

**SUBJECT:** Application of the Confined Spaces Standard for Construction, MR 5207.0300-5207.0304.

**I. Purpose:** This instruction establishes enforcement policy and provides explanation of the standard to ensure uniform enforcement.

**II. Scope:** This instruction applies OSHA-wide.

**III. References:**

- A. OSHA Instruction CPL 2.103, September 26, 1994, Field Inspection Reference Manual (FIRM).
- B. Minnesota Rules 5207.0300-5207.0304, Confined Spaces (for Construction)
- C. Federal Register, Vol.58, No.9, January 14, 1993, pages 4462-4563, Permit-Required Confined Spaces, Final Rule for General Industry, 29 CFR 1910.146.
- D. OSHA Instruction CPL 02-00-100, May 5, 1995, Application of the Permit-Required Confined Spaces (PRCS) Standards, 29 CFR 1910.146.
- E. MNOSHA Instruction CPL 2.100, April 26, 2004, Application of the Permit-Required Confined Spaces (PRCS) Standard in General Industry
- F. 29 CFR 1910.134, Respiratory Protection

**IV. Action:** OSHA Management Team Directors and supervisors shall ensure that the procedures established by this instruction are followed.

**V. Background:** Minnesota OSHA adopted Confined Space standards for General Industry and Construction on February 22, 1988. The Final Rule for Permit-Required Confined Spaces in general industry was published in the Federal Register on January 14, 1993, and became effective on April 15, 1993. Minnesota OSHA adopted the federal Permit-Required Confined Spaces standard (1910.146) for general industry on May 10, 1999. Minnesota OSHA continues to enforce 5207.0300-.0304 for Construction.

**VI. Standard Overview.** This standard describes minimum practices and procedures to prevent worker exposure to dangerous safety and health hazards in a confined space. It also recognizes the dynamic character of confined spaces as they occur in construction. Thus, the standard and our enforcement focus on the employer's whole program as conceived, documented and implemented as a primary safeguard for employees and on the capacity of that program to detect confined space hazards and to respond to them appropriately. The standard prescribes four general classes of confined spaces: those with few potential hazards (Classes 1A and 1B), those confirmed with no hazards at the time of entry but which could change after entry (Class II), and those with unknown or confirmed hazards (Class III).

A. 5207.0300 sets out the scope of the rule and provides examples of confined spaces. The scope does not include underwater operations. The intent of the standard is to "prevent worker exposure to dangerous air contamination, oxygen deficiency or oxygen enrichment" as defined in 5207.0301 of the standard. This section defines confined space to include dangerous atmospheric conditions, dangerous engulfment conditions, and hazardous entry or exit access. A 2002 ALJ decision determined the prevention of a hazardous entry or exit access alone does not fall within the intent of the standard. Therefore, if this is the only hazard present, this standard shall not be applicable.

- B. 5207.0301 contains definitions of key terms used in the standard.
- C. 5207.0302 subpart 1 requires the employer to comply with this rule before any entries into a confined space are made.
- D. 5207.0302 subparts 2 and 3 requires the implementation of an entry permit system which must include a written permit. Contents of the permit are prescribed in subpart 3.
- E. 5207.0302 subpart 4 describes the duration that a permit may be issued and the retention period for a permit. Class II and III permits are valid for one shift, Class IA or IB are valid for one year. Permits must be kept for 30 days unless testing showed a dangerous atmosphere, then they must be kept for one year.
- F. 5207.0302 subpart 5 requires operating procedures and references other OSHA rules (Respiratory Protection, other parts of this rule).
- G. 5207.0302 subpart 6 requires worker training for entrants, for those acting as standby workers, and for those conducting air testing.
- H. 5207.0303 sets forth eleven actions to be done prior to entry into a confined space. Reference is made in 5207.0304 subpart 3 (Class III) to the requirements of 5207.0303 as well.
- I. 5207.0304 subpart 1 sets forth requirements for work in Class I spaces.
- J. 5207.0304 subpart 2 sets forth requirements for work in Class II spaces.
- K. 5207.0304 subpart 3 sets forth requirements for work in Class III spaces.

VII. Compliance Officer Safety. Minnesota OSHA prohibits routine entry by an OSHI into permit spaces. If entry must take place, OSHI must consult their director or supervisor first before attempting any confined space entry.

VIII. Inspection Procedures. The following guidelines are for determining when to evaluate an employer's Confined Space Entry (CSE) program. Any OSHI who is familiar with the standard and with this inspection policy may evaluate an employer's CSE program.

NOTE: Appendix B of this instruction is intended only as an aid, and is not intended to be the sole basis on which an employer's CSE program is evaluated.

