

#### Accident Prevention Manual Confined Space Entry Program

# **Confined Space Entry**

Revised January 2024

### Purpose

The Confined Space program is designed to provide specific direction to our employees while ensuring a safe workplace free from recognized hazards. This program identifies management and employee responsibilities to reduce risk of exposure to hazards associated with Confined Space Entry that may result in severe injury and/or loss of life.

# Applicability

The Confined Space Entry Program applies to all District employees working under the scope and application of <u>WAC 296-45</u> and <u>WAC 296-809</u> performing any confined space entry with the exception of URD enclosed space entry procedures apply.

## Responsibility and Communication

#### **Management Responsibilities**

- Implement this program within their scope of responsibility.
- Conduct workplace safety assessments to identify and categorize all confined spaces under their control.
- Ensure that employees are trained on confined space entry.
- Ensure that employees actively participate in confined space rescue training on an annual basis.
- Retain confined space entry permits for a minimum of 2 years.
- Document locations in GIS that have been flagged as hazardous. For example, spaces that that have been identified as containing elevated levels of hydrogen sulfide (H2S).

#### **Worker Responsibilities**

- Identify, document, and discuss roles and responsibilities for attendants, entrants, and rescue personnel.
- Utilize stop work authority if conditions change that create a hazard.
- Ensure that rescue provisions are discussed and established prior to entry.
- Notify safety and management when deficiencies in entry procedures are identified.





#### **Safety Department Responsibilities**

- Program administration to include audit, inspection, program development and management implementation.
- Assist the affected departments with the selection of gas monitors, rescue equipment and additional PPE, as necessary.
- Review and revise the program on an annual basis.

### **Engineering Department Responsibilities**

- Ensure confined space requirements are identified and addressed when designing equipment or facilities to ensure that adequate access and rescue provisions are in place.
- Assist departments in incorporating rescue anchorages at existing confined spaces.

## **Confined Space Entry Procedure**

Prior to entering a confined space:

- Complete the linked confined space entry permit and post on site.
- Review the following responsibilities and permit entry procedures for entry the supervisor, entrant(s), and attendant(s) prior to entering the permit entry confined space.

Entry Supervisor has the overall responsibility for safe entry into the confined space.



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- Ensure the entry permit contains the necessary information before authorizing entry.
- Verify that only persons trained in confined space work enter the space.
- · Verify attendants have current first-aid cards.
- Ensure where applicable, harnesses, lifelines, and a retrieval system are used.
- Ensure use of air monitoring equipment, communications, and outside attendants.
- Ensure air is monitored for oxygen content, flammable or combustible gases or vapors, and toxic gases or vapors.
- Ensure entrants and their representative(s) have an opportunity to review air monitoring and hazard controls.
- Ensure approved fall-protection equipment is used if a fall hazard of four (4) feet or more exists.
- Ensure special protective clothing (i.e., boots, gloves, pants, eye/face protection) is used where spaces contain hazardous chemicals or substances due to spills and/or leaks.
- Ensure the necessary procedures, practices, and equipment for safe entry are in effect before allowing entry.
- Ensure all entrances to a confined space are posted and entry is controlled by an attendant.
- Ensure the space is returned to operational status when the work is complete.
- Identify fire hazards.
- Authorize hot work.
- Ensure fire protection for hot work.
- Ensure continuous ventilation during hot work.
- Ensure entry and hot work permits are saved for two years.

Entry Attendant is the designated individual stationed outside the permit confined space who is trained as required and who monitors the authorized entrants inside the permit confined space. They control access into the space, continuously monitor atmospheric conditions, hazards, and entrants. They have the authority to order all entrants out of the confined space if hazards are suspected.

The attendant must:

- Monitor only one confined space, (may do other tasks as long as they can monitor space and communicate with entrants).
- · Control access into the space
- Set up and maintain signs and/ or barriers around the opening as needed.
- Log and monitor entrants.
- Continuously monitor atmospheric conditions and keep an hourly log.
- Monitor ventilating equipment.
- Monitor for hazards that may develop inside the confined space.
- Watch for hazards outside the confined space that may endanger entrants.
- Maintain direct communication with entrants.
- Maintain rescue equipment.
- Summon emergency responders when necessary.
- Assist in entrant rescue without entering the confined space.



Confined Space Entrants must:

- Understand the entry requirements being worked in and voice any concerns prior to entry.
- Be able to recognize the presence of specific hazards that may be encountered in the confined space.
- Understand the use and application of the rescue equipment, procedures and be capable of executing the rescue plan.

Hot Work Permits must be initiated, completed, and signed by the entry supervisor and will be issued when the following conditions are met:

- Link to hot work entry permit.
- Continuous ventilation and/or appropriate respiratory equipment is provided where the nature of the hot work creates a potential for toxic or oxygen-deficient atmosphere.
- Work may create a fire hazard inside the confined space must be protected by appropriate fire extinguishing equipment. Consideration must be given to hazards that fire extinguishers may create inside a confined space such as oxygen deficiency from CO2 and toxicity from dry chemical.

### Training

All employees who access or supervise employees who enter confined spaces must be trained to a level of proficiency to ensure that they can execute the provisions of the confined space entry program and comply with additional requirements in WAC 296-809.

Training must include the following:

- · Roles and responsibilities
- Hazards of a confined space
- Procedures to protect employees from stored energy.
- Use and care of test equipment such as 4-gas meters, including the logging procedure for entrants.
- Use and care of rescue equipment, including demonstration of proficiency.
- Dangers of unauthorized entry and rescue.
- Department specific emergency response protocol

### **Definitions:**

Enclosed Space: This section applies to routine entry into enclosed spaces in lieu of the permit-space entry requirements contained in chapter 296-809 WAC. If, after the employer takes the precautions given in WAC 296-45-205, 296-45-215, and 296-45-225, the hazards remaining in the enclosed space endanger the life of an entrant or could interfere with an entrant's escape from the space, then entry into the enclosed space must meet the permit-space entry requirements of chapter WAC 296-809.

Attendant: An employee with first-aid training that is immediately available outside the enclosed space to monitor activity and available to provide assistance.

Entry: The action where any part of a person's body breaks the plane (passes through an opening) into a confined space. Entry occurs as soon as any part of the entrant's body breaks the plane of the opening into the space whether or not such action is intentional, or any work activities are actually performed in the space.



Hazardous atmosphere: An atmosphere that may expose employees to the risk of death, incapacitation, impair their ability to self-rescue (escape unaided from a permit-required confined space), injury, or acute ill-ness caused by one or more of the following:

- a. Flammable gas, vapor, or mist in excess of ten percent of its lower flammable limit (LFL) or lower explosive limit (LEL).
- b. Airborne combustible dust at a concentration that meets or exceeds its LFL. The concentration may be approximated as a condition in which the dust obscures vision at a distance of five feet or less.
- c. Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent
- d. Atmospheric concentration of any substance which may exceed a permissible exposure limit. (PEL)
- e. Any other atmospheric condition that is immediately dangerous to life or health.