

If you have any questions about this procedures sheet contact Auckland Council Stormwater

## 1. WHEN SHOULD I USE THIS BMP?

Best Management Practice (BMP) applies to all sites where a Confined Space Entry has to be undertaken, regardless of the duration of the entry, the reason for the entry or the type of confined space being entered.

## 2. WHAT IS A CONFINED SPACE?

An enclosed or partially enclosed space that is not intended or designed primarily for human occupancy, within which there is a risk of one or more of the following:

- An oxygen concentration outside the safe oxygen range.
- A concentration of airborne contaminant that may cause impairment, loss of consciousness or asphyxiation.
- A concentration of flammable airborne contaminant that may cause injury from fire or explosion.
- Engulfment in a stored free-flowing solid or a rising level of liquid that may cause suffocation or drowning.

This includes: a) storage tanks, tank cars, process vessels, boilers, pressure vessels, silos and other tank-like compartments; b) pipes, sewers, shafts, degreaser and silage pits, ducts and similar structures.

## 3. WHAT IS THE AIM?

The aim of this BMP is to provide a safe environment for employees, contractors, other personnel and the public in / on or around works where Confined Space entries are being undertaken.

## 4. WHY ARE CONFINED SPACES DANGEROUS?

A good deal of work in Stormwater involves entering systems or areas, either above or below ground that would be classed as confined spaces according to the definitions above.

Confined space work is hazardous work that requires careful planning and management by competent people to ensure that the take is undertaken in a safe manner.

Confined space entry tasks must be managed in such a way as to greatly reduce the risk posed by the multiple hazards found in confined space systems, which in many cases are unseen and require specialist equipment and training to manage.

Most Confined Spaces give little or no consideration to the possibility of persons entering them and specialist equipment and training must be employed to allow safe entry into these spaces and to allow the safe removal of entrants should the area need to be evacuated in an emergency.

## 5. SITE SAFETY MANAGEMENT

### Forward Planning

- Will any adjacent structures and roading have an effect?
- Will the water table need to be lowered prior to the works being undertaken and will dewatering the area cause movement in surrounding structures?
- Is there the potential for flooding?
- Will the area of works include reclaimed ground or previously filled areas.



Note: This is an illustration only.

- Will the contents of any land fill produce dangerous gasses?
- Spend time doing an in-depth Risk Assessment. The more risks that are identified during the planning process, the better equipped you will be to deal with them during the project.
- Identify what services (e.g. water, gas and electricity) are in the area.
- Obtain written approval to carryout Confined Space Work from Auckland Council Stormwater.

### Safe Practices and Controls

- Contact the owners of any services and request a meeting to plan the best way to manage the hazards posed by those services.
- Complete the correct documentation. E.g. A Confined Space Entry Permit must be completed before the Confined Space Entry work commences. This means for each shift commenced, a new permit is required.
- Identify the best method for entry into the space and the equipment that will be required to safely move personnel, equipment and materials into and out of the space.
- Use the most efficient methods of undertaking tasks so that the task can be completed quickly so that the exposure to the hazards are minimised.
- Check to ensure that the plant being used for the task is the most appropriate for the job. Consider the limitations imposed by access, visibility, working room, flammability of the atmosphere, other services that may need to be worked around, noise, dust, ground conditions, etc.
- Prevent unauthorised access to the Confined Space.
- Stop or safely manage any potential flooding and ingress of water. Remember to consider the environment when planning any bypass pumping (refer to environmental guidelines).
- Complete a gas test prior to entry.
- Manage any gasses that may be present and ensure the correct testing equipment is available and used.
- Use intrinsically safe plant and equipment around potentially flammable environments.
- Use the appropriate Personal Protective Equipment (PPE) around potentially flammable environments.
- Ensure all persons with work activities related to Confined Space entry are trained and assessed as competent to perform those activities against the relevant Australian Standard.
- If conditions change, stop work and reassess the risks immediately.

### Planning for Emergencies

- Prior to the work commencing, an emergency procedure must be established and practiced (e.g. rescue from a Confined Space). It cannot be a generic procedure but one developed after assessing the site and the possible hazards on site.

- Check your equipment to see if it is up to the task of being used in an emergency.
- Establish who on the team are competent and able to perform their assigned roles during an emergency.
- It is recommended that at an early stage of the project an emergency drill be carried out to assess the emergency procedures in a practical and controlled manor to establish what issues may arise and to put processes in place to minimise them.

### Monitoring

- Make regular site visits (if not based on site) and be sure to try to see the whole site to check the effectiveness of the safe work methodologies.
- Perform spot audits to ensure that the hazard controls or safe work methodologies are being followed.
- Have regular tool box meetings to update the Team on any changes to safe work method statements, new issues that may have arisen and how to control them.
- Establish processes to ensure that the staff training and competencies are kept valid and in date.
- Ensure that all new personnel to site are fully informed on the processes, procedures and requirements for being on site and ensure that any visitors are kept safe while on site.

### 6. Tips

- Seek advice from other people that may have done works in the area of your project in the past.
- Make sure that you are trained in and competent with the operation of any gas detectors.
- Don't be slow in stopping works if you feel there is a safety issue on site.

### 7. Useful links and information

- The Ministry of Business, Innovation and Employment information on its website which provide a good source of information on safe methods of entry into Confined Space's.
- The Industry Standard for Confined Space entry is AS 2865:2009 Safe working in a confined space.

**Disclaimer: All care and diligence has been used in extracting, analysing and compiling this information which is to be used as a guideline only. Auckland Council gives no warranty that the information provided in this BMP is without error or omission. The user is required to ensure they follow any legislative and best practice requirements.**

For access to this BMP and to find the other BMP information sheets, go to the link below:  
[www.aucklandcouncil.govt.nz/stormwater](http://www.aucklandcouncil.govt.nz/stormwater)

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