- A. **Unprogrammed Inspections.** A comprehensive CSE program review is expected to include a review by the OSHI of all confined spaces. The review is to be a part of all construction unprogrammed inspections where the subject of the complaint, referral, or initiating event is confined space hazards. The employer's CSE program is expected to be evaluated if the OSHI believes that confined space hazards exist even though they were not the subject of the complaint, referral, or event.
- B. **Programmed Inspections.** A CSE program review normally shall be part of comprehensive construction programmed inspections in any workplace where confined spaces may exist. Where a review is not done and permit spaces are found to exist in the workplace, the basis for the decision not to review shall be explained in the case file.

IX. Documentation for Violations. Because the standard focuses on the integrity of the employer's program and each of its components, OSHI's are expected to carefully review the employer's written confined space program and the documentation in support of that program, and note the extent of any discrepancy between the program as documented and as it is implemented. Deficiencies in either

program content or implementation may be cited, but the basis for any citation must be explicitly substantiated in the case file.

**X. Citation Guidance.** Citations for violations of the CSE standard shall be issued in accordance with the FCM.

A. If the employer has not implemented a confined space program, **and** their employees do not enter the confined spaces:

1) Cite 5207.0302 subp. 2A if the employer has not taken means to prevent unauthorized entry. This subpart anticipates that all or some of an employer's employees will not enter a confined space and requires some action to be taken. The OSHI must document an employee's access to the confined space. It will be important to know when the confined space was created and how the employer should have known of its existence, and how the employees could reasonably be expected to approach or access the confined space. The OSHI should also document the location and description of the confined space and the hazards in the confined space. Actions to prevent entry can be through instructions and education, signs, locks, etc.

B. If the employer has not implemented a confined space program but the employer **intends** to enter confined spaces: The employer's intent to enter a confined space is sufficient to require compliance with appropriate sections of this rule. The OSHI must document that the employer needs to enter the confined space as part of their work on the project. The OSHI should also document the location and description of the confined space, the hazards in the confined space, whether the employer has entered the space before (including at other jobsites), what plans, procedures and training are in place at the time of the inspection, when is the next entry planned, who will enter the confined space, whether the same employees have entered spaces in the past. The OSHI should propose the following citations:

1) Cite 5207.0302 subparts 2 and 3, grouped with 5207.0303 subpart 1. The employer is responsible for establishing appropriate procedures, including an entry permit system, prior to all entries. (Procedures prior to Entry)

2) Cite 5207.0302 subpart 5, grouped with 5207.0304 subpart 1, or 2, or 3 (depending on the Class). The employer is responsible for establishing operating procedures which are specific for the Class of confined space that will be entered. (Procedures during Entry)

3) Cite 5207.0302 subpart 6 The employer is responsible for providing training for employees who will enter confined spaces, for those who will perform rescue operations, and for those who will conduct atmospheric testing. (Training)

C. If the employer has not implemented a confined space program, **and** their employees do enter the confined spaces; the OSHI should propose the following citations:

1) Cite 5207.0302 subparts 2 and 3, grouped with 5207.0303 subpart 1. The employer is responsible for establishing appropriate procedures, including an entry permit system, prior to all entries. (Procedures prior to Entry)

2) Cite 5207.0302 subpart 5, grouped with 5207.0304 subpart 1, or 2, or 3 (depending on the Class). The employer is responsible for establishing operating procedures which are specific for the Class of confined space that is entered. (Procedures during Entry)

3) Cite 5207.0302 subpart 6. The employer is responsible for providing training for employees who enter confined spaces, for those who will perform rescue operations, and for those who will conduct atmospheric testing. (Training)

Any single confined space deficiency (such as air monitoring, ventilation, etc.) should be cited by the specific paragraph that applies.

D. Special Enforcement Situations. Appendix A of this instruction contains a list of particular standards which apply in specified situations. When there is a question as to the appropriate standard (vertical or horizontal), the vertical standard shall be cited primarily with the general standard cited in the alternative.

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For the MNOSHA Management Team

Distribution: OSHA Compliance and WSC Director

Attachments: Appendix A – Relationship with Other Standards  
Appendix B – Program Evaluation Considerations  
Appendix C – Frequently Asked Questions

NOTICE: Minnesota OSHA Directives are used exclusively by MNOSHA personnel to assist in the administration of the OSHA program and in the proper interpretation and application of occupational safety and health statutes, regulations, and standards. They are not legally binding declarations and they are subject to revision or deletion at any time without notice.

Appendix A

**Specific Vertical Standards Taking Precedence**

These particular vertical standards take precedence over the Confined Space standard for the hazards they address. Clarification note: The term "confined space(s)" as used in standards promulgated before the CSE standard are to be considered equivalent to a "confined space(s)" in 5207.0300.

Standard Working in Confined Spaces

1926.352(g) Fire prevention measures associated with the use of fuel gas and oxygen in enclosed spaces.

