



# Safety & Wellbeing Policy Arrangement

## Section 29 – Confined Spaces

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## Arrangement Section 29 – Confined Spaces

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Further guidance on this matter can also be obtained from the safety team at [healthandsafety@northlan.gov.uk](mailto:healthandsafety@northlan.gov.uk)

## Arrangement Section 29 – Confined Spaces

### 1. Introduction

North Lanarkshire Council recognises its responsibilities to manage health and safety risk, and to reduce the impact hazards may have to a level that is as low as reasonably practicable. It further acknowledges that working in or around a confined space has the potential to be a high risk activity and that all reasonable steps will be taken to reduce the potential impact of such work.

The purpose of this arrangement is to provide a framework for safety in confined space work. This arrangement applies to all activities and workplaces which are under the control of the North Lanarkshire Council.

### 2. Definitions

“Confined space” is described as any place, including any chamber, tank, vat, silo, pit, trench, pipe, sewer, flue, well or other similar place in, which, by virtue of its enclosed nature, there arises a reasonably foreseeable specified risk.

“Specified risk” means a risk of:

- a) the loss of consciousness of any person at work arising from an increase in body temperature.
- b) the loss of consciousness or asphyxiation of any person at work arising from gas, fume, vapour or the lack of oxygen.
- c) The drowning of any person at work arising from an increase in the level of liquid.
- d) The asphyxiation of any person at work arising from a free flowing solid or the inability to reach a respirable environment due to entrapment by a free flowing solid.

“Free flowing solid” means any substance consisting of solid particles and which is of, or is capable of being in, a flowing or running consistency, and includes sand, silt or other similar material.

In applying the definition a confined space could include attic spaces, solum spaces and the internal spaces of larger vehicles.

### 3. Principles

The following principles will be followed for activities involving confined space entry:

#### a) Risk assessment

If it is not reasonably practicable to prevent work in a confined space an assessment of the risks connected with entering or working in the space will be made (see appendix 1).

The assessment will identify the risks to those entering or working there, and also any others, for example, clients, contractors or employees from other Services in the vicinity who could be affected by the work to be undertaken. Assessment upon

which a safe system of work is to be based will be carried out by a competent person.

Where a number of confined spaces, for example solum spaces, are broadly the same, in terms of the conditions and the activities being carried out, and if the risks and measures to deal with them are the same, a generic risk assessment may be used to cover them all. Any differences in particular cases that would alter the conclusions of the generic risk assessment will be identified during the pre-planning stage of the work process.

Factors which will be considered during the assessment include previous contents, residues, temperature, contamination, oxygen deficiency and oxygen enrichment, physical dimensions, chemicals used for cleaning purposes, sources of ignition and ingress of substances.

A safe system of work (see appendix 2) will be developed as a result of the risk assessment process and used to contribute to the information, instruction and training programme associated with the planned work.

#### **b) Preventing the need for entry**

Employees are prohibited from entering a confined space unless it is not reasonably practicable to undertake the work without entering it.

Testing of the atmosphere or sampling the contents of confined spaces is usually performed from outside using long tools and probes etc.

The cleaning of a confined space or removal of residues from it using water jetting or long handled tools, etc. is performed from the outside where reasonably practicable.

#### **c) Work in confined spaces**

Where it is not reasonably practicable to avoid entering a confined space to undertake work, a safe system of work will be used.

An integrated part of the safe system of work will be the use of an appropriate "permit to work" (see appendix 3).

## **4. Responsibilities**

### **4.1 Services**

The Executive Director of each Service is responsible for the implementation of this arrangement within his or her area of control following consultation with the relevant Health and Safety Team.

The Executive Director has an overall responsibility for the establishment of an appropriate, effective and efficient management system. This includes, but is not limited to the following aspects:

- Definition of Service specific confined space entry procedures.
- Delegation of responsibilities.
- Training and competence of personnel.
- Setting of performance standards.

- Monitoring confined space entry practices for compliance and taking appropriate actions in case of non-compliance.
- Regularly assessing the effectiveness of confined space entry systems and modifying them as necessary.

## **4.2 Entry Supervisor**

For projects involving confined space entry a specific entry supervisor must be appointed, the responsibilities of this supervisor includes, but is not limited to:

- Safe systems of work and risk assessment.
- Training of personnel.
- Supervision and regular workplace inspections.
- Emergency procedures.

