Permit Required Confined Space

1. **PURPOSE**

This Confined Space Program has been developed in accordance with the Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.146. The purpose of this program is to ensure that proper protection is taken for all employees working in confined spaces.

1. **GENERAL PROGRAM MANAGEMENT**
   1. **Responsibility**

It is the responsibility of the management to protect its employees. The management will:

* + 1. Evaluate the workplace to determine if any spaces are permit-required confined spaces.
    2. Inform exposed employees of the permit-required confined spaces.
    3. Determine if employees will not enter permit spaces, and what effective measures will be taken to prevent employees from entering permit spaces.
    4. Decide that its employees will enter permit spaces, (a written permit space entry program must be developed and implemented).

The company Safety Officer, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is responsible for this program and has authority to make decisions to ensure the success of this program. Copies of the written program may be obtained from the office.

* 1. **Program Review and Update**

The Confined Space Program will be reviewed and/or updated under these circumstances:

* + 1. When the employer has reason to believe that measures taken under the confined space program may not protect employees, it will revise the program to correct deficiencies before authorizing subsequent entries; and
    2. After a review of the permit-required confined space program, using cancelled permits retained within one (1) year after each entry, the employer will revise the program as necessary.

1. **METHODS OF COMPLIANCE**
   1. General Requirements

An employer may use alternate procedures for entering a permit space under the conditions below:

Employees entering a permit space need not comply with the following parts of this program:

* + 1. Permit Required Confined Space
    2. Permit System
    3. Entry Permit
    4. Duties of Authorized Entrants
    5. Duties of Attendants
    6. Duties of Supervisors
    7. Rescue and Emergency Services, **providing that,**
       1. The employer can demonstrate that the only hazard is actual or a potentially hazardous atmosphere;
       2. The employer can demonstrate the forced air ventilation alone is sufficient to maintain safe entry;
       3. The employer develops monitoring and inspection data required by this program;
       4. If an initial entry is needed to collect the data above then it will be performed in compliance with parts (d) through (k) of the OSHA permit required confined space program.
       5. The determinations and data required above are documented and available to employees who enter the space;

Entry under the terms above must be performed in accordance with the following requirements:

* + 1. Any condition making it unsafe to remove an entrance cover will be eliminated before the cover is removed.
    2. When covers are removed, a barrier that will prevent accidental fall through the opening and protect employees in the space from foreign objects entering the space will promptly guard the entrance.
    3. Before an employee enters the space, the internal atmosphere will be tested with a calibrated direct-reading instrument, for the following conditions in the order given:
       1. Oxygen content
       2. Flammable gases and vapors, and
       3. Potential toxic air contaminants.
    4. There may be no hazardous atmosphere within the space whenever any employee is inside the space.
    5. Continuous forced air ventilation will be used as follows:
       1. An employee may not enter the space until forced air ventilation has eliminated any hazardous atmosphere;
       2. Forced air ventilation will be directed to ventilate the immediate areas where an employee is or will be, and will continue until all employees have left the space;and
       3. The air supply for the ventilation will be clean and may not increase the hazard.
    6. The atmosphere within the space will be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere.
    7. If a hazardous atmosphere is detected during entry:
       1. Each employee will leave the space immediately;
       2. The space will be evaluated to determine how the hazardous atmosphere developed; and
       3. Measures will be implemented to protect employees from the hazardous atmosphere before a subsequent entry.
    8. Before each entry, the employer will verify that the space is safe for entry and that the measures above have been taken, with a written certification giving the date, location of the space, and signature of the person providing the certification.
  1. **Non-Permit Space**

A space classified as a permit-required space may be reclassified as a non-permit space:

* + 1. If the permit space poses no actual or potential atmospheric hazards and if all hazards are eliminated without entering the space, it can be reclassified as a non-permit space as long as the non-atmospheric hazards remain eliminated.
    2. If it is necessary to enter the permit space to eliminate hazards, such entry will be performed under parts ( ) to ( ) of this program. If testing and inspection demonstrate that the hazards have been eliminated, the permit space can be reclassified as a non-permit space for as long as the hazards remain eliminated.
    3. The employer will document the basis for determining that all hazards have been eliminated through a certification that contains the date, location of the space, and the signature of the person making the determination.
    4. If hazards arise within a permit space that has been declassified to a non-permit space these requirements each employee will exit the space. The employee will reevaluate the space and determine if it must be reclassified as a permit space.