1926.353(b)(1) Requirement for exhaust ventilation when welding, cutting, or heating is performed in confined spaces.

1926.353(b)(2) Requires air line respirators and standby person whenever the means of access is blocked by ventilation equipment.

Appendix B

**CSE Program Evaluation Considerations**

This appendix has been included for general guidance only. It is not intended to direct the CSHO's investigation or restrict the manner in which an employer's program is evaluated.

**I. INITIAL INFORMATION**

- A. To what degree is the employer familiar with the standard and its contents? (Does the employer understand the key terms defined in the standard?)
- B. Request identification of those confined spaces evaluated and determined to require a permit, their locations, along with any documentation as to the permit space determination (memos, contract, report, etc.) and when the determination was made.
  - 1. How does the employer meet the standard's requirement of paragraph (c)(6) for review of existing non-permit confined spaces for hazards which would convert them to a permit space?
- C. Evaluate the process by which the employer identified any confined spaces, as follows:

NOTE: If an employer elects not to have its employees enter the confined space, a thorough evaluation of each space is not required.

- 1. Analyze the evaluation method and equipment used.
    - a. Was the determination made based upon historical data? If so, how reliable is that data?
    - b. Were the substance's hazards appropriately identified and evaluated to comply with 5207.0302 subpart 2 of the standard? All the hazards that can affect the safety and health of entrants must be determined; e.g., gasoline is flammable but also contains benzene which can be a health hazard.
    - c. Were the sampling methods and/or testing equipment appropriate for each substance?
    - d. Are mechanical and other non-atmospheric hazards, for the space or for the work to be performed in the space, addressed in the employer's evaluation method?
  - 2. If the employer has arranged to have some other party (consultant or insurance carrier) evaluate the workplace, request a copy of the report presented to the employer in order to assess the adequacy of the evaluation.
- D. Are contractors performing permit space entries? If so, determine who they are and their work location.
  - 1. Are these spaces multi-employer worksites?
  - 2. Did the contractor develop the permit space program in use? If not, whose program is being used or followed by the contractor? If so, how was their program coordinated with the host employer's or general contractor's CSE program?
  - 3. What measures have the employers taken to facilitate coordination and safety for multi-employer worksites? Examples of these measures might be communications systems, postings, assignments of liaison personnel, or contractual agreements.

## II. TRAINING

### A. Employees:

1. What is the employer's policy with regard to employee entry referenced in 5207.0302 subp. 6., and how are the employees informed of the policy?
2. How are the affected employees referenced in 5207.0302 subp. 6., identified? Who are they?
3. How are affected employees informed of the employer's policies on confined space entry?
4. How and when are new or reassigned employees informed of the existence and locations of confined spaces?
5. Is the employer's CSE program used in employee training?

### B. The trainer:

1. Who are the individuals conducting the training, and what training are they providing?
2. For the training being presented, is the trainer knowledgeable about the subject matter in general and with the particular permit space situations at the workplace?

### C. The employer:

1. How does the employer verify that the training has been provided?
2. How does the employer evaluate employee proficiency in the duties required by the permit space program?
3. What criteria does the employer use to decide if retraining is necessary?

## III. CSE PROGRAM.

### A. Obtain a copy of the employer's written policies and procedures.

1. Where is the written program normally kept?
2. Who is in charge of the CSE program?
3. Does the written program or procedures provide for compliance with the applicable elements listed in 5207.0302 subp. 5., of the standard?

### B. Does the program provide appropriately for employee input regarding the classification of spaces, the identification of hazards, training, the adequacy of entry procedures and precautions, and other areas where employee knowledge and experience would be pertinent?

## IV. ENTRY PROCEDURES

### A. Obtain a list of entrants or identify the employees who have been assigned the duties of "entry", "monitoring" or "standby person" and determine who is authorizing entry. During the inspection, interview a sufficient number of employees in each category to evaluate the training provided and the confined space program's effectiveness.

### B. Determine the name, position, and training of the person(s) responsible for authorizing or in

charge of entry under the permit system.

