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	Manager HSE Systems	
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29 Jul 2025		

1 Purpose

To ensure that risks to the asset and risks to people interacting with the asset are reduced as much as possible (to As Low As Reasonably Practical (ALARP)).

2 Scope

This procedure applies to:

all work activities completed by Water Corporation, including contractors.

This procedure excludes:

- alliances working on the assets over which they have day-to-day control
- parties that are not engaged by (or on behalf of) Water Corporation, see <u>Working Near Pipelines</u> guidance and the <u>Asset Damage Risk Assessment</u> procedure.

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3 Training

Workers performing activities or roles in Table 1 must meet the listed training and competency requirements prior to undertaking the activity or role.

Roles / Activities	Course	Validity	Comment
People involved in: • issuing permits (authorised persons) • receiving a permit to work (contractor supervisor) Contract managers engaging a contractor where a permit will apply.	OSH Permits ONLINE 12326	3 years	Duration: 40 mins

4 Procedure - Clearance to work

Clearance to work is a documented system to control certain types of work which are hazardous. A Clearance to work permit contains:

- location
- time
- equipment to be worked on
- scope of work
- · tools and equipment to be used
- hazard identification,
- mitigation / precaution measures used
- the names of those authorising the work and performing the work.

4.1 Standing appointments of authorised persons

Regional managers/head of business units who are responsible for the day-to-day operation of our assets must:

- appoint authorised persons for the Clearance to Work process
- maintain and make available via the <u>Authorised persons list</u>.

Note: The appointment authorised persons is under 'standing arrangements', rather than appointed for each project or contract.

Authorised persons should have the following competencies and attributes:

- have completed the training course 'OSH Permit'
- knowledge of scheme/asset configuration and its associated risks
- good communication skills, thorough, logical and calm
- not so remote from the work site, or senior, that they would not be able to commit the time necessary to fulfil their functions as an authorised person
- understands circumstances when, with whom, and how to apply other processes to notify or obtain other's approval before proceeding, or escalating to others, see Appendix A.

CTW is most commonly applied to operational assets, with the authorised person being a member of the local operations team. CTW may also apply to depot/office maintenance or upgrades, with the authorised person typically being:

- a representative of the occupier, in the case of maintenance, or
- the Property and Procurement contract manager (in consultation with the occupiers) in depot/office upgrades.



If the need arises to apply CTW where there is no readily identifiable authorised person, the contract manager must refer the matter to:

Infrastructure assets	Operations manager (or equivalent) in the first instance, with escalation to Service Delivery Manager (or equivalent) if necessary
Depots, offices and other facilities managed by Property and Procurement	Manager Property Management

Note: The contract manager has overall responsibility to (as far as practicable) ensure the Contractor will be and is working safely. Through the issue of a CTW Permit, this responsibility is NOT passed to the authorised person.

Through the CTW process, the role of the authorised person is to:

- protect the asset and its operation
- identify risks to the contractor from their interaction with the asset
- make the asset safe for the work, or
- notify the contractor of the asset-related risks that remain.

4.2 Planning

The planning or 'design' stage is critical for:

- identifying controls needed to protect the asset
- to understand asset-specific conditions that may impact safety of people doing the work.

At the planning phase, the contract manager must identify and liaise with the appropriate authorised person to: identify:

- asset-specific health and safety hazards
- operational or service delivery constraints
- the need for, or the existence of, contingency arrangements
- environmental issues
- issues affecting the provision of safe drinking water to customers
- other applicable permits or requirements
- sections or stages of the works that will each require a separate CTW

A minimum of five (5) working days' is required prior to the works.

Note: Early notification is beneficial, as most operations teams schedule using a six week planning table.

4.2.1 Work requiring a CTW

A CTW is required if: • there is a risk of damage to the asset or its ongoing operation • the contractor will be at risk through interaction with the asset • the contractor is not going to be directly supervised by Water Corporation's representative. • A CTW is not required: • when the Contractor is engaged by and directly supervised on site by the relevant Water Corporation's operations team.



Hazards and conditions will vary between different Water Corporation sites. Some projects will require multiple CTWs. Projects needing multiple CTWs typically involve works that are complex in nature (or requiring multiple crews) or works that are

- planned to occur over separate dates
- to be undertaken on multiple sites or assets.

