

Confined Space Entry

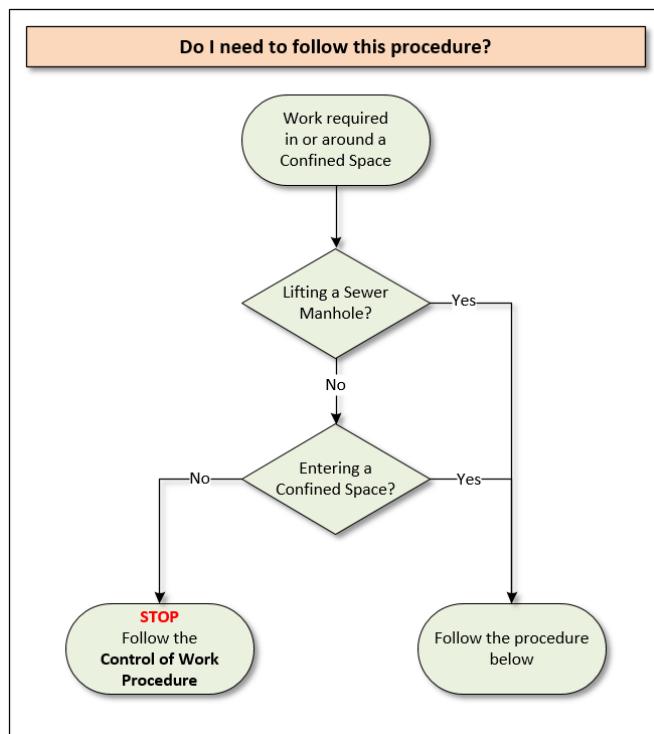
Purpose

To determine if work is in a Confined Space; and if so, apply for, authorise and manage work in a Melbourne Water Confined Space. A person is only considered to be in a Confined Space when 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.

Scope

This procedure applies to all assets owned, operated and leased by Melbourne Water and all employees and contractors.

The [WorkSafe Compliance Code - Confined Spaces](#) shall be followed, with the addition of the contents of this procedure.



A Confined Space Entry Permit is required when a person enters into a space which meets the criteria listed in Table 1.

Description of space	Confined Space Criteria							Confined Space?
	A. Is the space enclosed or partially enclosed?	B. Is it likely to be entered and is it at normal atmospheric pressure?	C. Does the space have a limited or restricted entry or exit?	D. Does the space contain, or is it likely to contain:				
				A harmful level of atmospheric contaminants?	An unsafe oxygen level?	Substances that could cause engulfment?		
Taking a media sample from inside a filter room	Y	Y	N	-	-	-	-	N
Carry out CCTV inspection of a sewer from the side of the road	Y	N	-	-	-	-	-	N
Completing a sewer walk	Y	Y	Y	Y	Y	N	-	Y
Developer stormwater connection in 0.5m deep trench	N	-	-	-	-	-	-	N
Developer stormwater connection in 4.0m deep trench	Y	Y	Y	Y	N	N	-	Y

Table 1 – Confined Space criteria

Confined Space Entry

1.1. Preparing an Authority to Access

Step	Who	Action
1	Work Party Lead	<p>Initiate planning and scheduling of the work and ensure that:</p> <ul style="list-style-type: none"> the Work Initiator has provided adequate information to understand the activity requirements the scope of work is clearly defined including the space, location and plant or equipment to be worked on it is understood whether or not the work requires entry to a confined space a risk assessment and a rescue plan is completed an appropriate amount of preparation time has been allowed for all parties to manage the work safely relevant parties have been notified of works required
2	Operations Team Leader	<p>Confirm the activity will involve entry into a Melbourne Water confined space. Allocate appropriate Operations Team Member to issue the Authority to Access. If isolations are required, the Work Permit Procedure must also be followed in addition to this procedure.</p>
3	Work Party Lead and Operations	<p>Discuss the task details ensuring:</p> <ul style="list-style-type: none"> the scope of work, location and equipment are clearly defined expiry date of the Authority to Access is agreed hazards that may arise from outside the work scope have been identified any potential impacts on Operations are understood work will not conflict with other current or upcoming work the Risk Assessment <u>and</u> Rescue Plan is adequate
4	Operations	Issue Authority to Access to Work Party Lead either remotely or face to face.

Confined Space Entry

STOP HERE

The next section of the procedure (1.2.) is only required to be followed if you are working in a Confined Space.

