



City of Montpelier, Vermont
"The Smallest Capital City in the United States"

CONFINED SPACES ENTRY PROGRAM

Last Updated August 28, 2003

Permit Required Confined Spaces Entry Program

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Purpose

This program was created to provide our employees with procedures and policies to properly and safely perform tasks that require entry into areas defined as confined spaces. This program was prepared in accordance with OSHA regulation Section 1910.146 Permit Required Confined Spaces Entry Procedures.

Copies of this program shall be located at each facility where confined spaces have been identified including temporary maintenance sites.

Program administrator

The program administrator shall be responsible for annual review of the program. Coordination of employee confined spaces training, purchase of equipment and incident review of injuries or illnesses that involve confined spaces entry is the responsibility of the Department Head.

Employees should refer their questions or comments about this program to the administrator.

The program administrator is

Eric Ladd, Public Works Department Supervisor

Annual review

The program shall be evaluated each year to determine the effectiveness of this program.

See Evaluation Form-page 6

Confined spaces evaluations and inventory

A competent person shall inspect and inventory all work locations to determine if confined spaces as defined by Section 1910.146 exist. A copy of the inventory shall be attached to the written procedures and updated as needed.

See Sample Confined Spaces Evaluations and Inventory Form -page 13

Definitions

- "Confined space" means 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 (In general, this means that the space does not have heat, light, pressurized air exchange and does not contain a potential hazard).

- "Permit-required confined space (permit space)" means 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.

- "Attendant" means 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" means an employee who is authorized by the employer to enter a permit space.
- "Entry" means 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)" means 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 required by this section. *See pages 10-12 for Sample Entry Permit Form.*
- "Entry supervisor" means the person (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.
NOTE: An entry supervisor also may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required by this section for each role he or she fills. Also, the duties of entry supervisor may be passed from one individual to another during the course of an entry operation.
- "Hazardous atmosphere" means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue.
- Other definitions can be found in the attached copy of the Section 1910.146 standard

Lockout/tagout procedures

If the hazard evaluation determines that lockout or tagout procedures are required to safely perform a task in a permit required, employees shall refer to the *entity's* lockout /tagout policy for proper procedures.

Hazardous communications

If hazardous substances are present in the confined space during entry (i.e. cleaning chemicals) a copy of the MSDS for the substances shall be available at the entry site.

Employee Information and Training

Any employee authorized or affected by the entry into a permit required confined space shall receive training as required by Section 1910.146(c)(7). Training will include:

- a. An overview of Section 1910.146, *See Appendix A, page 14.*
- b. The details of this program.
- c. General hazards associated with confined spaces in the workplace.
- d. The selection and use of proper personal protective equipment.
- e. Explanation of permit system.
- f. Duties of entrants and attendants.
- g. Recognizing hazards.
- h. Proper use and care of atmospheric testing equipment including field calibration.
- i. Emergency response procedures.
- j. Use of emergency rescue equipment.

A competent person as demonstrated by knowledge and experience shall conduct training. The name of the trainer, qualifications, training materials used, course content and date of training shall be documented.

See Employee Training Form, page 7

Employees will be given a learning exercise to determine their understanding of the program. New hires and transfers will be given the learning exercise prior to beginning their duties. Employees who do not receive 100 percent on the learning exercise will be retrained in those areas that were answered incorrectly.

The attendance record will be retained as proof of training.

See Employee Learning Exercise Form, page 8

Emergency response team

See Permit as required, Pages 10 -12. At each facility where confined spaces have been identified, an emergency response team will be established. The rescue team shall practice making permit space rescues at least once every 12 months, by means of simulated rescue operations in which they remove dummies, manikins or actual persons from the actual permit spaces or from representative permit spaces. Representative permit spaces shall, with respect to opening size, configuration and accessibility, simulate the types of permit spaces from which rescue is to be performed.

Outside contractors

The program administrator shall inform all contractors of the elements of this program. Contractors must also make a copy of their permit required confined spaces program available to the program administrator. Those who fail to follow the program requirements will be asked to leave the premises. Contractors with an insufficient program will not be allowed to begin work until their program meets or exceeds the requirements of this program.

Violation of permit required confined spaces program

Employees who violate the permit required confined spaces procedures will be disciplined according to the personnel policy. Employees will also be required to attend retraining on the procedures or policies that were violated.