Examples of when separate CTWs would be needed include:

Significantly different types of tasks	E.g. pipework and electrical work as part of the same upgrade) are being undertaken on different areas of a single Water Corporation site.
Several single-day tasks done over six months	A separate CTW may be required for each separate day, or each time the contractor accesses the asset.
Tasks undertaken on multiple assets or sites	E.g. multiple connections to pumping stations.

Note: All works require a risk assessment.

4.2.2 Preparing bid documentation

The contract manager must ensure bid documents:

- invoke the <u>Health Safety and Environment (HSE) requirements for contractors</u> (which in turn references this CTW Procedure)
- detail which parts of the work will require a CTW Permit (if known at this stage)
- state the notice required for a CTW (if other than the standard 5 working days).

Note: Where the work is likely to cause a service disruption to Water Corporation customers, a minimum notice of 15 working days must be required.

4.2.3 Start-up/kick off meeting

The contract manager must ensure:

- the contractor is aware of the CTW process and training
- the authorised person and contractor supervisor are established
- the contractor supervisor who will receive the CTW (permit holder) has completed the 'OSH Permit (Online)' training within the past three years
- The parts of the work that will require a separate CTW have been identified, or that there is a process in place to identify upcoming works requiring a CTW (typically by having this as an agenda item for progress meetings).

Note: A CTW may be needed immediately following the start-up meeting, within the minimum five (5) days. The contract manager should check with the authorised person and make arrangements with the contractor to request for CTW ahead of the start-up meeting.

4.2.4 Other permits

Where work is planned in a drinking water catchment, the contract manager must consult with the catchment manager or the relevant regional water quality coordinator and complete a <u>Catchment</u> Checklist for Clearance to Work Permits.

CTW is a 'general' permit to manage the safety and operational impacts of a contractor working on or adjacent to an asset. The authorised person must decide whether the CTW needs to be issued with other permits. Other permits include:

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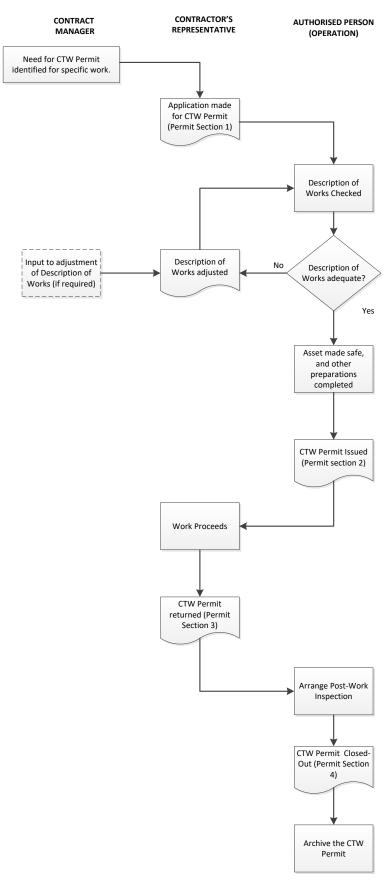


- hot work
- · confined space entry
- Grid mesh reinstatement
- Lock Out Tag Out (LOTO)
- Flammable Gas Areas (FGA)
- Asset Damage Risk Assessment (this is not a permit but functions in a similar manner to evaluate risks and decide mitigations. See <u>Asset Damage Risk Assessment</u> procedure and Asset Protection Risk Assessment (APRA) <u>example</u>).

Where CTW is used with another permit, the authorised person may:

- issue a CTW once confirming other permits are in place, or
- use Section 2 of the permit to specify applicable permits that must be obtained at the proper stage of the works.

4.3 CTW process



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4.3.1 Request CTW

The contractor supervisor must:

- complete section 1
- · attach a description of works
- and forward both to Water Corporation's authorised person (with a copy to the contract manager).

These documents must have sufficient detail so the authorised person can determine:

- which assets the contractor will work on or adjacent to
- the scope of work to be completed on the asset
- the overall work method and equipment involved, and how the contractor proposes to protect the asset
- preparations the authorised person will need to arrange, to make the asset safe to work on or near.

