

DEPAUL UNIVERSITY

Confined Space Program

Environmental Health & Safety

June 2017

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1.0 INTRODUCTION

The Occupational Safety and Health Administration (OSHA) developed the Permit-Required Confined Space Standard (29 CFR 1910.146) to prevent injuries and accidental deaths associated with entry into confined spaces. The standard mandates that employers identify all confined spaces and develop a written program to establish procedures for entry into such spaces, with the goal of protecting employees from the hazards they present.

Each department or functional area responsible for maintenance and repair operations involving confined spaces must develop and adopt standard operating procedures to comply with the requirements of this program.

A confined space is one that has all of the following characteristics:

- Large enough and so configured that an employee can bodily enter and perform assigned work.
- Has limited or restricted means for entry or exit.
- Is not designed for continuous employee occupancy.

A confined space is classified as a permit-required confined space if it has one or more of the following characteristics:

- Contains or has the potential to contain hazardous atmospheres.
- Contains a material that has the potential for engulfing an entrant.
- Has an internal configuration such that an entrant could be trapped by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section.
- Contains any other recognized safety or health hazards.

2.0 RESPONSIBILITIES

2.1 Environmental Health & Safety (EHS)

EHS is responsible for the development and implementation of this program to ensure that employees understand the different types of confined spaces, training requirements and required safety procedures.

2.2 Departments

The vast majority of confined spaces on University property fall within the operational jurisdiction of Facility Operations (FO). For this reason, FO's methods of identifying, classifying and marking confined spaces will be the preferred best practice throughout the University (See Appendix B). If deemed necessary, departments and functional areas may utilize other systems to classify confined spaces within equipment they own, operate and maintain. In this instance, the affected department or functional area must first consult with FO and EHS prior to establishing their own confined space assessment protocol. It is the duty of each department or functional area to recognize, identify and classify confined spaces within their operational jurisdiction. Each department or functional area is responsible for compliance with this program.

2.3 Employees

No University employee may enter a permit-required confined space.

Only authorized employees may enter a non-permit confined space or a non-permit pending, lockout/tagout confined space. They may do so only when performing assigned work and must follow all appropriate safety protocol. **Note: Currently, only select employees (“authorized employees”) of Facility Operations are trained and authorized to enter non-permit required confined spaces and non-permit pending, lockout/tagout confined spaces.**

3.0 TYPES OF CONFINED SPACES

Since there are many different types of confined spaces and degrees of hazard, it is important to know the exact type of confined space and the hazards before entering the space. The following are commonly known confined spaces: Tanks, vessels, vaults, pits, silos, storage bins, hoppers, pipelines, lift stations, manholes and tunnels. **Note: All manholes on DePaul property will be considered permit-required confined spaces and for this reason they will not be individually labeled as permit-required. This is to be universally understood by all affected employees and contractors.**

A confined space may be classified as:

- Permit-Required
- Non-Permit
- Non-Permit, Pending Lockout/Tagout

3.1 Permit-Required Confined Spaces

No DePaul University employee shall enter a permit-required confined space under any circumstances. Only maintenance and repair work that can be done without physically breaking the plane of the space is allowed.

In the event that work requires breaking the plane of a permit-required confined space, an appropriately trained and equipped contractor will be utilized. Selection and hiring of permit-required confined space contractors shall be done solely by FO or with the permission of FO and EHS in the case of a permit-required confined space within a piece of equipment owned and maintained by another department.

Entry into permit-required confined spaces without the following precautions could result in injury, impairment or death. As a best practice, and for communication with contractors, stated below are the conditions that must be met by contracted personnel prior to entry:

- Ensure that the permit-required confined space has been evaluated and properly tested for oxygen content, flammable gases and toxic gases, fumes, vapors, dust and/or mists.