## **4.3 Employees**

Employees play an important part in the safe management of confined spaces. Employees are required to:

- Take all opportunities possible to avoid working in a confined space
- Contribute to the risk assessment process
- Undertake the necessary instruction and training required to undertake the work
- Follow the instructions given within the safe system of work
- Understand the emergency procedures needed to allow the work to take place
- Inform their line manager or supervisor if they are unable to fulfil their responsibilities
- Bring to the attention of their line manager concerns over the working arrangements

## **5 Information, Instruction and Training**

Where applicable, each Service will need to ensure that all those working in or around confined spaces are adequately trained to undertake the work.

This includes the training needed to undertake the required work activity as well as the necessary training to contribute to the rescue of those who may become trapped or unwell whilst working in a confined space.

Whilst an information sheet is provided within appendix 5 for employees there will be a need to develop locally relevant training for all involved in confined spaces work. This must be recorded training developed in consultation with the Service Health and Safety team.

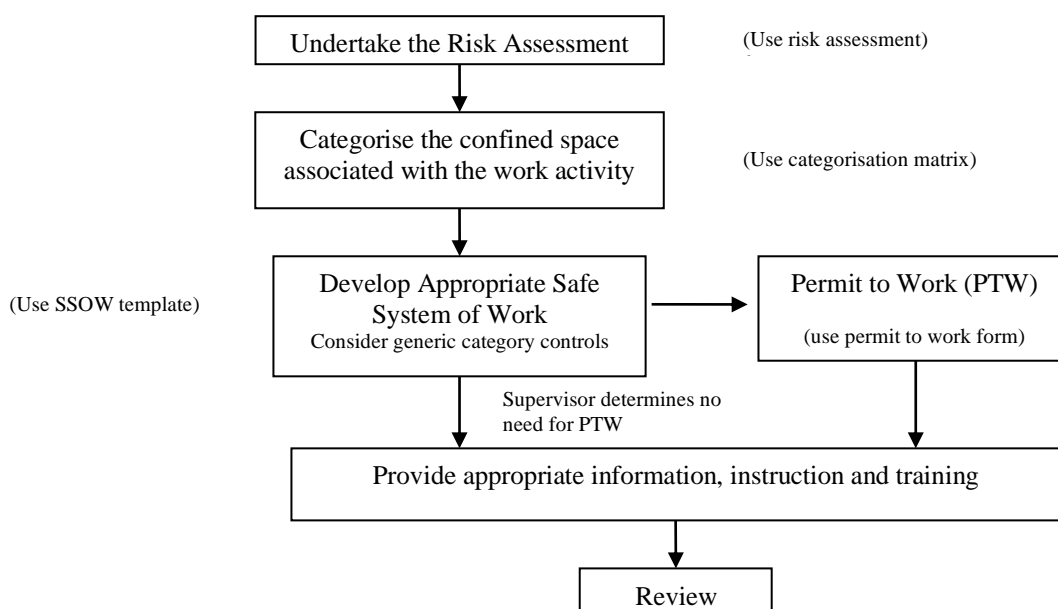
## Confined Spaces Categorisation & Risk Assessment

In order to help encourage a sensible approach to the management of work within confined spaces and to help inform the risk assessment process, the following “categorisation” advice is given.

It is recognised that the definition of a confined space can sometimes be varied and that as a result there can be some confusion over what constitutes a confined space. In addition that hazards associated with a confined space can change depending on the type and duration of work that is taking place. For example work in an attic space to lay insulation is confined work space because of the potential for excessive heating of the body, however treatment of timbers in an attic area may make it a concern due to solvent fumes whilst a simple inspection of the attic space to check a TV aerial connection would not merit much additional consideration, although it is recognised that the workspace can still be considered a confined space.

The example above will merit different levels of risk control outlined within a specific activity risk assessment. Whilst generic assessments may be appropriate, it is still critical that for each time a task work activity takes place, the generic assessment is checked to ensure it is wholly valid for the task in hand.

