

HS40 Working in Confined Spaces | Standard Operating Procedure

1. Background information

1.1. Introduction/Purpose

1.1.1. This Standard Operating Procedure (SOP) details the processes for working in confined spaces at SOAS University of London.

1.2. Definitions

1.2.1. Confined Space - A confined space is one which is both enclosed, or largely enclosed, and which also has a reasonably foreseeable risk to workers of fire, explosion, loss of consciousness, asphyxiation or drowning.

- It may be small and restrictive for the worker or it could be far larger such as a grain storage silo with hundreds of cubic metre capacity.

1.3. Roles and Responsibilities

1.3.1. Permit Holders - The person holding the permit has the responsibility to ensure that all reasonable precautions are taken, and that all persons under their control are aware of the risks involved, and the means to minimise them.

2. Main Content

2.1. Precautions for Working in Confined Spaces

- 2.1.1. The person holding the permit has the responsibility to ensure that all reasonable precautions are taken, and that all persons under their control are aware of the risks involved, and the means to minimise them.
- 2.1.2. All ladders used in gaining access to the confined space must be securely fastened and to SOAS standards.
- 2.1.3. Where possible, the air should be tested (prior to entry) to ensure that it is not stale or explosive, using an appropriated measuring device (test for oxygen and hydrogen sulphide content plus any explosive mixtures).
 - DO NOT ENTER THE SPACE IF THE TESTS SHOW THAT THE AIR IS DANGEROUS.
- 2.1.4. Ensure that people entering the space have an understanding of the potential risks and know the precautions to be taken once inside.
- 2.1.5. There should be a second person standing by outside, to watch and to communicate with anyone inside. There should be a second person standing by outside, to watch and to communicate with anyone inside.
- 2.1.6. Rescue harness should be worn when entering the confined space, with a lifeline attached if possible.
- 2.1.7. When hoisting or lowering materials, the lifting area should be made secure, and a safe system of raising and lowering items used.
- 2.1.8. Petrol or diesel engines must not be used in a confined space.
- 2.1.9. Avoid the use of paints and adhesives, which give off dangerous solvent vapours.
- 2.1.10. The use of facemasks is recommended where there are particles present in the air or breathing apparatus if available.
- 2.1.11. Never attempt to clear fumes or gases with pure oxygen, use either forced or natural ventilation.

2.2. Training and Supervision

- 2.2.1. Everybody employed in this type of work should be properly trained to recognise the dangers and to know what steps to take to avoid them.
- 2.2.2. The safety person should be familiar with basic rescue and resuscitation techniques.
- 2.2.3. The work must be adequately supervised, and continually monitored to ensure it's progressing safely.

2.3. The Hazards

- 2.3.1. Working in a confined space is dangerous because of the risks from noxious fumes, reduced oxygen levels, or a risk of fire.
- 2.3.2. Other dangers may include flooding/drowning or asphyxiation from some other source such as dust, grain or other contaminants.

2.4. Reducing Risks

- 2.4.1. SOAS advises, wherever possible, to avoid carrying out tasks in confined spaces. Where this is not possible, risks of the particular confined space must be assessed and plans created to show how the university will control those risks. For example:
 - If a confined space has noxious fumes, consideration should be given to how these can be ventilated or removed.
 - If there is a risk of liquids or gases flooding in, establish whether the valves can be locked shut.
 - If someone is going into a confined space and there is not enough oxygen to breathe properly, breathing apparatus must be provided or the space must be ventilated to increase oxygen levels before entering.
- 2.4.2. There should be emergency arrangements where necessary. -If someone is working in a confined space, the following must be considered:
 - How you will know they are okay and haven't been overcome by fumes.
 - How you will get them out if they are overcome. (It is not enough to rely on emergency services.)

2.5. The Dos and Don'ts of Working in Confined Spaces

2.5.1. Do...

- Be aware of the risks that may occur within a confined space.
- Ensure the person doing the work is capable and trained in both the work and the use of any emergency equipment.

2.5.2. Don't...

- Work in confined spaces unless it's essential to do so.
- Ignore the risks – just because a confined space is safe one day doesn't mean it will always be.
- Let others enter a confined space until you are sure it's safe to do so.