

OREGON MILITARY DEPARTMENT	NUMBER: AGP-99.200.04
ADJUTANT GENERAL PERSONNEL	EFFECTIVE DATE: June 30, 2025
SUBJECT: Confined Space Entry	

APPLICABILITY:

This policy and the procedures contained herein are applicable to state employees.

AUTHORITY/REFERENCE:

29 CFR 1910.146

OR-OSHA 437-002-946

ATTACHMENTS:

CONFINED SPACE AND PRCS RECOGNITION CHECKLIST

CONFINED SPACE ENTRY PLAN- ACKNOWLEDGEMENT OF CSEP

PERMIT REQUIRED CONFINED SPACE DECISION FLOW CHART

SAMPLE- OMD CONFINED SPACE ENTRY PERMIT- EXAMPLE

PURPOSE:

The purpose of this policy is to establish confined space entry standards for all Oregon Military Department (OMD) employees and contractors at OMD facilities or sites under the control of OMD.

DEFINITIONS:

Alternate Entry Method: An alternative process for entering a permit space under very specific conditions. The space remains a permit space even when entered using alternate entry.

Atmospheric Hazard: An existing or potential atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (escape unaided from a permit space), or an injury or acute illness from one or more of the following: (1) A flammable gas, vapor, or mist in excess of 10% of its lower flammable limit; (2) An airborne combustible dust at a concentration that meets or exceeds its lower explosive limit; (3) An atmospheric oxygen concentration below 19.5% (“oxygen deficient”) or above 23.5% “oxygen enriched”); (4) An airborne concentration of a substance that exceeds the dose or exposure limit specified by an Oregon OSHA requirement or; (5) an atmosphere that presents an immediate danger to life or health (IDLH).

Attendant: An individual stationed outside one or more permit-spaces to monitor authorized entrants and perform all attendant duties assigned in the permit space program.

Authorized entrant: An employee authorized by OMD to enter a permit-space.

Confined space: An area large enough and so configured that an employee can fully enter the space and perform work; has limited or restricted means for entry and/or exit; and is not designed for continuous human occupancy. Examples: sewers, storage tanks, pits, tunnels, excavations.

Continuous system: A confined space that is a part of, and contiguous with a larger confined space (for example, storm sewers, sanitary sewers, or steam tunnels); cannot be isolated from the larger confined space and is subject to a potential hazard release from the larger confined space that can overwhelm control measures and/or personal protective equipment, resulting in a hazard that is immediately dangerous to life and health.

Entry supervisor: The person responsible for ensuring the permit-space is safe for entry, overseeing entry operations and terminating entry as required.

Flammable Atmosphere: Flammable gas, vapor or mist in excess of 10 percent of the lower flammable limit of the material in question. These are often toxic as well as flammable. Atmospheric concentrations of dust which obscure vision at a distance of five feet or less are also potentially flammable.

Permit-required confined space (permit-space): A confined space that has one or more of the following characteristics: (1) contains, or has the potential to contain, a hazardous atmosphere; or (2) contains a material that has the potential to engulf an entrant; or (3) has an internal configuration such as that an entrant could become 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 that inhibits an entrants ability to self-rescue.

Oxygen Deficient Atmosphere: Atmospheres that contain less than 19.5 percent oxygen.

Oxygen Enriched Atmosphere: Atmospheres that contain more than 23.5 percent oxygen.

Testing: The process of identifying and evaluating the atmospheric hazards that entrants may be exposed to in a permit-required confined space. Testing includes specifying the initial tests that are to be performed in the permit space.

Toxic Atmosphere: Atmospheres having concentrations of airborne chemicals in excess of permissible exposure limits (PELs) as defined by ISHA or American Congress of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV's). Material Safety Data Sheets (MSDS) can provide guidance in establishing atmospheric conditions for air contaminants with PEL.

Ventilation: Controlling a hazardous atmosphere using powered equipment such as fans and blowers, to continuously move air.