- C. Review all data relating to each entry undertaken. The following are some examples of questions the CSHO may consider useful:
1. What is the size (volume) and configuration of the permit space?
  2. How have the physical properties (molecular weight, vapor pressure, etc.) of the atmospheric hazards been considered in the design of the ventilation plan?
  3. What is the capacity of each piece of ventilation equipment being used? Does capacity match requirements of the space(s)?
  4. What is the air exchange rate required to maintain acceptable entry conditions under a worst case scenario?
  5. What are the procedures the employer uses to determine acceptable entry conditions?
  6. Where and how is the data maintained?
  7. Do the entrants know what are the "safe for entry" conditions and where the supporting data is maintained?
  8. How does the employer demonstrate that the only hazards in the permit space are atmospheric?
  9. How did the employer demonstrate that continuous forced air ventilation would maintain the space safe for entry?
  10. How did the employer collect and document the monitoring and inspection data used to support the classification of the space?
  11. How does the employer make the documentation of determinations and supporting data available to permit space entrants?
  12. How does the employer determine that the operations or activities being performed within the permit space (for example: mucking, cleaning, etc.) do not contribute to the atmospheric hazard?
- D. Identify the equipment to be used for sampling and monitoring the permit space to comply with 5207.0303 subp. 4.
1. Determine if the equipment is being maintained and calibrated in accordance with the manufacturer's recommendations.
  2. Have air sampling, monitoring plans and procedures been developed which take into consideration any sampling equipment limitations?
  3. Do sampling plans include measuring exposure at the employee locations as well as other locations in the space?
- E. Who has the employer authorized to certify that the pre-entry measures required under 5207.0303 have been taken?

1. What does the certifier know about the confined space being entered?
2. How is the permit made available to each employee entering the space?
3. Are there any entry procedures used beyond those required by 5207.0302 subp. 2 and 3, and 5207.0304 subp. 1.A.(4) and B.(5) to inform entrants of entry conditions and how they relate to the acceptable entry conditions that have been determined?
4. How does the employer notify entrants of the need to exit the space when a hazardous atmosphere is detected?

#### V. **RESCUE.**

Review the employer's policy to determine which rescue procedures are being employed. If non-entry rescue has been ruled out, ascertain which of the entry rescue options has been implemented.

##### A. Non-entry rescue:

1. If non-entry rescue is being practiced, what equipment is used?
2. If non-entry rescue is not being practiced, what are the employer's reasons for not using it?
3. Does the employer review each space to be entered to determine whether to employ or not to employ non-entry rescue?
4. If entry was made through a top opening, was an approved hoisting device or similar means used to lift workers out of the space?

##### B. On-site rescue services: (An employer's own employees)

1. Determine the number of employees assigned to perform rescue, verify training for each member of the rescue service, and find out which of them have a current first-aid and cardiopulmonary resuscitation (CPR) certification (required for emergency work, 5207.0304 subp. 4).
2. Review the rescue procedures as they compare with the written CSE program.
3. Note the work shifts of the rescuers and compare them to the permit entry times.

##### C. Non-employer rescue employees (off-site):

1. Who provides the off-site rescue service and where is the service located?
2. How is the arrangement between the employer and the off-site rescue service documented (contract, letter of agreement, verbal agreement)?
3. How does the employer decide, given the identified confined space hazards, that the off-site rescue service's response time, experience, and training are adequate?
4. Have the rescue training requirements in 5207.0302 subp. 6A been met?
5. What method is used to summon rescuers?
6. Are rescue services on-call or on-site when permit space entry is underway?
7. What is the response time for rescue service?

8. How does the employer verify that the rescue service will be available during the time of employee entry?

D. Combinations:

1. If combination of on-site and off-site rescue services is employed:
  - a. Obtain a copy of the rescue plan which describes the roles of each party, and
  - b. Verify that the on-site and off-site rescue services employees have trained together as a team.
  - c. Determine if, the combined rescue services enable the employer to comply with the requirements for rescue services.

Appendix C

**Questions and Answers for CSE Standard Clarification**

This Appendix was derived from federal OSHA Instruction CPL 2.100; it has been modified to fit the Minnesota Rules.

**SECTION 5207.0300 Scope**

**1. Are only those employers engaged in construction operations covered by the CSE standard?**

Yes. The standard applies to all construction places of employment.

**2. What Standard Industrial Classification codes (SIC) fall under the scope exemption of the standard?**

Operations which are directly related to underwater operations conducted in diving bells or other underwater devices or to supervised hyperbaric facilities are not covered. Exact SIC codes are not specified and may vary, but may include commercial diving operations, SIC 7389.

**3. A facility, falling within the scope of the General Industry standards, is undertaking physical changes involving work in permit spaces. These changes will also employ construction practices either by in-house or contractual employees. Which standard, 1910.146 or 5207.0300, will be enforced for the work involved in the permit-required confined spaces?**

Generally speaking, refurbishing of existing equipment and space is maintenance; reconfiguration of space or installation of substantially new equipment (as for a process change) is usually construction. Those spaces identified under 1910.146(c)(1) as permit spaces that are undergoing maintenance or modifications, which do not involve construction, would be subject to the General Industry standards, such as 1910.146.

A confined space created during or as a result of construction activity or entered to perform construction activity would usually fall within the scope of the 5207.0300 or 29 CFR 1926 standards until the space is turned over for General Industry operations.