It is important to evaluate the level of consideration required for each confined space; this evaluation process is outlined below



## Safe System of Work

The precautions required in a safe system of work will depend on the nature of the confined space and the risk assessment. The main elements to consider when designing a safe system of work, and which may form the basis of a 'permit-to-work system' are:-

### 1. *Supervision*

The degree of supervision should be based on the findings of the risk assessment. In some cases it might be a case of simply instructing an employee in how to do the work and then periodically checking that all is well, for example, if the work is routine, the precautions straightforward, and all the arrangements for safety can be properly controlled by the person carrying out the work. It is more likely that the risk assessment will identify a level of risk that requires the appointment of a competent person to supervise the work and who may need to remain present while the work is being undertaken. It will be the supervisor's role to ensure that the permit-to-work system, where applicable, operates properly, the necessary safety precautions are taken, and that anyone in the vicinity of the confined space is informed of the work being done.

### 2. *Competence for Confined Space Working*

To be competent to work safely in confined spaces, adequate training and experience in the particular work involved is essential. Training standards must be appropriate to the task, and to the individual's roles and responsibilities, so that work can be carried out safely. Where the risk assessment indicates that properly trained individuals can work for periods without supervision, you will need to check that they are competent to follow the established safe system of work and have been provided with adequate information and instruction about the work to be done.

### 3. *Communications*

An adequate communication system will be needed and should enable communication:-

- between those inside the confined space;
- between those inside the confined space and those outside; and
- to summon help in case of emergency.

Whatever system is used, and it can be based on speech, tugs on a rope, the telephone, radio etc, it is important that all messages can be communicated easily, rapidly and unambiguously between relevant people. Equipment such as telephones and radios should be specially protected so that they do not present a source of ignition where there is a risk of flammable or potentially explosive atmospheres.

### 4. *Testing/Monitoring the Atmosphere*

The atmosphere within a confined space may need testing for hazardous gas, fume or vapour or to check the concentration of oxygen prior to entry. Testing will be



needed where knowledge of the confined space, for example, from information about its previous contents or chemicals used in a previous activity in the space, indicates that the atmosphere might be contaminated or to any extent unsafe to breathe, or where any doubt exists as to the condition of the atmosphere. It will also be needed where the atmosphere was known to be contaminated previously, was ventilated as a consequence, and needs to be tested to check the result.

Where the atmosphere in the space may not be safe to breathe and requires testing, the findings of the risk assessment may indicate that testing should be carried out on each occasion that the confined space is re-entered, even where the atmosphere initially was found to be safe to breathe. Regular monitoring of the atmosphere may also be necessary to check that there is no change in the atmosphere while the work is being carried out, particularly where there is a known possibility of adverse changes in the atmosphere during the work.

Testing equipment must also be in good condition and where necessary calibrated and checked in accordance with the intervals and recommendations accompanying the equipment, or at suitable intervals.

Testing to measure the oxygen content should be carried out before testing for concentration of flammable gases, followed by any further tests for toxic gases, vapours and dusts. Additional tests may be required for the presence of contaminants in liquid or solid form when the risk assessment indicates that they may be present.

The atmosphere in a confined space can often be tested from the outside, without the need for entry, drawing samples through a long probe or in the case of a shaft etc., lowering the test equipment in by a rope.

## **5. Gas Purging**

Where the risk assessment has identified the presence or possible presence of flammable or toxic gases or vapours there may be a need to purge the gas or vapour from the confined space. This can be done with air or inert (non-reactive) gas where toxic contaminants are present, but with inert gas only where there are flammable contaminants. You can only use inert gas for purging flammable gas or vapour because any purging with air could produce a flammable mixture within the confined space. Where purging has been carried out, the atmosphere will need to be tested to check that purging has been effective, and that it is safe to breathe before allowing people to enter.

## **6. Ventilation**

Some confined spaces are enclosed to the extent that they require mechanical ventilation to provide sufficient fresh air to replace the oxygen that is being used up by people working in the space, and to dilute and remove gas, fume or vapour produced by the work. This can be done by using a blower fan and trunking and/or an exhaust fan and trunking (provided that there is an adequate supply of fresh air to replace the used air). Fresh air should be drawn from a point where it is not contaminated either by used air or other pollutants. Never introduce additional oxygen into a confined space to 'sweeten' the air as this can lead to oxygen

enrichment in the atmosphere that can render certain substances (e.g. grease) liable to spontaneous combustion, and will greatly increase the combustibility of other materials. Oxygen above the normal concentration in air may also have a toxic effect if inhaled.

