

## CONFINED SPACE ENTRY PROGRAM

Published in accordance with OSHA 29 CFR 1910.146

<u>Purpose, Objectives and Goals</u> <u>OSHA Requirements</u> <u>Scope</u>

- 1. General Requirements
- 2. Non-permit Confined Spaces
- 3. Permit Required Confined Spaces
- 4. Permit System
- 5. Entry Permit
- 6. Training
- 7. Duties of Authorized Entrants
- 8. Duties of Attendants
- 9. Duties of Entry Supervisors
- **10. Rescue and Emergency Services**

Definition of Terms

Attachment #1. Confined Space Entry Permit Attachment #2. Davidson College Confined Spaces Locations

#### PURPOSE, OBJECTIVES AND GOALS

The purpose of a this Confined Space Entry Program is to establish a system for the identification and documentation of confined spaces on campus, to make an evaluation of the hazard potential associated with each space, and to develop hazard control entry procedures.

- The <u>objectives</u> of a Confined Space Entry Program are to:
  - Prevent employee injury, illness or death resulting from hazards associated with confined space.
  - Identify and evaluate confined spaces before entry.
  - Identify and understand confined space hazards.
  - Develop techniques to control confined space hazards.
  - Prepare emergency rescue and other contingency plans.
  - Comply with regulatory requirements.
- The <u>goal</u> of this program is to meet the above objectives and to comply with regulatory requirements as set forth by OSHA.

The OSHA regulation 29 CFR 1910.146 defines functions in terms of three tiers of responsibility:

- 1. The employer: Davidson College
- 2. The individual authorizing or in charge of entry; and
- 3. Entrants, attendants, entry supervisors, and rescue teams.

The regulation itself and this program in general, define the responsibilities of Davidson College. This program specifies the duties and training requirements for all authorized entrants, attendants, and individuals authorizing or in charge of entry. It further defines rescue procedures and duties of those campus personnel involved in rescue.

Other OSHA programs such as Lockout/Tagout, Electrical Safety Standards, and Hazard Communications must be reviewed as applicable. These standards must be reviewed prior to and in conjunction with confined space entry procedures. These standards may have to be adhered with as well before entry is authorized.

#### **OSHA REQUIREMENTS**

The OSHA regulations require that this program provide a basis for prevention of accidents and fatalities associated with confined spaces. The requirement includes the following:

- <u>**Recognition**</u>. Confined spaces and the hazards within are identified. Davidson College physical plant employees and EHS representatives are responsible for recognizing and understanding hazards, protecting employees from hazards, and educating employees concerning worker protection and safe work practices.
- **Evaluation**. Qualified (trained) persons must test the space with suitable instruments. More than one type of testing instrument may be needed. In addition, Material Safety Data Sheets (MSDS) or Safety Data Sheet (SDS) and other reference sources may need to be reviewed to determine the exposure limits for hazardous materials.
- <u>Controls</u>. Procedures describing the specific measures and precautions which allow safe entry are contained in this program. Hazards may be controlled through engineering and/or safe work practices. (Ventilation via exhaust fans is a good engineering example to consider when/if appropriate.)
- <u>Confined Space Entry Permit</u>. The Confined Space Entry Permit (Attachment 1) is the heart of the entry control system. <u>A permit is required for each permit required confined space entry</u>. (See Section II for procedures for non-permit confined spaces.) The permit certifies that the hazards have been identified and evaluated and that the required precautionary procedures are in place. The regulation requires a written permit system that ensures the proper preparation, issuance, and use of entry permits.
- **Training**. Employees must be trained so that attendants, authorized entrants, and persons authorizing or in charge of the entry can work safely in and around the confined space. After initial training, employees may need periodic retraining to ensure continued competence in entry procedures and safe job practices.
- <u>**Rescue**</u>. Entrants and attendants must be specially trained on the proper use of safety and rescue equipment and on emergency rescue procedures for Confined Space Rescue. Davidson College does not have an on-site trained response team. Due to the complexity of training and equipment requirements, when/if rescue is required the Davidson Fire Department (DFD) will be summoned.

