

Management Instruction

Confined Space Safety Program

This management instruction (MI) provides policy and procedures to ensure that entry into confined spaces does not threaten employee safety and health, and to enable compliance with applicable regulations.

Background

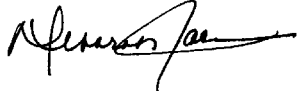
Postal Service facilities and property may contain spaces that are considered *confined* because their configurations hinder the activities of employees who must enter, work in, and exit them. A *confined space* has limited or restricted means for entry or exit, and it is not designed for continuous employee occupancy. Dock levelers, elevator pits, air handling units, ventilation and filtration units, compactors, manholes, sewers, pits, sumps, vaults, tanks, and tunnels are examples of confined spaces.

The Occupational Safety and Health Administration (OSHA) classifies these as follows:

1. **Permit-required confined space (permit space)** — a confined space that has one or more of the following characteristics:
 - a. Contains or has the potential to contain a hazardous atmosphere.
 - b. Contains a material that has potential for engulfing an entrant.
 - c. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross-section.
 - d. Contains any other recognized serious safety or health hazard, such as unguarded machinery, exposed live wires, or heat stress.
2. **Non-permit confined space (non-permit space)** — 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.

See Exhibit 1, Classifying Confined Spaces, on page 12.

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Policy

The Postal Service is committed to providing its employees and contractors with a safe and healthy environment and complying with all applicable OSHA requirements. Therefore, the Postal Service maintains a *confined space safety program*. The purpose of the program is to:

1. Identify existing or potential hazards in Postal Service facilities.
2. Ensure that responsible officials take appropriate action in accordance with this MI.
3. Provide the guidance and training necessary to implement the program efficiently.

Applicability

This MI applies to the following:

1. Managers and supervisors of employees working around or in confined spaces.
2. Employees working in proximity to permit spaces and non-permit spaces.
3. Employees who enter non-permit spaces.
4. Contractors who work in permit spaces and non-permit spaces.

Regulatory Requirements

The Occupational Safety and Health Administration (OSHA) regulates the conditions in which employees may or may not enter confined spaces under 29 CFR 1910.146, Permit-required confined spaces.

Note: Lookout galleries do not meet the OSHA criteria for confined spaces and, therefore, are not regulated by OSHA.

Restrictions – Postal Service Employees

Postal Service employees:

1. Are strictly prohibited from entering any permit space with an actual or potential hazardous atmosphere (see definition of “hazardous atmosphere,” on page 9).
2. May enter certain permit spaces classified as such because they contain only mechanical or electrical hazards **if** they have been temporarily reclassified as a non-permit spaces. Reclassification is accomplished by eliminating the mechanical or electrical hazard using the facility lockout program or by isolating or eliminating the hazard, providing the hazard can be eliminated without entry into the permit space. A permit space reclassified in this manner may remain a non-permit space for entry purposes as long as the hazard remains eliminated (i.e., lockout period).

Note: The reclassification must be documented in accordance with procedures outlined in this MI and the facility's lockout procedures.

3. May not perform work in temporarily reclassified (i.e., locked out) non-permit spaces if the work being performed can potentially pose an atmospheric or other hazard.

Restrictions – Contractors

Only competent contractors who have established a written permit space entry program may enter:

1. Any permit space that has an actual or potential hazardous atmosphere (see definition of "hazardous atmosphere," on page 9).
2. Temporarily reclassified (i.e., locked out) non-permit spaces if the work being performed can potentially pose an atmospheric or other hazard.

Confined Space Safety Program

Inventory and Evaluation

The Postal Service must identify and evaluate all OSHA-defined confined spaces on postal-owned and -leased property.

Inventory

Every Postal Service facility must conduct and maintain a current inventory of permit spaces and non-permit spaces that includes documentation of negative findings. See Exhibit 1, What is a Confined Space?, on page 11.

The inventory must be:

1. Completed by the assigned safety specialist who must be accompanied by the designated facility manager or supervisor (e.g., maintenance manager or installation head) familiar with confined space safety and health and the OSHA regulation.
2. Recorded on PS Form 8156, *Confined Space Inventory and Atmospheric Hazards Evaluation*, available at <http://blue.usps.gov/formmgmt/8999.htm>.
3. Retained in the safety office and appropriate maintenance manager's office indefinitely.
4. Reviewed annually or when a change in a confined space occurs.