Annual Program Evaluation

City of Montpelier

Program Name: **Confined Space Entry Program**

Evaluation Date:

Evaluation Team:

Name	Title	Department

* Team should include an authorized person from outside department

List injuries or near misses attributable to failure of program or failure to follow program:

Recommendations for additions to procedures/policies with explanation for each:

Recommendations for deletions of procedures/policies with explanation for each:

Recommendations for modifications to procedures/policies with explanation for each:

Description and date of actual modifications made:

Employee Training For Confined Spaces Entry

City of Montpelier Attendance Record

Instructor's Name:

Date:

Address:

Qualifications:

Course Outline:

List of employees receiving training

Employee Name	Signature

Instructor's Signature

Employee Learning Exercise for Confined Space Entry

Employee: _____ Signature: _____

Score: Date: _____

1. True False All confined spaces have hazardous atmospheres
2. True False More would-be rescuers die in confined spaces than employees working in them.
3. True False Confined spaces are divided into two types: permit required and nonpermit required.
4. True False Permit required confined spaces may be reclassified as nonpermit if the only hazard is atmospheric and it can be controlled.
5. True False When testing atmospheres, always check for flammable gasses first.
6. True False Lockout/tagout and isolation need not be considered for an entry if atmospheric hazards are controlled.
7. True False Traffic control is not a component of an entry procedure.
8. True False The employer must provide contractors with information on confined space they will be entering on his premises.
9. True False The attendant verifies the permit is complete before entry.
10. True False The attendant must monitor both inside and outside of the confined space to ensure it remains safe during entry.
11. True False Once the atmosphere has tested safe, it will remain safe during the entry.
12. True False One of the reasons employees die in confined spaces is that they under estimate the danger and think they can get in and out before the hazard affects them.
13. True False Confined space entry permits must be retained for one year.
14. True False Rescues must be practiced annually.
15. True False It is best to perform rescues without entering the confined space.

City of Montpelier Confined Space Entry Permit

Page 1 of 3

Date issued: _____ Expiration Date: _____

Authorized By:

Signature of authorizing person

Location of Work: _____

Description of Work: _____

Entrant: _____ Attendant: _____

Entrant: _____ Attendant: _____

Entry Date: _____ Entry Time: _____

Hazards

Check all applicable hazards

Oxygen Deficiency Toxic Atmosphere Fire/Explosion

Electrical Hazardous Chemicals Engulfment

Noise Heat/cold Slips/Falls

Other: _____

Hazard Control

Test Atmospheres Ventilate Pre-clean

Hot Work Permit Periodic Monitoring Continuous Monitoring

Other: _____

Atmosphere Tests

Monitor Number or Description: _____

Calibration: Pre-entry: Yes _____ No _____ Post-entry: Yes _____ No _____

Oxygen level (19.5 to 22%) *time/reading*: _____/_____/_____

Combustibles ($\geq 10\%$ LEL) *time/reading*: _____/_____/_____

Toxic Gases *time/reading*: _____/_____/_____

time/reading: _____/_____/_____

List: _____

List: _____

List: _____

Isolation Procedures

Hazard	Isolation Procedure Used
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Personal Protective Equipment

Check those that apply

- Protective Clothing Type required: _____
- Eye/Face Protection Type required: _____
- Foot Protection Type required: _____
- Hearing Protection Type required: _____
- Hard Hat Type required: _____
- Respirator Type required: _____
- Gloves Type required: _____

Emergency and Other Equipment

- Safety Harness Retrieval Unit Ladder Lighting Barricades
- Ventilation Fan Fire Extinguisher Radio or Telephone Other: _____

Emergency Phone Numbers

Name	Number

Describe any problems and causes for work interruptions under this permit:

Permit Cancellation: Date: _____ Time: _____

Signature: Signature of person canceling permit

Before a permit required confined space entry, the emergency rescue team shall be notified. Has the rescue team been notified? Yes _____ No _____

The emergency rescue team is:

Name	Number

**PLEASE NOTE THAT THE PERMIT ISSUED AT EACH FACILITY WHERE
CONFINED SPACES HAVE BEEN IDENTIFIED MUST BE KEPT ON FILE BY
THE FACILITY FOR ONE YEAR.**

Appendix A

To view and download the Section 1910.146 Permit – required confined spaces regulations from the OSHA web site, click on the following link:

http://www.osha_slc.gov/Oshd_data/1910_146.html

Print out a copy of the standard and mandatory appendices to include with your program.

APPENDIX B - Answers to Employee Learning Exercise for Confined Space Entry

Employee: _____ Signature: _____

Score: Date: _____

1. True ~~False~~ All confined spaces have hazardous atmospheres
2. True False More would-be rescuers die in confined spaces than employees working in them.
3. True False Confined spaces are divided into two types: permit required and nonpermit required.
4. True False Permit required confined spaces may be reclassified as nonpermit if the only hazard is atmospheric and it can be controlled.
5. True ~~False~~ When testing atmospheres, always check for flammable gasses first.
6. True ~~False~~ Lockout/tagout and isolation need not be considered for an entry if atmospheric hazards are controlled.
7. True ~~False~~ Traffic control is not a component of an entry procedure.
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