

UNIVERSITY OF TOLEDO

SUBJECT: CONFINED SPACE PROGRAM

Procedure No: S-08-019

PROCEDURE STATEMENT

Safe procedures, as defined by the Occupational Safety and Health Administration (OSHA) and described below, shall be followed by all University of Toledo personnel prior to entry into a confined space.

PURPOSE OF PROCEDURE

To ensure the safety and health of employees and outside contractors at the University of Toledo through compliance with regulations promulgated by OSHA in 29CFR1910.146.

DEFINITION

Confined Space means a space that:

1. Is large enough and so configured that an employee can bodily enter and perform assigned work;
2. 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
3. Is not designed for continuous employee occupancy.

Permit-required Confined Space (permit space) means a confined space that has one or more of the following characteristics:

1. Contains or has a potential to contain a hazardous atmosphere;
2. Contains a material that has the potential for engulfing an entrant;
3. 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
4. Contains any other recognized serious safety or health hazard.

Hot Work Permit means the employer's written authorization to perform operations (for example, riveting, welding, cutting, burning, and heating) capable of providing a source of ignition.

Attendant means an individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the employer's permit space program.

Authorized Entrant means an employee who is authorized by the employer to enter a permit space.

Hazardous Atmosphere means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:

1. Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL);
2. Airborne combustible dust at a concentration that meets or exceeds its LFL;
3. Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent;
4. Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances, and which could result in employee exposure in excess of its dose or permissible exposure limit;

NOTE: An atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision.

5. Any other atmospheric condition that is immediately dangerous to life or health.

NOTE: For air contaminants for which OSHA has not determined a dose or permissible exposure limit, other sources of information, such as Safety Data Sheets (SDS) that comply with the Hazard Communication Standard, section 1910.1200 of this Part, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

RESPONSIBILITY

The appropriate Facilities Maintenance Supervisor, or their designees, in conjunction with Environmental Health and Radiation Safety Department, are responsible for the initiation and execution of approved confined space entry procedures as defined by the Confined Space Entry Permit issued for entry.

PROCEDURE

A. Hazard Identification

Facilities Maintenance supervisors shall identify all spaces, meeting the criteria listed in the definition, which they believe may be a confined space, or a permit required confined space, in which it is reasonably anticipated that employees may be required to enter. (See current list attached.)

B. Entry into non permit required confined spaces

Entry into non permit spaces does not require the use of a confined space permit. Entrants are not required to have an attendant, rescue gear, or a rescue team. Entrants into non permit spaces should be acutely aware of any changes in or to the space which could result in the space becoming a permit required confined space.

C. Entry into permit spaces

Permit required confined spaces require the use of an entry attendant, effective rescue equipment, and available, trained rescue team. The University of Toledo does not allow entry into permit required confined spaces by its employees. Any work that must be completed in a permit required confined space must be appropriately contracted out to a vendor who can enter the space in accordance with 29 CFR 1910.146 (OSHA Permit Required Confined Space Standard) or entered under the PRCS C-5 or PRCS C-7 procedure, if applicable.

D. Reclassification of some permit spaces (PRCS C-5 and PRCS C-7)

Some permit required confined spaces on campus may be entered after reclassification. This procedure is known as PRCS C-5 or PRCS C-7.

1. PRCS C-5

If the only hazard posed by the permit required confined space is a (potential) hazardous atmosphere, and the space is proven safe through documented monitoring and continuous forced air ventilation, then the space may be temporarily reclassified as a PRCS C-5 and entry may take place by University of Toledo personnel. All personnel needing to enter a permit required confined space under the PRCS C-5 procedure must request and receive assistance (every time) from the Environmental Health and Radiation Safety Department before entering the space.

2. PRCS C-7

If the only hazard posed by the permit required confined space is mechanical in nature, and the hazard can be effectively eliminated from outside the space, then the space may temporarily be reclassified as a PRCS C-7. All personnel needing to enter a permit required confined space under the PRCS C-7 procedure must

request and receive assistance (every time) from the Environmental Health and Radiation Safety Department before entering the space.

E. Personal Protective Equipment

Personal protective equipment is never a substitute for the creation of safe working conditions and good judgement on the part of the worker and supervisory personnel. All personal protective equipment shall be selected based upon a hazard assessment of the job.

F. Training

The appropriate Supervisor shall ensure that his/her employees receive training on this procedure's requirements and personal protective equipment (where such protection is required) prior to entry of any confined space.