Some examples:

- The lining in a tank is in need of restoration either to prevent the structural part of the tank from deteriorating or to prevent the product from being contaminated by the material making up the tank structure. In either case, the partial patching or total removal of existing lining and replacement is maintenance. The installation of a new lining for the above reasons is also maintenance.
- The relining of a furnace with new refractory is maintenance.
- Tuck pointing and individual brick replacement in a manhole is maintenance.
- The relining of a sewer line using a sleeve which is pushed through a section of the existing system is maintenance.
- Repainting, which is part of a scheduled program to maintain a system or prevent its deterioration is maintenance.

**SECTION 5207.0301 Definitions**

**1. Under what circumstances will stairs or ladders constitute a limited or restricted means of egress under the standard?**

Ladders, and temporary, movable, spiral, or articulated stairs will usually be considered a limited or restricted means of egress. Fixed industrial stairs that meet OSHA standards will be considered a limited or restricted means of egress when the conditions or physical characteristics of the space, in light of the hazards present in it, would interfere with the entrant's ability to exit or be rescued in a hazardous situation.

**2. Does the fact that a space has a door mean that the space does not have limited or restricted means of entry or exit and, therefore, is not a "confined space"?**

**A space has limited or restricted means of entry or exit if an entrant's ability to escape in an emergency would be hindered.** The dimensions of a door and its location are factors in determining whether an entrant can easily escape; however, the presence of a door does not in and of itself mean that the space is not a confined space. For example, a space such as a bag house or crawl space that has a door leading into it, but also has pipes, conduits, ducts, or equipment or materials that an employee would be required to crawl over or under or squeeze around in order to escape, has limited or restricted means of exit. A piece of equipment with an access door, such as a conveyor feed, a drying oven, or a paint spray enclosure, will also be considered to have restricted means of entry or exit if an employee has to crawl to gain access to his or her intended work location. Similarly, an access door or portal which is too small to allow an employee to walk upright and unimpeded through it will be considered to restrict an employee's ability to escape. OSHA published a technical amendment to the preamble in Federal Register / Vol. 59, No. 213 / Friday, November 4, 1994, page 55208. **Please note** that a 2002 ALJ decision determined the prevention of a hazardous entry or exit access alone does not fall within the intent of the standard. Therefore, if this is the only hazard present, this standard shall not be applicable.

**3. Can the distance an employee must travel in a space such as a tunnel, to reach a point of safety be a determinant for classifying a space as a confined space?**

Yes. The determination would most likely be a function of the time of travel to the point of safety.

**4. How will OSHA assess a space which is entirely open on one plane, such as a pit, in determining whether a space has limited or restricted means for entry or exit?**

In determining whether a space has limited or restricted means for entry or exit, OSHA will evaluate its overall characteristics to determine if an entrant's ability to escape in an emergency would be hindered. Thus, a pit, shaft or tank that is entirely open on one plane can be considered a confined space if the means for entering the space (stairway, ladderway, etc.) are narrow or twisted, or otherwise configured in such a way as to hinder an entrant's ability to quickly escape (See question No. 1 of this section). Similarly, the pit, shaft, or tank itself may be confining because of the presence of pipes, ducts, baffles, equipment or other factors which would hinder an entrant's ability to escape.

**5. How will OSHA address a space that does not satisfy the criteria for a confined space but that potentially contains a hazardous atmosphere?**

Employers must comply with the permissible exposure limits and other requirements contained in standards addressing specific toxic substances and air contaminants, to the extent applicable, in all spaces in which employees may be present. In addition, the respiratory protection standard, 29 C.F.R. 1910.134, applies where an employee must enter a space in which a hazardous atmosphere may be present and no other specific standard applies. The respiratory protection standard contains special precautions for working in atmospheres that are oxygen deficient or immediately dangerous to life or health.

**6. Are the hazards posed by a confined space to be considered in determining whether a space meets the definition of a confined space?**

The determination whether a space has entry or exit within the meaning of the standard's definition of "confined space" should include consideration of whether, in light of the hazards posed by the particular space at issue, the configuration or other characteristics of the space would interfere with an entrant's ability to escape or be rescued in an emergency situation. **Please note** that a 2002 ALJ decision determined the prevention of a hazardous entry or exit access alone does not fall within the intent of the standard. Therefore, if this is the only hazard present, this standard shall not be applicable.

**7. Can a space that is initially designed for continuous human occupancy become a "confined space" because of changes in its use?**

If the changes alter the character of the space or if new or more serious hazards are introduced, those changes require reevaluation of whether the space is fit for continuous employee occupancy. If the space is not fit for continuous employee occupancy and the other criteria of the confined space definition are met, the space should be reclassified as a confined space.