Policy:

It is the policy of the OMD to provide a safe workplace for all employees. The OMD shall establish confined space entry standards for all OMD employees and contractors at OMD facilities. It is under this policy that the OMD does not allow its state employees to enter permit required spaces unless alternate entry methods can be achieved. OMD shall enforce this policy as a means of protecting the health and safety of workers while entering, working in, and exiting confined spaces. Failure of employees to adhere to the provisions of this program may result in disciplinary action, up to and including dismissal. Before entry, the worker(s) shall be made aware of the hazards of confined space work and the safe work practices necessary.

Workplace Evaluation:

An initial evaluation will be conducted of each work location to determine if there are any confined spaces. Those confined spaces will be logged on a “master” spreadsheet and maintained by the Maintenance Operations Supervisor. The master list will identify the location of each confined space; any known or anticipated hazard that affects the space; the classification of the space if previously classified; and any precautions and procedures previously implemented for entering the space.

Labeling and Posting:

At all entrances to confined spaces, signs will be posted that include the following language:
DANGER Follow Confined Space Entry Procedure Before Entering

At all entrances to permit-required confined spaces, signs will be posted that include the following language:
Danger Permit-Required Confined Space Do Not Enter

Unauthorized Entry:

Measures to prevent unauthorized entry include, but are not limited to, bolting of access doors, posting the spaces, and erecting temporary barriers at open spaces.

Space Evaluation:

Prior to entering a confined space, the hazards of the space will be evaluated to determine if a space is permit required or can be entered by alternate methods. Standard operating procedures will be addressed.

Entry into Non-Permit Confined Spaces:

Spaces such as crawl spaces under certain buildings are not expected to have atmospheric hazards since there is continuous water and air movement, and/or no decaying organic matter or other chemical use in the space. However, there may be physical hazards associated with these spaces such as high-water flow or difficult entry or egress.

If all the hazards (physical and atmospheric) inside of a space can be eliminated without having to first enter the space, it can be classified as a non-permit-space and entered without using

permit-space entry procedures. If ventilation must be used to control potential atmospheric hazards, the space cannot be classified as non-permit. At the minimum, the Alternate Entry Procedures must be used.

Multiple Employers, Contractors and Visitors

- All non-OMD personnel entering confined spaces at OMD facilities will follow the requirements of the OMD confined space program. Exceptions will be made on a case-by-case basis if the non-OMD employer has a confined space entry program, and that program has been reviewed and deemed satisfactory by Maintenance Operations Supervisors.
- OMD site supervisors will inform visitors and contractors of the locations and hazards of the confined spaces at the site, when applicable. In addition, the visitors will be informed of any control procedures in place to minimize or eliminate the hazards.
- If multiple employees are working in or near the same confined space, their activities will be coordinated so that the actions of one employee will not pose a danger to others. Coordination of activities will also be done if visiting employees and OMD employees are working in or near the same confined space.
- The means by which visitors and contractors will be informed of confined spaces at the facility and coordination of activities will be handled on a case-by-case basis. Possible methods include pre-entry meetings with all affected parties and written correspondence.
- At the end of confined space entry activities, visiting employees will notify the OMD site supervisor that they have completed their work. The visiting employee will be debriefed as to the nature of the work and the presence of any hazards in the spaces.

Permit Requirements for Permit-Confined Spaces:

The confined space entry permit used by OMD will include the following information:

- Permit-space to be entered;
- Purpose of the entry;
- Date, start, and stop times of the permit;
- Name of the authorized current entrants, attendants and entry supervisor;
- Hazards of the permit-space;
- Space isolation procedures, including lockout/tagout, procedures for purging, inerting, ventilating and flushing;
- Acceptable entry conditions;
- Results of initial and periodic tests, including time and person;
- Who is performing the tests;
- Rescue and emergency procedures;

- Communications procedures and equipment;
- PPE, testing equipment, communication equipment, alarm systems, and rescue equipment and;
- Other applicable information and additional permits (i.e., hot work) that may be issued.

All permit-required confined space entries will require a permit to be filled out prior to entering the space and shall be signed by the entry supervisor authorizing entry. These permits are valid for the duration of the job or one work shift, whichever is less. Work that carries over into a second work shift will require a new permit to be issued. Subsequent entry into a space that has had the permit canceled will also require a new permit.