G. Outside Contractors

When outside contractors must enter a known confined space, it is the duty of the appropriate supervisor to provide a copy of the OSHA Standard on confined space entry to that contractor. In this case, the "appropriate" supervisor is the supervisor with primary knowledge of the work to take place. In addition to providing a copy of the standard, the supervisor shall enable, to the degree possible, the contractor to provide for safe practices for their employees. The supervisor shall provide assurance to the Environmental Health and Radiation Safety Department as to the effectiveness and use of the contractor's confined space entry program.

Source: Safety & Health Committee

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1/1/05

12/28/07

12/15/10

12/11/13

12/11/16

LIST OF HEALTH SCIENCE CAMPUS CONFINED SPACES

Building	Space	Location	Classification
Steam Tunnels:			2,4
Educare			
Main Campus to P.H.			
P.H. to Dana			
Storm Sewer Manholes (deeper than 4 feet)		Various	2,4,PRCS
Heatherdowns Boiler	Educare	Basement Mechanical Space	1,2,4,PRCS
Underground Storage Tanks		Various	2,3,4,PRCS
Air Handlers: (those large enough to enter)			2-C5 or C7
D.H. (8)			
HEB (10)			
CAPH (1)			
Health Center (2)			
Glendale (1)			
Dana (1)			
FSB (1)			
Library (1)			
BHSB (4)			2,3,5,PRCS
ECI			2,4,PRCS
Elevator Pits			2,4,PRCS
D.H. (4)			
HEB (2)			
CAPH (1)			

*See page 6 for code definitions

1. Combustible Dust
 2. Limited Access/Egress
 3. Flammable Atmosphere
 4. Oxygen Deficiency/Enrichment
 5. Exceeds OSHA Limit
- P Permit required

Building	Space	Location	Classification
Health Center (1)			
Glendale (1)			
Dana (1)			
Library (5)			
Hospital (8)			
HSB (3)			
Cooling Towers			2
Sewer Manholes			2,4,PRCS
Acid Sumps			2,4,PRCS
Utility Tunnel at Sub. St.			2,4,PRCS
Natural Gas Manholes			2,3,PRCS
Sump Pump Pits			2,4,PRCS
Wire Closets			2
Pipe Shafts			2

LIST OF MAIN CAMPUS CONFINED SPACES

Building	Space	Location	Classification
Bowman Oddy	Storm Pumps/Crocks	NW Side	PRCS
Campus	Manholes	Various	PRCS C-5
Campus	Steam Vaults/Pits	Various	PRCS C-5
Carlson	Lift Station	N of Stadium, NE of Parks Tower	PRCS
Field House	Small Tunnels		NPRCS
Gillham Hall	Sump Pump	Mech Room, NE Corner, S Side	PRCS
Glass Bowl	Dike Pumps	Lot 10	PRCS C-5
Health Education	Pool Discharge Pit	Pool Filter Room	PRCS
Health and Human Services	Dana Auditorium	Half Door Over Crawl	NPRCS
Law Center	Sump Pump	E	PRCS
North Engineering	Mechanical Room	Boiler Room, S Basement	PRCS
Palmer	Sewage Lift Station	S Door under W Stairway	PRCS
Parks Tower	Dike Pumping Station	NE in flats	PRCS
Parks Tower	Concrete Waste Vault	Mechanical Room	PRCS
Savage Hall	Dike Pumping Station	Lot 5, NE Corner	PRCS
Memorial Field House	Mechanical Room 1078		NPRCS
Student Union	Steam Line Access	S Side	NPRCS
Student Union	Steam Line Access	NW Side	NPRCS
Student Union	Fountain Pump Room Sub Basement	N Side	NPRCS

LIST OF SCOTT PARK CONFINED SPACES

Building	Space	Location	Classification
Non Academic Services Center	Gas/Diesel Above Ground Storage Tank	Rear Side	PRCS
Non Academic Services Center	Sump Pump	Rear Side	PRCS C-5

Atmosphere Hazards

1. Combustible Dust = An airborne combustible dust at a concentration that obscures vision at a distance of five feet or less.
 2. Limited Access/Egress = A space large enough that an employee can enter, which has restricted means for entry or exit and is not designed for continuous employee occupancy.
 3. Flammable Atmosphere = A flammable gas, vapor, or mist in excess of 10% of its lower flammable limit.
 4. Oxygen Deficiency/Enrichment = An atmospheric oxygen concentration below 19.5% or above 22%.
 5. Exceeds OSHA Limit = Exceeds a "recognized" exposure limit [OSHA permissible exposure limit, immediately dangerous to life or health limit, or published exposure recommendation (i.e., from a SDS)].
- P Permit required for entry (where feasible area is required to be posted "Permit Required Confined Space").