When considering the ventilation method, take account of the layout of the space, the position of openings etc. and the properties of the pollutants, so that circulation of air for ventilation is effective. Natural ventilation may suffice if there are sufficient top and bottom openings in a vessel.

## **7. *Removal of Residues***

Cleaning or removal of residues is often the purpose of confined space work. In some cases residues will need to be removed to allow other work to be undertaken safely. Appropriate measures should be taken where risk from the residues are identified. For example, dangerous substances (such as hazardous gas, fume or vapour) can be released when residues are disturbed or, particularly, when heat is applied to them. The protective measures might include the use of powered ventilation equipment, specially protected electrical equipment for use in hazardous atmospheres, respiratory protective equipment and atmospheric monitoring. The cleaning or removal process might need to be repeated to ensure that all residues have been removed, and in some cases might need to deal with residues trapped in sludge, scale or other deposits, brickwork, or behind loose linings, in liquid traps, joints in vessels, in pipe bends, or in other places where removal is difficult.

## **8. *Isolation from Gases, Liquids, and other Flowing Materials***

Confined spaces will often need to be isolated from ingress of substances that could pose a risk to those working within the space.

## **9. *Isolation from Mechanical and Electrical Equipment***

Some confined spaces contain electrical and mechanical equipment with power supplied from outside the space. Unless the risk assessment specifically enables the system of work to allow power to remain on, either for the purposes of the task being undertaken or as vital services (i.e. lighting, vital communications, fire fighting, pumping where flooding is a risk, or cables distributing power to other areas) the power should be disconnected, separated from the equipment, and a check made to ensure isolation has been effective. This could include locking off the switch and formally securing the key in accordance with a permit-to-work, until it is no longer necessary to control access. Lock and tag systems can be useful here, where each operator has their own lock and key giving self-assurance of the inactivated mechanism or system. Check there is no stored energy of any kind left in the system that could activate the equipment inadvertently.

## **10. *Selection and Use of Suitable Equipment***

Any equipment provided for use in a confined space needs to be suitable for the purpose. Where there is a risk of a flammable gas seeping into a confined space and which could be ignited by electrical sources (e.g. a portable hand lamp), specially protected electrical equipment needs to be used, for example, a lamp certified for use in explosive atmospheres.

## **11. Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE)**

So far as is reasonably practicable a confined space should be safe to work in without the need for personal protective equipment (PPE) and respiratory protective equipment (RPE) which should be a last resort, except for rescue work (including the work of the emergency services). Use of PPE and RPE may be identified as necessary in your risk assessment, in which case it needs to be suitable and should be provided and used by those entering and working in confined spaces. Such equipment is in addition to engineering controls and safe systems of work. The type of PPE provided will depend on the hazards identified but, for example, might include safety lines and harnesses, and suitable breathing apparatus. Take account of foreseeable hazards that might arise, and the need for emergency evacuation.

Wearing respiratory protective equipment and personal protective equipment can contribute to heat stress. In extreme situations cooling air may be required for protective suits. Footwear and clothing may also require insulating properties, for example, to prevent softening of plastics that could lead to distortion of components such as visors, air hoses and crimped connections.

## **12. Portable Gas Cylinders and Internal Combustion Engines**

Never use fuelled internal combustion engines in confined spaces such as generators fuelled by petrol, diesel or gas.

Check gas equipment and gas pipelines for gas leaks before entry into the confined space. At the end of every work period remove gas cylinders, including those forming welding sets, from the confined space in case a slow leak contaminates the atmosphere within the space.

## **13. Gas Supplied by Pipes and Hoses**

The use of pipes and hoses for conveying oxygen or flammable gases into a confined space should be controlled to minimise the risks. It is important that at the end of every working period, other than during short interruptions, the supply valves for pipes and hoses are securely closed before the pipes and hoses are withdrawn from the confined space to a place that is well ventilated. Where pipes and hoses cannot be removed, they should be disconnected from the gas supply at a point outside the confined space and their contents safely vented.

## **14. Access and Egress**

A safe way in and out of the confined space must be provided. Wherever possible allow quick, unobstructed and ready access. The means of escape must be suitable for use by the individual who enters the confined space so that they can quickly escape in an emergency. The safe system of work should ensure that everyone has left the confined space during 'closing-off' operations particularly when the space is complicated and extensive, for example in boilers, cableways and culverts where there can be numerous entry/exit points.