In addition to complying with requirements that apply to all employers, each contractor that performs permit space entry will:

* + 1. Obtain any available information regarding permit space hazards and entry operations from the host employer;
    2. Coordinate entry operations with the host employer, when both host employer and contractor personnel work in or near permit spaces, as required in this program.
    3. Inform the host employer of the permit space program that the contractor will follow and any hazards confronted or created in permit spaces.
  1. **Permit-Required Confined Space**
     1. The employer will implement measures necessary to prevent unauthorized entry to a confined space.
     2. The employer will identify and evaluate the hazards of the permit spaces before employees enter them.

NOTE: This requires atmospheric testing with a gas detector before entry into the space.

* + 1. The employer will provide the following equipment for free to employees, and maintain the equipment properly, and ensure that employees use that equipment properly:
       1. Testing and monitoring equipment needed to evaluate the permit space conditions;
       2. Ventilating equipment needed to obtain acceptable entry conditions;
       3. Communications equipment necessary for compliance;
       4. Personal protective equipment insofar as feasible engineering and work practice controls do not adequately protect employees;
       5. Lighting equipment needed to enable safe work in and exit from the space;
       6. Barriers and shields to protect entrants from external hazards;
       7. Equipment needed for safe ingress and egress;
       8. Rescue and emergency equipment to comply with this program; and
       9. Any other equipment necessary for safe entry and rescue.
    2. The employer will provide at least one attendant outside the permit space for the duration of entry operations;
    3. If multiple spaces are to be monitored by a single attendant, the employer will provide the means and procedures to enable the attendant to respond to an emergency in one or more spaces without distraction form the attendant's responsibility under this program.
    4. The employer will designate the persons who are to have active roles in entry operations, their duties, and provide each with the training required by this program.
    5. The employer will develop and implement a procedures for summoning rescue and emergency services, for rescuing entrants, and for preventing unauthorized personnel from attempting rescue;
    6. The employer will develop and implement procedures to coordinate entry operations when employees of more than one employer are entering a permit space so that they do not endanger each other;
    7. The employer will develop and implement a system for the preparation, issuance, use, and cancellation of entry permits; and
    8. The employer will develop and implement procedures to coordinate entry after operations are completed;
  1. **Permit System**
     1. Before entry is authorized, the employer will document the completion of the measures below by preparing an entry permit. The employer will develop and implement the means, procedures, and practices necessary for safe entry, including:
        1. Specifying acceptable entry conditions;
        2. Isolating the permit space;
        3. Purging, flushing, or ventilating the permit space to eliminate or control atmospheric hazards;
        4. Providing barriers as necessary to protect entrants from external hazards;and
        5. Verifying that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry.

NOTE: To eliminate any possible doubt or confusion regarding this matter, appropriate testing or monitoring during the course of entry operations is specifically required by this program. This provision requires whatever periodic or continuous monitoring necessary to protect the employees.

* + 1. Before entry, the entry supervisor shall sign the permit to authorize entry.
    2. The completed permit will be made available to all authorized entrants to confirm that pre-entry preparations have been completed.
    3. The duration of the permit will not exceed the time required to complete the assigned task or job.
    4. The entry supervisor will terminate entry and cancel the permit when:
       1. Operations have been completed; or
       2. A condition that is not allowed under the entry permit arises in or near the permit space.
    5. The employer will retain each entry permit for at least 1 year to facilitate the review of the permit-required confined space program. Any problems encountered during an entry operation will be noted on the permit so that appropriate revisions to the program can be made.

NOTE: This requires recordkeeping of gas detector readings, since these readings are entered on the permit before and during the entry.

