

Sample Written Program
for
Permit Required Confined Space Entry

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OHSB

New Mexico Occupational Health and Safety
Bureau

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GUIDELINES FOR A PERMIT REQUIRED CONFINED SPACE ENTRY WRITTEN PROGRAM

The Permit-Required Confined Space (PRCS) Standard which adopts federal OSHA 29 CFR 1910.146 poses several questions to employers:

1. Do you have PRCS in your workplace?
2. Will your employees enter them?
3. Do you know the hazards associated with them?
4. Do you educate and equip your employees to safely enter and perform tasks?

Affirmative answers to these questions form the basis of the written PRCS program found in paragraph (d) of the standard:

“The employer shall develop a permit required confined space program which shall:”

- Prevent unauthorized entry
- Specify acceptable entry conditions
- Specify all equipment needed to safely perform all tasks in the space
- Assure communications capabilities
- Use personal protective equipment
- Train all affected employees
- Identify and evaluate hazards
- Maintain acceptable conditions throughout the entry
- Have available and use monitoring and ventilation equipment
- Proper lighting
- Rescue and emergency capabilities
- Control or eliminate all hazards in the space

The attached sample program and worksheet are designed to aid employers in developing a system for evaluating and controlling hazards associated with entries into PRCS.

NOTE: This document is intended as a compliance guide for the federal OSHA standard codified as 29 CFR 1910.146, Permit Required Confined Spaces. This guide does not substitute for a full reading of the standard. The sample forms which are included in the appendices may be used as required by the standard or equivalent versions may be substituted.

I. POLICY

(Company name) _____ is committed to providing a safe and healthful work

environment for our entire staff. To achieve this goal, the following written program identifies all Permit-Required Confined Spaces (PRCS) and the procedures which shall be used to eliminate or control hazards associated with PRCS operations.

II. RESPONSIBILITIES

Overall Program Responsibility

(Company Representative's name or position) _____ is responsible for the overall implementation and maintenance of any written program or any certification concerning the requirements of the permit-required confined space standard at our facility.

Permit-Required Confined Space Evaluation

(Company Representative's name or position) _____ is responsible for evaluating the workplace to determine if any permit spaces are present.

Note to the Employer: A confined space is a space which:

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

A permit space is a confined space which has one or more of the following characteristics:

- Contains or has a potential to contain a hazardous atmosphere;
- Contains a material that has the potential for engulfing an entrant;
- 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
- Contains any other recognized serious safety or health hazard (i.e., electrical, mechanical, etc.).

Training

(Company Representative's name or position) _____ is responsible for ensuring that all affected personnel are properly trained and that refresher training is given. Personnel who may be included are any Authorized Entrants, Attendants, Entry Supervisors, on-site rescue team members, and employees who may potentially enter the space under paragraphs (c)(5), (c)(7) or through inadvertence.

Equipment

(Company Representative's name or position) _____ will ensure that all equipment needed for safe entry into any permit spaces and non-permit spaces is available and in proper working order.

Rescue Services

(Company Representative's name or position) _____ will ensure that rescue and emergency services have been developed either in house or contracted.

III. PERMIT SPACE EVALUATION AND CLASSIFICATION

Note to the Employer: All employers must evaluate the workplace to identify PRCS and whether their employees will enter them.

Employers who determine that their employees will enter a permit space must set up procedures to ensure safe entry. Because of the different types of permit spaces found in the work environment, the regulations allow options for employers to use to achieve safe entry. Proper evaluation by the employer will determine which procedures can be used.

1. **Non-permit confined space** means 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. (c)(7)
Permit spaces can be entered using alternate procedures when:
 - (A) The employer can demonstrate that the only hazard posed by the permit space is an actual or potential hazardous atmosphere; and
 - (B) The employer can demonstrate that continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry; and
 - (C) The employer develops monitoring and inspection data that supports the demonstrations required. (c)(5)

Permit spaces requiring a full permit-required confined space entry shall be performed in full compliance with paragraphs (d) through (k) of the standard.
It is the responsibility of the employer to determine which procedure is acceptable for any particular space.

