Zero incidents
Zero harm
Zero compromise
Keeping you healthy and safe, every day at work.

ESSENTIAL STANDARD no.40

A contractors guide to Confined Space Entry in Thames Water

Thames Water

KEY MESSAGES

- Thames Water operates a Zero-Compromise culture approach to working in Confined Spaces.
- All persons entering a confined space when working for or on our behalf must ensure that they do so in compliance with the Confined Space Regulations and in line with our standards.
- Any persons carrying out a confined space entry or associated task must hold a current qualification for the relevant type of entry being undertaken – certification must be readily available on request.
- All personnel must be clean shaven and able to demonstrate a face fit test if alternative type of equipment is used for Breathing Apparatus.

1. Introduction

The term Confined Space is used widely throughout the water industry. In general terms, a confined space will be identified by its enclosed nature together with a reasonably foreseeable specified risk.

The Confined Space Regulations make it clear that entry into confined spaces, where possible, must be avoided and all reasonable steps taken to carry out work without the need for entry. We know that in Thames Water this is not always achievable given the nature of our operations.

The risks involved in working in confined spaces are significantly more hazardous than normal workplaces. The hazards may not be unique to confined spaces but are worsened due to the enclosed nature of the working area.

Effectively managed, planned and controlled, no confined space entry should expose individuals to foreseeable risk and everyone who enters should go home safe and well at the end of every day.

This guidance is designed to help managers to make the right decisions when committing people to work in confined spaces or managing contractors working on our behalf. It must not be read in isolation, further information covering all aspects of confined space work can be found in the document referenced below.

2. Definition of roles within Thames Water

Manager	A person who has responsibility for confined spaces and those people selected to work in confined spaces and is suitably trained and formally assessed in confined space management. He/she has the authority and responsibility to appoint persons to the specific roles.
Competent Person 1 (CP1)	A person who has successfully completed the training and assessment for working in and escaping from confined spaces and has been appointed by their line manager as being competent. CP1 can only work in confined spaces under supervision of a CP2.
Competent Person 2 (CP2)	A person who has successfully completed the training and been formally assessed as suitably competent for working and carrying out emergency rescues, has been appointed by their manager as being competent.
CP2 (In Charge)	A person who has been trained, assessed and formally appointed, has the required knowledge and experience. Is nominated to lead a rescue in the case of an emergency.
Top-Person	A person who has been trained to CP2 standard, has experience of working in confined spaces and has been assessed and formally appointed to discharge those duties.
Appointed Person – Confined Spaces (AP(C))	A person who has been mentored to the role of AP(C) and has been formally assessed and appointed by the relevant manager.
Appointment	Formal written appointment.
Visitor	Any person who has not been trained to CP1 or CP2 standard.

