CONFINED SPACE PROGRAM
TEMPLATE

Construction Site Safety Documentation

Company Name:	
Program Effective Date:	
Last Revision Date:	
Program Administrator:	

IMPORTANT: This template is provided as a starting point for developing a site-specific confined space program. Each employer must customize this program to address their specific confined space hazards, work practices, and regulatory requirements. Ensure compliance with OSHA 29 CFR 1926.1211-1926.1213 (Construction) and all applicable state and local regulations.

This Confined Space Program Template provides a comprehensive framework for establishing safe entry procedures for permit-required confined spaces at construction sites. The program addresses hazard identification, atmospheric testing, entry procedures, rescue requirements, and training in accordance with OSHA regulations.

Prepared by First Underwriters Insurance Brokers as a safety resource for our construction clients.

TABLE OF CONTENTS

1. Purpose and Scope

2. Definitions

3. Roles and Responsibilities

4. Confined Space Identification and Evaluation

5. Permit-Required Confined Space Entry Procedures

6. Atmospheric Testing Requirements

7. Ventilation Requirements

8. Personal Protective Equipment

9. Communication Procedures

10. Rescue and Emergency Services

11. Training Requirements

12. Documentation and Recordkeeping

Appendix A: Confined Space Inventory

Appendix B: Entry Permit Checklist

1. PURPOSE AND SCOPE

1.1 Purpose

The purpose of this Confined Space Program is to establish procedures and requirements for the safe entry into and work within permit-required confined spaces at construction sites operated by [COMPANY NAME]. This program is designed to protect employees from the hazards associated with confined space entry and to ensure compliance with OSHA regulations.

1.2 Scope

This program applies to all employees, contractors, and subcontractors who may be required to enter or work in or around confined spaces at [COMPANY NAME] construction sites. This includes but is not limited to:

- Manholes and underground vaults
- Storage tanks and vessels
- Pits, trenches, and excavations meeting confined space criteria
- Pipelines and ductwork
- Silos and hoppers
- Boilers and pressure vessels
- Any other space meeting the OSHA definition of a confined space

1.3 Regulatory Basis

This program is developed in accordance with OSHA 29 CFR 1926.1211-1926.1213 (Confined Spaces in Construction) and incorporates applicable requirements from 29 CFR 1910.146 (Permit-Required Confined Spaces for General Industry).

2. DEFINITIONS

Confined Space: A space that: (1) Is large enough for an employee to enter and perform work; (2) Has limited or restricted means of entry or exit; and (3) Is not designed for continuous employee occupancy.

Permit-Required Confined Space (PRCS): A confined space that has one or more of the following characteristics: (1) Contains or has the potential to contain a hazardous atmosphere; (2) Contains material with the potential to engulf an entrant; (3) Has an internal configuration that could trap or asphyxiate an entrant; or (4) Contains any other recognized serious safety or health hazard.

Atmospheric Hazard: A condition in which the atmosphere in a confined space may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness.

Entry: The action by which any part of a person's body passes through an opening into a permit-required confined space.

Entry Permit: The written document that authorizes entry into a permit-required confined space and contains the information required by this program.

Entry Supervisor: The qualified person responsible for determining if acceptable entry conditions are present, authorizing entry, overseeing entry operations, and terminating entry.

Authorized Entrant: An employee who is trained and authorized to enter a permit-required confined space.

Attendant: A trained individual stationed outside the permit-required confined space who monitors the entrants and performs the duties assigned in this program.

Hazardous Atmosphere: An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness from one or more of the following: flammable gas, vapor, or mist; oxygen deficiency or enrichment; or toxic substance.

Immediately Dangerous to Life or Health (IDLH): Any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.

Engulfment: The surrounding and effective capture of a person by a liquid or finely divided solid substance.

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.

