confined space signage <ul style="list-style-type: none"> Signage can be achieved either through attachment of signs to the space or in the case of pits, manhole covers etc., through the application of confined space markings using paint and a template Confined space signage is to be regularly inspected and repaired, repainted or replaced as necessary
3.4 Confined Space Register	<ul style="list-style-type: none"> Each site that is managed or controlled by GMW will develop and maintain a Confined Space register The Confined Space register will identify each space, its location and the date that it was last assessed



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Sect.	Requirement
3.5 Confined Space Training	<ul style="list-style-type: none"> • Only persons that have up to date, accredited Confined Space Entry training are permitted to perform work in any identified confined space • GMW employees and contractors required to work in a Confined Space or act and a CSE standby person must: <ul style="list-style-type: none"> ○ Complete a confined space entry training course conducted by an accredited training provider and be assessed as competent. ○ Participate in 3 yearly confined space refresher training programs at reasonably practicable intervals arranged by Learning and Development ○ Complete a Level 2 First Aid course • Records of employees who are trained and deemed competent will be recorded in the GMW Learning Management System (LMS). • Proof of 'Recognised Training', issued by a Registered Training Organisation, must be provided by contractors
3.6 Confined Space Hazards	<ul style="list-style-type: none"> • Identifying hazards involves identifying all aspects of the task, equipment and environment that could potentially cause harm • The following risks/hazards must be identified prior to confined space entry (including, but not limited to): <ul style="list-style-type: none"> ○ Atmospheric hazards and engulfment hazards
3.7 Confined Space Risk Assessment and Safe Work Method Statement	<ul style="list-style-type: none"> • A risk assessment must be conducted by the work team before the commencement of any tasks associated with the confined space • The Confined Space Entry Permit and a Confined Space Safe Work Method Statement (SWMS) must be completed and present at the worksite for all activities associated with the confined space <ul style="list-style-type: none"> ○ The SWMS must be reviewed and revised whenever there is evidence to indicate that the level of risk has changed or that hazards are not controlled by the current controls
3.9 Atmospheric Testing and Monitoring	<ul style="list-style-type: none"> • Prior to any entry to a confined space, the atmosphere must be tested and deemed to be safe for entry • Only competent persons who have been trained in confined space entry are permitted to monitor or test atmospheres • Records of the test results must be recorded on the Confined Space Entry Permit • Further specific information can be found within procedural sections: <ul style="list-style-type: none"> ○ 3.9.1 - Where to Test ○ 3.9.2 - When to Test ○ 3.9.3 - Ensuring a Safe Atmosphere ○ 3.9.4 - Purging a Confined Space
3.10 Equipment for use in a Confined Space	<ul style="list-style-type: none"> • Instruments used for atmospheric testing and monitoring must be calibrated, maintained, & inspected in accordance with the manufacturer's guidelines <ul style="list-style-type: none"> ○ Records are to be retained in a local files • Portable electrical equipment and lighting for use in a confined space must be extra low voltage (equal to or less than 32 V AC or 115 V DC) (ELV) or protected by a residual current device (RCD) <ul style="list-style-type: none"> ○ The ELV transformer or the RCD must be located outside the location and be connected to the electrical equipment with a heavy duty flexible supply cable complying with AS 3147
3.11 Confined Space Rescue	<ul style="list-style-type: none"> • Prior to works being conducted in any identified confined space, consideration must be given to the type of rescue that will be required. The two distinct types of rescue are: <ul style="list-style-type: none"> ○ An entry rescue ○ A non-entry rescue • In all instances where an entry rescue will be required, an external, specialist organization must be on standby to affect a rescue if required



Confined Space Procedure

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Sect.	Requirement
3.11 Confined Space Rescue Cont.	<ul style="list-style-type: none"> • Rescue procedures must be reviewed in conjunction with the refresher training every 2 years to ensure that they are efficient and effective: • An Emergency Rescue Plan must be completed, reviewed and understood by all members of the team prior to entry to the space • Note: 000 is not acceptable as an Emergency Plan • 3.11.1 - Rescue Equipment for use in a Confined Space Entry <ul style="list-style-type: none"> ○ Ensure that all equipment for a rescue is available prior to entering the confined space ○ All equipment available for a rescue must be inspected and maintained as per the compliance schedule / Maximo requirements
3.12 Confined Space Entry (Including Permits)	<ul style="list-style-type: none"> • Prior to entry of a confined space, the following must occur: <ul style="list-style-type: none"> ○ Complete risk assessment (as detailed above); ○ A Confined Space Entry Permit must be issued by the authorised permit issuer <ul style="list-style-type: none"> ▪ The Permit identifies the conditions for confined space entry, and outlines the following details (but not limited to): <ul style="list-style-type: none"> ▪ Atmospheric testing; ▪ Purging (if required) ▪ Isolation, Lock Out Tag Out; and ▪ Serviceability of all PPE used ○ Adhere to Confined Space SWMS
3.13 Notification Incidents	<ul style="list-style-type: none"> • Employees must report safety incidents immediately to their supervisor <ul style="list-style-type: none"> • An incident must be recorded in IRIS by the employee or supervisor • Injuries requiring medical treatment at a clinic, doctor's surgery or a hospital must be reported OccCorp and the Return to Work Coordinator as soon as possible
3.14 Documentation and Record Keeping	<ul style="list-style-type: none"> • The following records must be kept for all confined spaces and confined space entries in a manner easily accessible for audit and review: <ul style="list-style-type: none"> ○ Confined Space risk assessments ○ Confined space registers: ○ Completed Confined Space Entry Permits (onsite and/or held within GMW's electronic Management System – currently Objective); ○ Confined space work training records (onsite /or held within GMW's electronic Management System – currently Objective) or LMS; ○ Risk Assessment Reports (onsite /or held within GMW's electronic Management System – currently Objective)