* 1. **Entry Permit**

The entry permit that authorizes entry into a permit space shall identify:

* + 1. The space to be entered;
    2. The purpose of the entry;
    3. The date and authorized duration of the entry;
    4. The authorized entrants;
    5. The personnel serving as attendants;
    6. The individual serving as the entry supervisor;
    7. The hazards of the permit space to be entered;
    8. The measures used to isolate the space and eliminate or control hazards before entry;
    9. The acceptable entry conditions; and
    10. The results of initial and periodic tests performed below:(accompanied by the names or initials of the testers and by an indication of when the tests were performed)
        1. Test conditions in the permit space to determine if acceptable entry conditions exist before entry is authorized to begin, except that, if isolation of the space is infeasible because the space is larger or is part of a continuous system (such as sewer), pre-entry testing will be performed to the extent feasible before entry is authorized and, if entry is authorized, entry conditions will be continuously monitored in the areas where authorized entrants are working;
        2. Test or monitor the permit space as necessary to determine if acceptable entry conditions are being maintained during the course of entry operations, and;
        3. When testing for atmospheric hazards, test first for oxygen, then for combustible gases and vapors, then for toxic gases and vapors.

NOTE: The test for oxygen must be done first because most combustible gas sensors require oxygen to function.

* + 1. The rescue and emergency services that can be called and how to call them;
    2. The communication procedures used by entrants and attendants to maintain contact with each other;
    3. Equipment, such as testing equipment, to be provided for compliance with 29 CFR 1910.146;
    4. Any other information necessary to ensure employee safety; and
    5. Any additional permits, such as Hot Work Permits, issued for work in the space.
  1. **Training**
     1. The employer will provide training so that employees acquire the understanding, knowledge, and skills necessary for the safe performance of the duties assigned.
     2. Training will be provided:
        1. Before the employee is first assigned duties under this regulation;
        2. Before there is a change in permit space operations that presents a hazard about which an employee has not previously been trained on;
        3. Whenever the employer has reason to believe there are inadequacies in their knowledge of these procedures.
     3. The employer will certify that the training required has been accomplished and the employee is proficient in the duties.
  2. **Duties of the Authorized Entrants**

The employer shall ensure that all authorized entrants:

* + 1. Know the hazards that may be faced during entry;
    2. Understand proper use of the equipment required;
    3. Communicate with the attendant as necessary to enable the attendant to monitor the entrants and to enable the attendant to alert entrants of the need to evacuate as required.
    4. Alert the attendant whenever:
       1. The entrant recognizes any warning sign or symptom of exposure to a dangerous situation, or
       2. The entrant detects a prohibited condition, THEN
    5. Exit from the permit space as quickly as possible whenever:
       1. An order to evacuate is given by the attendant or supervisor;
       2. The entrant recognizes any warning sign or symptom of exposure to a dangerous situation,
       3. The entrant detects a prohibited condition; or
       4. An evacuation alarm is activated.
  1. **Duties of Attendants**

The employer shall ensure that each attendant:

* + 1. Knows what hazards that may be faced during entry;
    2. Is aware of possible behavioral effects of hazard exposure;
    3. Continuously maintains an accurate count of entrants;
    4. Remains outside the permit space during entry until relieved by another attendant;
    5. Communicates with entrants as necessary to monitor their status and to alert them of the need to evacuate;
    6. Monitors activities inside and outside the space to determine if it is safe and orders evacuation immediately under any of the following conditions:
       1. If the attendant detects any prohibited condition;
       2. If the attendant detects the behavioral effects of hazard exposure in an entrant;
       3. If the attendant detects a situation outside the space that could endanger entrants; or
       4. If the attendant cannot effectively and safely perform all duties required.
    7. Summon rescue and other emergency services as soon as it is determined that entrants may need assistance to escape;
    8. Takes the following actions when unauthorized persons approach or enter a permit space while entry is under way:
    9. Performs non-entry rescues as specified by the employer's rescue procedure; and
    10. Performs no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.
  1. **Duties of Entry Supervisors**

The employer will ensure that each entry supervisor:

* + 1. Knows the hazards that may be faced during entry;
    2. Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin;
    3. Terminates the entry and cancels the permit as required by this program.
    4. Verifies that rescues services are available and that the means for summoning them are operable;
    5. Removes unauthorized individuals who enter or attempt to enter the permit space during operations; and
    6. Determines that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.
  1. **Rescue and Emergency Services**
     1. The following requirements apply to employers who have employee enter permits spaces to perform rescue services.
        1. The employer will ensure that the rescue service is provided with, and is trained to use, personnel protective equipment necessary for making rescues.
        2. Each member of the rescue service will be trained to perform assigned rescue duties. They will also receive the training required of authorized entrants under this plan.
        3. Each member of the rescue service will practice making rescues at least once every 12 months.
        4. Each member of the rescue service will be trained in basic first-aid and CPR.
     2. When a host employer arranges to have persons other than their employees perform rescues, the host employer will:
        1. Inform the rescue service of the hazards they may confront when called on to perform a rescue, and
        2. Provide the rescue service with access to all permit spaces from which rescue may be necessary to allow them to develop rescue plans and practice rescues.
     3. To facilitate non-entry rescue, retrieval systems or methods will be used whenever an authorized entrant enters a permit space, unless this would increase risk or would not assist the rescue. Retrieval systems will meet the following:
        1. Each authorized entrant will use a chest or full body harness with a retrieval line. Wristlets may be used in lieu of a harness if the employer can demonstrate that they are a safer, more effective alternative.
        2. The other end of the retrieval line will be attached to a mechanical device or fixed point outside the permit space so that rescue can begin as soon as it becomes necessary.
     4. If an injured entrant is exposed to a substance for which an MSDS sheet or other similar written information is required, that sheet or written information will be made available to the medical facility treating the exposed entrant.

**Appendix A  
  
Confined Space Pre-Entry Checklist(Sewer Entry Permit)**

See Safety procedure.

A confined space either is entered through an opening other than a door (such as manhole or side port) or requires the use of a ladder or rungs to reach the working level and test results are satisfactory. This checklist must be filled out whenever the job site meets this criteria.

|  |  |  |
| --- | --- | --- |
| 1. | Did your survey of the surrounding area show it to be free of hazards such as drifting vapors from tanks, piping or sewers? | YES( ) NO( ) |
| 2. | Does your knowledge of industrial or other discharges indicate this area is likely to remain free of dangerous air contaminants? | YES( ) NO( ) |
| 3. | Are you certified in operation of the gas monitor to be used? | YES( ) NO( ) |
| 4. | Has a gas monitor functional test (Bump test) been performed this shift on the gas monitor to be used? | YES( ) NO( ) |
| 5. | Did you test the atmosphere of the confined space prior to the entry? | YES( ) NO( ) |
| 6. | Did the atmosphere of the confined space prior to entry? | YES( ) NO( ) |
| 7. | Will the atmosphere be continuously monitored while the space is occupied? | YES( ) NO( ) |

Contact County for personnel rescue by local fire department in the event of an emergency. If on-site at the Regional Treatment Plant, contact the Plant Control Center (PCC).

NOTE: If any of the above questions are answered "no" do not enter. Contact Supervisor Immediately!

Job\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Location\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lead Person Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Appendix B**

**Confined Space Entry Permit**

**Pre-Entry/Entry Checklist**

Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Time\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_am pm (circle one)

Issued:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Job Site:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Equipment to be worked on:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Pre-Entry (See Safety Procedure)

|  |  |  |
| --- | --- | --- |
| 1. | Atmospheric Checks: | Time:\_\_\_\_\_\_\_\_\_\_\_\_\_\_AM PM |
|  |  | Oxygen:\_\_\_\_\_\_\_\_\_\_\_\_% |
|  |  | Explosives:\_\_\_\_\_\_\_\_\_\_\_\_%L.F.L |
|  |  | Toxic:\_\_\_\_\_\_\_\_\_\_\_\_PPM |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2. | Source isolation (No Entry): | N/A | Yes | No |
|  | Pumps or lines blinded | ( ) | ( ) | ( ) |
|  | Disconnected or blocked | ( ) | ( ) | ( ) |
| 3. | Ventilation Modification: | N/A | Yes | No |
|  | Mechanical | ( ) | ( ) | ( ) |
|  | Natural Ventilation only | ( ) | ( ) | ( ) |