#### **SCOPE**

The scope of this program is to protect Davidson College employees and any contracted personnel during entry into any permit-required confined space.

#### 1. GENERAL REQUIREMENTS

- A OSHA requires site evaluation in order to determine if any spaces are permit required spaces. Only through physical audit can <u>all</u> confined spaces be identified.
  - 1 The Physical Plant, with assistance from the office of Environmental Health and Safety, will identify all potential permit required confined spaces. Maps of the

identified confined spaces on the Davidson College campus are located in the Physical Plant Office, Ridge Rd.

2 All identified permit required areas contain potential hazards. These spaces must be posted to inform employees with a sign at <u>all</u> entrances stating:



- **B** Only employees identified by Physical Plant and Environmental Health and Safety will be allowed access via permit into permit required confined spaces.
  - 1 Identified employees include those who have completed confined space training.
- **C** Selected employees must have written permits issued by the Supervisor responsible for the job, or his designated representative prior to entrance. (*See attachment #1*, Confined Space Entry Permit).
  - 1 Permits will be issued only for specific spaces and for established time frames. Time frames will not exceed a normal eight (8) hour work period. If additional time is required to complete tasks within the confined space, a new permit must be issued.
  - 2 Spaces classified by the Physical Plant as permit required space may be reclassified as non-permit confined space under conditions specified under 29 CFR 1910.146 (c)(7)(i)(ii)(iii)(iv). (See Section II)
  - 3 Any change in the use or configuration of a non-permit confined space must be reviewed by the responsible Supervisor and/or the EHS Manager to determine whether or not reclassification to permit status is required

**NOTE:** Contractors working in Confined Spaces on Davidson College must be informed of the dangers, and must comply with the requirements of the permit system, and are subject to this policy in its entirety. It is the responsibility of the contract manager onsite to notify, brief, and provide a copy of this policy to any contractor working in a confined space on the campus. It is the contractor's responsibility to inform all workers under his control, and any subcontractors of specific confined space hazards. Briefings must be documented and records maintained for a period of not less than one (1) year.

#### 2. Non-permit Confined Spaces

- A. As stated in the General Requirements section (Section I), a space can be designated a non-permit confined space per 29 CFR 1910.146 (c)(7) under the following conditions:
  - 1 The only hazard posed by the space is atmospheric; and

2 The use of continuous forced air ventilation alone maintains safe entry. In order to establish data to support the above conditions, monitoring and inspection information must be collected. This information is maintained and kept on file in Physical Plant Offices. If the space must first be entered to collect supporting data, it must be done so in accordance with the requirements for entry into a permit-required confined space. Once this information is collected, the space may be entered using abbreviated procedures as an alternate procedures space. Alternate procedures spaces **do not** require a permit be completed prior to entry, or for specific rescue procedures to be in place.

B. Requirements For Entry Into Non-permit Confined Spaces:

Prior to entry the responsible Supervisor or EHS Manager must certify that the space is safe to enter and that appropriate measures have been taken to eliminate the potential for a hazardous atmosphere to exist in the space. This certification must be written and include the date, the location of the space, and the signature of the Supervisor. This certification must be made available to each employee entering the space prior to entry.

**Appendix 2** contains the Non-permit Confined Space Certification Form that must be completed prior to entry by Davidson College personnel.