The completed permit will be reviewed by all authorized entrants and attendants prior to entering the space. The completed permit will be posted at the entry portal or by any other equally effective means so entrants can confirm that pre-entry preparations have been completed.

The entry supervisor shall terminate entry and cancel the permit when entry operations have been completed, or a condition that is not allowed under the entry permit arises in or near the permit space.

Canceled permits will be maintained for at least one-year and used as part of the required permit space program review. Any problems encountered during an entry operation shall be noted on the pertinent permit so that appropriate revisions to the permit space program can be made.

Entry into Permit-Required Confined Space:

The following steps will be followed during permit-required confined space entry activities:

- Calibrate the air monitoring instrument prior to any atmospheric monitoring. The entry supervisor will calibrate the instrument. The calibration record will be placed on the entry permit.
- Perform initial air monitoring from outside the space.
- The appropriate instrument readings should be:
Oxygen between 19.5 and 23.5 percent; and
Combustible gases and vapors less than 10 percent of the LEL.
- Other contaminants may need to be monitored on a case-by-case basis. The above readings are considered acceptable entry conditions.
- No entry is permitted in the space if the instrument readings are not within the above parameters. If the atmospheric concentrations of the above contaminants inside the space cannot be brought within the given parameters, then the site supervisor or their designee must be notified prior to attempting an entry.
- In addition to atmospheric testing, the space should be isolated and all equipment locked and tagged out prior to entering the space. It is the duty of the entry supervisor to verify that this has been accomplished.
- The entry supervisor will determine how often air monitoring must be performed once entry activities have been undertaken. The results and time of the measurements will be recorded on the entry permit

Alternate Entry Procedures for Permit-Spaces:

Permit spaces may be entered without a permit by OMD employees when all hazards have been eliminated and all atmospheric hazards are controlled with continuous force-air ventilation.

Each space must have a developed and implemented procedure that must address:

- The hazards of the space;
- The methods used to eliminate hazards;
- The methods used to ensure that the hazards have been eliminated;
- The methods used to test the atmosphere within the space, where applicable for all atmospheric hazards;
- training the methods used to determine if unsafe conditions arise before or during entry;
- The criteria and conditions for evacuating the space during entry;
- The methods for training employees in these procedures;
- The methods for ensuring employees follow these procedures.

When using ventilation to control atmospheric hazards:

- Use only properly calibrated direct-reading meters to test the atmosphere.
- Ensure direct-reading instruments are used and tested according to the instructions and recommendations from the instrument manufacture;
- Test the atmosphere for all identified atmospheric hazards before entering the space;
- Only enter after atmospheric testing verifies that all atmospheric hazards are adequately controlled by the ventilation;
- Perform continuous atmospheric monitoring for all atmospheric hazards during the entry;
- Immediately evacuate the space:

When the atmospheric monitoring indicates the return of atmospheric hazards;

Upon any failure with the direct-reading instrument;

Upon any failure with the ventilation;

When a new hazard is introduced or conditions within the space change.

Ensure all employees or their representatives who will conduct the entry have the opportunity to observe all activities used to comply with this section.

Ensure all employees who conduct entry have an effective means of communication such as a two-way radio, cell phone, or voice if other employees are present to summon help while within the space.

When a space is evacuated, it must be treated as a permit space unless the conditions that necessitated the evacuation are corrected and the re-entry is treated and document as a new entry.

Document each entry. This documentation must include:

- The location of the space;
- The hazards of the space;
- The measures taken to eliminate the hazards and;
- When applicable, the measures used to control the atmospheric hazards.
- When applicable, the identity of the direct-reading instruments used to test the atmosphere, including the date of calibration.
- When applicable, the results of the atmospheric testing.
- The date of the entry.
- The duration of the entry.
- When applicable any and all conditions that required the evacuation of the space.
- The name, title, and signature of the person responsible for ensuring the safe entry conditions.

Maintain this documentation for the duration of the entry and at the location of the entry.