- Evaluate physical hazards such as heat, noise, vibration, machine guarding, slip, trip and fall, activation of equipment, entrapment and /or engulfment by materials.
- Participants must be designated to serve the active roles of Entry Supervisor, Authorized Entrant and Attendant.
- At least one attendant must be stationed outside the permit space until the completion of the operation.
- The Entry Supervisor shall initiate a pre-planning meeting to familiarize all participants involved on the procedures, guidelines, hazards of the permit space and how to control them, emergency procedures, engineering controls, personal protective equipment and their duties/responsibilities.
- All energy sources which are potentially hazardous to participants must be secured, relieved, disconnected and/or restrained.
- Means of safe entry and exit must be provided. Each entry and exit point should be evaluated to determine the most effective method and equipment to be utilized to enable employees to safely enter and exit the confined space.
- Appropriate retrieval equipment or methods must be used whenever a person enters a permit space. A mechanical device (e.g. a tripod) must be available to retrieve personnel from vertical confined spaces greater than five feet in depth. The Entry Supervisor may waive use of retrieval equipment if use of the equipment increases the overall risks of entry or does not contribute to the rescue.
- Ensure all entry requirements have been completed and approved by FO or EHS. The entry permit, upon approval, shall be posted at the entrance and filed for recordkeeping.

3.2 Non-Permit Confined Spaces

Non-permit confined spaces meet the criteria of a confined space but do not have the potential for a hazardous atmosphere and do not contain other hazards which could cause serious physical harm or death. No University employee or contractor shall perform work within any non-permit confined space until it has been properly identified, assessed and labeled in accordance with this program. All entry into non-permit confined spaces shall be by authorized employees and contractors to carry out a specific routine inspection, maintenance or repair. Entry for any other purpose or by unauthorized individuals is prohibited.

3.3 Non-Permit, Pending Lockout/Tagout Confined Spaces

Non-permit, pending lockout/tagout confined spaces meet the criteria of a confined space but do not have the potential for a hazardous atmosphere. These spaces are however known to contain other hazards that could cause serious physical harm or death. The other known hazards (normally energy sources or moving objects) must be configured such that they can be shut down and/or de-energized following proper lockout/tagout procedures prior to entering the space. All entry into non-permit, pending lockout/tagout confined spaces shall be carried out by authorized employees and contractors to carry out a specific inspection, maintenance or repair. Entry for any other purpose or by unauthorized individuals is prohibited.

4.0 TRAINING AND EDUCATION

Note: At this time, only Facility Operations employees receive formal confined space training. Should other departments or functional areas become responsible for confined spaces through equipment purchases or purchase or rental of facilities not maintained by Facility Operations, they are required to consult with EHS and develop an appropriate training program for their employees. All training is provided at no cost to University employees.

4.1 Annual Awareness Level Training

FO provides annual awareness level training for all affected employees.

Awareness level training includes:

- Explanation of the general hazards associated with confined spaces.
- Discussion of specific confined space hazards associated with the facility, location or operation.
- Reason for, proper use and limitations of personal protective equipment and other safety equipment required for entry into confined spaces.
- Explanation of permits and other procedural requirements for conducting a confined space entry.
- A clear understanding of what conditions prohibit entry.
- Duties and responsibilities as a member of the confined space entry team.
- Description of how to recognize symptoms of overexposure to probable air contaminants and methods for alerting attendants.
- How to respond to emergencies.
- Information pertaining to new construction or changes to machinery or equipment.

This training will be conducted more than annually if there are significant changes to machinery or equipment or when a new employee is hired.

Additionally, facility managers and chief engineers at each campus have been trained on how to identify and classify confined spaces.

4.2 Emergency Response and Rescue

All incidents and emergency situations must be reported to Public Safety. In the event of a confined space emergency that requires rescue, Public Safety will contact the Chicago Fire Department and if necessary, provide them access to the emergency site.

Public Safety can be contacted at:

- Lincoln Park Campus: 773-325-7777 (57777)
- Loop Campus: 312-362-8400 (28400)

When contacting Public Safety it is helpful to have the following information ready:

- Type of incident

- Extent of any injuries/illnesses
- Building/location where the incident occurred
- Your name and phone number where you can be reached

5.0 CONTRACTORS

When contracting out work in permit-required confined spaces, the following procedures must be followed:

- Inform the contractor that the workplace contains permit spaces and that they must follow a permit space entry program per OSHA standard 29 CFR 1910.146.
- Apprise the contractor of the known elements, including the hazards identified and the experience with the space that makes it a permit space.
- Apprise the contractor of the precautions or procedures implemented for protection of employees in or near permit spaces.
- Debrief the contractor at the conclusion of the entry regarding the permit space program followed and regarding any hazards confronted or created in the space during entry operations.

Contractors performing permit space entry are required to:

- Coordinate entry operations with others working in or near permit spaces.
- Inform DePaul of the permit space program that will be followed, and of any hazards confronted or created in permit spaces, either through a debriefing or during the entry operation.