Suitable means to prevent access should be in place when there is no need for anybody to work in the confined space.

The size of openings to confined spaces needs to be adequate. Openings affording safe access to confined spaces, and through divisions, partitions or obstructions within such spaces, need to be sufficiently large and free from obstruction to allow the passage of persons wearing the necessary protective clothing and equipment, and to allow adequate access for rescue purposes.

There should be a safety sign that is clear and conspicuous to prohibit unauthorised entry alongside openings that allow for safe access.

### **15. Fire Prevention**

Wherever possible flammable and combustible materials should not be stored in confined spaces, unless they have been specifically created or allocated for that purpose. If such materials accumulate as a result of the work activity they should be removed as soon as possible and before they begin to create risk. Where flammable materials need to be located in a confined space the quantity of the material should be kept to a minimum. In most cases flammable materials should not be stored in confined spaces.

### **16. Lighting**

Adequate and suitable lighting, including emergency lighting, should be provided. For example, the lighting will need to be specially protected if used where flammable or potentially explosive atmospheres are likely to occur. Other gases may be present that could break down thermally on the unprotected hot surfaces of a lighting system and produce toxic products. Lighting may need to be protected against knocks (e.g. by a wire cage), and/or be waterproof. Where water is present in the space, suitable plug/socket connectors capable of withstanding wet or damp conditions should be used and protected by residual current devices (RCD's) suitable for protection against electric shock. The position of lighting may also be important, for example to give ample clearance for work or rescue to be carried out unobstructed.

### **17. Static Electricity**

Exclude static discharges and all sources of ignition if there is a risk of a flammable or explosive atmosphere in the confined space. All conducting items such as steel trunking and airlines should be bonded and effectively earthed. If cleaning operations are to be carried out assess the risks posed by the use or presence of high resistivity materials (such as synthetic plastics) in and adjacent to the confined space.

### **18. Smoking**

Smoking must be prohibited in confined spaces. The result of the risk assessment may indicate that it would be necessary to extend the exclusion zone to a distance beyond the confined space, for example, 5 -10m.

### **19. Emergencies and Rescue**

The arrangements for the rescue of persons in the event of an emergency need to be suitable and sufficient and, where appropriate, there will also be a need for the necessary equipment to enable resuscitation procedures to be carried out. The

arrangements should be in place before any person enters or works in a confined space.

## **20. Limited Working Time**

There may be a need to limit the time period that individuals are allowed to work in a confined space. This may be appropriate where, for example, respiratory protective equipment is used, or under extreme conditions of temperature and humidity; or the confined space is so small that movement is severely restricted. For a large confined space and multiple entries, a logging or tally system may be necessary to check everyone in and out and to control duration of entry.

## **21. Use of a Permit-to-Work System**

The issuer of the permit-to-work must ensure that the recipient has read and understood the requirements of the permit-to-work (safe control measures etc.).

A permit-to-work system is a formal written system and is usually required where there is a reasonably foreseeable risk of serious injury in entering or working in the confined space. The permit-to-work system is an extension of the safe system of work, not a replacement for it. The use of a permit-to-work system does not, by itself, make the job safe. It supports the safe system, providing a ready means of recording findings and authorisations required to proceed with the entry. It also contains information, for example time limits on entry, results of any gas testing and other information that may be required during an emergency and which, when the job is completed, can also provide historical information on original entry conditions. A permit-to-work system is appropriate, for example:-

- a) to ensure that the people working in the confined space are aware of the hazards involved and the identity, nature and extent of the work to be carried out;
- b) to ensure there is a formal check undertaken confirming elements of a safe system of work are in place. This needs to take place before people are allowed to enter or work in the confined space;
- c) where there is a need to coordinate or exclude (using controlled and formal procedures), other people and their activities where they could affect work or conditions in the confined space;
- d) if the work requires the authorisation of more than one person, or there is a time-limit on entry. It may also be needed if communications with the outside are other than by direct speech, or if particular respiratory protective and/or personal protective equipment is required.

A permit-to-work should be cancelled once the operations to which it applies have finished.

The nature of permit-to-work systems will vary on their scope depending on the job, and the risks. A permit-to-work system is unlikely to be needed where, for example:-

- a) the assessed risks are low and can be controlled easily and
- b) the system of work is very simple; and
- c) you know that other work activities being carried out cannot affect safe working in the confined space.