Hazard Identification, Evaluation and Control:

All permit-space hazards will be identified and controlled prior to entering the space under alternate entry procedures if applicable. (OMD Employees do not enter permit required confined spaces, unless under alternate entry). Measures for identifying and controlling hazards include atmospheric testing, de-energizing and lockout or tagging of equipment, procedures for purging, inerting, ventilating, and flushing permit spaces. Entrants will be protected from external hazards, such as vehicles, by the use of barriers or other means.

For permit-space entry the following types of equipment will be provided for safe entry such as:

- Personal protective equipment (PPE)
- Testing and monitoring equipment
- Communications equipment
- Alarm systems
- Rescue equipment
- Ventilation equipment
- Lighting equipment
- Ladders or other equipment

The equipment to be used will be dependent upon the space. Specific equipment to be used will be listed on the entry permit for that specific entry. All employees who use equipment will be trained in the use of that equipment.

Personnel Needed for Entry:

For each permit-required confined space entry (unless using Alternate Entry Procedures), the following personnel will be necessary:

Authorized Entrants

- The authorized entrant(s) will be stated on the permit prior to entry. These are the only individuals who may enter the space while the permit is in effect.

- Entrants must know the hazards they may be faced with during entry; Communicate with attendant as necessary in order to monitor entrant's status; alert attendant whenever entrant detects dangerous or hazardous conditions; exit from permit space as quickly as possible when order to evacuate is given; recognize warning signs or symptoms of exposure to dangerous situations; detect dangerous or hazardous conditions and evacuate when alarm is activated.

Attendants

- During entry into permit-required confined spaces, at least one attendant will be stationed outside the space to maintain constant communication with the entrant. The attendant is not the designated rescue person and should only attempt non-entry rescues. In the event of an emergency, the attendant will summon rescue personnel.
- The attendant must also know the hazards that may be faced during entry; be aware of possible behavioral effects of hazard exposure; continuously maintain an accurate count and means to identify authorized entrants in permit space; remain outside the permit space during entry operation until relieved by another attendant; communicate with authorized entrant as necessary to monitor entrant status; monitor activities inside and outside the space to determine if it's safe for entrant to remain in the space and order authorized entrant to evacuate immediately if attendant detects dangerous or hazardous condition; if attendant detects behavioral effects of hazard exposure; detects a situation outside the space that could endanger the entrant; or the attendant cannot effectively and safely perform all the duties required.
- The attendant will summon rescue and other emergency services as soon as they determine authorized entrant may need assistance to escape from permit space hazard.

Entry Supervisors

- Each permit-required confined space entry will have an entry supervisor who is responsible for all aspects of the entry. The entry supervisor may also be the authorized entrant or attendant for a given entry.
- The supervisor must know the hazards that may be faced during entry, including type of hazard, signs, symptoms and consequences of exposure to hazards; understand the means and methods to control and/or eliminate hazards; verify the appropriate entries have been made on the permit, that all tests specified have been conducted and that all procedures and equipment are in place before endorsing the permit; inform entrant and attendant of hazards and conditions associated with the space; terminate the entry and cancel permit; verify rescue services are available and means for summoning them are operable; remove unauthorized individuals who enter or who attempt to enter the permit space; and reevaluate the conditions within the space whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space.

Training:

All personnel involved in permit-required confined space entry will be trained on the hazards associated with the work. The training will be provided before the employee is assigned duties under this policy, whenever there is a change in assigned duties, a new hazard is introduced, changes to the permit program; when the permit audit shows deficiencies; when there are new or previously unidentified permit spaces and whenever there is a deviation from the established procedures or employee knowledge of the procedures is inadequate.

This training will cover the following:

- Hazard recognition, including symptoms of exposure to hazards;
- Proper use of personal protective equipment, respirators, and other safety equipment;
- Communication procedures;
- Summoning rescue services;
- Prevention of unauthorized entry;
- Air monitoring procedures;
- Performing non-entry rescue;
- Hazard control procedures including ventilation and lockout/tagout procedures;
- Properly filling out permits; and
- Termination procedures.

Provide awareness training to all employees whose work operations are or may be in an area where permit spaces are present to explain the permit space program; the entry permit system; the alternate entry procedures, if used; and how to recognize permit spaces in their work areas.