**8. Does the characteristic "dangerous air contamination may exist or develop" in the definition of "confined space" refer only to those atmospheres which pose an acute hazard?**

Where employees are exposed to atmospheric or toxic hazards which do not present an immediate danger of death or disability that would render the employee unable to escape from the confined space (e.g., air contaminants such as arsenic or asbestos) OSHA's health standards for those hazards apply rather than 5207.0300, and employees must be appropriately protected in accordance with those health standards. The CSE standard is intended to protect entrants against short-term, acute hazards (not exposures at or below the permissible exposure limits); other standards address a broader range of health and safety concerns.

As noted in the definition of "dangerous air contamination" relating to atmospheric concentration of any substance for which a **dose** or **permissible exposure limit** is published in Subparts "G" and "Z" of 1910, any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to health effects is not covered by the CSE standard.

**9. Does the mere presence of water in a confined space such as a manhole trigger the application of the standard in order to work in that space?**

No.

**10. If the presence of water alone is not considered a hazard characteristic which would trigger the classification of a, CSE what would?**

As previously stated, the mere presence of water alone would not be a basis for applying the CSE standard; there must be a quantity sufficient either to endanger the life of the entrant or to interfere with escape from the space. Water in combination with other hazardous conditions could trigger the application of standard. For example, a small quantity of water (perhaps as much as 2 to 3 inches deep) may not trigger the confined space classification; however, if the water conceals trip and fall hazards such as abandoned machine pads or floor holes and openings, the combination of these conditions may very well cause the space to be classified as a confined space.

**SECTION 5207.0302 Operating Procedures**

**1. Are employers covered by the standard in violation of paragraph subp 2 of the standard if they**

**have not evaluated their workplace to determine if any permit-required confined spaces exist?**

Yes. Employers are required to evaluate their workplace to determine if any spaces were confined spaces. Employers who have not performed the evaluation would be in violation of 5207.0302 subp 2.A. and 2.B. unless the workplace does not and could not contain any confined spaces.

**2. Can OSHA cite an employer for not documenting the initial evaluation of the workplace required by 5207.0302?**

The evaluation need not be documented. The employer, however, must be able to explain how the evaluation was conducted and describe the results. Thus, OSHA's citation will be for failure to evaluate as required by the standard, rather than for failure to create a record of the evaluation.

**3. Does the initial evaluation for identifying confined mandate a specific physical survey of each space?**

Not necessarily; the evaluation requirement may be met through existing records and knowledge of the space, provided this information is adequate to make the determination required by the standard. For example, a telecommunications company may have records which show that the hazards of all manholes in one section of the region can be addressed by the 1910.268(o) procedures and that the manholes in another section of the region may contain toxins due to ground water contamination. Only manholes in the latter section would need to be surveyed. This same approach can be used for any industry which has a number of identical spaces and records to support its determination(s).

**4. How will OSHA interpret the language in 5207.0302 subp. 2.A. requiring employers to identify spaces to their employees?**

Ordinarily, information about confined spaces is most effectively and economically communicated through the use of signs. Consequently, signs would be the principal method of warning under the standard. Alternative methods, such as additional training, may be used where they are truly effective in warning all employees who could reasonably be expected to enter the space. It is the employer's obligation to assure that an alternative method is at least as effective as a sign. In some cases, employers may have to provide training in addition to signs, to protect employees who do not speak English or who would have difficulty understanding or interpreting signs. (One method by which OSHA can gauge an employer's effectiveness is through random interviews of affected employees.)

If a space has locked entry cover or panel, or an access door that can only be opened with special tools, the use of signs may be unnecessary if the employer ensures that all affected employees are informed about such spaces and know that they are not to be opened without taking proper precautions, including temporary signs, to restrict unexpected or unknowing entry.

**5. How will an employer determine a "safe for entry" level for contaminants under the provisions of 5207.0302 subp. 2.B.?**

OSHA is willing to accept as the minimal "safe for entry" level, that which is 50% of the flammable or toxic substance that would constitute a hazardous atmosphere. Two examples are:

(1) The LFL for methane is a concentration of 5 percent by volume. Ten percent of this value is 0.5 percent, a concentration which would be considered hazardous by definition. Under the guideline the measured concentration of methane cannot exceed 0.25 percent after ventilation. (source: page 4488 of the preamble to 1910.146)

(2) The 8-hour time weighted average PEL for hydrogen sulfide is 10 ppm. This concentration of hydrogen sulfide would be considered hazardous by the definition of "hazardous atmosphere". Under the guideline, the measured concentration of hydrogen sulfide cannot exceed 5.0 ppm after

ventilation.

**Entry would not be acceptable if hazards in the space quickly increased if the ventilation were to stop. Sufficient time must be available for an entrant to safely exit the space if the ventilation stops.**

**6. What type of documentation will OSHA look for if an employer wishes to provide additional ventilation under 5207.0303 subp.7 and enter a confined space subject to Class 1 requirements of 5207.0304 subp.1?**

The data must demonstrate that there are no non-atmospheric hazards and that the ventilation will keep the air inside the permit space safe for entry. This should include initial data in the form of:

- Volume of the space to be entered;
- Capacity and configuration of the ventilation equipment to be used;
- Identified atmospheric hazards and potential hazards;
- The sampling results from routine testing of the space from the time ventilating has begun through final determination of acceptable entry conditions; and
- Atmospheric hazards created by work in the space.

