

1.0 PROGRAM OBJECTIVE

The purpose of this procedure is to protect workers against the hazards involved in confined spaces. This procedure establishes the controls and responsibilities for entering, working in, and exiting confined spaces.

2.0 SCOPE

This program covers all employees required to enter confined spaces such as manholes, ducts, tanks, etc., which may potentially contain hazardous atmospheres or conditions.

3.0 DEFINITIONS

3.1 Attendant - a Qualified Employee stationed outside of the Permit-Required Confined Space who monitors the authorized entrant(s).

3.2 Confined Space - a space which:

3.2.1 Is large enough and so configured that an employee can enter and perform assigned work and

3.2.2 Has limited or restricted means for entry or exit (some examples are tanks, boilers, manholes)

3.2.3 Is not designed for continuous employee occupancy.

3.3 Entrant or Authorized Entrant - a Qualified Employee or contractor who will enter the Confined Space. The entrant is trained on the procedures of the Confined Space and is authorized by Penn to enter.

3.4 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.

3.5 Entry Permit - a written authorization to enter a Permit-Required Confined Space. It defines the conditions under which the permit space may be entered. It states the reasons for entering, identifies all hazards and identifies the Entry Supervisor.

3.6 Entry Supervisor - a Qualified Employee who is responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, authorizes entry, oversees entry operations, and terminates entry when required.

3.7 Hazardous Atmosphere: An atmosphere that may expose employees to the risk of death, incapacitation, interfere with an individual's ability to escape unaided from a space, or cause acute illness from one or more of the following causes:

3.7.1 Flammable gas, vapors, or mists in excess of five percent (5%) of its Lower Explosion Limit (LEL).

3.7.2 Atmospheric oxygen concentrations below 19.5% or above 23.5%.

3.7.3 Atmospheric concentrations of any substance that could meet or exceed the permissible exposure limit as prescribed by OSHA standards. Review the MSDS sheets of all known substances contained within a space.

3.7.4 Any other atmospheric condition that is immediately dangerous to life or health (IDLH).

3.8 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; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout/tagout of all sources of energy; or blocking or disconnecting all mechanical linkage.

3.9 Non-Permit Confined Space - a Confined Space which does not contain or have the potential to contain a "Hazardous Atmosphere" or any hazard capable of causing death or serious physical harm.

3.10 Permit Required Confined Space (PRCS):

3.10.1 A Confined Space that has one or more of the following characteristics:

- Contains or has the potential to contain a "Hazardous Atmosphere"
- Contains a material with the potential for engulfment of an entrant,
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls, or a floor which slopes downward and tapers to a smaller cross-section; or
- Contains any other recognized serious safety or health hazard.

3.10.2 Any space meeting the above definition will be entered by permit only.

3.10.3 See Attachment A for a list of PRCS's and their associated hazards.

3.11 Qualified Employee - an employee that has been trained on confined space entry procedures and the use of confined space equipment, air-monitoring equipment, and ventilation equipment.

3.12 Stratified Atmosphere - an atmosphere where the contents have become "layered". Atmospheric testing may indicate different percentages of oxygen, explosive gasses, and hazardous contaminants at different levels.

4.0 RESPONSIBILITIES

4.1 Management

4.1.1 Shall ensure that personnel under their direction maintain compliance with this program.

4.1.2 Shall ensure that only trained employees assume roles and perform work in confined spaces in accordance with this program.

- 4.1.3 Ensures that a periodic review of the overall effectiveness of the Confined Space Program/Procedures is completed.

4.2 Supervision

- 4.2.1 Is responsible for initiating and controlling this procedure on shift.
- 4.2.2 Ensures that the proper procedures for isolating all energy sources have been controlled.
- 4.2.3 Ensures Entry Supervisors are inspecting work in spaces to ensure adherence to procedures.

4.3 Entry Supervisors

- 4.3.1 Be aware of hazards of the space to be entered, and signs, symptoms, and consequences of exposure, and specific space control procedures.
- 4.3.2 Execute all requirements of this instruction before work begins within a confined space.
- 4.3.3 Authorizes entry into a confined space when acceptable entry conditions have been met.
- 4.3.4 Ensures that all personnel entering and leaving the confined space are accounted for.
- 4.3.5 Terminate entry and cancel the permit if conditions warrant.
- 4.3.6 Verify that rescue services have been identified and that means for summoning them are operable.
- 4.3.7 Remove unauthorized individuals who enter or who attempt to enter the permit space during entry operations.