APPENDICES

APPENDIX A: DEFINITIONS

Affected Employee: An employee who works around confined spaces and receives annual awareness level training.

Attendant: An individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs the duties assigned in the employer's permit-required confined space program.

Authorized Employee: An employee who is authorized to enter non-permit confined spaces and non-permit, pending lockout/tagout confined spaces.

Authorized Entrant: A contractor who is authorized by DePaul to enter a permit space.

Confined space: Any space that meets all of the following conditions:

- Is large enough and so configured that an employee can bodily enter and perform assigned work.
- Has limited or restricted means for entry or exit.
- Is not designed for continuous human occupancy.

Emergency: The occurrence (including any failure of hazard control or monitoring equipment) or the occurrence of events internal or external to the permit space that could endanger entrants.

Engulfment: The surrounding and effective capture of a person by a liquid or finely divided (flammable) solid substances that can be aspirated to cause death by filling or plugging the respiratory system, or materials that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

Entrapment: The trapping of an employee or worker by inwardly converging walls or by a floor that slopes downward and tapers to smaller cross sections.

Entry: The action by which a person passes through an opening into a permit space. Entry is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

Entry permit (Permit): A written document that is approved by the employer to allow and control entry into a permit space and that certifies the requirements of paragraph (f) of 29 CFR 1910.146.

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

- Flammable gas.
- Airborne combustible.
- An atmospheric oxygen concentration below 19.5 percent or above 23.5 percent.
- An atmosphere where the permissible exposure limit for a certain chemical has been exceeded and could result in exposure.
- Any other atmospheric condition that is immediately dangerous to life or health.

Isolation: The process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding, lock out/tag out of all source of energy, removing sections of lines, pipes, or dust.

Non-permit confined space: Confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

Permit-required confined space: A confined space that has one or more of the following characteristics:

- Contain or has the potential to contain hazardous atmospheres.
- Contain a material that has the potential for engulfing an entrant.
- Has an internal configuration such that an entrant could be trapped by inwardly converging walls or by a floor, which slopes downward and tapers to smaller cross- section.
- Contains any other recognized serious safety or health hazard.

Permit system: The employer's written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

Purge: Complete air exchange in a confined space prior to entry, which is designed to remove, contaminated air and replace it with fresh air.

Retrieval system: The equipment (including a retrieval line, chest or full body harness, wristlets, if appropriate, and lifting device or anchor) used for non-entry rescue of persons from permit spaces.

Testing: The process by which the hazards that may confront an entrant of a permit confined space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

APPENDIX B: FACILITY OPERATIONS CONFINED SPACE ASSESSMENT PROTOCOL

Purpose Statement: All confined spaces within buildings, grounds and equipment maintained by Facility Operations are to be identified, inventoried, signed and secured by Facility Operations personnel as outlined in this procedure.

1. **Identification.** Starting in March 2010 and continuing until all buildings and grounds have been surveyed, a confined space assessment team consisting of at least the facility manager, the chief engineer and a painter will audit every building and related grounds at each campus. Additional personnel including outsourced environmental/safety consultants, the chief electrician and or a carpenter may be included in the group as needed to execute all the steps involved in this process.
 - 1.1 The facility managers and chief engineers at each campus have been trained by representatives of the Ramboll-Environ Company on how to identify and classify confined spaces. They will comb each building and area of the grounds and identify confined spaces using the following basic criteria (refer to the official written program for a more detailed explanation):
 - 1.1.1 It is large enough and so configured that an employee can bodily enter and perform assigned work.
 - 1.1.2 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/exit).
 - 1.1.3 It is not designed for continuous employee occupancy.
2. **Classification.** Each identified confined space will be classified by the facilities manager and the chief engineer.
 - 2.1 The three classifications of confined space we will use are defined as the following (refer to the official written program for a more detailed explanation):
 - 2.1.1 Permit-Required Confined Spaces. A permit required confined space meets criteria for a confined space and is known to have or have the potential to contain hazardous atmospheres and/or other hazards that can cause serious physical harm or death and shall be classified as permit-required confined spaces until proven otherwise.
 - 2.1.2 Non-Permit Confined Spaces. Non-Permit Confined Spaces meet the criteria of a confined space but do not have or have the potential for a hazardous atmosphere and do not contain other hazards which could cause serious physical harm or death.