If an assessed risk is subsequently eliminated entirely, and there is no foreseeable chance of it recurring, you can consider giving unrestricted entry provided the above conditions apply.

The decision not to adopt a permit-to-work system should be taken by a competent person, where necessary following consultation with specialists bearing in mind the findings of the risk assessment and the need to ensure a safe system of work.

The Permit-to-Work System (Appendix 3); should be used, and will need to be tailored to suit the actual work that is to be undertaken within the confined space.

# Confined Spaces: Safe System of Work Template



## A - Administrative Details

1. **Work location:**
2. **Activity Description:**
3. **Parent Risk Assessment Details:**
4. **Prepared by:**
5. **Content delivered to relevant employees by (delete as appropriate) :**

Tool box talk / training session/ hand out/ other etc. (please specify)

## B - Main Details

1. **Supervision** - Outline and provide names of those appointed to supervise the confined spaces work
  
2. **Competence for Confined Space Working** – Outline the level of confined spaces training/awareness that is required for the particular work activity being undertaken
  
3. **Communications** – Outline the methods of communication to be used as part of the ongoing work activity and the summoning of assistance.

4. **Testing/Monitoring the Atmosphere** – It may be necessary to test the atmosphere within the confined space for hazardous situations, e.g. fumes, gases, temperature etc, outline the monitoring steps being taken for this particular work activity
  
5. **Gas Purging** – If purging is required outline the process, timescales and confirmation processes that are to take place
  
6. **Ventilation** – Outline how adequate ventilation of the confined space is to be achieved
  
7. **Removal of Residues** – Outline the mechanisms being used to make the work area safe from the effects of materials to be found within the confined space prior to or during
  
8. **Isolation from Gases, Liquids, and other Flowing Materials** – Identify and detail the products that may be flowing into the confined space and outline how these are to be isolated and blanked off.



9. **Isolation from Mechanical and Electrical Equipment** - Identify and detail the mechanical and electrical elements that are associated with the confined space and outline how these are to be isolated.
  
10. **Selection and Use of Suitable Equipment** - Identify and detail the equipment to be used to undertake the work activity, highlight standards where appropriate.
  
11. **Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE)** - Identify and detail the protective equipment to be issued and used by those undertaking the work activity.
  
12. **Portable Gas Cylinders and Internal Combustion Engines** - Identify and detail any combustion engine equipment that is being used along with the measures to be used to manage the exhaust, fuel and noise issues this may present.
  
13. **Gases Supplied by Pipes and Hoses** - Identify and detail any air/gas equipment that is being used along with the measures to be used to manage the potential hazards this may present.

14. **Access and Egress** - Identify and detail the intended access and egress mechanisms to be used as part of the work activity, outlining how these are to be secured and protected
  
15. **Fire Prevention** - Identify and detail the fire prevention processes that are to be utilised during the work activity, a particular focus should be given to any alternative arrangements that may required due to a work activity impacting on existing day to day arrangements
  
16. **Lighting** - Identify and detail the mechanisms to be used to ensure adequate lighting is available, and how lighting can be maintained should there be a loss of power etc.
  
17. **Static Electricity** - Identify and detail sources of static electricity and outline the measures to be taken to minimise the effect it may have on the work activity.
  
18. **Smoking** - Identify and detail arrangements for those that may wish to smoke, bearing in mind the legal restrictions that exist about smoking in workplaces and other enclosed public places

19. **Emergencies and Rescue** - Identify and detail the procedures to be used to deal with the foreseeable emergencies that may arise during the work activity.
  
20. **Limited Working Time** - Identify and detail requirement for the development of a staggered work pattern to allow for appropriate rest breaks, this is often linked to, although not exclusively, overheating caused by the environment, activity or equipment being worn.
  
21. **Use of a Permit-to-Work System** - Identify and detail the level to which the permit to work system is to be used in order to ensure the safety of those working within or around the confined space.