|  |  |  |
| --- | --- | --- |
| 4. | Atmospheric check after isolation and ventilation: | Time:\_\_\_\_\_\_\_\_\_\_\_\_\_\_AM PM (circle one) |
|  |  | Oxygen:\_\_\_\_\_\_\_\_\_\_\_\_% > 19.5% |
|  |  | Explosives:\_\_\_\_\_\_\_\_\_\_\_\_%L.F.L < 10.0% |
|  |  | Toxic:\_\_\_\_\_\_\_\_\_\_\_\_PPM < 10 PPM H2S |

If conditions are in compliance with the above requirements and there is no reason to believe conditions may change adversely, then proceed to the Permit Space Pre Entry Checklist. Complete and post with this permit. If conditions are not in compliance with the above requirements or there is reason to believe that conditions may change adversely, proceed to the Entry Checklist of this Permit.

Date and Time Expires:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Work to be performed:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Entry(See Safety Procedure)

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Yes | No |
| 1. | Entry, Standby, and back-up persons: | ( ) | ( ) |
|  | Successfully completed required training? | ( ) | ( ) |
|  | Is it current? | ( ) | ( ) |
|  |  | N/A | Yes | No |
| 2. | Equipment: | ( ) | ( ) | ( ) |
|  | Direct reading gas monitor tested? | ( ) | ( ) | ( ) |
|  | Safety harness and lifelines for entry and standby persons | ( ) | ( ) | ( ) |
|  | Hoisting equipment | ( ) | ( ) | ( ) |
|  | Powered communications | ( ) | ( ) | ( ) |
|  | SCBA's for entry and standby persons | ( ) | ( ) | ( ) |
|  | Protective Clothing | ( ) | ( ) | ( ) |
|  | All electric Equipment listed Class I, Division I, Group D and Non-sparking tools? | ( ) | ( ) | ( ) |
| 3. | Rescue Procedures: |  |  |  |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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We have reviewed the work authorized by this permit and the information contained here-in. Written instructions and safety procedures have been received and are understood. Entry cannot be approved if any squares are marked in the "NO" column. This permit is not valid unless all appropriate items are completed.

Permit and Checklist Prepared By: (Supervisor)

Approved By: (Unit Supervisor)

Reviewed By: (Confined Space Operations Personnel) : (Printed name and Signature)

This permit is to be kept at the job site. Return job site copy to Safety Office following job completion. Three copies should be maintained: Safety Office, Unit Supervisor, and Job Site

**Entry Permit**

|  |  |
| --- | --- |
| Confined Space\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Hazardous Area\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**PERMIT VALID FOR EIGHT(8) HOURS ONLY. ALL COPIES OF PERMIT WILL REMAIN AT JOB SITE UNTIL JOB IS COMPLETED**

Site Location and Description:

Purpose of Entry:

Supervisors in Charge of Crews:

Type of Crew:

Phone #'s:

**\* BOLD DENOTES MINIMUM REQUIREMENTS TO BE COMPLETED AND REVIEWED PRIOR TO ENTRY\***

|  |  |  |
| --- | --- | --- |
| **REQUIREMENTS COMPLETED** | **DATE** | **TIME** |
| **Lock Out/De-energize/Try-out** |  |  |
| **Line(s) Broken-Capped-Blanked** |  |  |
| **Purge-Flush and Vent** |  |  |
| **Ventilation** |  |  |
| **Secure Area (Post and Flag)** |  |  |
| **Breathing Apparatus** |  |  |
| **Resuscitator - Inhalator** |  |  |
| **Standby Safety Personnel** |  |  |
| **Full Body Harness with "D" Ring** |  |  |
| **Emergency Escape Retrieval Equipment** |  |  |
| **Lifelines** |  |  |
| Fire Extinguisher |  |  |
| Lighting (Explosive Proof) |  |  |
| Protective Clothing |  |  |
| Respirator(s) (Air Purifying) |  |  |
| Burning and Welding Permit |  |  |

NOTE: Items that do not apply should have N/A entered in the blank.

