UNIVERSITY FACILITIES

Standards & Procedures

Confined Space

Summary

University Facilities (UF)
Internal Procedure: 01.B.10.01
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Approved by: Bob Wells, updated Todd Barnette

This document establishes official Procedure for working in a confined space.

Program Objective

Clemson University Facilities has established standard work practices and procedures necessary for personnel protection when entering and working within confined spaces. These work practices and procedures shall be incorporated in all procedures that cover confined space entry.

Scope

This standard is written to define the components of the UF Confined Space Entry Program and to define responsibilities for assuring that all requirements for confined space entry, documentation and training are met.

Confined Space

A space that is large enough and so configured that an employee can bodily enter and perform assigned work; and has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and is not designed for continuous employee occupancy.

Permit Required Confined Space

A space (such as, tanks, vessels, bins, silos, boilers, vaults, pits, ditches, or sewers) which can be completely entered, has limited or restricted means of egress, is not intended for continuous employee occupancy and has one or more of the following characteristics:

- Contains or have the potential to contain a flammable, explosive, acid, caustic, toxic, oxygen enriched, oxygen deficient, or noxious odor atmosphere.
- Contains a material that has the potential for engulfing an entrant
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
- Contains any other recognized serious safety or health hazard; such as, ionizing radiation, electric shock, temperature extremes, or moving parts.

Identification/Recognition

All campus locations which are considered to be permit-required confined spaces shall be identified as specifically as possible, including area or room, the building and its specific address. Entry into these spaces shall be subject to the provisions of the Clemson University Confined Space Program found in the Comprehensive Environmental Health and Safety Plan.

Known permit-required confined spaces at Clemson University:

- Manholes
- Tunnels*
- Steam Plant: boilers, smoke stacks, bag house, coal elevators
- Amphitheater – under floor
- HVAC ducts • Water cooling towers
- Tanks
- Silos
- Waste Treatment Plant: bar screen pits, raw sewage sump pumps, clarifiers, digester tanks, belt press sump pumps.

*Each tunnel has been surveyed for hazards or potential hazards within. The survey was conducted by a team of qualified individuals from University Facilities and EHS.

The following hazards or potential hazards have been identified and are common to all tunnels:

- Extreme heat.
- Low overhead, head bumping hazards.
- High Voltage electrical hazards.
- Tripping/slipping hazards.
- Compressed gas (steam).
- Biological hazards within the tunnel.
- Mechanical hazards (i.e., piping hazards).

This Document is intended to be a summary of the program. For more information, please contact Tim Nix at: tnix@clemson.edu