4.4 Entrants

- 4.4.1 Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- 4.4.2 Use all equipment as required by this instruction and the specific permit space entry procedures.
- 4.4.3 Communicate with the attendant as necessary to enable the attendant to alert entrants of the need to evacuate the space as required by this instruction and for attendant to be able to monitor status of entrants.
- 4.4.4 Alert the attendant whenever:
- The entrant recognizes any warning sign or symptom of exposure to a dangerous situation, or

- The entrant detects a prohibited condition.
- 4.4.5 Exit from the confined space as quickly as possible whenever:
- Order to evacuate is given by the attendant or the entry supervisor.
 - The entrant recognizes any warning sign or system of exposure to a dangerous situation, or the entrant detects a prohibited condition or an evacuation alarm is activated.

4.5 Attendants

- 4.5.1 Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- 4.5.2 Be aware of the possible behavioral effects of hazard exposure in authorized entrants.
- 4.5.3 Continuously maintain an accurate count of authorized entrants in the permit space and ensure that the means used to identify authorized entrants in the permit under this procedure accurately identifies who is in the permit space.
- 4.6.4 Remain outside the permit space during entry operations until relieved by another attendant.
- 4.6.5 Communicate with authorized entrants as necessary to monitor entrant status and to alert entrant of the need to evacuate the space if conditions warrant.
- 4.6.6 Initiate onsite rescue procedures and if necessary, summon additional rescue and other emergency rescue services when self-rescue is not possible.
- 4.6.7 Perform no duties that might interfere with his/her ability to monitor and protect the authorized entrants.
- 4.6.8 Monitor activities inside and outside the space to determine if it is safe for entrants to remain in the space.
- 4.6.9 Warn unauthorized persons to stay away and advise those who may have entered the permit space that they must leave.
- 4.6.10 Inform authorized entrants and Entry Supervisor of unauthorized persons.

5.0 GENERAL INFORMATION

5.1 General Rules

- 5.1.1 When practical, all confined spaces shall be permanently marked. A sign shall be installed at each opening of the 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.

- 5.1.2 All confined spaces where there is an opening that can easily be walked into (floor openings, manhole openings, etc.) shall have a physical barrier (guardrail, gate, etc).
- 5.1.3 When required, isolating energy sources to the confined space shall be performed in accordance with Penn's Lockout/Tagout Program.
- 5.1.4 If "hot work" conditions exist, precautions shall be taken in accordance with Penn's Welding, Cutting, Hot Work Program. Cylinders of compressed gases are never permitted in a confined space.
- 5.1.5 No smoking is permitted in a Confined Space or near the entrance/exit area.
- 5.1.6 Air monitoring is required before entering any PRCS.
- 5.1.7 Portable electrical equipment used in Confined Spaces, which have wet surfaces, shall be supplied power through a ground fault interrupter or be battery powered.

5.2 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.

- 5.2.1 Entry Supervisor
- 5.2.2 Attendant
- 5.2.3 Entrant(s)

6.0 PROCEDURE

6.1 Confined Space Entry Permit

- 6.1.1 Before entry is authorized, the entry supervisor shall document the safety measures taken in order to enter the Confined Space by preparing a Confined Space Entry Permit (See Attached).
- 6.1.2 Before entry begins, the entry supervisor identified on the permit shall complete and sign the entry permit to authorize entry. Acceptable entry conditions must be met in order for entry to be authorized.
- 6.1.3 The completed permit shall be made available at the time of entry to all authorized entrants, by posting it at the entry portal or by any other equally effective means, so that the entrants can confirm that pre-entry preparations have been completed.
- 6.1.4 The duration of the permit may not exceed the time required to complete the assigned task or job identified on the permit.

- 6.1.5 The entry supervisor shall terminate entry and cancel the entry permit when:
- 6.1.5.1 The entry operations covered by the entry permit have been completed or
 - 6.1.5.2 A condition that is not allowed under the entry permit arises in or near the permit space.
- 6.1.6 Canceled entry permits shall be retained for at least one year to facilitate the review of the PRCS program. Any problems encountered during an entry operation shall be noted on the pertinent permit so that appropriate revisions to the program can be made.