2.1.3 Non-Permit, Pending Lockout/Tagout Confined Spaces. Non-Permit, Pending Lockout/Tagout Confined Spaces meet the criteria of a confined space but do not have or have the potential for a hazardous atmosphere. These spaces are however known to contain other hazards that could cause serious physical harm or death. The other known hazards (normally energy sources or moving objects) must be configured such that they can be shutdown and/or de-energized following the proper lock-out tag-out procedure prior to entering the space.

2.2 If in doubt, the facilities manager and the chief engineer are to classify any questionable space as permit-required, until proven otherwise. Once all known spaces have been initially assessed, the University will then hire an appropriately trained environmental/safety consultant to assess and re-classify all questionable spaces, as appropriate.

2.3 The facilities manager and other members of the assessment team will not enter (break the plane of) any space classified as permit-required or any possibly permit-required spaces during the classification process.

3. **Signage.** Each identified and classified confined space shall be labeled appropriately to inform exposed employees of the potential danger. It is our intent, whenever possible, to paint or install the appropriate signage at each confined space immediately at the time of classification. This reduces the number of trips required in this process and helps avoid confusion later, as nobody will have to remember which space gets which label, etc.

3.1 The following signage protocol was developed by Facility Operations to classify and label confined spaces under FO jurisdiction in and around University property. All other departments or functional areas with jurisdiction of confined spaces should follow this protocol whenever possible to facilitate consistent and effective hazard communication University-wide.

3.1.1 Danger! Permit Required Confined Space. Do Not Enter Without Permit! **(Red)**

3.1.2 Warning! Non-Permit Required Confined Space. Follow All LOTO Procedures. Trained Personnel Only! **(Orange)**

3.1.3 Caution! Non-Permit Confined Space. Trained Personnel Only! **(Yellow)**

3.1.4 Notice: Not a Confined Space **(Blue)** This will be used only in those cases such as some fan units where multiple doors lead to a confined space and another door, that looks exactly the same, does not lead to a confined space.

3.2 Sign Materials:

3.2.1 It is our intent to create templates for each type of confined space sign in a 1" font, such that a painter can paint the applicable warning sign directly on the confined

space at or near the entry points. We prefer this method because it works for all types of equipment regardless of shape or construction. DePaul will paint all such warning signs on a white rectangular background such that all lettering stands out and is readily apparent to all observers. Once the white background rectangle has been painted, the proper warning sign will be painted in the correct color, as noted in 3.1 above.

3.2.2 For any confined spaces in finished spaces where a spray painted warning may not be appropriate, a hard plastic sign with the same wording may be substituted. The sign should follow our established color coding scheme whenever possible and must be permanently mounted on or very near the confined space entry points.

3.3 Sign Locations: Signs will be painted or installed on or as near as possible to every accessible access point into a confined space. In some cases, if the sign cannot be placed by the confined space entrance point, an arrow may be painted on walls and equipment in mechanical rooms to link the confined space entrance point and its sign. Whenever possible, signs will be painted or installed at eye-level.

4. **Building Names and Space Numbers.** It is highly important that the Loop and Lincoln Park facilities groups use the same method when assigning building names and numbers to each confined space at their campuses. The following guidelines are to be followed:

4.1 Building Names: Confined spaces located inside or on top of a building will be considered part of that building. For example, a cooling tower sump on the roof of the DePaul Center is part of the DePaul Center. A few clarifications on this point:

4.1.1 We will use the terms LPC Grounds and Loop Grounds for any outdoor manholes, vaults, pits or any freestanding objects that can be accessed without entering the building first. For example, there is a freestanding cooling tower outside of Byrne Hall. This would be part of the LPC Grounds and not part of Byrne Hall. The reason for this is that the cooling tower may exist as a confined space even if we opted to demolish Byrne Hall.

4.1.2 Tunnels that run between multiple buildings: Tunnels that run between multiple buildings are technically one big confined space. However we will treat them as separate confined spaces for our purposes. For example, the tunnel between Corcoran Hall and Commons would be treated as two confined spaces, one in Corcoran Hall and one in Commons because the tunnel has an access point in each building. The reason for this is simple: Someday we may opt to demolish Corcoran Hall; but we would still need to know about and have an accounting for any remaining tunnel spur under Commons.