When contractors/employees of another employer enter permit spaces under our control, we must inform them that the workplace contains permit spaces and can be entered only when the applicable requirements of the OSHA Confined Spaces in General Industry and Construction rules are met; of the identified hazards and our experience with each permit space they will enter; of any precautions or procedures required to protect employees in or near spaces where the contractor will be working; discuss entry operations with contractor after they are complete including the program followed during permit space entry and any hazards confronted or created.

Records of training will be maintained on site. Cancelled permits shall be maintained for one year from the date the permit expires for review. NOTE: Additional record retention requirements may apply under OAR 437-002-1910.1020. "Access to Employee Medical and exposure Records."

Confined Space Entry Program Review:

The confined space entry program shall be reviewed periodically. Canceled permits will be utilized to facilitate review of the program. Revisions of the program will be performed to ensure employee safety and compliance with applicable regulations.

The program shall also be reviewed whenever deficiencies are suspected. Deficiencies may be suspected when employees note them or there is an accident or near-miss. The program shall be reviewed immediately with corrective actions taken immediately if required.

Responsibilities:

Employees shall:

- Not enter permit-required confined spaces unless alternate methods are used and authorized to do so.
- Follow all procedures for entering spaces.

Supervisors shall:

- Implement the OMD confined space program at their facility.
- Label all permit-required confined spaces.
- Ensure personnel are trained on the OMD confined space program.
- Consult with contractors regarding confined space entry procedures.

The Safety Office shall:

- Assist in developing specific confined space entry procedures.
- Assist in confined space entry training.
- Assist in periodic review of this program.
- Provide resources for acquiring needed equipment.

Inquiries / Questions: Questions pertaining to this guidance may be directed to AGP at (971) 355-3986.

Tracy GARCIA

Tracy Garcia
Adjutant General Personnel
Oregon Military Department

CONFINED SPACE AND PRCS RECOGNITION CHECKLIST

Part I

- _____ 1. Is this space large enough so an employee can bodily enter and perform work?
- _____ 2. Does the space have limited or restricted means of entry and exit?
- _____ 3. Is the space designed for continuous occupancy?

If the answer is yes to all items in Part I, continue to Part II. If the answer is no to any of the items in Part I, the space is not considered a confined space.

Part II

- _____ 1. Does the space contain or potentially contain a hazardous atmosphere?
- _____ 2. Does the space contain any chemicals or chemical residue?
- _____ 3. Does the space contain any flammable/combustible substances?
- _____ 4. Does the space contain or potentially contain any decomposing organic matter?
- _____ 5. Does the space have any pipes which bring chemicals into it?
- _____ 6. Does the space have any materials that can trap or potentially trap, engulf or drown an entrant?
- _____ 7. Is vision obscured by dust at 5 feet or less?
- _____ 8. Does the space contain any mechanical equipment servicing the space?
- _____ 9. Does the space have converging walls, sloped floors, or tapered floor to smaller cross-sections which could trap or asphyxiate an entrant?
- _____ 10. Does the tank or vessel contain rusted interior surfaces?
- _____ 11. Does the space contain thermal hazards (e.g. cold, hot)?
- _____ 12. Does the space contain excessive noise levels which could interfere with communication with an attendant?
- _____ 13. Does the space present any slip, trip, or fall hazards?
- _____ 14. Are there any operations conducted near the space opening which could present a hazard to the entrant?

- _____ 15. Are there any hazards from falling objects?
- _____ 16. Are there lines under pressure servicing the space?
- _____ 17. Are cleaning solvents or paints going to be used in the space?
- _____ 18. Is welding, cutting, brazing, riveting, scraping, or sanding going to be performed in the space?
- _____ 19. Is electrical equipment located in or required to be used in the space?
- _____ 20. Does the space have poor natural ventilation which would allow an atmospheric hazard to develop?
- _____ 21. Are there any corrosives which could irritate the eyes in the space?
- _____ 22. Are there any conditions which could prevent any entrant's self-rescue from the space?
- _____ 23. Are there any substances used in the space which have acute hazards?
- _____ 24. Is mechanical ventilation needed to maintain a safe environment?
- _____ 25. Is air monitoring necessary to ensure the space is safe for entry due to a potential hazardous atmosphere?
- _____ 26. Will entry be made into a diked area where the dike is 5 feet or more in height?
- _____ 27. Are residues going to be scraped off the interior surfaces of the vessel?
- _____ 28. Are non-sparking tools required to remove residue?
- _____ 29. Does the space restrict mobility to the extent that it could trap an irritant?
- _____ 30. Is respiratory protection required because of a hazardous atmosphere?
- _____ 31. Does the space present a hazard other than those noted above which would make it a permit space?