6.2 Air Testing

- 6.2.1 The atmosphere within the space will be tested to determine whether dangerous air contamination and/or oxygen deficiencies exist. Direct reading instruments, detector tubes, alarm only gas monitors and explosion meters are examples of monitoring equipment that may be used to test confined space atmospheres. Employees who have successfully completed air-monitoring training for the type of monitor they will use shall perform the air testing. Air testing equipment shall be calibrated (bump tested using span gas) and certified according to the manufacturer's recommendations. Calibration records shall be kept.
- 6.2.2 The minimum parameters to be monitored are oxygen deficiency, LEL and, if applicable, contaminants that may be present which are over OSHA's PEL's. When testing for atmospheric hazards, first test for oxygen content, then for flammable gases or vapors and lastly for toxic gases or vapors. The initial air readings shall be recorded on the Permit and kept at the work site for the duration of the job. The employees shall be able to review the testing results.
- 6.2.3 Air Testing Procedures. Prior to atmospheric testing, check air readings outside of the Confined Space to ensure proper operation of the instrument and that air readings are within normal ranges. Record Air test readings on the Permit.
- 6.2.3.1 Air testing for Confined Spaces having a top entrance (manholes, tanks, etc.):
- From each entrance, drop the sampling probe of the Meter to the bottom of the space. Additionally, use other available openings, which would facilitate air testing for that confined space.
 - Slowly raise the sampling probe, stopping at intervals of two feet to ensure that the atmosphere is not stratified. The rate of sampling shall be slowed to accommodate detector response due to the length of the sampling line and probe.
 - Record air testing data on the confined space permit.
- 6.2.3.2 Air testing for Confined Spaces having a side or bottom manway (ducts, tanks, etc.):

- From each entrance, move the sampling probe of the Meter to the opposite side of the space. Use rods, poles or other means to extend the probe to the opposite side of the space.
- Slowly test all areas inside the Confined Space. The rate of sampling shall be slowed to accommodate detector response due to the length of the sampling line and probe.
- Record air testing data on the confined space permit.

6.2.3.3 Upon initial entry, all areas that could not be tested from the manway shall be tested. Slowly test the areas with the sampling probe out in front of you, checking all areas that were missed.

6.2.4 If there are no non-atmospheric hazards present and if the pre-entry tests show there are no dangerous air contamination and/or oxygen deficiency within the space, entry into and work within the space may proceed.

6.2.5 The atmosphere within the space shall be periodically tested as necessary to ensure no accumulation of a hazardous atmosphere. If conditions exist that could change the atmosphere of the Confined Space, it will be necessary to monitor the atmosphere continuously during occupancy. Air monitoring shall be performed at the actual work location in the confined space. The results of this monitoring shall be documented on the confined space permit, at a frequency established by the Entry Supervisor.

6.2.6 The workers will immediately leave the permit space and notify Environmental Health and Radiation Safety (EHRS) when any of the gas monitor's alarm set points are reached as defined. After a suitable ventilating period, repeat the testing. Entry may not begin until testing has demonstrated that the hazardous atmosphere has been eliminated and EHRS approves.

6.3 Entry Procedures

6.3.1 Each PRCS to be entered shall have specific procedures developed to ensure the safety of all affected personnel, including, but not limited to, the following:

6.3.1.1 Specifying acceptable entry conditions,

6.3.1.2 Isolating the permit space,

6.3.1.3 Purging, flushing, or ventilating the permit space as necessary to eliminate or control atmospheric hazards,

6.3.1.4 Providing pedestrian, vehicle, or other barriers as necessary to protect entrants from external hazards and

6.3.1.5 Verifying that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry.

6.3.2 Retrieval and rescue equipment is required for entry into permit required confined spaces. The use of a harness is not required if it will create a greater hazard to the wearer.

- 6.3.3 Reference Appendix A and Attachment A for specific confined space entry procedures.

