

ESTATES OPERATIONS

HEALTH & SAFETY DOCUMENT	-	CODE of PRACTICE
DOCUMENT TITLE	-	CONFINED SPACES
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Please Note – the guidance provided in this Code of Practice pertains only to the Estates Operations Group and its operations. For Imperial College Health & Safety policies and Codes of Practice go to: <http://www.imperial.ac.uk/estates-facilities/health-and-safety/safety-guidance/>.

INTRODUCTION

This Code of Practice sets out the arrangements considered to be appropriate for the safe management within confined spaces, tunnels and service risers within the College.

Over and above the general duty of care owed by the College to its staff, students and others under the Health and Safety at Work etc. Act 1974, all work that requires access into confined spaces is legislated by the Confined Spaces Regulations 1997. The use of any personal protective equipment will be covered by the Personal Protective Equipment Regulations 1992 (as amended), with the requirement to undertake a risk assessment legislated by the Management of Health and Safety at work Regulations 1999. The Control of Substances Hazardous to Health Regulations 2002 will be applicable where hazardous substances may be present within the confined space.

This Code of Practice provides the following:

- A definition and the scope of the applicable Regulations
- The duties Imposed on the employer/employee/others
- Types of personal protective equipment
- Further guidance

1. Overview and Introduction to Personal Protective Equipment

The Confined Spaces Regulations 1997 Require employers to undertaken a number of key duties. These include avoiding entry to confined spaces in the first instance e.g. by doing the work from outside. If this is unavoidable, a safe system of work will be required. Additionally an adequate emergency plan will be required prior to the commencing of any work within a confined space.

The Management of Health and Safety at Work Regulations 1999 require employers and self-employed people to carry out a suitable and sufficient assessment of the risks for all work activities for the purpose of deciding what measures are necessary for safety. For work in confined spaces this means identifying the hazards present, assessing the risks and determining what precautions to take.

The Personal Protective Equipment Regulations 1992 (as amended); these 'PPE' regulations place duties to provide employees and visitors with the appropriate PPE. The principle requirement is that PPE is to be supplied and used at work, wherever there are risks to health and safety that cannot be adequately controlled in other ways. Further guidance can be found in the Estates Operations' [Code of practice on PPE](#).

Control of Substances Hazardous to Health Regulations 2002 (as amended) COSHH provides a legal framework to protect people against health risks from hazardous substances used at work. It applies wherever there is a risk at work of health effects from skin exposure to hazardous substances. Further guidance can be found in the Estates Operations' *Code of Practice on Substances Hazardous to Health*.

2. Duties Imposed on the Employer/Employees/Others

The Confined Spaces Regulations 1997 and the Management of Health and Safety at Work Regulations 1999 place duties on the employer to carry out a suitable and sufficient assessment of all work activities.

For work involving confined spaces this means identifying the hazards present, assessing those risks associated, and determining what precautions to take.

To this end Estates Operations will undertake an assessment, including consideration of:

1. the task;
2. the working environment;
3. working materials and tools;
4. the suitability of those carrying out the task;
5. arrangements for emergency rescue.

Within the College environment there are a number of confined spaces. These include mechanical and electrical risers, and some service tunnels. In the majority of these instances the frequency of access is very low. In others, access is required on a more regular basis.

In order to ensure the safety of persons who enter a confined space on a College site, a safe system of work will be required.

Safe Systems of Work

The results of the specific risk assessment undertaken will assist in identifying the necessary precautions which are required. Everyone involved will be required to be appropriately trained and instructed to ensure they are aware of what procedures to follow. The following includes the main elements of what should be contained within a safe system of work for confined spaces:

1. A competent supervisor will be required to be appointed to ensure that the necessary precautions are taken, and to ensure that the safe system of work is followed and adhered to at each stage.
2. Only competent persons who have the relevant experience and qualifications will be allowed to access confined spaces. Factors relating to individual fitness, ability to wear breathing apparatus, and medical advice on an individual's suitability may be required.
3. It will be important to ensure that, where practicable, mechanical and electrical equipment within the confined space is isolated. Checks should be made to ensure that pipework etc is well maintained to prevent the release of gas, fumes or vapours into the confined space.
4. It may be necessary to clean the confined space before entry, ensuring that fumes do not develop from residues while work is being carried out.
5. The size of the entry point to the confined space will need to be examined to ensure that persons can gain access while wearing the relevant PPE, and also to ensure that persons can enter and exit in the event of an emergency.
6. Consideration must be given to ventilation and the possible installation of mechanical ventilation to ensure a steady supply of fresh air. This is important in those confined spaces where portable gas cylinders and diesel fuelled equipment are used.

7. Tests will be required before entry to the confined space to ensure that the air is free from both toxic and flammable vapours and, oxygen levels are not depleted below a factor of 19.5%. Testing should be carried out by a competent person.
8. Special consideration must be given to the use of non-sparking tools and specially protected lighting. This is important where flammable or potentially explosive atmospheres are likely.
9. If the air inside the space cannot be made suitable to breathe because of gases, fumes or vapours, then the provision of breathing apparatus will be required.
10. The safe system of work will require the development of an emergency plan (see below).
11. An effective communication system will need to be established, allowing for the person within the confined space to summon help in the event of an emergency.
12. The confined space work should be subject to a formal 'permit to work' system. For further guidance please refer to Estates Operations' [Permit to Work System Code of Practice](#).

Emergency Procedures

The College has a duty to put in place an emergency plan which will ensure that staff working in the confined space can be rescued in an emergency. An emergency plan will take in to account the nature of the confined space, the risks which have been identified, and consequently the likely nature of an emergency rescue.

Rescuers

Staff who may be involved in any emergency rescue must be adequately trained, sufficiently fit to carry out their task, ready at hand, and capable of using any equipment provided for rescue.

Rescuers will also need to be protected against the cause of the emergency. It may be necessary to shut down adjacent plant before attempting any emergency rescue.

Consideration must also be given to the provision of appropriately trained first aiders and the main point of contact for liaising with the emergency services on their arrival.

Appendix 1 - Guidance Documents Available:

Safe Work in Confined Spaces

Further guidance on the safe working within confined spaces can be found at the following link:

<http://www.hse.gov.uk/pubns/indg258.pdf>

Confined Spaces Regulations 1997

The link below provides an electronic copy of the regulations:

<http://www.legislation.gov.uk/ukxi/1997/1713/contents/made>