A variety of forms have been included with this sample PRCS program to assist employers in assessing and documenting hazards and control measures. The Confined Space Identification Matrix (Appendix A) allows the user to document hazards for purposes of classifying the space.

This information is essential in formulating the equipment needs and training requirements of entrants prior to entry. Remember that the status of a space is dynamic and can change from full permit to non-permit, or back, based on purposeful action or due to prohibited/unforeseen circumstances.

(Company Representative's name or position) _____ has evaluated the workplace and determined:

(Check appropriate box)

- ☐ No permit-required confined space(s) exist at the worksite. Appropriate documentation regarding the absence of hazardous conditions, which may include monitoring data, should be maintained to confirm non-permit status.
- ☐ Permit-required confined space(s) have been determined to exist.

Appendix B is a list of all Permit Required Confined Spaces by classification and the intended entry method: Full Permit, Alternate Entry and Non-Permit.

Note to the Employer: A commonly found situation is a PRCS where the only hazard is a mechanical and/or electrical hazard and these hazards can be locked out from outside the space. This eliminates the hazard and enables the space to be reclassified as non-permit as long as those hazards remain eliminated.

When air monitoring indicates acceptable entry conditions without the use of ventilation, the following questions must be asked:

Is there a "potential" for an atmospheric hazard to develop in the space or can the space be determined to be totally free of hazards (non-permit)?

What chemicals may be in the space? Review those MSDS. Will entrants be disturbing chemicals in the space, taking chemicals into the space? Doing hot work? Are there ongoing oxidation (rusting) or organic decomposition (rotting) processes in the space?

If the Matrix reveals only an actual or potential atmospheric hazard exists which can be controlled by forced air ventilation the space may be entered through alternative procedures. The Occupational Health Division handout, OH-871, Alternate Entry Procedure, (attached) lists the requirements for an alternate entry.

Please be aware that all classification documentation (Permit, Alternate Entry and Non-Permit) involve the same information. OHSB representatives may ask to see the data to confirm your evaluation system. It is recommended that you use one form to collect data, then based on that data, assign a classification. Your employees will become practiced at, and familiar with, the paper and the process if you can minimize the variety of forms in the program.

IV. PREVENTION OF UNAUTHORIZED ENTRY

If permit spaces are identified at our worksite (Company Representative's name or position) will inform exposed or potentially exposed employees of their existence and hazards. The method(s) that will be used will be:

(Check box(es) for firm's specific policy)

☐ Posting of danger signs at each permit space reading "Danger-Permit-Required Confined Space-Do Not Enter" or other similar language.

☐ (Alternate method) _____

It has been determined by (Company Representative's name or position)
that the permit spaces identified at our worksite:

☐ Will not be entered by our employees.

The following measures have been taken to prevent employees from entering the space(s):

☐ Will be entered by our employees.

V. SAFE ENTRY CONDITIONS

Entry into PRCS shall not be attempted unless the following conditions exist:

- 1) Oxygen levels are between 19.5% and 23.5%.
- 2) Flammable gas, vapor or mist concentration is 10% or less of the lower flammable limit (LFL).
- 3) Concentrations of combustible dust are kept below the LFL and shall not obscure vision at distances of 5 feet or less.
- 4) All substances which have an OSHA PEL or ACGIH TLV, and which cause acute illness or would impair the entrant's ability to self-rescue, will be controlled within the space to a concentration equal to 50% of the PEL or TLV.
- 5) All electrical, mechanical and other kinetic hazards within the space shall be locked out, de-energized or safety blocked per OSHA safety standards.
- 6) Engulfment or entrapment hazards shall be eliminated or controlled.
- 7) All of these conditions shall be confirmed and noted on the Entry Permit or certification prior to entry.

VI. SAFE ENTRY PROCEDURES AND EQUIPMENT

Safe entry procedures have been developed for each permit space at our facility. These procedures specify the proper methods and equipment necessary to conduct the entry operation in a safe manner.

Where hazards posed, tasks performed and/or equipment and training needed are similar, the procedures would cover multiple spaces. Where specific written entry procedures have been developed, they should be attached to this program. They should indicate the specific PRCS they apply to.

The written entry permit exercised and reviewed prior to each entry is the checklist utilized to ensure all the procedural steps for a safe entry have been taken.