6.4 Alternative Procedures

- 6.4.1 Alternative entry procedures may be used in the following circumstances:
- 6.4.1.1 The only hazard posed by the permit space is an actual or potential hazardous atmosphere.
 - 6.4.1.2 The employer can demonstrate that continuous forced air ventilation alone is sufficient to maintain the permit space safe for entry. Air levels must be below 50% of established permissible exposure levels.
 - 6.4.1.3 The employer develops monitoring and inspection data that supports the demonstration that continuous forced air ventilation alone is sufficient to maintain the permit space safe for entry.
- 6.4.2 The atmosphere within the space shall be continuously monitored to ensure that forced air ventilation is preventing the accumulation of a hazardous atmosphere.
- 6.4.3 Training shall be provided to the employees who enter permit spaces under the alternative procedures and to the employer's representatives who verify that permit spaces are safe for entry under the alternative procedures.
- 6.4.4 The Attendant and Entry Supervisor are not required by the Alternative Procedures as well as retrieval and rescue equipment.
- 6.4.5 The Entry Supervisor is responsible for documenting the basis for determining that all atmospheric hazards in the permit space have been eliminated or controlled through a certification that contains the date, the location of the space, any air sampling data to support this and the signature of the Entry Supervisor making the determination. This certification shall be made available to all employees involved.
- 6.4.6 See Appendix B for alternate entry procedures.

6.5 Reclassifying a Permit Required Confined Space

- 6.5.1 A space classified as a PRCS may be reclassified as a non-permit confined space under the following procedures.
- 6.5.2 If the PRCS poses no actual or potential atmospheric hazards or if all hazards within the space are eliminated without entry into the space and without the use of forced ventilation, the permit space may be reclassified as a Non-Permit Confined Space for as long as the non-atmospheric hazards remain eliminated.
- 6.5.3 If it is necessary to enter a PRCS to eliminate a hazard or to test for atmospheric hazards, such entry shall be completed under a confined space permit.
- 6.5.4 Once the space is reclassified, it may be treated as a Non-Permit Confined Space for the duration of the work being performed. The permit is no longer required as well as an attendant, supervisor, retrieval and rescue equipment. Air monitoring should be conducted each day before entering the non-permitted space. Once a job is complete, the space reverts to a PRCS.

- 6.5.5 The Entry Supervisor is responsible for documenting the basis for determining that all hazards in the permit space have been eliminated through a certification that contains the date, the location of the space, any air sampling data to support this and the signature of the Entry Supervisor making the determination (the use of a confined space entry permit will meet this requirement). The Supervisor will sign on the permit that the space has been reclassified, as non-permit required. This certification shall be made available to all employees involved.

6.6 Contractors

- 6.6.1 At a minimum, Contractors must follow the requirements of Penn's Confined Space Program.
- 6.6.2 Penn will provide Contractors: information on all PRCS('s) to be entered, hazards associated with the Confined Space(s) and a copy of this Confined Space Program.
- 6.6.3 Contractor employees must be trained in confined space entry. Contractors that are required to enter a Confined Space must show certification that their employees have been trained in accordance with 29 CFR 1910.146.
- 6.6.4 Additionally, the Contractor employees will be trained on Penn's Confined Space Program. Penn's Contractor Representative will communicate to the Contractor the requirements of this program and potential hazards they may encounter inside the confined space and the surrounding area. Contractor Training should be documented.

7.0 CONFINED SPACE RESCUE

- 7.1 In the event of an emergency of any type in the confined space, entrants in the space shall evacuate as quickly as possible. Injured employees are encouraged to use self-rescue when applicable.
- 7.2 If rescue from within the confined space is required, the attendant should immediately call **Penncom**. Inform the Penncom Operator that rescue is needed from a confined space. Give the emergency service the location, the type of confined space, and the hazards associated with the space.

8.0 TRAINING

- 8.1 All personnel involved with confined space activities shall receive training consistent with their duties. Employees will receive training in order to acquire the understanding, knowledge and skills necessary for the safe performance of the duties assigned under this program.
- 8.2 Training shall be provided to each affected employee that may be designated as a supervisor, entrant or attendant:
- 8.2.1 Before the employee is first assigned duties,
- 8.2.2 Before there is a change in assigned duties,

- 8.2.3 Whenever there is a change in confined space operations which presents a hazard to an employee who has not been previously trained and
- 8.2.4 Whenever the employer has reason to believe that there are deviations from the confined space entry procedures or that there are inadequacies in the employee's knowledge or use of these procedures.
- 8.2.5 The training shall establish employee proficiency in the duties required and shall introduce new or revised procedures, as necessary, for compliance.