4.2 Confined Space Numbers: Because both campuses are dynamic and buildings and grounds come and go as the master plan evolves, it is important that we develop a flexible numbering

system that can account for old confined spaces being demolished and new spaces coming online. The method to use is the following:

4.2.1 Determine the building to classify the confined space under first. Once you have determined the proper building (or grounds) then we will simply start at #1 and continue sequentially until all confined spaces in that building are numbered. It doesn't matter if #1 starts with a piece of equipment in the penthouse and #2 is a boiler vessel in the basement of the building. The reason that we are numbering spaces uniquely by building is that it will be easy to query future inspection reports. We could simply look for all confined spaces in DePaul Center, for example. The other reason for doing this is that it is easy to account for spaces that no longer exist. If we demolish McGaw Hall, it will be easy to identify and mark all of those confined spaces as demolished.

4.2.2 Once the proper confined space number has been determined, that number should be noted directly below the confined space warning verbiage at each entry point (still within the white background rectangle) using number templates and the appropriate color of spray paint, stick on vinyl numbers, or a hard plastic number sign as appropriate. Important considerations for numbering include:

4.2.2.1 Numbers are to be assigned per confined space, not per entrance point. For example, a fan plenum may have three doors and we may paint or install signs by each opening. However, we will not assign three confined space numbers to that unit. If that confined space is number 4, then "4" should be put below the confined space warning verbiage at each of the entrance points.

4.2.2.2 Remember that tunnels between buildings are a special exception. The same tunnel could be classified as DePaul Center 1, Lewis Center 23, and CDM 5. This is perfectly fine, as it will help us account for the tunnel spur at each facility.

4.2.2.3 Never re-use numbers. Once a number has been used in any given building, it is used up forever. If a DePaul Center boiler containing confined space 100 is demolished, we will note that in our records, but do not reuse that confined space number on the new boiler. Assign the new boiler a new number.

4.2.2.4 Remember that the blue [Not a Confined Space] signs do not get numbered. They only exist to remind us that a space is not a confined space; hence it doesn't make sense to assign them a confined space number.

5. **Filling out the Confined Space Profile and Assessment Form.** When doing the assessments and signage work at each confined space location, the facilities managers at the Loop and Lincoln Park Campuses will fill out the Confined Space Profile and Assessment Sheets. These sheets will serve as our primary documentation for each confined space; and for that reason, it is important that they are filled out correctly as per these instructions:

5.1 Building Name: Write in the building name or grounds, as outlined in Section 4 of this procedure.

5.2 Space Number: Write in the next number in sequence for the building or grounds, as outlined in Section 4 of this procedure.

5.3 Evaluated By: The manager must print their name on this line, and then note their title and the date of the assessment in the appropriate lines. Finally, the manager must sign the signature line.

5.4 Location Description Line: Write in basic layman's terms to describe how to get to the primary confined space entrance point. For example: Manhole NE corner of SAC room 120.

5.5 Technical Description: Write in a more exact location (if applicable) the way that maintenance staff may describe the confined space. For example SAC AHU-1 fan room NW corner before the filter rack, etc.

5.6 Access: We need to document the access controls to the confined space. Check any boxes that apply. If there is an additional or supplemental access control, write it in the other box.

5.7 Type of Sign Installed: Circle which of the four types of signs were placed in this location. Use the extra space in this box to describe any special circumstances that may exist.

5.8 Status: This is where the manager classifies the type of confined space a particular location is. Check only one box in this section. Remember, if there is any doubt, the space must be classified as a Permit-Required Confined Space until proven otherwise.

5.9 Type of Space: Check the appropriate category Air Handling, Manhole, Pits, or Other and then check the most appropriate item amongst the equipment listed for that category. If nothing applies, write in a description in the other line at the bottom of the box.

5.10 Potential Hazards. Consult with the Chief Engineer and/or the Chief Electrician (if needed) and determine what hazards are known or potentially represented in the space. Check all boxes that apply.

5.11 Proposed Number of Entry Times per Year: Write in the most likely number of times staff would enter the space per year. If there isn't a normal reason, put zero.

5.12 Entry/Egress Locations: This is just to help people know if there is more than one access point. Check all boxes that apply.