**7. What are the minimal credentials for the person authorized to certify the space safe for entry referred to in paragraph 5207.0302 subp 2 & 3?**

OSHA would consider as acceptable any employer representative who possesses a level of knowledge, training, and understanding of the specific space equal to that of an Entry Supervisor.

**8. What does the phrase "readily available" mean in 5207.0302 subp 4?**

The permit must be made available to employees entering the space so they can have the means to evaluate the measures taken for their protection. This requirement can be satisfied either by providing each affected employee with a copy of the permit or by posting the permit so that each affected employee is able to inspect it. In addition, the individual who prepared the permit must be available to explain the measures taken to eliminate the hazards if any of the affected employees are reading-impaired or cannot understand the language in which the permit is written.

**9. What are the employer's responsibilities in multi-employer permit space entries?**

The host employer who arranges for a permit space entry by contractor employees has a duty to instruct the contractor on the hazards or potential hazards and other factors that make the space a permit space. The contractor who will have employees enter the permit space is responsible for obtaining that information prior to entry. All employers who will have employees in the permit space are responsible for developing and implementing procedures to coordinate entry operations (for example, determining operational control over the space, affected employee training, rescue, emergency services, and all other aspects of the standard requiring coordination). Any one of the employers having employees enter the permit space could have operational control over the permit space during dual entry. All parties (host employer and contractors) retain responsibility for the protection of their own employees even though all the employers have agreed to a specific permit space controlling employer. There should be absolutely no doubt, by any permit space entrant, attendant, and entry supervisor regarding who the controlling employer is and whose policy and permit space practices are to be followed.

**10. Does an employer who has permit spaces and had initially met its obligation under 1910.146(c)(3) or 5207.0302 subp. 2.A., have to take additional measures when a contractor begins to alter a permit space?**

Yes, the employer(s) has a continuing obligation under either standard to prevent affected employees from entering permit spaces. Paragraphs 1910.146(c)(8) and (c)(9) require coordination when both the host and contractor employees are in or near a permit space during entry operations. Only affected employees (those working in or who routinely pass through the work area) are required to be informed.

**11. What information about the present or previous contents of the confined space must be provided to the contractor before its employees enter?**

At a minimum, the applicable Material Safety Data Sheet (MSDS) or hazard information on the contents, coatings or liners, potential hazardous atmospheres, sampling data base, and residue(s) found or anticipated in the confined space. All information generated in the original evaluation of the confined space must also be provided.

**12. Are simple alarm devices considered to be the "direct reading instruments" referenced in paragraph 5207.0304 subp. 1.B(3)?**

No, simple "alarm only" devices which do not provide readings, are not considered acceptable direct reading instruments, for either initial (pre-entry) or periodic (assurance) testing of a space since they do not provide enough information relative to the established acceptable entry conditions which is essential to the entrants knowledge. Combination units which have a meter or display which reflect the actual concentrations and a preset alarm feature would be acceptable and possibly desirable because they provide "real time" information on actual concentrations as well as the benefit of automatic (unattended) alarming at a predetermined value.

**Section 5207.0303 Pre Entry Procedures**

**1. What does OSHA accept as a "calibrated" direct reading instrument required by 5207.0303 subp 3 for entrants to test the atmosphere for permit space entry?**

A testing instrument calibrated in accordance with the manufacturer's recommendations meets this requirement. The best way for an employer to verify calibration is through documentation.

**2. Continuous monitoring is required by 5207.0303 subp. 4 in the areas where the authorized entrants will be working. Does each entrant have to be monitored individually or can an area monitor be used?**

An area monitor could be used where small groups (two or three employees) work together in close proximity as long as the monitor can measure hazards encountered by the employees. However, all the entrants must remain together as a group for the entire entry procedure.

**3. What does "additional continuous or periodic monitoring" mean as required by 5207.0303 subp. 4 to decide if the acceptable entry conditions are being maintained?**

The standard does not have specific frequency rates because of the performance oriented nature of the standard and the unique hazards of each permit space. However, there will always be, to some degree, testing or monitoring during entry operations which is reflective of the atmospheric hazard. The employer must determine the degree and the frequency of testing or monitoring. Some of the factors that affect frequency are:

- Results of test allowing entry.
- The regularity of entry (daily, weekly, or monthly).
- The uniformity of the permit space (the extent to which the configuration, use, and contents vary).
- The documented history of previous monitoring activities.
- Knowledge of the hazards which affect the permit space as well as the historical experience gained from monitoring results of previous entries.