Note: It is the responsibility of the contract manager to satisfy themselves that the contractor meets Water Corporation HSE requirements for the scope of works as per the HSE requirements for contractors. The contractor provides a Work Health and Safety (WHS) management plan, Safe Work Method Statement (SWMS) or Job Hazard Analysis (JHA) for the work. The 'description of works' attached to the CTW is in addition to this and is not necessarily in the form of a SWMS or JHA.

4.3.2 Issue CTW

The authorised person must review the CTW request to:

- determine and arrange isolations or other asset preparations
- advise the contractor (and contract manager) of hazards at the asset on section 2
- confirm that other permits are in place, where needed
- confirm the contractor's proposed work methods won't damage the asset
- consult or obtain manager approval to undertake actions such as notifying customers of a supply disruption
- determine operational constraints, or the need for contingency to be in place
- confirm the operator's preparations are in place, or will be in place, prior to authorising CTW.

Appendix B lists risks that may need to be considered. The list is not exhaustive.

If the authorised person requires the contractor to implement control measures that are not stated on the contractor's description of works, the authorised person must either:

- notify the contractor to have them adjust and re-submit (and advise the contract manager)
- state extra controls in section 2, as conditions of the permit.

Note: The role of the authorised person is protection of the asset, and protection of people from risks associated with the asset. If the authorised person has concerns about the contractor's proposed work methods (such as the peripheral traffic management), the authorised person must raise with the contract manager for discussion with the contractor.

The authorised person must complete section 2 of the CTW only when:

- the detail on the CTW and its attachments is satisfactory,
- all the asset operator's preparations are arranged, or are in place.



Within section 2, the authorised person describes:

- hazards associated with the asset and that the contractor is to control (e.g. a potentially unsafe atmosphere)
- other permits (required to be in place, or obtained as a condition of the CTW)
- conditions placed on the contractor (such as site induction requirements).

The authorised person retains a copy of the CTW and forwards a copy to the contractor supervisor, and another copy to the contract manager.

4.3.3 During work

The contractor supervisor must:

- · obtain other permits where specified
- · display the CTW on site
- ensure control measures included in the description of works are implemented
- ensure hazards listed on the CTW are managed
- other conditions included on the CTW are complied with.

The authorised person (or nominee) or the contract manager (or nominee) may inspect the contractor's work to ensure compliance with the CTW.

If work is not complete before CTW expiry, the contractor supervisor must advise the authorised person as soon as practicable, in order to arrange for new work dates.

The authorised person may cancel the permit where changed circumstances make the permit invalid. The authorised person must notify the contractor supervisor and contract manager at once. A new permit may be issued.

4.3.4 Work completion

The contractor supervisor must advise the authorised person by completing section 3, and forwarding a copy to the authorised person (with a copy to the contract manager).

Post work inspection	The authorised person must arrange final inspection of the asset by the contract manager, a works inspector or other person.
	The inspection is to confirm there is no damage to the asset, and that the area has is safe for operation.
	Note: This post work inspection is separate to inspections by the contract manager to check that new infrastructure meets contract specifications.
Permit close out	The authorised person must close out the CTW by completing section 4 of the permit and forwarding a copy to the contractor supervisor.



Where the work has been completed, but the CTW has not been returned, do the following in order of preference:

or preference.	of profession.		
Authorised person (or nominee)	Must attempt to contact the contractor supervisor to have section 3 completed and returned.		
Authorised	Contact the contract manager who must either:		
person (or nominee)	 arrange the contractor to return the CTW 		
nominecy	 provide written acknowledgement to the authorised person that the work under the CTW is complete (or will not be completed) and that they are satisfied the CTW may be closed out. 		
	The authorised person must then arrange the post work inspection and close out the CTW at Section 4, attaching a copy of the notice from the contract manager.		
Operations manager (or equivalent) Must arrange sufficient enquiry to be certain the work under the CTW completed (or will not be completed). The District Operations Manager make notes in Section 3 of the CTW (the section the contractor would close out). The authorised person must then arrange the post work ins and close out the Permit at Section 4.			

4.4 Reactive work

For reactive work, the 5 day notice may be unachievable. A CTW is still required.

On arrival, the authorised person must to ensure the contractor has fulfilled the requirements under this procedure prior to conducting the work.