Appendix C lists the variety of equipment available for use in PRCS entries. The Training Section IX lists the training to be used to certify the skills, knowledge and understanding required to perform certifications and entries.

VII. HOST EMPLOYER'S RESPONSIBILITIES WITH CONTRACTORS

When contractors are involved in permit space entry work at our workplace, (Company Representative's name or position) will inform the contractor of the following information and coordinate any entry operations:

- The location of the permit spaces at our facility. Notify the contractor that entry into these spaces is only allowed through a permit space program, alternative procedures or space reclassification.
- Our rationale for listing the space as a permit space, such as any identified hazards, and our experiences with the particular space.
- Precautions that we have implemented to protect employees working in or near the space.

(Company Representative's name or position) will debrief the contractor at the completion of the entry operation, or during if a need arises, and if any hazards were confronted or created during their work.

The following is a list of contractors our company uses in projects/tasks involving PRCS:

VIII. CONTRACTOR'S RESPONSIBILITIES WITH HOST EMPLOYERS

Note to the employer: Contractors may not be aware of their responsibilities under the standard. Host employers must proactively seek this information.

When a contractor is hired to perform work in a PRCS, (Company representative's name or position) _____ will:

- Obtain from the contractor any information on the hazards (chemicals, equipment, tasks) the contractor's employees will introduce into the permit space.
- Determine whether our employees will be working in or near a PRCS where they may be exposed to the contractor's hazards. Coordinate entry operations with a designated contractor representative.
- Obtain from the contractor the PRCS entry program/procedures they will be utilizing.
- Hold a debriefing conference with the contractor at the completion of the entry operation or during the entry operation (if needed) to exchange information on any hazards confronted or created.

IX. TRAINING

Training must be given to each employee who has access or potential access to a permit space. The amount and type of training needed will depend on the individual's job responsibilities. The overall intent of this training is to give employees the understanding, knowledge, and skills necessary for the safe performance of their assigned duties in relation to the entry of PRCSs.

Awareness Training - Awareness training for employees potentially exposed to permit spaces. This training provides knowledge regarding:

- the existence, location and danger posed by PRCS in the company,
- the design, content and purpose of any warning sign posted or other means of warning
- the prohibition of entry into PRCS unless expressly authorized by a permit or certification.

Training Required for All PRCS Entry Categories:

Note to employer: Entries into PRCS can be made through the use of a permit or through certification as an alternate entry or non-permit classification. Regardless of the method, employees are required to have training regarding hazards, safeguards and prohibited conditions requiring employee evacuation of the space.

Include in your program only those controls you intend to use. Although this program contains common, generic terms, your program shall reflect what your specific PRCS entries are and how you evaluate and control your hazards.

Training for entry into any PRCS shall include (as applicable):

- The hazards associated with any atmospheric contaminants including their acceptable entry levels and symptoms of overexposure.
- Awareness training to recognize other potential hazards in or around the space.
- Any conditions which may make it unsafe to remove the entrance cover.
- The need for prompt guarding of the entrance opening.
- Atmospheric testing equipment including: use, calibration, maintenance, testing protocol, pre-entry testing, and frequency of testing.
- Train employees on the hazards associated with the space (i.e., mechanical, chemical, atmospheric) and the methods needed to eliminate the hazards including: isolation techniques; lockout/tagout; disconnection and misalignment of pipes; double block and bleed; blanking and blinding; removal of engulfment hazards; elimination of hazardous atmosphere by draining, inerting, purging, cleaning, and venting.
- Procedures the employee must follow if a prohibited condition is detected.
- When to exit the space.
- The evaluation process to be used for reentry if a hazardous atmosphere is detected or the entrant(s) vacate(s) the space and returns some time later.
- Train employees on the use of entry equipment, including ladders and intrinsically safe lighting.
- Personal protective equipment (e.g., gloves, hard hats, boots, etc.) and its use, limitations, and required maintenance.
- A review of the completed written certification form or permit with the employee prior to entering the space.

Additional Training for Using Alternate Entry Procedures - If the space qualifies for alternate procedures, training on the following topics is suggested:

- These procedures can only be used when a hazardous atmosphere is the **only** hazard of concern.
- Any process which may introduce a hazard (e.g., cleaning with chemical solvents) would prohibit the use of alternate procedures.
- Review the requirements of paragraph (c)(5) with the employee.