- C. The following are requirements for entry into Non-permit Confined Spaces:
  - i. Any conditions which make it unsafe to remove an entrance cover must be eliminated before the cover is removed.
  - ii. When entrance covers are removed, the opening must be promptly guarded by a railing, temporary cover, or other temporary barrier to prevent an accidental fall through the opening and protect the employees working in the space from foreign objects entering the space.
  - iii. Prior to any employees entering the space, the internal atmosphere must be tested with a calibrated direct-reading instrument for the following conditions, in order:
    - 1. Oxygen content;
    - 2. Flammable gases and vapors; and
    - 3. Potential toxic air contaminants

# Note: There can not be any hazardous atmosphere within the space while employees are inside.

- iv. Continuous forced air ventilation must be used as follows:
  - a. Employees must not enter the space until the forced air ventilation has eliminated any hazardous atmosphere;
  - b. The forced air ventilation must be directed so as to ventilate the immediate areas where employees are, or will be present within the space and must continue until all employees have left the space; and,
  - c. The air supply for the forced air ventilation must be from a clean source and not increase the hazards in the space.
  - d. The atmosphere within the space must be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. If a hazardous atmosphere is detected during entry, the following must occur:
    - i. Employees must leave the space immediately;
    - ii. The space must be evaluated to determine how the hazardous atmosphere developed; and,
    - iii. Measures must be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.

#### 3. Permit Required Confined Space Program

The following is mandatory under the permit required confined space program.

A. Implementation of measures to prevent unauthorized entry. (Barricades, appropriate signage, roping off of the area etc.)

- B. Identify and evaluate space hazards prior to entry of employees.
- C. Develop and implement procedures necessary (for safe permit space entry operations.) These procedures may include but are not limited to the following:
  - i. Specifications for acceptable entry conditions. (i.e. locking out electrical sources, atmospheric testing etc.)
  - ii. Isolating the space.
  - iii. Purge, inert, flush or vent the space as required.
  - iv. Establish barriers to protect entrants from external hazard. (*i.e.* falling or thrown objects.)
  - v. Verify conditions for the entrant throughout duration of an authorized entry. (In most cases, the condition will be verified by visual observation or by voice communication with the entrant via radio.) (Refer 29 CFR 1910.146 (d)(3)(i)(ii)(iii)).
- D. Provide equipment as necessary, and ensure that employees use the equipment properly.
  - i. Testing and monitoring equipment. (Must be maintained, and calibrated as required by the Physical Plant offices. Training on equipment usage must be documented.)
  - ii. Ventilation equipment. (Exhaust Fans or other acceptable methods.)
  - iii. Communications equipment. (Hand held radios or telephone.)
  - iv. Personal protective equipment (PPE). (i.e., lifelines, respirators, eye & ear protection, gloves, appropriate footwear etc.)
  - v. Lighting (To include emergency conditions. Explosion proof flashlights are required in the event that ignitable gasses may be present).
  - vi. Barriers and shields as required.
  - vii. Egress and ingress equipment as required (i.e. ladders, lowering devices, etc.)
  - viii. Reserve and emergency equipment/procedures as required. (Refer to 29 CFR 1910.146 (d)(4)(i)through(ix)).

Note: <u>All Manholes</u> on Davidson College campus are to be considered a <u>confined space</u>, <u>Permit</u> <u>Required</u>. Anyone entering a Manhole, marked or unmarked, must obtain a Confined Space Permit from Physical Plant Supervisor or the Environmental Health & Safety Manager. <u>NO</u> <u>EXCEPTIONS WILL BE TOLERATED</u>.

- E. Evaluate permit space conditions when entry operations are conducted.
  - i. Test condition to determine acceptable entry. (Use of detection equipment.)
  - ii. Test/monitor during course of entry operations.
  - iii. <u>Always</u> test for oxygen levels first. (Test for oxygen adequacy first and then for an oxygen enriched atmosphere.)
  - iv. Test for other atmospheric hazards. (Refer 29 CFR 1910.146 (d)(5)(i)(ii)(iii)).
- F. Physical Plant must provide at least one attendant outside of the permit space for the duration of authorized entry operations by Davidson College personnel. <u>Note</u>: Contract personnel are required to provide an outside attendant when contractor permit space entry is required.
- G. Multiple spaces <u>may</u> be monitored by a single attendant <u>if</u> the permit authorizes such entry. This practice is not recommended or encouraged.
- b. When notifying the Public Safety dispatcher, state the following.
  - 1. Location of individual on campus. Be exact. (i.e. West side of Chambers Building, behind Baker Sports Complex, approximately 35' to the north of Richardson Stadium)

Attendant (give name) is standing by.