5 Definitions

Term	Description
Contract manager	The authorised representative of Water Corporation responsible for the management of the performance of a contract ensuring that all parties involved in the contract meet their obligations safely, expediently, and effectively.
Contractor supervisor	Means a person appointed by the contractor to represent the contractor in the Clearance to Work (CTW) Process. The Contract Supervisor may not be the same individual throughout the process.

6 Records

Records must be stored as per table below.

Record	To be saved by	Nexus folder path / location
Clearance to Work (CTW) Including associated attachments to the permit (e.g. contractor's Description of Works)	Section manager of the relevant authorised person	Hardcopy folder, keep for 7 years. Not required to be scanned into Nexus.



7 References

Document Number	Title	
Procedure (Assets)	Asset damage risk assessment procedure	
Register (HSE)	Authorised persons list.	
Standard (HSE)	HSE requirements for contractors	
Procedure (HSE)	Contractor management procedure	
Work instruction (Water Quality)	Catchment Checklist for Clearance to Work Permits	

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Appendix A Examples of applying Clearance to Work

Situation	Application of CTW
Construction of 2km new DN150 water main. The new main will cross an old ductile iron pressure sewer main that would be at risk of being damaged. When the new main is laid, the contractor will do	In project planning the contract manager consults with the Region's Asset Delivery Representative. They confirm that two separate CTWs will be needed, one for the crossing of the ductile iron pipe, and the other for the tie-in. The contract manager ensures references to these two specific CTWs are made on the relevant contract drawings.
a tie-in to an existing DN300 water main.	The tie-in will involve isolating the water main for about 8 hours, and preparations will need to be made to ensure customers won't be affected by this. These are started by the authorised person and will involve people and processes that they understand through prior experience.
A project involves a large upgrade to an existing treatment plant, with the work expected to run for 7 months. The treatment plant will continue to run over this period.	At or before contract start-up, the separate sections of work that will each need its own CTW cannot all be decided with any reliability. At the start-up meeting the contract manager ensures the contractor is aware of the CTW process, and that there will be a system in place to forecast ahead to identify discrete parts of the work that will need its own CTW. Typically this is through having 'Permits in upcoming work' as an agenda item for the project progress meetings.
A contractor will be performing a tie-in to an existing MSCL water main on the premises of a Water Corporation water tank. The work will involve welding and grinding near dry grasses and there is a credible fire risk.	The contractor will need one CTW to cover both the work of excavating to reveal the existing main, and the tie-in. The Hot work procedure requires that (in addition to the CTW) a Hot Work Permit is issued. The region's authorised persons register identifies four people from the district that can be the authorised person for both the CTW and Hot Work. Both permits are sought and issued together. Section 2 of the CTW identifies that it is being used in conjunction with a Hot Work Permit.
A contractor to Western Power will be excavating within 2m of an asbestos cement water main.	The CTW procedure does not typically apply because the contractor has not been engaged by (or on behalf of) Water Corporation. As an independent party in a public area, the contractor needs to apply the Asset Damage Risk Assessment process to engage with Water Corporation.
A contractor to Water Corporation will be excavating and using heavy mobile plant close to an existing critical underground water trunk main.	The Asset Damage Risk Assessment (ADRA) process is tailored to managing the risk of damage to critical underground pipelines, whereas CTW is a general permit-to-work system. Though primarily intended to apply to third parties (rather than contractors to Water Corporation) applying ADRA would likely cause a more thorough evaluation of the specific risks to an underground pipeline.
	Being a more appropriate tool to manage the risk, ADRA may be applied instead of (or in addition to) a CTW.
An operations team who have day-to- day control of an asset engage a local excavator operator (contractor) to help with an upcoming job. The excavator operator will be working directly with Water Corporation crew and will be signed onto their safe job planning.	The CTW procedure does not apply because the work of the excavator operator is directly overseen by the operations team that are on site.
A contractor is engaged by a contract manager to replace a 200m DN300 water main. In planning the contract manager consults with the district's	The contractor submits a CTW with a 'description of works' and it is clear to the authorised person that the near side of the public road will need to be closed. Through the 'description of works' the authorised person becomes aware that the