**\*\* RECORD CONTINUOUS MONITORING RESULTS EVERY 2 HOURS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CONTINUOUS MONITORING\*\* TESTS TO BE TAKEN | PERMISSIBLE ENTRY LEVEL | PRE-ENTRY READING | TIME | EXIT READING | TIME |
| Percent of oxygen | 19.5% to 23.5% |  |  |  |  |
| Lower flammable Limit | Under 10 % |  |  |  |  |
| Carbon Monoxide | +35 PPM |  |  |  |  |
| Aromatic Hydrocarbon | +1 PPM \* 5PPM |  |  |  |  |
| Hydrogen Cyanide(skin) | \* 4PPM |  |  |  |  |
| Hydrogen Sulfide | +10 PPM\*15PPM |  |  |  |  |
| Sulfur Dioxide | +2 PPM \* 5PPM |  |  |  |  |
| Ammonia | \*35PPM |  |  |  |  |

\*Short-term exposure limit: Employee can work in the area up to 15 minutes.

+8 hour Time Weighted Average: Employee can work in area 8 hours (longer with appropriate respiratory protection).

Remarks:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Gas Tester Name and Check # Instrument(s) used Model and/or Type Serial#\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and/or Unit#\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_:

**Safety Standby Person is Required for ALL Confined Space Work**

Safety Standby Person\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Check No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor authorizing entry

All Above ConditionS Satisfied? YES\_\_\_\_\_NO\_\_\_\_\_

Department Phone No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Emergency Phone No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fire No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ambulance No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Safety Director No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Gas Coordinator No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**PERMIT-REQUIRED CONFINED SPACE ENTRY RECORD OF TRAINING**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| DATE | Instructor(s) | \* Training | Description (# Below) | Employee Name |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

\*Training- Lecture, Group, Hands-on, etc.

Training Description

1. Hazard Recognition
2. Emergency Notification
3. Personal Protective Equipment Usage
4. Lockout and Tagging Procedures
5. Atmosphere Testing Instruments
6. Special Equipment Usage
7. Emergency and Rescue Operations

**PERMIT-REQUIRED CONFINED SPACE ENTRY EXAMPLES OF TRAINING TOPICS**

Hazard Recognition:

1. Is there a residual material remaining on the Permit-Required Confined Space?
2. Is the lighting adequate?
3. Are the inside surfaces slippery and wet?
4. Are the values locked and tagged?
5. Thoroughly review the Material Safety Data Sheet for the chemicals you may encounter.

Emergency Notification:

1. In case of an accident or emergency, who is your first contact? Phone, intercom,beeper or radio number?
2. Is there an emergency siren, bell or other sounding device in the facility? Is there a particular code for different emergencies? When is the device tested?
3. Who is to call the rescue team, rescue squad or others?

Personal Protective Equipment Usage:

1. Air Fed or Cartridge Type Respirators
2. SCBA (Self Contained Breathing Apparatus) Training
3. Protective Suits and Gloves
4. Hearing Protection
5. Eye Protection
6. Protective Footwear

Lockout and Tagging Procedures:

1. Is Production department sign off required? Daily and weekly production meeting notification? Who is contact for coordination?
2. Has the tagging system been color coded? What is tagging procedure exactly?
3. How is a lock out of a particular device initiated?

Atmospheric Testing:

1. Who performs the instrument calibration?
2. Perform training with each specific instrument.
3. Review the listing of LEL's (Lower Explosive Limits) and IDLH (Immediate Dangerous to Life or Health) concentrations on the chemicals likely to be encountered. (Refer to MSDS)

Special Equipment Usage:

1. Specialized material handling/vacuum system to remove residual material from Permit-Required Confined Space.
2. Lifting apparatus required by Section II. Permit-Required Confined Space Entry Equipment.

Emergency And Rescue Methods And Procedures:

* Review how an employee is to remove from a Permit-Required Confined Space. What equipment is to be used, how many people (minimum) will be required.