If any other questions in Part II have been checked yes, the confined space is a Permit-Required Confined Space (PRCS). As such, entry into these spaces must be performed under the protection of your PRCS program. Note: In some situations, alternative procedures or reclassifying to a non-PRCS may be possible in lieu of a full PRCS program.



OREGON MILITARY DEPARTMENT
Adjutant General Personnel Office
1776 Militia Way SE
Salem OR 97301

CONFINED SPACE ENTRY PLAN
ACKNOWLEDGEMENT OF CSEP

I acknowledge that I have read and understood AGP Confined Space Entry Plan.

I acknowledge that I will not enter permit-required confined spaces unless authorized to do so and will follow all procedures for entering confined spaces as outlined in the plan.

I also acknowledge that entering a permit-required confined space without prior authorization could subject me to disciplinary measures up to and including dismissal.

I will abide by this plan and I realize that this signed statement will be placed in my personnel file.

Employee Name (printed)

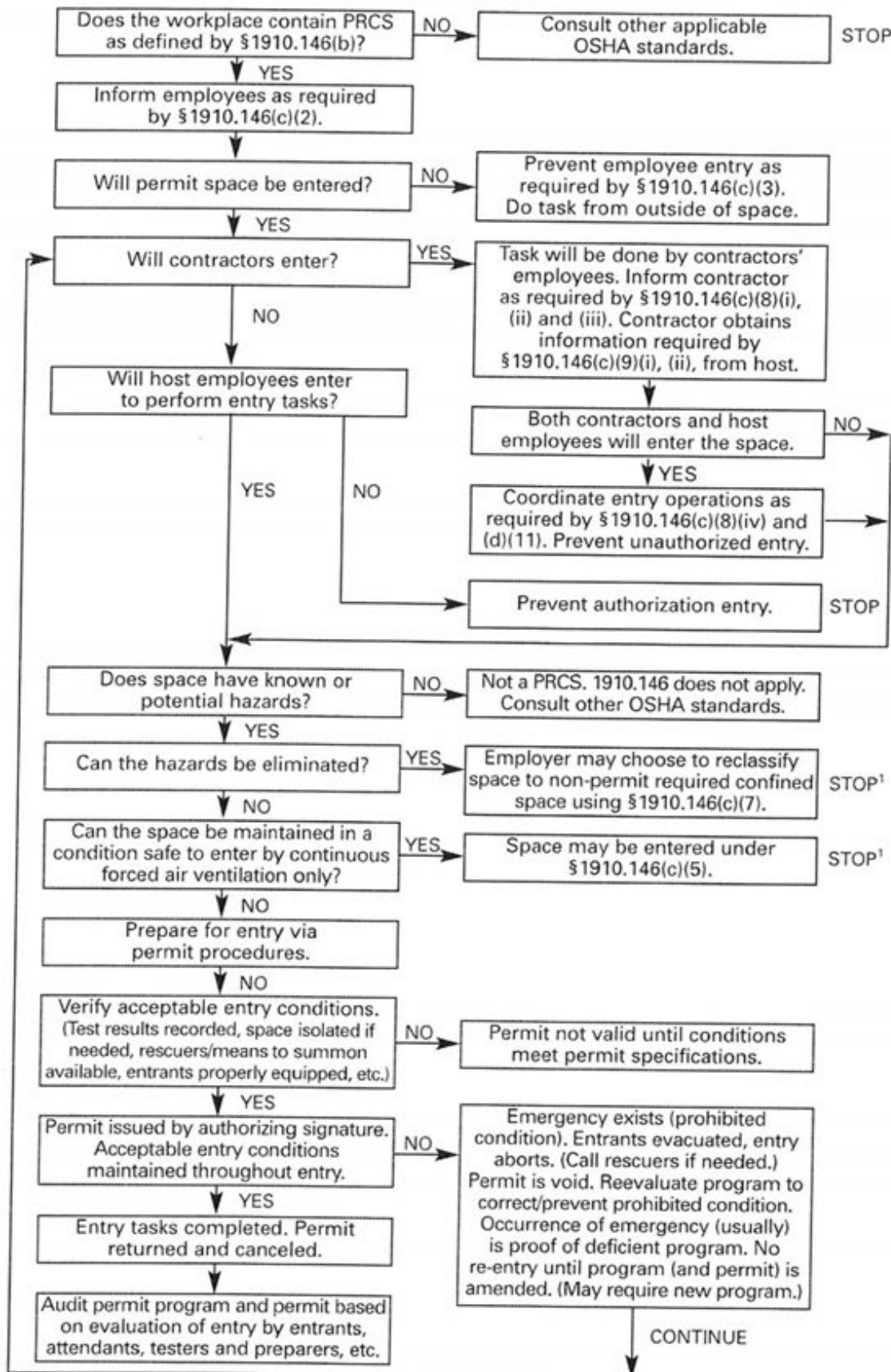
Division / Section

Employee Signature

Date

Permit-Required Confined Space Decision Flow Chart

Attachment 3



¹ Spaces may have to be evacuated and reevaluated if hazards arise during entry.

A Sample Permit

OMD Confined Space Entry Permit (Example)

Date & Time Issued _____ Date & Time Expires _____
 Job site/space I.D. _____ Job Supervisor _____
 Equipment to be worked on _____ Work to be performed _____
 Entrants _____
 Stand-by personnel _____

1. Atmospheric checks Time _____
 Oxygen _____ %
 Explosive _____ % LFL
 Toxic _____ PPM

2. Tester's signature _____

3. Source Isolation (No Entry) NA Yes No
 Pumps or lines blinded,
 disconnected or blocked _____