Evaluation

A confined space may require evaluation of atmospheric hazards to determine if it is a permit space or to verify that acceptable entry conditions exist. When such an evaluation is required:

1. Follow 29 CFR 1910.146, Appendix B, Procedures for Atmospheric Testing, available at: <http://www.osha.gov/SLTC/confinedspaces/index.html>.

2. Document the evaluation on PS Form 8156 *Confined Space Inventory and Atmospheric Hazards Evaluation*, available at <http://blue.usps.gov/formmgmt/8999.htm>.

Exception

In most cases, boilers are classified as non-permit spaces if: (1) they have been decommissioned for inspection; or (2) maintenance activities are not being conducted on them. A boiler inspector may enter only to conduct an inspection. The non-permit space status of the boiler must be confirmed by the servicing safety specialist, using the process set forth in Reclassification, on page 5.

Requirements

If confined spaces are identified during the facility inventory and evaluation process, Postal Service management must take the following steps:

1. **Prepare a written confined space safety program:**
 - a. Postal Service facilities or properties that have confined spaces as identified by the inventory and evaluation process must prepare and maintain a written confined space safety program.
 - b. The Safety and Environmental Resources Web site provides resources and guidance for developing a confined space safety program. These resources include standardized information and forms for use in developing a site-specific program.
2. **Inform exposed employees:**
 - a. Inform exposed employees, such as maintenance personnel, of the existence and location of: (1) all permit spaces and non-permit spaces; (2) the dangers posed by permit spaces; and (3) the prohibition against entering these spaces.
 - b. Advise employees not to create hazards in non-permit spaces.
3. **Bar entry:**
 - a. Lock or otherwise physically bar unauthorized entry into permit spaces if possible.
 - b. If it is not possible to lock the entrance to a permit space (e.g., an exterior manhole), notify the servicing safety office.
4. **Post signs:**
 - a. At the entrances to all permit spaces, post signs that say: "DANGER — PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER".
 - b. At the entrances to all non-permit spaces, post signs that say: "CONFINED SPACE".
 - c. If it is not possible to post a sign at the entrance to a permit space (e. g., an exterior manhole), notify the servicing safety office.

5. **Inform contractors:**
 - a. Inform contractors who will work in permit spaces that they must have a written program for these spaces.
 - b. Review the contractor's program.
 - c. Apprise the contractor of the Postal Service's evaluation of the permit space and any special precautions to take.
 - d. Coordinate entry.
 - e. Debrief the contractor and learn of any problems (see 29 CFR 1910.146(c)(8) and (c)(9)).
6. **Provide awareness training:**
 - a. Provide awareness training for employees who will enter non-permit spaces and their supervisors. (See Employee Awareness Training, on page 6.)
 - b. Awareness training should cover: (1) the hazards inherent in permit spaces; and (2) the types of operations prohibited in non-permit spaces
 - c. If a space contains hazardous materials, such as might be found in an underground storage tank, a material safety data sheet (MSDS) must be available for each hazardous material present.

Reclassification

A confined space may be reclassified to:

1. Temporarily reclassify a permit space to a non-permit space; or
2. Reclassify any type of confined space to another type due to a change in conditions or operations in the space.

Temporary Reclassification

Permit spaces may be temporarily reclassified as non-permit spaces as follows:

1. Under certain conditions, if a permit space poses no actual or potential atmospheric hazard, and if all physical hazards within the space are eliminated without entry into the space, supervisors or safety professionals may reclassify the permit space as a non-permit space as long as the hazards remain eliminated. Examples include certain dock levelers, air handling units, ventilation and filtration units, and compactors.
2. To reclassify the space, supervisors or safety personnel must complete PS Form 8157, *Temporary Confined Space Reclassification Certification*, post a copy at the entrance to the space, and file the original with PS Form 8156. (PS Form 8157 is available at <http://blue.usps.gov/formmgmt/8999.htm>.)
3. If hazards arise during entry into a reclassified space, the entrant must exit immediately and the space must be reevaluated.

This does not apply to permit spaces with actual or potential atmospheric hazards. Postal Service employees are prohibited from entering any confined space with actual or potential atmospheric hazards.

