

University of Delaware
Environmental Health and Safety Protocol

Section: Construction/Facilities Safety

Protocol Name: Confined Space Work

Origination Date: April 27, 2015

Revisions: February 2019

Protocol Number: C-02

I. SCOPE OF PROTOCOL

This protocol addresses confined space work and applies to all University departments and contractors.

II. DEFINITIONS

A. Confined Space

1. A confined space is large enough and so configured that an employee can bodily enter and perform assigned work; and has limited or restricted means for entry and exit; and is not designed for continuous employee occupancy.
2. A confined space includes, but is not limited to, any of the following if the criteria set forth in the above definition are met:
 - a. Storage tanks, process vessels, bins, tank trailers, and other tank-like compartments usually with one or more manholes for entry
 - b. Open-topped spaces of more than 4 feet in depth such as bins, silos, pits, vats, tubs, vaults, vessels, floating roof storage tanks, trenches, and excavation pits
 - c. Ventilation or exhaust ducts, manholes, sewers, tunnels, pipelines, and similar structures
 - d. Ovens, furnaces, kilns, boilers, and similar structures

B. Permit Required Confined Space

1. A permit required confined space has one or more of the following characteristics:
 - a. Contains or has a potential to contain a hazardous atmosphere
 - b. Contains a material that has the potential for engulfing an entrant
 - c. 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
 - d. Contains any other recognized serious safety or health hazard

C. Non-Permit Required Confined Spaces

1. A non-permit confined space does not contain or have the potential to contain any hazard capable of causing death or serious physical harm

III. PROTOCOL STATEMENT

- A. No University personnel shall enter a permit-required confined space except with the approval of and in accordance with procedures established by the Department of Environmental Health and Safety.
- B. No contractor shall enter a permit-required confined space except with the approval of and in accordance with procedures established by their company.
- C. Permit-Required Confined Space Personnel: The following individuals are required when entry into a PRCS is necessary. Employees shall receive the appropriate level of training before entry into the Confined Space is permitted. Note: An attendant can also act as an entry supervisor if properly trained.
 1. Entry Supervisor
 2. Attendant
 3. Entrant(s)
- D. Signage: When practical, all permit-required confined spaces shall be permanently marked. A sign shall be installed at each opening of the permit required confined space. Signs should contain the following text or similar language: DANGER – PERMIT REQUIRED CONFINED SPACE DO NOT ENTER. Spaces not permanently marked (ex. manholes) shall be posted with a portable sign when access to the spaces is required.
- E. Confined Space Entry Permits shall be completed in accordance with the established procedures and filed with the Department of Environmental Health and Safety.
- F. The Department of Environmental Health and Safety may evaluate confined spaces and confined space activities.
- G. Contractors and Subcontractors must have written Confined Space Entry programs equal to or exceeding the requirements of this Protocol and the EHS Confined Space Program.

IV. RETENTION OF RECORDS

- A. Canceled Permits and other documentation shall be retained by the departmental Program Records Coordinator not less than one year following the date of entry. If departments conduct a single annual review covering all entries during a 12-month period, then the permits have to be retained for the duration between reviews. After the annual review, provide the canceled permits to EHS. EHS shall retain the permits as employee exposure records.
- B. Employee training records shall be retained by EHS for the length of employment.

V. PROTOCOL STANDARDS AND PROCEDURES

- A. OSHA standard 1910.146 “Permit-required confined spaces”

- B. ANSI/ASSP standard Z117.1 - 2016 "Safety Requirements for Entering Confined Spaces"
- C. Department of Environmental Health and Safety "Confined Space Program"

For more information regarding this policy, contact the Department of Environmental Health and Safety 302-831-8475.