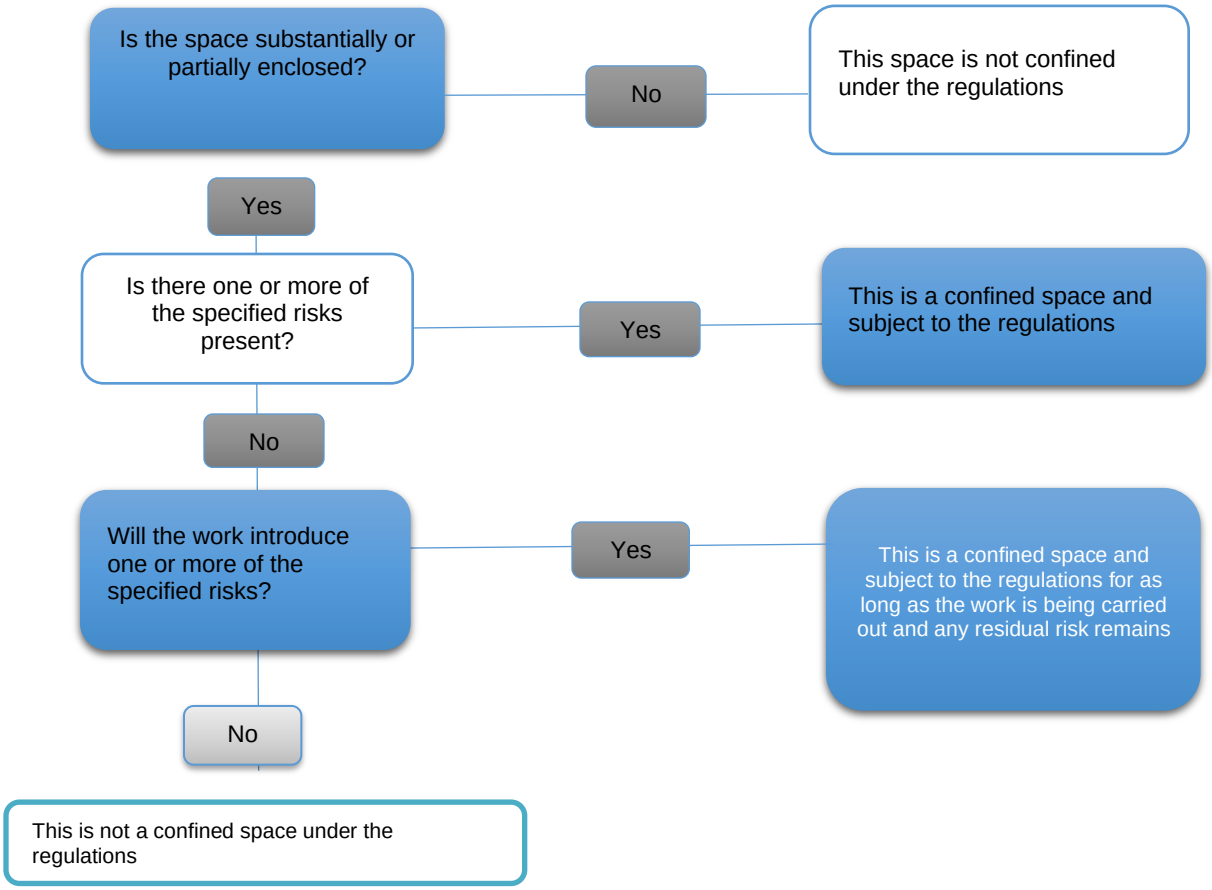
3. Confined Space

The specified risk will be either **inherent** (for example due to a build-up of substances such as hydrogen sulphide, methane or from the presence of chemicals or free flowing solids) or **introduced** (such as bringing solvents or undertaking hot works).

The Health & Safety Executive (HSE) define specified risks as:

- Loss of consciousness caused by gases, vapours, fumes or lack of oxygen
- Loss of consciousness caused by an increase in body temperature
- Serious injury from fire or explosion
- Drowning from an increase in the level of liquid
- Asphyxiation caused by a free flowing solid or inability to reach a respirable environment due to entrapment by a free flowing solid.

The following flowchart can help when with the decision-making process. For a work area to be deemed a confined space, there must be at least one of the above specified risks present or reasonably foreseeable to make an enclosed / restricted space a confined space.



4. Competence and Classification

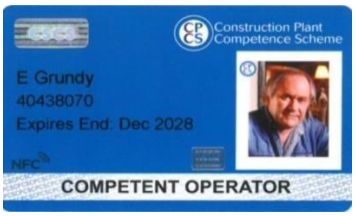
Any person undertaking confined space entry activity on Thames Water assets must conform to either the Thames Water categorisations (CP1 etc), or the EUSR NC1-NC4 or equivalent.

Thames Water does not specify which awarding body must be used, only that it meets the agreed standards set out by the Energy & Utility Skills Standard.

The cards issued by the awarding body come in various styles, of which some examples are detailed in the following table.

All should be enrolled within the Energy & Utility Skills Register, which can be checked by using the QR Codes alongside each example.

EUSR	Energy & Utility Skills Register		

NOCN	National Open College Network		SCAN ME
C&G	City & Guilds		
CABWI	Certification and Assessment Board for the Water Industry		SCAN ME

The full list of acceptable qualifications can be found on the EUSR webpage

Energy & Utility Skills Standard

Thames Water Minimum Standard	**EUSR Registration Title**
Class 0 – Confined Spaces Awareness Class A – Competent Person 1 (CP1)	Working in Low Risk Confined Spaces (EUSCS01)
Working Party Standard – Competent Person 1 (CP1)	Working in Medium Risk Confined Spaces (EUSCS02)
Appointed – Competent Person 2 In Charge (CP2 IC)	Top Person – non entrant for Medium Risk Confined Spaces (EUSCS04)
Competent Person 2 (CP2)	Working in High Risk Confined Spaces (EUSCS03)
Appointed – Competent Person 2 In Charge (CP2 IC)	Top Person for High Risk Confined Spaces (EUSCS05)
Competent Person 2 (CP2)	Emergency Rescue and Recovery of Casualties from Confined Spaces (EUSCS07 & EUSCS08)
Management of Confined Spaces	Managing Work in Confined Spaces (EUSCS06)

5. Hazard Identification and Risk Assessment

Before undertaking any work in a confined space, a risk assessment is necessary to determine the measures that must be taken to ensure the safety, health and wellbeing of those entering and working in the confined space.