3. ROLES AND RESPONSIBILITIES

3.1 Program Administrator

The Program Administrator is responsible for:

- Overall management and implementation of this program
- Ensuring adequate resources are available for program implementation
- Reviewing and updating this program at least annually
- Coordinating training for all affected personnel
- Maintaining program documentation and records
- Conducting periodic audits of program compliance

3.2 Entry Supervisor

The Entry Supervisor is responsible for:

- Knowing the hazards that may be faced during entry
- Verifying that all tests have been conducted and all procedures followed before endorsing the permit
- Authorizing entry and overseeing entry operations
- Terminating entry and canceling the permit when required
- Verifying that rescue services are available and the means for summoning them are operable
- Removing unauthorized individuals from the area
- Determining that entry conditions remain acceptable throughout the entry

3.3 Authorized Entrant

The Authorized Entrant is responsible for:

- Knowing the hazards that may be faced during entry
- Properly using equipment as required
- Communicating with the attendant as necessary
- Alerting the attendant whenever a warning sign or symptom of exposure is recognized
- Exiting the space immediately when ordered by the attendant or entry supervisor, or when recognizing any danger

3.4 Attendant

The Attendant is responsible for:

- Knowing the hazards that may be faced during entry
- Being aware of possible behavioral effects of hazard exposure on entrants
- Maintaining continuous communication with and an accurate count of entrants
- Remaining outside the permit space during entry operations
- Ordering evacuation when a prohibited condition is detected or behavioral effects of exposure are noted
- Summoning rescue and emergency services when necessary

- Preventing unauthorized persons from entering the space
- Performing non-entry rescues as specified in the rescue procedures

4. CONFINED SPACE IDENTIFICATION AND EVALUATION

4.1 Identification Process

Before work begins at any construction site, the competent person shall identify all confined spaces where employees may be required to work. Each identified space shall be evaluated to determine if it meets the criteria for a permit-required confined space.

4.2 Evaluation Criteria

A space is classified as a permit-required confined space if it:

- Contains or has the potential to contain a hazardous atmosphere
- Contains material that has the potential to engulf an entrant
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or a floor that slopes downward and tapers to a smaller cross-section
- Contains any other recognized serious safety or health hazard

4.3 Documentation

All identified confined spaces shall be documented in the Confined Space Inventory (Appendix A). The inventory shall include the location, description, identified hazards, and classification of each space. The inventory shall be updated whenever new spaces are identified or conditions change.

4.4 Warning Signs

All permit-required confined spaces shall be posted with warning signs that read: "DANGER - PERMIT-REQUIRED CONFINED SPACE - DO NOT ENTER" or similar language. Signs shall be clearly visible and maintained in legible condition.

5. PERMIT-REQUIRED CONFINED SPACE ENTRY PROCEDURES

5.1 Pre-Entry Requirements

Before any entry into a permit-required confined space, the following requirements must be met:

- Entry permit completed and authorized by Entry Supervisor
- All hazards identified and documented
- Atmospheric testing completed with acceptable results
- Space isolated from all energy sources (lockout/tagout)
- All lines containing hazardous materials blanked or disconnected
- Ventilation established if required
- All required personal protective equipment available
- Communication system tested and operable
- Rescue equipment in place and rescue services on standby
- All entrants, attendants, and supervisors briefed on hazards and procedures

5.2 Entry Permit

No employee shall enter a permit-required confined space without a valid entry permit. The entry permit shall document that all required precautions have been taken and shall include the following information:

- Name and location of the confined space
- Purpose of entry
- Date and authorized duration of the permit
- Names of authorized entrants, attendants, and entry supervisors
- Hazards identified within the space
- Measures used to isolate the space and eliminate or control hazards
- Acceptable entry conditions (atmospheric test results)
- Results of initial and periodic atmospheric tests
- Rescue and emergency services and how to summon them
- Communication procedures
- Equipment required for entry
- Any additional permits required (hot work, etc.)

5.3 Permit Duration

Entry permits are valid for a single entry operation and shall not exceed one work shift. A new permit shall be issued for each shift or whenever entry conditions change. Permits shall be canceled when the entry operation is completed or when conditions change requiring re-evaluation.