8.3 Training content shall include:

- 8.3.1 Duties of Entry Supervisor, Entrant and Attendants,
- 8.3.2 Penn's Confined Space Program and other procedures relating to Confined Space Entry (Lockout/Tagout, Hot Work, etc.),
- 8.3.3 Hazards of Confined Spaces,
- 8.3.4 Use of Air Monitoring Equipment,
- 8.3.5 Use of ventilation equipment,
- 8.3.6 Emergency Action & Rescue Procedures,
- 8.3.7 Confined Space Entry Equipment, including Personal Protective Equipment and
- 8.3.8 Requirements of 29 CFR 1910.146 Permit Required Confined Spaces.

9.0 DOCUMENTATION

- 9.1 Department Managers shall retain each canceled entry permit for at least one year to facilitate the review of the PRCS program. The Department Manager or designee will conduct and document this review.
- 9.2 Training documentation shall be kept for all affected employees. Training rosters shall indicate the employee's name, date, level of training (supervisor, entrant, and/or attendant) and the instructor who performed the training. The Department Managers shall maintain all training rosters. The most current training record shall be kept for each affected employee.
- 9.3 Calibration and/or certification of air monitoring instruments shall be conducted in accordance with the manufacturer's recommendations. The Department Manager shall maintain records. The Department Manager shall periodically inspect the calibration records to ensure completion.

10.0 REFERENCES

- 10.1 29 CFR 1910.146 Permit Required Confined Spaces
- 10.2 Penn's Lockout/Tagout Procedure
- 10.3 Penn's Hot Work Procedure

TITLE:

**Confined Space Entry Procedure
Facility Services**

**Revision 2
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7/26/2005

Approved By:

Director of Central Services

Effective Date

Utilities Operations Manager

Appendix A

CONFINED SPACE ENTRY PROCEDURE

JOB PLANNING MEETING

- 1) Prior to entry into a confined space, personnel involved with the job will discuss the procedures that will be followed, so that the confined space work will be completed safely. The required equipment will be assembled; instructions will be conveyed to those involved in the entry; procedures will be discussed; and hazards, which may be encountered, will be explained. The attendant should ensure that any ignition source taken into the confined space is limited to ones required to perform the necessary work. Each location may have different hazards.
- 2) All necessary equipment to be used for entry will be assembled by the attendant, including communication devices (radios, if required) to be used to quickly summon Rescue Personnel

ENTRY PROCEDURE

- 1) Follow Penn's Lockout/Tagout procedures to isolate any potential hazardous sources, which will adversely affect those working in confined space.
- 2) Open sufficient manhole covers, doors, vents, or other openings in the confined space.
- 3) Where necessary, use ventilators to change the air in the confined space.
- 4) A Qualified Employee will test the air for oxygen content, flammable and toxic gases (See Section 6.2). Initial air monitoring data will be recorded on the confined space permit. (See Attached Confined Space Permit)
 - a) Oxygen must be between 19.5% and 23.5%
 - b) Flammable/Explosive gases must be below 5% Lower Explosive Limit (LEL)
 - c) Toxic gases/vapors must be below OSHA's Permissible Exposure Limits
- 5) The Entry Supervisor will assign a trained Attendant to control entry into the confined space.
- 6) The Attendant will ensure that all Entrants are authorized; keep an accurate count of all who enter; continually communicate with those within the confined space; watch out for the well-being and safety of all entrants; and stay until relieved. Attendants will verify that all Entrants sign the Permit prior to entry.
- 7) If all is clear in step 6, the Entry Supervisor will authorize entry. Continuous forced ventilation should be used when required. Continuous air monitoring shall be conducted and recorded periodically on the back of the permit when required.
- 8) If work is stopped for any reason, the air tests shall be re-taken if deemed necessary by the Entry Supervisor, prior to re-entry.
- 9) When the job has been completed, the Attendant will account for all Entrants before they leave the job site.
- 10) The Entry Supervisor will check to ensure that all personnel are out, all equipment is clear, and when he is satisfied with the site conditions, he/she can close out the confined space entry permit, prior to allowing the Confined Space to be sealed.

Appendix B

ALTERNATIVE ENTRY PROCEDURES

This Appendix lists the alternative entry procedures. It may be used as a checklist when permit space entry by the alternative procedures is allowed. The signature of the employer's representative verifies that the space is safe for entry. This certification shall be made before entry and shall be available to each employee entering the space.