Additional Training for Use when Reclassifying to Non-Permit Space Status - If the permit space can be reclassified as a non-permit space, the following items should be discussed:

- Employees are entitled to see and review the documentation of the elimination of the hazards. If elimination of the hazards or verification of elimination requires employees to enter the space, then a full PRCS entry is needed.
- The requirements of paragraph (c)(7) must be reviewed with the employee(s).
- Inform employees that any procedures such as cleaning with a chemical, or other prohibited condition would negate the reclassification and convert the space back to a permit space.

Specific Personnel Titles for Full Permit-Required Confined Space Entry Operations

Entry into any PRCS where a full PRCS program is mandated will require the employer to designate an entry team. Each team will consist of an:

- authorized entrant(s)--can simultaneously be entry supervisor
- attendant(s)
- entry supervisor(s)--can simultaneously be authorized entrant
- rescue personnel--see Rescue Section X

These team members will need the following training on these duties which are over and above training for all PRCS entrants:

Authorized Entrants

- Maintain a continuous means of communication with the attendant.
- Alert the attendant in the event of an emergency.

Attendants

- Maintain an accurate account of the authorized entrants.
- Remain at their assigned station until relieved by another attendant or until the permit space entry is complete.
- Monitor conditions in and around the permit space.
- Summon rescue and applicable medical services in the event of an emergency.
- Perform non-entry rescue procedures.
- Perform appropriate measures to prevent unauthorized personnel from entering the permit space.
- Maintain communication with authorized entrants in the space.

Entry Supervisors

- Verify that the safeguards required by the permit have been implemented.
- Verify that rescue services are available and that means for summoning them are operable.
- Cancel the written permit and terminate the permit space entry when required.
- Remove personnel who are not authorized to enter the permit space during entry operations.
- Periodically, determine that the entry operation is being performed in a manner consistent with the requirements of the permit space entry procedures and that acceptable entry conditions are maintained.
- Procedures for annual review of canceled permits.
- Any other information necessary to ensure employee safety during a permit space entry operation.
- Documentation of the training.

Rescue personnel: See Occupational Health Division handout OH-873 (attached) for rescue personnel training.

See Appendix D for documentation of training.

X. RESCUE AND EMERGENCY SERVICES

Note to the Employer: This subsection is not required if all permit spaces have been reclassified and entered as a non-permit spaces or if alternative procedures are used.

The precautions and procedures outlined in our written PRCS program are designed to ensure that our employees are safe while working in permit spaces. Under no circumstances do we expect our employees to enter a permit space where hazards have not been eliminated or effectively controlled.

Additionally, we recognize that unexpected situations might arise that prevent entrants from self-rescue. In response, the following rescue and emergency action plan has been developed and will be strictly enforced:

(Name of Company)_____ has decided to utilize:

(Check all that apply)

☐ on-site rescue services which include:

- ☐ non-entry rescue procedures
- ☐ entry rescue procedures

☐ off-site entry rescue services

Note to the Employer: Each permit space must be individually evaluated to determine whether entry or non-entry rescue procedures can be used to remove incapacitated entrants. Non-entry rescue is the desired method because it is not necessary to place the rescuer at risk to remove the injured employee(s). Occupational Health Division handouts OH-872 and OH-873 are designed to assist the development of rescue strategies.

(Company Representative's name or position)_____ will ensure that each member of the in-house rescue team is appropriately trained, has appropriate first aid/CPR credentials and annually practices appropriate rescues.

(Company Representative's name or position)_____ has made arrangements with (Name of Off-site Rescue Services)_____ for off-site rescue and emergency services and they have consented to provide this service. The company has also informed the rescue service of the types of spaces and potential hazards, and has provided the service with access to the spaces for practice.

If rescue and emergency services are needed, the following procedures will go into effect:

Note to the Employer: Describe the procedures that will be used for summoning the rescue and emergency services. Include the name, location, and telephone numbers of the rescue services in this program and also on the entry permit. Train employees on the specific procedures for summoning the rescue and emergency services.