4. Ventilation Modification
 Mechanical _____
 Natural Ventilation only _____

5. Atmospheric check after
 isolation and ventilation
 Time _____
 Oxygen _____ % > 19.5%
 Explosive _____ % LFL < 10%
 Toxic _____ PPM < 10 PPM H₂S
 Tester's signature _____

6. Communication procedures _____

7. Rescue procedures: _____

8. Entry, standby, backup persons
 Training completed? Yes _____ No _____
 Training current? Yes _____ No _____

9. Equipment	NA	Yes	No
Direct reading gas monitor tested?	_____	_____	_____
Safety harnesses/lifelines for entrants/standby crew?	_____	_____	_____
Holsts	_____	_____	_____
Powered communications?	_____	_____	_____
SCBA's for entrants and standby crew?	_____	_____	_____
Protective clothing?	_____	_____	_____
All electric equipment listed Class I, Div I, Group D and non-spark producing?	_____	_____	_____

10. Periodic atmospheric tests

Time _____	O ₂ _____ %	Explosive _____ %	Toxic _____ %
Time _____	O ₂ _____ %	Explosive _____ %	Toxic _____ %
Time _____	O ₂ _____ %	Explosive _____ %	Toxic _____ %
Time _____	O ₂ _____ %	Explosive _____ %	Toxic _____ %
Time _____	O ₂ _____ %	Explosive _____ %	Toxic _____ %
Time _____	O ₂ _____ %	Explosive _____ %	Toxic _____ %
Time _____	O ₂ _____ %	Explosive _____ %	Toxic _____ %
Time _____	O ₂ _____ %	Explosive _____ %	Toxic _____ %

We have reviewed the work authorized by this permit and the information contained herein. Written instructions and safety procedures have been received and are understood. Entry cannot be approved if any column is marked "no". This permit is not valid unless all appropriate items are completed.

Permit prepared by: (Supervisor) _____

Approved by: (Unit Supervisor) _____

Reviewed by: (CS Ops Personnel) _____

(Printed Name)

(Signature)