Reclassification Due to Change in Conditions

If the conditions of, or the operations conducted in, a non-permit space change, and, if the change may pose a hazard, management must:

1. Reevaluate the space and reclassify it if necessary; use PS Form 8156 and, if temporary, PS Form 8157.
2. Prohibit entry by Postal Service employees until the evaluation is complete.

Employee Awareness Training

Confined space awareness training is required for:

1. Employees who work close to permit spaces.
2. Employees who work in non-permit spaces.
3. Supervisors of both types of employees.

Awareness training for these three groups can be combined.

The National Center for Employee Development (NCED) provides information about requirements and availability of training programs.

Go to: http://nced.usps.gov/environ/documents/safety_training_matrix.pdf.

Permit Spaces

Employees who work near (or have access to) a permit space must be informed of the existence and location of the space, the danger it poses, and the prohibition against entry.

Non-permit Spaces

For employees who enter non-permit spaces, management must:

1. Inform employees of the types of potential hazards in the confined spaces.
2. Instruct employees not to perform tasks that may create an atmospheric or other hazard, such as:
 - a. Hot work, such as welding, cutting, or soldering.
 - b. Cleaning with organic solvents, corrosives, or any other hazardous materials.
 - c. Painting or applying any other surface coating.
 - d. Using powered equipment (other than small hand tools) that may pose a hazard or create dust.
3. Ask employees to report any suspected hazards they may encounter.
4. Advise employees to evacuate any space with a suspected hazard and report it immediately.

Safety Professionals

Training for safety professionals should include classroom and practical exercises such as those offered by the:

1. National Institute for Occupational Safety and Health (NIOSH)
Education and Resource Centers:
<http://www.cdc.gov/niosh/oep/centers.html>.
2. OSHA Training Institute (OTI):
<http://www.osha.gov/dcsp/ote/oti.html>.

Roles and Responsibilities

Headquarters

This person or organization...	Is responsible for...
Vice President, Employee Resource Management (ERM), Human Resources (HR)	<ul style="list-style-type: none"> ■ Serving as the Chief Environmental Officer for the Postal Service. ■ Communicating safety and environmental policies, including those pertaining to confined spaces.
Director, Safety and Environmental Performance Management (SEPM), ERM, HR	<ul style="list-style-type: none"> ■ Establishing strategic direction and overseeing the Postal Service's environmental and safety programs, including confined space safety. ■ Coordinating with Maintenance Policies and Programs, Engineering, to establish national policy and provide technical guidance.
Manager, Environmental Policy and Programs (EPP), SEPM, ERM, HR	<ul style="list-style-type: none"> ■ Developing policies and procedures to provide technical guidance on confined spaces covered by environmental regulations, e.g., underground storage tanks.
Manager, Maintenance Policies and Programs, Engineering	<ul style="list-style-type: none"> ■ Coordinating with SEPM to establish national policy and provide technical guidance on confined space safety.

Areas

This person or organization...	Is responsible for...
Area Managers, Safety, Human Resources	<ul style="list-style-type: none"> ■ Monitoring written confined space safety programs. ■ Ensuring that safety specialists receive training adequate to make them proficient in identification and classification of confined spaces (see Safety Professionals, on page 6).

Performance Clusters

This person or organization...	Is responsible for...
District Managers	<ul style="list-style-type: none"> ■ Ensuring that all District facilities comply with OSHA's confined space requirements.
Installation Heads	<ul style="list-style-type: none"> ■ Ensuring that Postal Service policy and OSHA regulations on confined spaces are followed.
Safety Specialists	<ul style="list-style-type: none"> ■ Identifying and evaluating or arranging for the evaluation of confined spaces ■ Keeping records of identifications and evaluations. ■ Reclassifying spaces as necessary.
Maintenance Managers and Supervisors	<ul style="list-style-type: none"> ■ Prohibiting unauthorized entry into permit spaces. ■ Informing exposed employees (i.e., providing awareness training). ■ Temporarily reclassifying permit spaces using lockout procedures as necessary. ■ Making arrangements with contractors to have work done in permit spaces.

Resources

Federal

National Institute for Occupational Safety and Health (NIOSH)

NIOSH provides a list of academic degree programs and research training opportunities supported by NIOSH through university-based Education and Research Centers, in the core areas of industrial hygiene, occupational health nursing, occupational medicine, and occupational safety, plus specialized areas relevant to the occupational safety and health field. The list is available at <http://www.cdc.gov/niosh/oe/centers.html>.