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Situation	Application of CTW
operations representative and confirms one CTW will be needed as a 'hold point' to ensure bypasses and isolations are in place before work commences.	Contractor is not planning to close any part of the road, or have signage, traffic controllers or a traffic management plan, but instead only have a 'spotter' to warn of approaching traffic. Though significant, this concern is unrelated to the asset. The authorised person notifies the contract manager to resolve with the contractor.
A contractor applies for a CTW for the replacement of a hatch on top of a water tank. The hatch is several metres away from a marked 'no go zone' for a mobile phone transmitter mounted on the tank. The Contractor's 'description of works' submitted with the CTW makes no mention of it.	The authorised person issues the CTW. Conditions in section 2 include adherence to the 'no go zone', and receiving a site induction on arrival. The 'no go zone' will be explained as part of the site induction.
A contractor is engaged for upgrade of a dam wall and outlet works. Several separate CWTs will be involved. The first CTW will be for 'Stage 1 outlet works upgrade'. The 'description of works' attached is in the form of the Project WHS Management Plan, and Project Environmental Plan.	The authorised person rejects the CTW request, explaining to the contractor that these plans should be provided to the contract manager. They are not directly related to the CTW process, and they do not adequately support the CTW as they do not provide the necessary information specific to the Stage 1 outlet works upgrade. The authorised person notifies the contract manager that this has occurred.
A CTW is issued for the re-lining of a chemical bund. When the work is completed, the contractor supervisor completes section 3 and sends it to the authorised person.	An inspection of the asset must occur before section 4 is completed and the CTW closed out. The authorised person decides who will do the inspection. In this case, it has been arranged that it will involve the contractor supervisor, the works inspector, and the authorised person.
A CTW is needed for works that will involve several items of diesel fuelled earthmoving plant. The works are within a drinking water catchment area.	The CTW is issued, with section 2 having a condition that a completed 'Catchment Checklist for Clearance to Work Permits' is obtained.
A telecommunications operator has transmitters installed within a Water Corporation facility. A contractor to the telco needs to access the transmitters for a routine service.	CTW is intended to apply to parties who are contracted by, or on behalf of, Water Corporation. It may be extended to apply to third parties telco's contractor, but only where it is assessed there is a risk to the contractor from interaction with Water Corporation infrastructure, or vice versa.



Appendix B Prompts for authorised persons

This list is intended as an aid to the authorised person (or others), to identify potential impacts of the works in assessing a request for a CTW.

Hazards (to the Confined Space Entry contractor, through Striking underground service

interaction with Water Asbestos

Corporation asset/site) Unsafe atmosphere (H2S, LEL, CO, oxygen too low or high, other)

Exposure to, or spills of chemicals, fuels, chlorine or other hazardous chemicals

Falls

Electric fences

Pressurised equipment

Equipment needing isolation (fluid, gas, power, stored energy)

Contact with wastewater pathogens

Noise/vibration Ultraviolet lamps

RF energy (e.g. transmission towers)

Conditions on site temporarily in an unsafe condition (tagged, barricaded)

Drowning/engulfment/flooding

Metallic service with potentially induced voltage from adjacent power lines

Site induction requirements not met

Drinking water quality Catchment management and source protection

Water treatment plant operation

Chlorinator operation
Service tank contamination
Backflow into the reticulation

Other permits required

Confined space entry permit

Hot work permit LOTO permit

Grid mesh reinstatement permit Flammable Gas Area (FGA) permit

Catchment checklist for clearance to work permits

Operational impacts or asset damage

Disruption of supply to customers

Damage caused by mobile plant

Chemical or biological contamination

Access to equipment blocked during the work

Fire/explosion

Delays to work require asset to be isolated longer than planned

Bypasses needing to be arranged

Contingency plans needed (by contractor, or Water Corporation)

Notification or approval by others required

Downstream/upstream impacts Site security compromised

Local constraints to water discharge/dewatering Contractor's provision for clean up or site restoration

Causing direct damage to a pipe or coating* Causing excessive impact, shock or vibration*

Causing excessive loading* Limiting future access*

Disturbing foundations or bedding*

Causing subsidence*
Altering the depth of cover*

Interference with cathodic protection*

Note: Items marked with an asterisk (*) are also referred to in the <u>Asset Damage Risk Assessment</u> procedure, which outlines the process for initiating a damage risk assessment for works near an asset. Related guidance material be viewed via the <u>Working Near Pipelines</u> page at www.watercorporation.com.au.