## C – Supplementary Notes/Observations and Restrictions



# Confined Space Entry Permit

Confined Space Permit Number			
Issuing Service	Overlapping permits if any		
Detailed location of work			
Is entry to this confined space essential? YES/NO ( <i>delete as appropriate</i> )			
Description of task/s			
Hazards identified (including any introduced by use of PPE etc)			
Control measures and precautions necessary	Yes	No or N/A	Person responsible for implementation
<b>CHECKLIST</b>			
Safe access/egress for operatives, necessary equipment and services			
Adequate space to carry out work safely and space free from clutter and debris			
Operatives adequately trained and suitable for tasks and trained in use of any PPE that has to be worn			
Competent supervision on hand throughout job			
Incoming services isolated – ( <i>*delete as appropriate</i> ) gas*/electricity*/steam*/water*/fuel*/other*			
Installed equipment isolated mechanically/*electrically/*both ( <i>*delete as appropriate</i> )			
Equipment and pipes/tanks have been drained and vented			
Potential ingress of fumes or other substances (e.g. excess rainwater if outside) has been evaluated and control measures arranged			
Residues, sludges or other potential causes of fume have been removed			
Atmospheric testing for oxygen*/toxic fumes*/flammables*has been carried out ( <i>*delete as appropriate</i> )			
There are proven means and trained people prepared for evacuating a casualty from this confined space			
Suitable means of communication have been set up for those in the confined space to person/s on watch or outside at all times			
Suitable tools and equipment have been selected, and intrinsically safe electrical appliances if a flammable atmosphere may exist			
Adequate ventilation by natural air flow*/mechanical means* has been arranged ( <i>*delete as appropriate</i> )			
Adequate lighting has been arranged			
Fire prevention arrangements*/fire extinguishers* are provided ( <i>*delete as appropriate</i> )			
Any other precautions applicable to this job			

Personal Protective Equipment and safety equipment needed (e.g. gas monitor) (specify)	
Authorisation by responsible person (signature and print name)	
Acceptance by workers that they have read, understood and will follow permit (signatures and names)	
Time permit starts	Date
Time permit expires	Date
Authorisation to extend permit to (new expiry time and date)	(Signature and name)
Sign off that work is completed*/suspended* ( <i>*delete as appropriate</i> ) (Signature and name)	
Time and date	

## **Competence for Work in Confined Spaces**

The following gives an indication of expected training standards to be utilised for work in confined spaces. These standards are based on the national standards established by City and Guilds.

There will often be occasions where training over and above this standard will also be required. Such additional training should be identified by the risk assessment process. The risk categories referred to below are the confined space categories determined from the matrix contained in appendix 1.

### **Low Risk**

#### Employees

Minimum training on the risks and generic procedures expected when working in and around confined spaces. The standard of training should be shaped by the content of the City & Guilds 6150-01 Level 2 qualification "Low Risk Confined Spaces". In essence this covers the following:

- Prepare to enter and work safely in low risk confined spaces.
- Enter and exit confined spaces safely.
- Use equipment and tools safely and in accordance with manufacturers' specifications.
- Follow procedures and work safely.
- Deal with emergencies.
- Use appropriate behaviour for working in low risk confined spaces.
- Use general knowledge for working in low risk confined spaces.

#### Supervisors

Basic assessed training on the risks associated with confined spaces and the control measures to be used to minimise risk. The content of the training must incorporate the elements mentioned within the employee training section for low risk confined spaces

### **Medium Risk**

#### Employees

Attendance on a formal training course that outlines the significant risks and standard control mechanisms. Such a course is likely to be reflective of the content of the City & Guilds 6150-02 Level 2 course, Medium Risk Confined Spaces.

#### Supervisors

Attendance on a formal training course/workshop that outlines the significant risks and standard control mechanisms to be used when working in or around confined spaces. An assessment of understanding must be included. Such a course will provide an enhanced level of knowledge expected to exceed that contained within the course City & Guilds 6150-02 Level 2 course, Medium Risk Confined Spaces.

## **High Risk**

### Employees

Attendance on a formal assessed training course that is based around the content of the course entitled High Risk Confined Spaces (City & Guilds 6150-03 Level 2)

### Supervisors

Overseeing Work in High Risk Confined Spaces (City & Guilds 6150-04 Level 4) is to be used as the indicative standard for supervisors managing activities that fall into the high risk category.

## **Very High/Unacceptable Risk**

### Employees

Attendance on a formal assessed training course that is based around the content of the course entitled High Risk Confined Spaces (City & Guilds 6150-03 Level 2). Additional training is also likely to be required around the other equipment being used.