The risk assessment should identify the relevant hazards / risks and will help to formulate a safe system of work. It must also determine the manning levels, competency requirements and emergency arrangements that must be in place prior to any entry. The risk assessment must evaluate the risks to those entering or working in the confined space including any third parties within the vicinity.

Other hazards must be considered e.g. working from height, possible contact with moving machinery, live electrical equipment etc.

Permits (PTW)

Controlling some hazards may require additional permits to work. A permit is a documented procedure that authorises a person or persons to carry out specific tasks within a specified time frame. The permit will detail the precautions required to complete the task safely, based on a risk assessment. It will describe what work will be done and where, which will be detailed in a method statement. The use of the Permit does not, by itself, make the task safe.

Role of the Independent Authorising Body (IAB)

All Wastewater confined space entry activities, must be reviewed, authorised, coordinated and checked for conflicts by the IAB prior to validation by the Wastewater Operational Control Centre (WOCC). A Safe Sewer Access Control Form will be issued for all entries deemed either of medium or high complexity. Low Complexity activities may be signed off by suitably assessed and appointed individuals. Please speak to your Health Safety and wellbeing business partner the IAB for further guidance.

Any changes that impact the way the wastewater network operates must be authorised by the IAB who will raise and issue a diversion notice communicating the changes to all relevant parties. Ref to Essential Standard 31

For further advise speak to your Health Safety & Wellbeing Business Partner

Declassification

In some circumstances it may be necessary to apply a temporary declassification. (i.e. cleaned/purged digesters, service tunnels and holding tanks).

This will only be appropriate if:

- No actual or potential atmospheric hazards exist
- All other hazards associated with the work area can be eliminated for the duration of the entry

If these conditions are not met before entry, the entry must be treated as a confined space and relevant working procedures must be followed.

Only those specifically trained and appointed to Senior Atmospheric Tester (SAT) standard, to de-classify confined spaces and authorised to issue the atmospheric test safety clearance certificate.

Where no appointed SAT is in place speak to your Health Safety & Wellbeing Business Partner.

6. Planning, Preparation and Equipment

Methods of communication must be determined at the planning stage of any confined space entry

- Clearly defined roles and responsibilities (who's in charge)
- Clearly defined rescue plans.
- Any additional Permits and authorisations
- Additional Influences (Tidal, emergencies etc)

Medicals

All those required to work in confined spaces must be fit to carry out their duties and hold an in date medical and within their company prescribed policy weight limit.

All confined space personnel are responsible for ensuring that this weight limit is not exceeded.

Face Fit Testing

Workers required to wear escape or full working/rescue breathing apparatus for CP1 and CP2 duties are legally required to undertake Face fit testing or a regular basis.

For any employees required to wear respiratory protective equipment, you must comply with the Respiratory Protective equipment (RPE) Regulations (breathing apparatus or escape sets) and hold a current Face fit test.

Any person(s) working on behalf of Thames Water or on a Thames Water asset must be clean shaven in line with TWUL Policy.

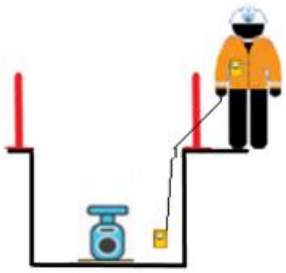
- Identify those employees required to wear tight fitting RPE
- Ensure a face fit test is completed at regular intervals and monitored for dramatic physical changes (weight loss, dental work etc), additional face fit test is carried out where necessary thereafter.
- Ensure that the results of the face fit tests are recorded within LOT
- Ensure they are clean shaven for both practical training and work activities.

7. Minimum staffing levels

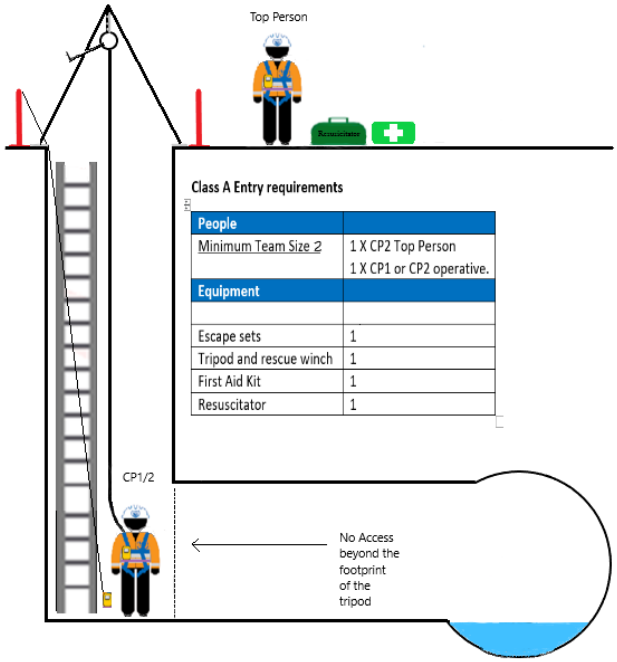
The Safe System of Work (SSOW) must set out the correct personnel and equipment levels required for the specific entry.