5.4 Entry Termination

Entry shall be terminated and all entrants shall exit immediately when:

- The Entry Supervisor or Attendant orders evacuation

- An automatic alarm is activated
- An entrant recognizes any warning sign or symptom of exposure
- A prohibited condition is detected
- An emergency outside the space affects the entry operation

6. ATMOSPHERIC TESTING REQUIREMENTS

6.1 Testing Sequence

Atmospheric testing shall be performed in the following sequence to ensure accurate hazard assessment:

1. Oxygen content
2. Flammable gases and vapors
3. Toxic gases and vapors

6.2 Acceptable Atmospheric Conditions

Parameter	Acceptable Range	Action Level	IDLH
Oxygen (O_2)	19.5% - 23.5%	<19.5% or >23.5%	<16% or >25%
LEL (Combustibles)	<10% LEL	≥10% LEL	≥20% LEL
Carbon Monoxide (CO)	<25 ppm	≥25 ppm	≥1,200 ppm
Hydrogen Sulfide (H_2S)	<10 ppm	≥10 ppm	≥100 ppm

6.3 Testing Procedures

- Test the atmosphere before entry and continuously during occupancy
- Test at multiple levels (top, middle, bottom) of the space
- Use only properly calibrated and maintained testing equipment
- Perform bump test on equipment before each day's use
- Record all test results on the entry permit and atmospheric testing log
- If initial testing reveals unacceptable conditions, do not enter until conditions are corrected and verified

6.4 Equipment Calibration

All atmospheric monitoring equipment shall be calibrated according to manufacturer's recommendations and at least monthly. Calibration records shall be maintained for each instrument.

7. VENTILATION REQUIREMENTS

7.1 Forced Air Ventilation

When forced air ventilation is used to control atmospheric hazards, the following requirements apply:

- Ventilation shall be directed to ventilate the immediate area where employees are working
- The air supply source shall be from a clean, uncontaminated source
- Ventilation shall continue until all employees have exited the space
- Atmospheric testing shall continue during ventilation to verify effectiveness
- If ventilation is interrupted, employees shall immediately exit until acceptable conditions are restored

7.2 Natural Ventilation

Natural ventilation alone is acceptable only when atmospheric testing confirms continuous acceptable conditions without mechanical assistance. Continuous monitoring is required throughout the entry.

8. PERSONAL PROTECTIVE EQUIPMENT

8.1 Required Equipment

The following equipment shall be provided and used as appropriate for the hazards of each confined space:

- Hard hat
- Safety glasses or goggles
- Appropriate respiratory protection (when required by atmospheric conditions)
- Full body harness with retrieval line attachment
- Chemical-resistant clothing (when required)
- Appropriate gloves
- Safety footwear
- Hearing protection (when noise levels require)
- Personal atmospheric monitor (when required)

8.2 Retrieval Systems

Each authorized entrant shall use a chest or full body harness with a retrieval line attached at the center of the entrant's back near shoulder level, above the entrant's head, or at another point that presents a profile small enough for successful retrieval. The other end of the retrieval line shall be attached to a mechanical device or fixed point outside the permit space.

9. COMMUNICATION PROCEDURES

9.1 Communication Methods

Effective communication shall be maintained between the attendant and entrants at all times during entry operations. Acceptable communication methods include:

- Voice communication (if acoustically feasible)
- Two-way radio
- Hand signals (when pre-established and understood by all parties)
- Visual observation
- Lifeline signals (tugging patterns)

9.2 Communication Check

The communication system shall be tested before entry begins. The attendant shall maintain continuous communication with entrants and shall verify entrant well-being at regular intervals not exceeding 5 minutes.

10. RESCUE AND EMERGENCY SERVICES

WARNING: Attempting rescue without proper training and equipment is the leading cause of multiple fatalities in confined space incidents. NEVER enter a confined space to attempt rescue unless you are trained, equipped, and authorized to do so.

