

Aston University Estates & Facilities Department  
Confined Spaces Policy and Procedure  
Version date, 12<sup>th</sup> February 2010

## Policy Principles.

**This Policy assumes that a ‘suitable and sufficient’ Risk Assessment and Method Statement are in place prior to entering the following areas.**

There are two reasons to enter a confined space:-

- 1) To inspect and operate equipment or services.
- 2) To carry out work.

There are three types of ‘confined space’ categories at Aston University

- 1) Category **GREEN** zone
- 2) Category **AMBER** zone
- 3) Category **RED** zone

Category **GREEN** zone means:-

- 1/. An area that has a restricted access and/or egress as identified by the managers but can be subject to **One Man Working**.
- 2/. The person who is to work in this area is to report to the supervisor’s office to record the work and area etc on the Control Board before entering. Currently there are two control boards situated in the Estates and Facilities offices (SW707) and the Estates Supervisors corridor (LG 129). It is considered that ‘One Man Working’ is ‘safe’ under normal working conditions.
- 3/. If the worker needs to ‘over-run’ his expected time of egress, he is to inform the supervisor. If the time of expected egress has elapsed the supervisor is to investigate the reason for the “no show” immediately.
- 4/. In case of an incident, a rescue plan is to be implemented to suit the situation.

Category **AMBER** zone means;-

- 1/. An area that has a restricted access and/or egress as identified by the managers is to be subject to **‘Two Man Working’**.
- 2/. The persons who are to work in this area are to report to the supervisor’s office to record the work and area etc on the Control Board. It is considered that ‘Two Man Working’ is ‘safe’ under normal working conditions.
- 3/. In case of an incident, a rescue plan is to be implemented to suit the situation.

Category **RED** zone means;-

- 1/. An area that has a restricted access and/or egress as identified by the managers is to be subject to a minimum **‘Three Man Working’** strictly utilising the SWP 12/04 (as attached) **for directly employed staff**.

Contractors will be required to provide their own risk Assessment and method statement for these areas.

2/. The persons who are to work in this area are to report to the supervisor's office to record the work and area etc on the Control Board. It is considered that 'Three Man Working' is 'safe' under normal working conditions.

3/. In case of an incident, a rescue plan is to be implemented to suit the situation.

**GREEN**, **AMBER** and **RED** zones are recognised by local signage within the designated areas and on drawings.

Currently areas considered **GREEN** zones are:-

MB sub basement.

SW & NW sub basements.

L36 basement areas.

MB Pipe Ducts (between LG and Sub-basement).

Currently areas considered **AMBER** zones are:-

MB corridor overhead ducts.

MB Great Hall, Rigging Area and Roof Void

LG 77

Woodcock Sports Centre Basement.

Currently areas considered **RED** zones are:-

MB Pipe Ducts, all cul-de-sacs.

All District Heating chambers and ducts.

**To enable control of individuals entering confined spaces a 'Control Board' is located at the Estates and Facilities Supervisors & Managers Office Area's and all staff/contractors that need to enter the controlled areas are to be entered on the appropriate Control Board.**

**Items to be recorded include; date, time, place visiting & duration/time out.**

## **Clarification of Zone Types.**

**GREEN ZONE** - An area where the atmosphere is not suspect and access is acceptable but the area is not normally a visited area. One man working but will be indicated on the Control Board.

**AMBER ZONE** - An area where the atmosphere is not usually suspect but access/egress is restricted. Two Man Working is required and to be entered on the Control Board.

**RED ZONE** - An area that may have a depleted and/or an explosive atmosphere where atmosphere tests and an access 'PWT' is required and entered on the Control Board.