5.13 Do Any Deficiencies Exist: Circle yes or no to document the state of the confined space at the time of the evaluation. If any known deficiency exists (Damaged door, missing sign, damaged lighting, etc.), follow the steps outlined below in section 6 of this procedure.

5.14 Potential Reasons for Entry/Type of Work Proposed: If there is a normal routine that happens, describe what that is, "Filter Maintenance," for example. If there isn't a normal

reason to enter the space put, “Non-Routine Maintenance or Repair.” This will be our catchall phrase for spaces we don’t normally enter.

5.15 Atmospheric Testing Information: This box is only to be filled in by a qualified environmental consultant, in the event that DePaul contracts out air sampling in order to re-classify permit spaces as non-permit spaces. Otherwise, this is to be left blank.

6. **Dealing with Deficiencies.** The majority of our confined space locations will have no apparent deficiencies. However, while performing the assessment process, the facilities manager and support staff may find some deficiencies that need attention. The process for dealing with such deficiencies will be the following:

6.1 Neatly note all deficiencies on the back of the profile and assessment form at the time that the assessment is being completed. This way we will know the date that these items were discovered.

6.2 Facilities managers will coordinate prompt repairs for all deficiencies and track their completion. Managers should see that repair items are either entered into the work order system or into the inspection database so that there is a record generated to track the repair process.

6.3 Once the manager receives feedback from the trades that the deficiencies have been repaired, the manager will visit the site to verify satisfactory completion of the item.

6.4 Once deficiencies are verified to be repaired, the manager will write “Complete” next to each item on the back of the assessment form. The manager will also initial the item and note the date.

APPENDIX C: CONFINED SPACE FORM

CONFINED SPACE PROFILE AND ASSESSMENT SHEET

Department: _____ **Space Number:** _____ **Evaluated By:** _____ **Title:** _____ **Date:** _____

Building Name: _____

Location Description: _____

Technical Description: _____

Access: Behind Locked Door Manhole Cover/Lid Exposed Appropriate Signage In Place? Circle one: Y / N

Status: Permit Required Confined Space Non-Permit Required Confined Space Non-Permit Required Provided LOTO Procedures Followed

Other: _____

TYPE OF SPACE

Air Handling Units/Systems Manhole Pits Equipment Pit Ejector Pit Other

Supply Sewer Elevator Pit Other

Exhaust Chemical Neutralization Pit Utility Vault Tank/Vessel

Duct Storm Tunnel Pipe Chase Storage Bin

Other _____

POTENTIAL HAZARDS

Unsafe to Remove Cover Mechanical Fan blades and/or agitator

Excess pressure could blow cover off during removal Unguarded energized equipment

Pressurized chemicals Pinch points

Vacuum Other _____

Extreme heat/steam Material harmful to skin

Oxygen deficient atmosphere (<19.5% O₂) Airborne combustible dust

Flammable gases or vapors (>10% LEL) Electrical

Oxygen enriched atmosphere (>23.5% O₂) Temperature extremes

Other toxic gases or vapors greater than established PEL Hanging materials which could fall

List if known: _____

Combustion byproducts (flue gas, CO, CO₂) Decaying waste (sewage, stagnant water, H₂S, methane)

Entrapment (slipping shape that could trap a person) Noise

Engulfment (space contains material which could engulf entrant) Other hazardous materials depending on area being exhausted

ENTRY INFORMATION

Proposed Number of Entry Times Per Year: _____ Entry/Egress Location(s): Top Bottom Sides

Potential Reasons for Entry/Type of Work Proposed within the Confined Space: _____

ATMOSPHERIC TESTING INFORMATION

Date: _____ Time: _____ AM _____ PM Sampled By: _____ Instrument Type: _____

Oxygen: _____ % Hydrogen Sulfide: _____ ppm Model Number: _____

Combustibles: _____ % Carbon Monoxide: _____ ppm Serial Number: _____

Other: _____

VERSION 1.0 (2/16)

ACKNOWLEDGEMENTS

This standard practice instruction was developed using best practice examples from Florida Atlantic University and Harvard University.

This program will be updated on an annual basis or whenever changes occur to 29 CFR 1910.146 that prompt revision of this document, or when facility operational changes occur that require a revision of this document. Effective implementation of this program requires support from all levels of management at DePaul. This written program will be communicated to all personnel that are affected by it and will encompass the total workplace, regardless of the number of workers employed or the number of work shifts.