Knowledge and recorded data gained from successive entries (such as ventilation required to maintain acceptable entry conditions) may be used to document changes in the frequency of monitoring.

**4. How much periodic testing is required by 5207.0303 subp.4?**

The requirement in 5207.0303 subp 4 for periodic testing as necessary to ensure the space is maintained within the limits of the acceptable entry conditions is critical. OSHA believes that all confined space atmospheres are dynamic due to variables such as temperature, pressure, physical characteristics of the material posing the atmospheric hazard, variable efficiency of ventilation equipment and air delivery system, etc.

The employer will have to determine and document on an individual permit space basis what the frequency of testing will be and under what conditions the verification testing will be done.

**5. What is meant by the phrase “augmented by appropriate means if practical and feasible” as used in 5207.0303 subp. 7?**

The forced clean air ventilation must be directed to where the employee is working or will be working. If the space is so configured or so large that directed air cannot be delivered by local ventilation (such as fans and blowers), ducting the "clean" air is required.

NOTE: The exhaust discharge of contaminants from the permit space to areas adjacent to the permit space must not endanger the employees of the other work areas. Also, the supplied air ventilation for the permit space must not cause ventilation imbalances which would create hazards in the work area from which it is taken.

**6. Are the results of the air sampling and exposure monitoring required by this standard considered exposure records for purposes of 29 C.F.R. 1910.1020 (c)(5) OSHA's Record Access rule?**

The requirements of 1910.1020 are applicable to construction (see 1926.33). Those results which show the composition of an atmosphere to which an employee is actually exposed (even if the employee is using a respirator) are exposure records under 29 C.F.R. 1910.1020(c)(5)). Conversely, if the employer determines as the result of initial air sampling not to allow entry into a confined space until additional ventilation and purging of the atmosphere has occurred, the sample would not be considered as exposure record because no employee would ever have been exposed to the atmosphere sampled. Once the employer takes corrective action so that an employee can enter, however, the results of subsequent air sampling that show the atmosphere the employee actually entered would be considered exposure records.

**SECTION 5207.0304 Entry Procedures**

**1. What does OSHA consider to be examples of changes in "use and configuration" which might increase the hazard to entrants and require reevaluation and reclassifying confined spaces under 5207.0304 subp 1.A.(4) and 1.B.(5)?**

Changes in "configuration" address physical changes in the space such as shape (adding or removal of inwardly converging floor), volume, equipment or components (addition or removal of a blender), means of access or egress.

Changes in "use" include changes in the function of the space, the contents or atmosphere created within it, the temperature and humidity, and the work practices being performed or anticipated in the space.

**Duties of Standby persons**

**1. When a single attendant is monitoring more than one confined space, is there a limit on how far the attendant can be from any of the spaces monitored? 5207.0304 subp. 2.D. and 3.D.**

The bench mark for monitoring multiple permit spaces by a single attendant is his/her ability to perform all their (attendant) duties without compromising the safety of any entrants in all the permit spaces being monitored by the attendant. There is no minimum proximity requirement.

**Rescue Procedures**

**1. Does an off-site rescue service have to have a confined space program?**

No, a complete program is not necessary; however, rescue plans and procedures are necessary. Rescue services (on-site and off-site) are required by 5207.0304 subp. 2.D. and subp. 3.D. to have members who are trained, for safe entry into the particular permit spaces from which they will be expected to rescue entrants.

**2. What is OSHA policy on "horizontal" non-entry rescue?**

When practical, non-entry rescue is the preferred method of rescue, even for horizontal entries. OSHA recognizes that the danger of entanglement due to lifelines or lanyards snagging or obstructions within a permit space may be greater for horizontal permit spaces than for vertical spaces.

**3. Does an employer have to verify the availability of the off-site rescue service each time a confined space entry is scheduled or attempted?**

Off-site rescue service is not required, but the employer has overall responsibility for employee safety. The employer's operating procedures, 5207.0302 subp. 5, must include rescue procedures. Additionally, a standby person shall not enter a confined space without alerting an emergency response team (FD or other trained rescue workers). If the off-site rescue service indicates, for any reason, that it would be unable to respond to a rescue summons, entry shall not be authorized unless an adequate alternative rescue service is arranged.

**4. Would a rescuer entering an Immediately Dangerous to Life and Health (IDLH) atmosphere using a supplied-air respirator in combination with SCBA (escape bottle), be in violation of OSHA regulations?**

No, as long as all conditions of 1910.134(g)(3) are met. Note: it is important to determine that the auxiliary SCBA provides sufficient amount of time for escape, if a supplied-air respirator and SCBA are used.

Because of the performance nature of the standard, specifications for off-site rescue services are not mentioned.