O Entry (NC1)

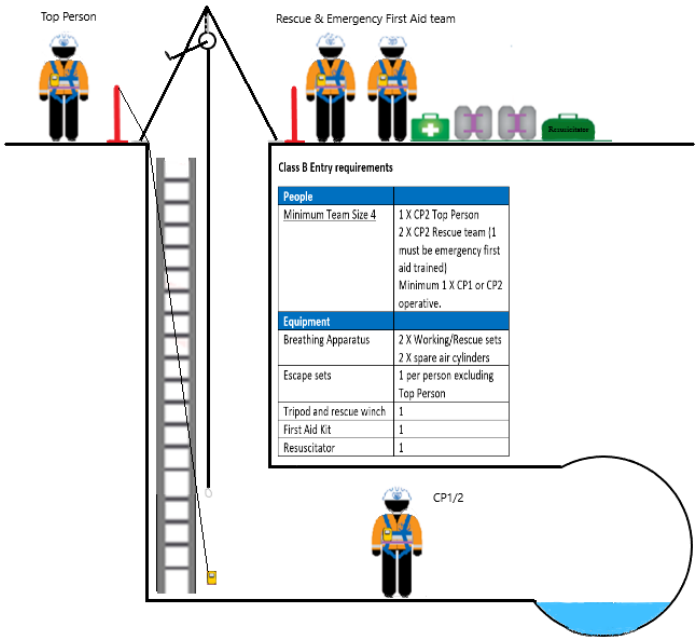
Gas check required prior to entry.



A Class Entry (NC2)



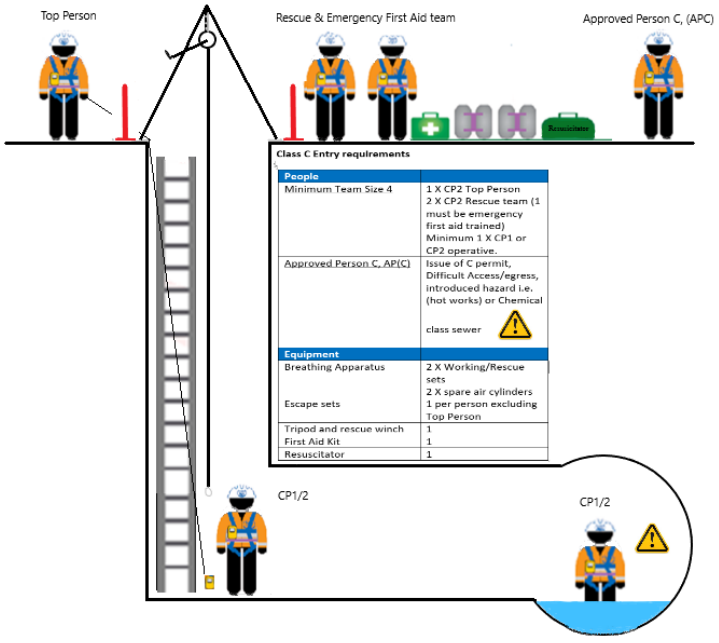
B Class Entry (NC3)



C Class Entry (NC4)

Works under a C Permit - entries may require additional staff over and above a B class entry, dependent on guidance given by the AP(C) issuing the C permit.

Note: AP(C) does not need to remain on site throughout the duration of the activity but must be on site for the issuing of the C Permit.



8. Emergency Rescue

Possible emergencies must be anticipated, and appropriate rescue arrangements clearly defined. Consideration of the likely risks, with instructions identifying communication source, the equipment, and measures to be taken to enable a successful rescue by fully trained and appointed.

Reliance on the emergency services alone will not be enough and should not be a major part of any emergency procedure.

Note: Where emergency services are required to enter a confined space a specific request must be made for the NHS Paramedic, Hazardous Area Response Team (HART), to be in attendance.

9. Visitors in Sewers

The company recognises that on occasion for business-critical reasons that it is not practical to follow the above process. Where this is the case, you must make contact with Thames Water's Senior Health Safety and Wellbeing Business Partner or the SME.