### Supervisors

Overseeing Work in High Risk Confined Spaces (City & Guilds 6150-04 Level 4) is to be used as the indicative standard for supervisors managing activities that fall into the high risk category.

## Appendix 5

### Information Sheet – Working in Confined Spaces

Each year approximately 15 people in the UK are killed and many injured whilst working in confined spaces. This includes those people who were at work and those who attempted to rescue them without proper training and equipment.

Work in confined spaces is governed by statutory legislation, principally the Confined Spaces Regulations which:

- a) prohibit entry into a confined space to carry out activities unless there is no other reasonably practical alternative means of doing so;
- b) require any activities within confined spaces to be undertaken in accordance with a safe system of work; and
- c) require adequate arrangements to be in place to rescue any person in an emergency situation.



This information sheet aims to provide Council employees with an overview of the health and safety issues associated working in a confined space and what can be expected of the line manager before such work is undertaken.

#### What is a confined space?

It is not possible to provide a comprehensive list of confined spaces. However, it can be any space of an enclosed nature where there is a risk of death or serious injury from hazardous substances, hot temperatures or dangerous conditions (e.g. lack of oxygen).

Some confined spaces are fairly easy to identify, e.g. enclosures with limited openings:

- storage tanks;
- silos;
- reaction vessels;
- enclosed drains;
- sewers.

Others may be less obvious, but can be equally dangerous, for example:

- open-topped chambers;
- vats;
- combustion chambers in furnaces etc;
- ductwork;
- unventilated or poorly ventilated rooms or spaces.



Some places may become confined spaces when work is carried out, or during their construction, fabrication or subsequent modification. Confined spaces can be found inside and outside buildings and can be both small and large in nature.



## **What are the dangers from confined spaces?**

Dangers can arise in confined spaces because of:

- a lack of oxygen;
- the introduction of poisonous gases, fumes or vapours;
- the influx of liquids and/or solids which can suddenly fill the space;
- residues left in the space which can give off gas, fume or vapour;
- dusts when present in high concentrations, e.g. in flour silos or wood dust in a small room; or
- hot conditions leading to a dangerous increase in body temperature.

Whilst some of these situations may already be present in the confined space, some may arise as a result of the work being carried out, or because of ineffective isolation of plant nearby, e.g. leakage from a pipe connected to the confined space.

## **Risk Assessments and Safe Systems of Work**

The Council are required to undertake a suitable and sufficient assessment of the risks associated with all work activities, this includes work within a confined space. The result of the assessment will generate a task specific work instruction, known as a "safe system of work". It is this safe system of work that will be used to ensure those working in or around a confined space are kept as safe as possible.

The system of work will detail the manner in which the work will take place, the content and level of training needed by those undertaking the activity and the emergency/rescue processes that will be needed in order to allow the activity to take place. Detailed guidance on managing confined space work is available on CONNECT.

## **Actions**

When you have been asked to undertake work within or around a confined space you need to follow the instructions you have been given so you and your colleagues can do so safely.

If you have been asked to work in what you believe to be a confined space and have not received task specific training/briefings then speak to your line manager before starting work

There may be occasions where you will be asked to contribute to a risk assessment and you should do all you can to help.

It is important that you understand the emergency procedures associated with the confined space work as it is not unusual for untrained rescuers to be injured or killed when trying to help

If you have any questions or need clarity on how work within a confined space is to take place then discuss this with your line manager or Service Health and Safety team.

**Impact Assessments**

**Document Title:** Health and Safety Policy - Arrangement Section 29 – Work In Confined Spaces

**Date:** 1 April 2017

**Review Date:** As circumstances dictate

**Environmental Impact Assessment:** This document has been assessed for significant environmental impact; no detrimental impact has been identified

**Equality Impact Assessment:** This document has been assessed for significant equality implications; no significant issues have been identified.

**General Comments:** This document is the arrangement section relating to safe working in and around confined spaces and is associated with the Council's health and safety policy required by the Health and Safety at Work Act 1974. The general aim of the council is to ensure a healthy and safe working environment for all persons working for, or make use of, Council Services. Nothing in the document serves to have any negative impact on the above issues and indeed, in general, associated documents will encourage positive consideration of the factors to ensure all members of the workforce and community are afforded access to the same safe and healthy workplace