Alternative entry procedures may be used in the following circumstances. The only hazard posed by the permit space is an actual or potential hazardous atmosphere. The employer can demonstrate that continuous forced air ventilation alone is sufficient to maintain the permit space safe for entry, and the employer develops monitoring and inspection data that supports the demonstration that continuous forced air ventilation alone is sufficient to maintain the permit space safe for entry.

Permit Space Location: _____ Date: _____

1. Eliminate any conditions making it unsafe to remove an entrance cover. List the hazards and precautions:
2. When the entrance covers are removed, promptly guard the entrance to prevent accidental falls through the opening and to protect the entrants from foreign objects. Describe the guards to be erected:
3. Before an employee enters the space, test the internal atmosphere for the following conditions, in the order given, and record below. List the acceptable range for the potential toxic air contaminants.

Oxygen Content: _____	Acceptable Range 19.5% to 23.5%
Flammable Gas and Vapors: _____	0% to 5% LEL
Toxic Air Contaminants (____): _____	0 to

4. Provide continuous forced air ventilation as follows:
 - An employee may not enter the space until the forced air ventilation has eliminated any hazardous atmosphere.
 - Forced ventilation is so directed as to ventilate the immediate areas where an employee is or will be present within the space and shall continue until all employees have left the space.
 - The air supply for the forced air ventilation is from a clean source and does not increase the hazards in the space.
5. Continuous monitoring will be conducted. Employees must evacuate the space if the oxygen content drops below 19.5%, the flammable gas or vapor concentration is at or above 5% of the LEL, and the toxic gases or vapor concentration exceeds 50% of the PEL.
6. If a hazardous atmosphere is detected during entry, each employee shall leave the space immediately; the space shall be evaluated to determine how the hazardous atmosphere developed; and measures shall be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.

I, _____, certify that these procedures have been followed and that the confined space is safe for entry.

Entry Supervisor: _____
Signature Date

CONFINED SPACE ENTRY PERMIT

(Complete Prior to Entry)

I. ENTRY DESCRIPTION

Confined Space Location /Number: _____

Purpose of Entry: _____

Date Permit Issued _____ Time of Entry: (in) _____ (out) _____ Permit Expires _____

Any equipment in need of repairs must be reported to the supervisor who will take proper steps to have repairs made immediately.

II. ENTRY TEAM MEMBERS

Name (list below)	Time In	Time out
Attendant	xxxxxxxx	xxxxxxxx
Entrant		

III. ATMOSPHERIC TESTING

Has unit been calibrated within last month Yes/No Battery checked? Yes/No

Location in space	% O2	% LEL	CO ppm	Other	Initials of Tester
Prior to Entry*					

At Opening					
Middle					
Bottom					
Acceptable Limits*	19.5-23.5%	Below 5%	Below 25 ppm		

*Continuous monitoring may be required. Site-specific conditions may require entrant to wear a monitor.

**Contact EHRS 215-898-4453 if any reading exceeds acceptable limit

IV. SAFETY CHECKLIST (check each item when completed)

- _____ 1. Establish communication from worksite with OCC or PENNCOM (**Emergency: dial 215-573-3333**)
- _____ 2. Barricades in position
- _____ 3. Establish continuous ventilation/monitoring if required.
- _____ 4. Communication checked between entrants and attendant (List how _____)
- _____ 5. Escape harness, tripod and winch available
- _____ 6. Lockout/tag out completed (if needed)
- _____ 7. Appropriate PPE worn
 - _____ Harness _____ Hardhat _____ Gloves _____ Hearing Protection _____ Foot _____
 - _____ Personal Monitor _____ Eye Protection _____ Other (list) _____
- _____ 8. Lighting
- _____ 9. Heat conditions assessed
- _____ 10. Others (list) _____

V. AUTHORIZATION FOR ENTRY

Entry Supervisor (print) _____ Signature _____ Date _____

OR: Entry into this confined space can be completed using *Alternative Method Procedures*:

Entry Supervisor (print) _____ Signature _____ Date _____

OR: The above confined space has been reclassified to *Non Permit Required*:

Entry Supervisor (print) _____ Signature _____ Date _____

MANAGER MUST RETAIN THIS FORM FOR ONE (1) YEAR FROM DATE OF ISSUE