2) Condition of victim if known.

3) Location of entrance and name of attendant.

4) Immediate hazard if known (e.g. electrical, contaminated atmosphere, fire etc).

- The Davidson College Public Safety Dispatcher will notify 911 and advise of the emergency. Public Safety officers will meet and guide rescue personnel to the proper location on campus. A written procedure <u>must</u> be developed and implemented by physical plant for preparation, issuance, use, and cancellation of entry permits. See <u>addendum #1</u>
- 3. Internal procedures must be developed by Physical Plant and/or the Environmental Health and Safety Manager for each of the following:

a. Multiple entry by Davidson College employees and contractor employees if such occurs

b. Securing entrances, and cancellation of permits after completion of work

c. Review of procedures at anytime by Physical Plant supervisory or management personnel.

d. Review of permit required entry spaces within one (1) year after each entry. Review must be accomplished utilizing canceled permits. Canceled permits must be retained for a minimum of one year after completion of the job. It will be the responsibility of the the Environmental Health & Safety Manager to accomplish and document annual review of permit documentation.

#### **<u>4.</u>** The Permit System

The permit system procedures for maintenance and control is the responsibility of Environmental Health and Safety. The system is subject to review at any time by management. The permit system will document at minimum, the following:

the permit system will document at minimum, the following

- A. The signature of the authorized entry supervisor.
- B. Time duration for the permit. (Not to exceed eight hours on a single day.)
- C. Termination procedures where:
  - 1. Entry operations are completed
  - 2. A condition arises in or near the entry area that is not allowed.

#### **<u>5.</u>** Entry Permit (<u>Attachment #1</u>)

The permit must identify the following:

- The identity of the space to be entered.
- Purpose of entry.
- Date and duration of the permit.
- Authorized entrant(s).
- The name of the attendant(s).
- The name of the entry supervisor.
- Identification of hazards (must be specific).
- Isolation measures.

- Acceptable entry conditions.
- The results of initial and periodic testing
- Rescue and Emergency procedures.
- Communications procedures.
- Equipment to be used.
- Additional permit requirements, i.e. hot work-welding.
- Any other information that may be relevant to the safety of employees.

#### THE PERMIT MUST BE COMPLETED EITHER IN INK OR TYPED.

#### <u>6.</u> Training

- 1) Initial and refresher training courses thereafter must be provided:
- 2) Initial training must be provided to each affected employee:
  - a. Before the employee is assigned confined space duties
  - b. Before there is a change in assigned duties
  - c. When there is a change in permit space operations
  - d. Whenever physical plant supervisory personnel feel that there may be inadequacies in the program or training.
- Refresher Training
  Additional training must be accommodeled
  - a. Additional training must be accomplished for all affected employees on a refresher and review basis
- 4) Training must ensure employee proficiency
- 5) Training documentation must contain each trained employees name, signature, and date of training. Documentation of initial training and annual training (to include any intermediate training) will be maintained by the Environmental, Health and Safety Manager for a minimum of three (3) years.
- 6) Training will be provided by the Environmental Health and Safety Manager.

## **<u>7.</u>** Duties of the Authorized Entrants

- A. At a minimum, the duties of the authorized entrant(s) are:
  - 1) To review the permit prior to entrance.
  - 2) To know the hazards/potential hazards of the job.
  - 3) To know the proper use of required equipment and PPE.
  - 4) To understand communications requirements with the attendant.
  - 5) To alert the attendant of any unusual condition or hazard during the entry process or as the task to be preformed is being accomplished.
  - 6) To evacuate if/when directed by attendant or when an emergency arises. (IN NO CASE WILL AN ENTRANT IGNORE AN ATTENDANT'S DIRECTIVE TO IMMEDIATELY EVACUATE.)
  - 7) To perform the tasks within the space(s) as assigned.