Occupational Safety and Health Administration (OSHA)

OSHA provides information about the regulation of confined spaces, including standards, fact sheets, handbooks, and videos. Go to <http://www.osha.gov/SLTC/confinedspaces/index.html>.

Postal Service

Safety and Environmental Performance Management

The *Postal Service Confined Space Written Program Guide* is available at: <http://safetytoolkit.usps.gov/resources/resources.aspx>.

PolicyNet

PS Form 8156, *Confined Space Inventory and Atmospheric Hazards Evaluation*, and PS Form 8157, *Temporary Confined Space Reclassification Certification*, are available at <http://blue.usps.gov/formmgmt/8999.htm>.

Definitions

The following definitions are based on those in 29 CFR 1910.146(b):

Acceptable entry conditions — the conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

Attendant (or standby person) — an individual stationed outside one or more permit spaces who monitors the authorized entrants and the conditions in the space.

Blanking or blinding — the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

Confined space — a space that:

1. Is large enough and so configured that an employee can bodily enter and perform assigned work;
2. Has limited or restricted means for entry (for example, tanks, vessels, vaults, and pits are spaces that that may have limited means of entry); and
3. Is not designed for continuous human occupancy.

Double block and bleed — the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

Emergency — any occurrence (including any failure of hazard control or monitoring equipment) or event internal or external to the permit space that could endanger the entrants.

Engulfment — the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constrictions, or crushing.

Entry — the action by which a person passes through an opening into a permit-required confined space; 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.

Entrapment — the trapping or asphyxiation of a person in a confined space with inwardly converging walls or a floor that slopes downward and tapers to a small cross-section.

Entry permit (permit) — the written or printed document that is provided by the employer to allow and control entry into a permit space.

Entry supervisor — the person (such as the foreman, shop or division supervisor) responsible for (1) determining if acceptable entry conditions are present at a permit-required confined space; (2) authorizing entry and overseeing entry operations; and (3) terminating entry into the space.

Hazardous atmosphere — an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:

1. Flammable gas, vapor, or mist in excess of 10 percent of the lower flammable limit (LFL).
2. Airborne combustible dust at a concentration that meets or exceeds the LFL.
3. Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent.
4. Atmospheric concentration of any substance which could result in employee exposure in excess of its dose or permissible exposure limit.
5. Any other atmospheric condition that is immediately dangerous to life or health (IDLH).

Hot work permit — employer's written authorization to perform operations (for example, riveting, welding, cutting, brazing or soldering) capable of providing a source of ignition.

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 by such means as: (1) blanking or blinding; (2) misaligning or removing sections of lines, pipes, or ducts; (3) a double block and bleed system; (4) lockout or tagout of all sources of energy; or (5) blocking or disconnecting all mechanical linkages.

Non-permit confined space (non-permit space) — 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.

Oxygen deficient atmosphere — an atmosphere containing less than 19.5 percent oxygen by volume.

Oxygen enriched atmosphere — an atmosphere containing more than 23.5 percent oxygen by volume.

Permit-required confined space (permit space) — 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.

Prohibited condition — any condition in a permit space that is not allowed by the permit during the period when entry is authorized.

Rescue service — the personnel designated to rescue employees from permit spaces.

Retrieval system — the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

The following definitions also apply to work in confined spaces:

Confined space entrant — the individual entering the confined space.

Confined space entry permit — authorization and approval in writing that: (1) specifies the location and type of work to be done; (2) certifies that all existing hazards have been evaluated by the entry supervisor; and (3) certifies that necessary protective measures have been taken to ensure the safety of each worker entering the confined space (see 29 CFR 1910.146, Appendix A, Permit-required Confined Space Decision Flow Chart).

Hazardous energy — any energy source (e.g. electrical, mechanical, hydraulic, pneumatic, chemical, thermal or the sudden release of stored energy) that could cause injury or death to an employee while servicing or repairing a piece of machinery.

Lockout/Tagout — the control of all hazardous energies within a system prior to performing service on the system according to 29 CFR 1910.147, The control of hazardous energy (lockout/tagout).

Personal protective equipment (PPE) — equipment that will help prevent accidents and personal injury. PPE includes hardhats, eye protection, face shields, protective footwear, respirators, aprons, gloves, and full body suits, as necessary, dependant upon the hazards.

Exhibit 1
Classifying Confined Spaces