**The following instructions must be observed before, during and after entry into any confined space identified as:-**

**GREEN ZONE**

- 1/. Any area that has a restricted access and/or egress as identified by the managers is to be subject to **One Man Working**.
- 2/. The person who is to work in this area is to report to the supervisor's area to record the work and area on the Control Board before entering. **Communication devices will be agreed upon/issued at this stage.**  
It is considered that 'One Man Working' is 'safe' under normal working conditions.
- 3/. If the worker needs to over-run his expected time of egress, he is to inform the supervisor. If the time of expected egress has elapsed the supervisor is to investigate the reason for the "no show" immediately.
- 4/. In case of an incident, a rescue plan is to be implemented to suit the situation, See appendix 1.

**All entries on the 'Control Board' must be cleared as each job is completed.**

**The following instructions must be observed before, during and after entry into any confined space identified as:-**

**AMBER ZONE**

- 1/. Any area that has a restricted access and/or egress as identified by the managers is to be subject to **'Two Man Working'**.
- 2/. The persons who are to work in this area are to report to the supervisor's area to record the work and area on the Control Board. **Communication devices will be agreed upon/issued at this stage.**  
In this zone Two Man Working is considered to be safe under normal operating conditions.
- 3/. In case of an incident, a rescue plan is to be implemented to suit the situation, See appendix 1.

**All entries on the 'Control Board' must be cleared as each job is completed.**

**Following are instructions that must be observed before, during and after entry into any confined space identified as:-**

**RED ZONE**

**SAFE WORKING PRACTICE. SWP12/04.**

**ENTERING AND WORKING IN A CONFINED SPACE.**

During the normal course of the working day and as a part of a planned operation, there may be a requirement to enter and work in a confined space. This may entail entry for just inspection or to operate valves and work on systems/equipment.

**Regulations regarding Confined Spaces can be found in  
“Confined Space Regs 1997”  
“Management of H&S Regs 1999”.**

**A Confined Space is defined as: - (General Safety Regulations – OHSA).**

*Confine Space means an enclosed, restricted or limited space in which, because of its construction, location or contents, or any work activity carried on therein, a hazardous substance may accumulate or an oxygen-deficient atmosphere may occur, and includes:*

- *any chamber, tunnel, pipe, sewer, container, valve, pump, sump, or similar construction, equipment, machinery, or object in which a dangerous concentration of gas, vapour, dust or fumes may be present.*

1/. Persons (directly employed by Aston University) selected by the Supervisor to be in charge, (**Selected Person**) is to gather together all confined space entry equipment and check the condition and operation of all items including test meters and monitors.

**Communication devices will be agreed upon/issued at this stage.**

This equipment will be stored in the Fitters Workshop and Supervisors Office when not in use. This equipment is to be checked and tested regularly as part of the PPM. A list of all equipment is to be kept for checking against.

Contractors utilising this Policy will provide their own risk assessment, method statement and air monitoring equipment along with ‘evidence of tests/maintenance’ as required including lighting if necessary.

2/. There will be a minimum of three staff present to set up, test and enter the confined space, one of which will be the Selected Person. All are to be trained in confined space entry. A maximum of two persons are to enter with a **“Surface Safety Person”** at the entrance. They are to remain in contact with each other at all times. A **“Permit-to-work form”** is to be used in the preparation for entry to the area. This is to be filled in by the Selected Person and counter signed by the supervisor.

3/. Open access to the space. Selected Person is to sample the atmosphere using **Multi Gas Test Unit**. - The area is to be sampled at regular levels when descending into a below ground area and every two meters when accessing from the side. Results of the samples are to be recorded on the permit-to-work form. When first entering to test the atmosphere, the first worker to enter is to be wearing a full body harness attached to a safety line on the tripod system. He must be carrying his “Head 10 set” and be wearing his Oxygen monitor. **No other person is to enter until the recordings of the atmosphere have been assessed.**