## **<u>8.</u>** Duties of Attendants

- A. At minimum, the duties of attendants are:
  - To review the permit prior to entrance of entrant with both the entrant and the entry supervisor. (Note: The attendant and the entry supervisor may be the same individual.)
  - To know the potential hazards of the tasks.
  - To be aware of possible behavioral effects of hazard exposure in authorized entrants. (Behavior not considered normal for the individual in the confined space (i.e. lethargic, garbled voice, giddy, or no response.)
  - To maintain continuous control and head count of entrants.

- To remain outside the space at all times.
- To maintain communication with entrant(s) at all times. In most cases in tunnel and crawl space work, communications will be via radio.
- To monitor conditions inside and outside the confined space to insure the safety of all parties involved.
- To summon rescue and emergency services as required. In all cases, this notification will be directed to the office of Public Safety at extension #2911. (DO NOT CALL 911 DIRECTLY). Calling 911 directly will delay direct response to the accident scene.
- To ensure that unauthorized persons do not approach the work area.
- To perform (NON-ENTRY) rescue procedures as required. (This duty may entail pulling the entrant from the space via rope or other device without the attendant entering the space.

<u>Note</u>: In no instance will the attendant enter the confined space. Entrance by a second individual without proper equipment, i.e. Self-Contained Breathing Apparatus (SCBA), may result in the need for the rescue of the well intentioned but unprotected rescuer, as well as the original victim.

B. To perform no duty while assigned to this task that might interfere with this primary responsibility.

#### 9. Duties of Entry Supervisors

- A. At minimum, the duties of the entry supervisors are:
  - To verify completeness of the entry permit.
  - To terminate entry and cancel the permit as required.
  - To verify the availability of rescue services. Call Public Safety at Tel. Ext. 2104. Advise the dispatcher that a confined space entry will occur. Provide location, and estimation of completion time. This procedure may enhance rescue operations if/when an emergency occurs.
  - To remove unauthorized individuals from the confined space area.
  - To determine conveyance of a confined space entry procedure.

## **10.** IX. Rescue and Emergency Services

All rescue operations will be controlled through coordination with Public Safety Emergency Tele: Ext.2911.

- A. Due to the complexity of training and equipment required, in all cases involving an emergency or rescue procedure for confined space entry Public Safety will notify the Davidson Fire Department, (DFD). The Public Safety dispatcher will automatically request a parametric rescue unit, in addition to a squad.
- B. Public Safety officers will guide DFD to the entrance location from a meeting point designated by the Public Safety dispatcher.
- C. The dispatcher will obtain as much information as possible from the reporting individual.
- 11. B. When/if an injured entrant is exposed to a chemical hazard(s), a Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS) for the substance(s) is required. Material Safety Data Sheets or Safety Data Sheets may be obtained from the MSDS file within Physical Plant x2595, or from the office of Environmental Health and Safety. x2929.



## **DEFINITIONS OF TERMS** (from 29 CFR 1910.146(b))

<u>Acceptable entry conditions</u> - the conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

<u>Attendant</u> - 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 - an employee who is authorized by the employer to enter a permit space.

**Blanking or blinding** - the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

**Confined space** a space that:

- 1 Is large enough and so configured that an employee can bodily enter and perform assigned work; and
- 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. (Note: This will include areas normally used only for maintenance purposes.)

**Double block and bleed** - the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

**Emergency** - any occurrence (including any failure of hazard control or monitoring equipment) or event 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 (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction or crushing.

**Entry** - the action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and 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) - the written or printed document that is provided by the employer to allow and control entry into a permit space and that contains the information specified in paragraph (i) of this section.

**Entry supervisor** - the person designated by Physical Plant managerial personnel (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations and for terminating entry as required by this section.

**<u>Hazardous atmosphere</u>** - an atmosphere that may expose employees to the risk of death, incapacitation, and 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 it 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 Sub part G, <u>Occupational Health and Environmental</u> <u>Control</u>, or in Sub part Z, <u>Toxic and Hazardous Substances</u>, of this part and which could result in employee exposure in excess of its dose or permissible exposure limit;
- 5 Any other atmospheric condition that is immediately dangerous to life or health.