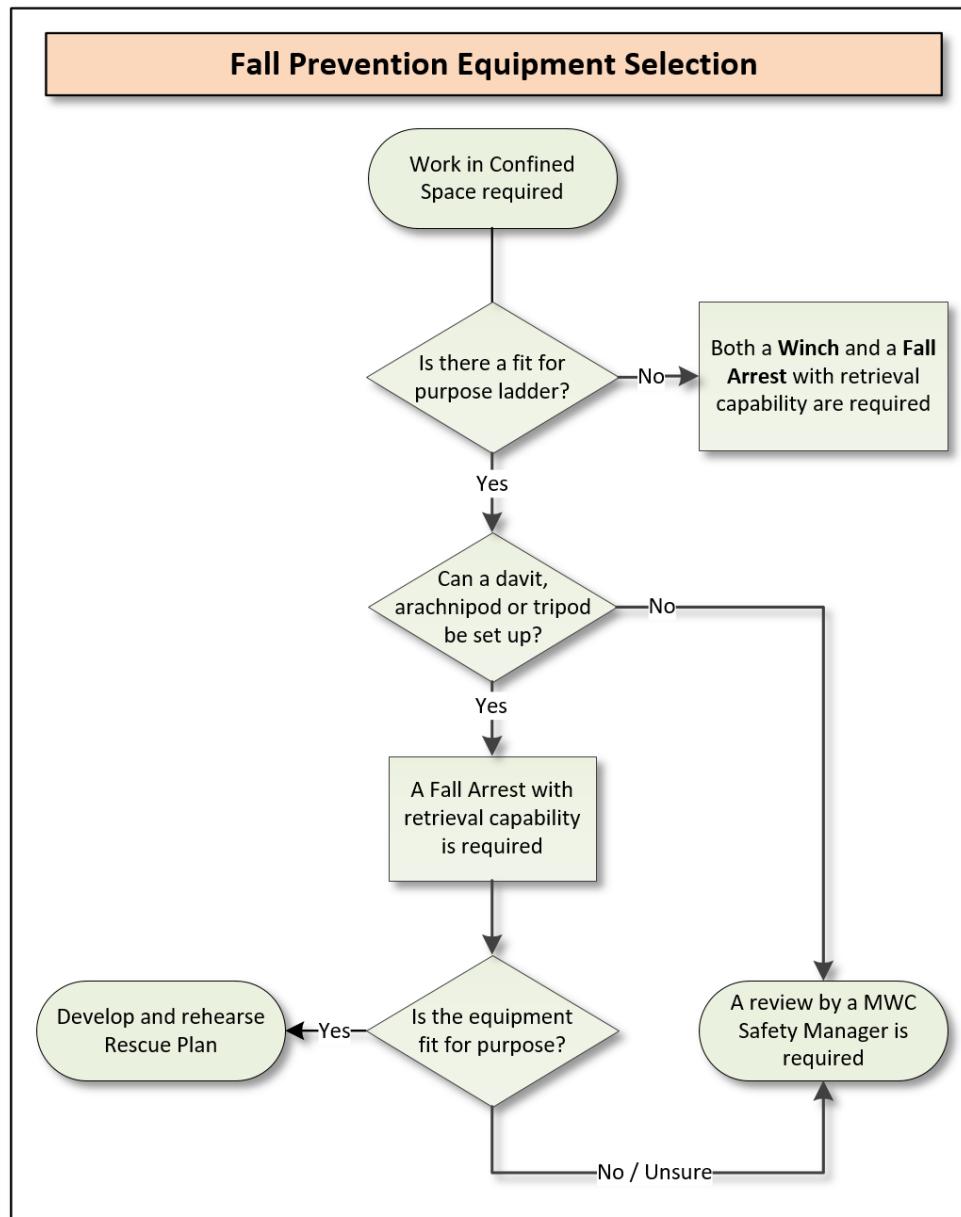
All other sections of this procedure apply.

1.2. Working in a Confined Space under an Authority to Access

Step	Who	Action
1	Work Party Lead	<p>Confirm that there are sufficient Work Party Members to undertake the entry and implement the Rescue Plan.</p> <p>Confirm that all Work Party Members are:</p> <ul style="list-style-type: none"> • Appropriately skilled and trained • Assigned to CSE roles
2	Work Party Lead	<p>Briefs the Work Party on the:</p> <ul style="list-style-type: none"> • Scope of work • Documented risks and controls
3	Work Party	<p>Ensure understanding of the:</p> <ul style="list-style-type: none"> • Scope of work • Documented risks and controls
4	Work Party Lead and Work Party	<ul style="list-style-type: none"> • Implement Risk Assessment Controls. E.g. Correct Signage • Complete a physical/desktop rehearsal of the Rescue Plan • Inspect and test all required rescue equipment
5	Work Party Lead	<p>Nominate a Work Party Member to test atmosphere prior to entry. Gas test results shall be within acceptable range, as per Atmospheric Gas Testing, before entry is permitted.</p>
6	Work Party Lead	<p>Issue a Confined Space Entry Permit and call in:</p> <ul style="list-style-type: none"> • Prior to entry for each shift • When the Confined Space Entry Permit issuer leaves the worksite • When the location changes <p>Ensure that the Confined Space Entry documents are stored at the worksite in a clean, secure and accessible manner</p>
7	Work Party	<p>Sign onto the Confined Space Entry Permit</p>
8	Work Party Lead	<p>Ensure continuous monitoring of the head space is conducted for the duration of the entry</p>
9	Work Party Lead	<p>On completion of entry, ensure call out process followed.</p>

Fall Protection and Rescue Equipment

Equipment shall be selected with the aid of the below decision tool:



Rescue Plans

A rescue plan shall be developed for every individual confined space entry location and recorded on either the Melbourne Water Rescue Plan or equivalent. Rescue Plans shall be:

- Developed, reviewed and rehearsed by all team members prior to entering a confined space
- Understood and able to be completed by the Work Party

Fall protection devices can be removed once at the bottom of the confined space if there is a method to rescue the entry party.

