UNIVERSITY OF SOUTH CAROLINA

CONFINED SPACE ENTRY

Introduction

A confined space is any space that is large enough for an employee to enter, that has a restricted means of entry or exit, and that is not designed for continuous employee occupancy. All of these criteria must be met for a space to be classified as confined. Examples of confined spaces include tanks, pits, certain tunnels, utility vaults, and boilers. The physical and atmospheric hazards often associated with confined spaces can cause serious injury or death to workers. The major factors that lead to injuries in confined spaces include failure to recognize and control these hazards, and inadequate or incorrect emergency response.

Scope and Application

The Occupational Safety and Health Administration (OSHA) requirements apply to most activities that require entry into a confined space. Examples of specific activities include, but are not limited to, the following:

- Maintenance and cleaning of boilers
- Cutting or welding in confined spaces
- Telecommunications and electrical utility work performed in manholes and unvented vaults
- Work in excavations or trenches that could develop hazardous atmospheres
- Work in sewers, manholes, pits, traps, and the like

Program Description

Workplace Survey and Evaluation of Confined Spaces

Departments must conduct a survey of their workplace to determine if any confined spaces exist. As part of the survey, confined spaces must be evaluated to determine if any physical or atmospheric hazards are associated with them. Assistance in confined space identification and evaluation is available through Environmental Health and Safety (EHS).
Written Confined Space Entry Program

Departments whose workers are expected to enter confined spaces must develop a written program that outlines procedures to be used for safe entry. These procedures are usually incorporated into a written entry permit and may include provisions from other programs, such as lockout/tagout. A model Written Confined Space Entry Program is available from EHS, or you may download one from the EHS website.

Protective Equipment and Material

Several types of protective equipment and material are usually necessary for safe entry into confined spaces. These may include equipment for atmospheric testing, ventilation, communication, lighting, and rescue. Personal protective equipment appropriate for the hazards of the space must also be provided to workers.

Training

All authorized employees who enter or work in a confined space or serve as entry supervisor, qualified person, attendant/standby person, or rescue person will receive safety and health training to minimize the occurrence of accidents and adverse health conditions.

Emergency Rescue

In an emergency the attendant/standby person(s) are to maintain unobstructed lifelines and communication to all workers within the confined space, and summon rescue personnel (U.S.C. Police at 777–9111) if necessary. Under no circumstances should the attendant/standby person enter the confined space. While awaiting rescue assistance, the attendant/standby person will make rescue attempts utilizing the lifelines from outside the confined space.

Contractors

Departments must inform outside contractors of the potential hazards that may be encountered during their work at the University. This includes giving the contractor access to any information available on the confined spaces involved in their project.

Similarly, the contractor must inform the Department of any changes made to a confined space in the course of their work. Any change, no
matter how minor, would require a re-evaluation of the space before entry would again be allowed.

Roles and Responsibilities

Department

- Survey workplace to identify any confined spaces.
- Evaluate confined spaces found during the workplace survey.
- Evaluate program and procedures at least annually.
- Provide necessary protective equipment and materials.
- Provide specific training for confined space entry.
- Provide contractors with information on any confined spaces that are involved in a project.

Supervisors

- Recognize confined spaces in the workplace.
- Identify workers who may be expected to enter confined spaces.
- Ensure workers receive general and specific training.
- Ensure workers follow all appropriate procedures during confined space entries.

EHS

- Provide general training.
- Assist in identification and evaluation of confined spaces and their hazards.

Individual

- Attend training.
- Never enter a confined space unless following proper procedures.
- Report potentially hazardous conditions to supervisors.

For More Information

- Contact the USC Employee Safety Coordinator at 777-5269
- A model Written Confined Space Entry Program is available through EHS, or you may download the program and appendices from the EHS website.
- A Confined Space Entry Self-Audit Checklist is available through EHS. The [checklist](#) and [key](#), both in Microsoft Word, may be
downloaded and either printed as is or customized to meet the
needs of the particular user.

- A copy of 29 CFR 1910.146 is available through EHS or the OSHA
  Website