4/. At all times when inside a confined space, the workers must wear the **Personal Oxygen alarm. They are to have a “Head 10” Emergency Breathing Set,** (which is to be donned immediately if the O2 monitor alarms and BOTH workers are to evacuate the area). They are to obey any instruction to evacuate from the “**Surface Safety Person**”. **Who is in charge of the operation and he must stay in contact with the staff inside the space at all times. The Multi Gas Test Unit is to be in use with the extension pipe run from the entrance to the area where the work is taking place. This is to be monitored constantly by the “Surface Safety Person”.**

5/. Any confined space that is left open must be fully fenced off before vacating the area. When returning to the area the confined space is to be re-tested and results recorded before entry is attempted. **This is especially relevant if the area has been left overnight. A new Permit will be issued every 24 hours or less.**

6/. If in any doubt as to the safety of those in the confined space, the Surface Safety Person is to order the evacuation of the space. He is not, under any circumstances, to enter the confined space himself but is to seek help from others. If at any time an incident occurs where a person is incapacitated, a Rescue Plan for the situation is to be implemented, see appendix 1.

7/. At all times the workers in the confined space must wear the appropriate PPE i.e.: hard hats, safety boots and gloves. They are to carry a torch if required.

8/. If an explosive atmosphere is suspected when testing the confined space, **OR** alarms on the **Multi Gas Test Unit activate** during work operations, **OR** if in any doubt, **NO WORK** is to be undertaken. The confined space is to be ventilated until it is tested clear of explosive gasses in conjunction with the appropriate Risk Assessment.

9/. Once all work has been completed, the **Selected Person** is to ensure that all tools, equipment and rubbish are removed from the area. The confined space is to be re-sealed and the confined space permit-to-work is to be signed off by the supervisor. All entry equipment is to be checked against the list, cleaned as required and stored back in the Fitters Workshop.

**All entries on the ‘Control Board’ must be cleared as each job is completed.**

Appendix 1  
Rescue Plans  
**Green Amber** and **Red** Zones

*Green Zone Rescue Plan*

- 1) Utilising communication devices raise the alarm with the Security Officers clearly stating your location and type of emergency.
- 2) Utilising communication devices alert your Supervisor and/or colleagues who may be able to assist with isolations etc re specialist site knowledge outside the green zone.
- 3) **Persons concerned in items 1 & 2 above will liaise to agree actions, in particular with reference to the possibility of explosive or oxygen depleted atmospheres in the rescue area.**
- 4) If safe to do so (and you are capable) remove yourself from any known hazards, i.e. rising water levels, hot pipe work or gas systems discharge, electrical hazards.
- 5) Await rescue party while maintaining communications in a safe position.

*Amber Zone Rescue Plan*

- 1) Utilising communication devices raise the alarm with the Security Officers clearly stating your location and type of emergency.
- 2) Utilising communication devices alert your Supervisor and/or colleagues who may be able to assist with isolations etc re specialist site knowledge outside the amber zone.
- 3) **Persons concerned in items 1 & 2 above will liaise to agree actions, in particular with reference to the possibility of explosive or oxygen depleted atmospheres in the rescue area.**

- 4) If safe to do so (and you are capable) enter amber zone to attend your colleague but do not subject yourself to any known hazards, i.e. rising water levels, hot pipe-work or gas systems discharge, electrical hazards etc.
- 5) Await rescue party while maintaining communications in a safe position.

### *Red Zone Rescue Plan*

- 1) Utilising communication devices raise the alarm with the Security Officers clearly stating your location and type of emergency.
- 2) Utilising communication devices alert your Supervisor and/or colleagues who may be able to assist with isolations etc re specialist site knowledge outside the Red zone.
- 3) **Persons concerned in items 1 & 2 above will liaise to agree actions, in particular with reference to the possibility of explosive or oxygen depleted atmospheres in the rescue area.**
- 4) If safe to do so enter the nearest amber zone (in relationship to the Red Zone) to await the security team leader but do not subject yourself to any known hazards, i.e. rising water levels, hot pipe-work or gas systems discharge, electrical hazards etc'.
- 5) Await rescue party while maintaining communications in a safe position.