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Atmospheric Gas Testing

Acceptable readings for pre-entry and alarms levels are provided in the table below:

Business Areas	Gas Type	Acceptable Pre-Entry Level	Alarm Level
All Areas	Oxygen (O ₂)	Between 19.5% and 23.5%	Less than 19.5% Greater than 23.5%
	Carbon Monoxide (CO)	Less than 30ppm	Greater than 30ppm
	Hydrogen Sulphide (H ₂ S)	Less than 10ppm	Greater than 10ppm
	Lower Explosive Level (LEL)	Less than 5%	Greater than 10%
Additional tests for the Sewer Network	Volatile Organic Compound (VOC)	Less than 10ppm	Greater than 10 ppm
	Ammonia (NH ₃)	Less than 25ppm	Greater than 25 ppm

Pre-Entry Testing

If test results fall outside the acceptable levels listed above, the space shall not be entered.

Additional controls (e.g. increased ventilation) should be installed and the atmosphere shall be re-tested before entry. If at this stage it is still unsafe to enter, Operations shall be notified.

Any readings that are outside normal atmospheric conditions should be considered as part of the risk assessment.

Continuous Atmospheric Monitoring

If the gas detector alarms:

- Everyone must immediately exit the space
- Document the gas testing results on the Confined Space Entry Permit
- Notify Operations

Authority to Access Cancellations

An Authority to Access can be cancelled abnormally under the following conditions:

- For the purpose of Emergency Management
- When the condition of the working environment changes
- If unsafe work practices exist on the worksite

Changing the Authority to Access Expiry Date

If it becomes apparent that the work cannot be completed before the expiry date, the Operations and the Work Party Lead may agree a suitable period of extension for the Authority to Access.

Work cannot continue past the expiry date. Any work found to be continuing past the expiry date shall be stopped by Operations.

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Roles and Responsibilities

Role	Responsibility
Work Initiator	<ul style="list-style-type: none"> • Make it as clear as possible what the work outcome should be. • Consider all known and potential hazards of the work to ensure the safest approach is adopted to achieve the work outcome with consideration of the hierarchy of controls.
Operations Team	<ul style="list-style-type: none"> • Issue an Authority to Access after review of documents and hazards identified. • Monitor the operations and process to ensure the Work Party Lead is notified of changes that may affect the safety of the Work Party. • Cancel the Authority to Access if there is a risk to the safety of people and/or assets.
Work Party Lead	<ul style="list-style-type: none"> • Ensure Rescue Plan is adequately detailed and rehearsed before entry • Receive the Authority to Access and conduct work in accordance with the risk assessment • Issue and manage the Confined Space Entry Permit • Brief the Work Party on the Authority to Access conditions • Oversee the work to ensure the work outcome is achieved and work performed in accordance with the permit. • Ensure all members of the Work Party are appropriately skilled • Maintain communication with Operations to ensure any changes to work environment are identified and managed appropriately.
Work Party Member	<ul style="list-style-type: none"> • Undertake the work in accordance with the Authority to Access and Confined Space Entry Permit.

Training

The below table outlines the CSE training requirements. All training has a refresher frequency of **two years**.

	Working Well at Melbourne Water*	Confined Space Entry Awareness	Confined Space Entry Course (RTO)
Work Initiator	✓	✓	
Operations	✓		✓
Work Party Lead	✓		✓
Work Party	✓		✓

Anyone issuing an Authority to Access (Operations) must also complete specific site training to the satisfaction of the Operating Authority, with consideration of competency based training and/or the skills matrix. Sign-off is then required by the Work Permit Operating Authority.

*If isolations are required, the Work Party Lead must have also completed the Melbourne Water Permit System Training

Fitness for Work

Consideration should be given to:

- Physical ability
- Ability to work in a restrictive space
- Ability to wear the PPE required to do the work

For Melbourne Water employees, a health assessment is required as per CORP H&S PRO – Heath Assessment

Confined Space Entry

References and related content

Standards

[WorkSafe Compliance Code - Confined Spaces](#)

Fall Prevention AS/NZS 1816

To view attachments please speak to your Melbourne Water host

Confined Space Entry Permit

Melbourne Water Rescue Plan

Melbourne Water Procedures

CORP H&S PRO - Control of Work

CORP H&S PRO - Work Permit

CORP H&S PRO - Health Assessment

Document History

Date	Reviewed/ Actioned By	Version	Action
October 2020	Scott McMillan	4	Scope updated now that procedure has been rolled out business wide.
March 2020	Scott McMillan	3	Consolidation of all CSE Procedures after consultation and feedback