10.1 Rescue Service Options

The employer shall ensure that at least one of the following rescue options is available:

- On-site rescue team trained and equipped for confined space rescue
- Off-site rescue service that has been evaluated and confirmed capable of responding in a timely manner
- Non-entry rescue using retrieval systems from outside the space

10.2 Non-Entry Rescue

Non-entry rescue shall be the primary rescue method whenever feasible. Retrieval systems shall be used with a mechanical retrieval device (tripod/davit with winch) to facilitate rapid extraction of an incapacitated entrant.

10.3 Emergency Procedures

In case of emergency:

1. Alert the attendant and evacuate the space immediately
2. DO NOT enter the space to attempt rescue without proper equipment and training
3. Attendant initiates non-entry rescue using retrieval equipment if safe to do so
4. Call 911 and notify on-site emergency contacts
5. Prepare to provide rescue personnel with information about the space, hazards, and number of entrants
6. Entry Supervisor coordinates emergency response activities

10.4 Emergency Contact Information

Emergency Service	Contact Number	Response Time
Emergency Services (911)		Immediate
Local Fire Department		
Local Hospital/Trauma Center		
Poison Control Center	1-800-222-1222	Immediate
Company Emergency Contact		
Rescue Service Provider		

11. TRAINING REQUIREMENTS

11.1 General Requirements

All employees involved in confined space entry operations shall receive training before initial assignment and whenever there is a change in their duties, a change in permit space operations presenting a new hazard, or when there are deviations from established procedures.

11.2 Training Content

Training shall include, at a minimum:

- Recognition of confined spaces and their hazards
- Proper use of entry permits
- Atmospheric testing procedures and equipment
- Proper use of personal protective equipment
- Communication procedures
- Emergency and rescue procedures
- Duties specific to the employee's role (entrant, attendant, supervisor)

11.3 Documentation

Training records shall be maintained for each employee and shall include the employee's name, training dates, and the name of the trainer. Records shall be retained for the duration of employment.

12. DOCUMENTATION AND RECORDKEEPING

12.1 Required Records

The following records shall be maintained:

- Confined Space Inventory (Appendix A)
- Completed entry permits (retained for at least one year)
- Atmospheric testing logs
- Equipment calibration records
- Training records for all personnel
- Rescue service agreements and capability assessments
- Program review documentation

12.2 Program Review

This program shall be reviewed at least annually and updated as necessary to ensure its continued effectiveness. The review shall also be conducted after any incident or near-miss involving a confined space entry.

12.3 Permit Retention

Canceled entry permits shall be retained for at least one year to facilitate the annual program review. Permits shall be available for review by affected employees and their representatives.

APPENDIX A: CONFINED SPACE INVENTORY

Use this form to document all confined spaces at the work site. Update as new spaces are identified or conditions change.

Location/ ID	Description	Identified Hazards	PRCS?	Date Evaluated	Evaluated By

APPENDIX B: ENTRY PERMIT CHECKLIST

Use this checklist to verify all requirements have been met before authorizing entry.

Pre-Entry Requirements

[ ] Space identified and hazards documented

[ ] Entry permit completed with all required information

[ ] All entrants, attendants, and supervisors identified and trained

[ ] Atmospheric testing completed with acceptable results

[ ] Space properly isolated (LOTO completed if required)

[ ] Lines blanked/disconnected as required

[ ] Ventilation established if required

[ ] All required PPE available and in good condition

[ ] Retrieval system and anchor point in place

[ ] Communication system tested and operable

[ ] Rescue services available and means to summon them verified

[ ] All personnel briefed on hazards and emergency procedures

[ ] Hot work permit obtained (if applicable)

[ ] Area secured to prevent unauthorized entry

Authorization

Entry Supervisor (Print):	
Signature:	
Date/Time Authorized:	

This program template is provided by First Underwriters Insurance Brokers as a safety resource.
Customize this template for your specific operations and ensure compliance with all applicable regulations.