Name of Rescue Service _____

Telephone Number _____

Location _____

Approximate Response Time _____

The specific procedures for summoning rescue and emergency services for our workplace is outlined as follows:

XI. PERMIT-REQUIRED CONFINED SPACE PROGRAM REVIEW

Note to the Employer: This subsection is not required if all permit spaces have been reclassified as a non-permit space or if alternate procedures are used.

Within one year of any entry operation, (Company Representative's name) will conduct a review of the program using the cancelled entry permits to identify any deficiencies in our program. A review will be conducted sooner if there is reason to believe that the program does not adequately protect our employees. Any corrective measures will be documented by a revision of the program. Employees will be trained on any changes. Additionally, employees who note any inadequacies with the program can contact (Company Representative's name).

If no permit space entry operations are conducted during the year, no review is needed.

APPENDIX B

COMPANY NAME: _____

Permit-Required Confined Space Lists:

The following spaces have been determined to be PRCS and will be entered using full-permit entry procedures.

The following spaces have been determined to be PRCS and can be entered using alternate entry procedures:

The following spaces have been determined to be non-permit spaces or will not be entered until conditions within the space have been altered to achieve non-permit status:

CONFINED SPACE IDENTIFICATION MATRIX

Confined Space Type & Location	Oxygen Deficiency YES or NO	Combustible YES or NO	Toxic Atmosphere What Toxics?	Engulfment/ Entrapment Hazard	Electrical Hazard	Mechanical Hazard	Classification
	Documented or Potential						
1.							
2.							
3.							
4.							

Confined Spaces are areas which:

- 1) Have adequate size and configuration for employee entry,
- 2) Have limited means of access or egress, and
- 3) Are not designated for continuous employee occupancy.

*Consult standard for definitions, if necessary.

Classifications:*

- 1) Permit-required
- 2) Alternate procedure
- 3) Non-permit

Firm Name _____

Location _____

Analysis By _____

Date _____

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APPENDIX C

COMPANY NAME _____

Equipment used in PRCS entries (to include as needed):

1. Properly calibrated testing and monitoring equipment;
2. Ventilating equipment needed to obtain/maintain acceptable entry conditions;
3. Communications equipment, if necessary;
4. Personal protective equipment insofar as feasible engineering and work practice controls (i.e., lockout/tagout) do not adequately protect employees;
5. Lighting equipment needed to enable employees to see well enough to work safely and to exit the space quickly in an emergency;
6. Barriers and shields;
7. Equipment, such as ladders, needed for safe ingress and egress by authorized entrants;
8. Rescue and emergency equipment, except to the extent that the equipment is provided by rescue services; and
9. Any other equipment necessary for safe entry into and rescue from permit spaces.

APPENDIX D

DOCUMENTATION OF TRAINING

COMPANY NAME: _____

Note to the Employer: You may be entering spaces throughout your company in all 3 ways; as an alternate entry, reclassifying to non-permit or as full PRCs entries. There are common steps to be taken in the evaluation and control of hazards, equipment, skills and knowledge necessary for entering spaces. Recognizing the duplication involved and minimizing unnecessary repetition saves time and resources. Focus on a set of practices you want employees to commit themselves to as they evaluate entries and take steps to protect themselves. Document all employee training. This certification simply requires the employee's name, the signature(s) or initial(s) of the trainer(s), and date(s) of training.

The following is a list of employees who have been equipped and trained to serve as authorized entrants or as entrants using non-permit or alternate procedures at our facility:

Authorized Entrants(s)	Trainer	Date of Training
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_____	_____	_____
_____	_____	_____
_____	_____	_____

The following is a list of employees who have been equipped and trained to serve as attendants:

Attendant(s)	Trainer	Date of Training
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_____	_____	_____
_____	_____	_____
_____	_____	_____

The following is a list of employees who have been trained to serve as entry supervisors:

Entry Supervisor(s)	Trainer	Date of Training
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_____	_____	_____
_____	_____	_____
_____	_____	_____

The following is a list of employees who have been trained to serve as Rescue Personnel:

Rescuer(s)	Trainer	Date of Training
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_____	_____	_____
_____	_____	_____
_____	_____	_____