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

**Immediately dangerous to life or health (IDLH)** - any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.

Note: Some materials--hydrogen fluoride gas and cadmium vapor, for example--may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possible fatal collapse 12-72 hours after exposure. The victim "feels normal" from recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be "immediately" dangerous to life or health.

**Inerting** - the displacement of the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible. *Note*: This procedure produces an IDLH oxygen-deficient atmosphere.

**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; non-aligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

**Line breaking** - the intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

<u>Non-permit confined space</u> - a 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.

**Oxygen deficient atmosphere** - an atmosphere containing less than 19.5 percent oxygen by volume.

**Oxygen enriched atmosphere** - an atmosphere containing more than 23.5 percent oxygen by volume.

**<u>Permit-required confined space</u>** (permit space) - 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.

<u>Permit-required confined space program</u> (permit space program) - the employer's overall program for controlling, and where appropriate, for protecting employees from, permit space hazards and for regulating employee entry into permit spaces.

<u>**Permit system</u>** - the employer's written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.</u>

**Prohibited condition** - any condition in a permit space that is not allowed by the permit during the period when entry is authorized.

**<u>Rescue service</u>** - the personnel designated to rescue employees from permit spaces.

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

**Testing** - the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

#### Attachment #1 DAVIDSON COLLEGE CONFINED SPACE ENTRY PERMIT

This permit is valid for a maximum of eight (8) hours. Copies of this permit are to remain on the job site until the job is completed. The original will be maintained in the Physical Plant office for control purposes.

JOB SITE (LOCATION/DESCRIPTION):\_\_\_\_\_

\_\_\_\_\_

REQUIREMENTS (COMPLETE AS REQUIRED):	TIME	DATE
LOCKOUT/TAGOUT		
LINE(S) BROKEN/CAPPED/BLANKED		
PURGED/FLUSHED/VENTED		
VENTILATION		
AREA SECURED		
RESPIRATOR		
ATTENDANT POSTED		
PERSONAL PROTECTIVE EQUIPMENT/LIFELINE		
FIRE EXTINGUISHER		
LIGHTING (EXPLOSION PROOF)		
NOTE: FOR ITEMS THAT DO NOT APPLY, ENTER N/A		

CONTINUOUS MONITORING: TESTS	PERMISSIBLE ENTRY LEVEL	RECORD MONITORING EVERY TWO (2) HOURS
PERCENT OF OXYGEN	19.5-23.5%	
LOWER FLAMMABLE LIMIT	UNDER 10%	
HYDROGEN SULFIDE	+10 TO 15 PPM	
CARBON MONOXIDE	35 PPM	
OTHER		
OTHER		

REMARKS:\_\_\_\_\_

SUPERVISOR AUTHORIZING ENTRY:(SIGNATURE)

Date:

NOTE: IN THE EVENT OF AN EMERGENCY, CONTACT THE PUBLIC SAFETY DISPATCHER AT TELEPHONE EXTENSION 911, OR VIA RADIO TRANSMISSION.

(NOTE: RETURN THIS FORM W/PERMIT COPIES TO PHYSICAL PLANT OFFICE FOR FILE)

#### NON-PERMIT REQUIRED CONFINED SPACE CERTIFICATION FORM

Confined Space Location:\_\_\_\_\_

Methods Taken to Eliminate the Potential for a Hazardous Atmosphere:

Due to the methods described above, I, certify that the confined space listed herein is safe for entry. To ensure the above identified space remains safe during entry operations the atmosphere within the space will be periodically tested to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. If a hazardous atmosphere is detected during entry the following will occur:

- Entrants will leave the space immediately;
- The space will be evaluated to determine how the hazardous atmosphere developed; and
- Measures will be implemented to protect entrants from the hazardous atmosphere before any subsequent entry takes place.

EHS Manager

Signature

Printed

Date