



MNOSHA Instruction **STD 5-3.1B**

April 19, 2016

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SUBJECT: Enforcement of the Confined Spaces Standard for Construction, 1926.1201-1213

Purpose:

This instruction establishes enforcement policy and provides explanation of the standard to ensure uniform enforcement.

Scope:

This instruction applies OSHA-wide.

Cancellation:

This instruction supersedes STD 5-3.1, dated November 4, 2014.

References:

1. OSHA Instruction CPL 02-00-159, October 1, 2015 Field Operations Manual (FOM).
2. Federal OSHA standard for Confined Space in Construction, Subpart AA, 29 CFR 1926.1201 – 1926.1213
3. 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.
4. OSHA Instruction CPL 02-00-100, May 5, 1995, Application of the Permit-Required Confined Spaces (PRCS) Standards, 29 CFR 1910.146.
5. MNOSHA Instruction CPL 2-2.100, January 20, 2016, Application of the Permit-Required Confined Spaces (PRCS) Standard in General Industry.

6. 29 CFR 1910.134, Respiratory Protection.

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. The Final Rule for Confined Spaces in Construction was published in the Federal Register on May 4, 2015 and became effective on August 3, 2015. Minnesota OSHA adopted the federal standard on January 4, 2016.

Action:

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

A. 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 is separated into multiple standard numbers as opposed to paragraphs within one standard.

1. 1926.1201 sets out the scope of the rule and provides examples of confined spaces. The scope does not include excavations, underground construction and diving (Subparts P, S and Y of the Construction standards).
2. 1926.1202 contains definitions of key terms used in the standard. A confined space is defined as a space that is large enough and so configured that an employee can bodily enter and perform assigned work, has limited or restricted means for entry or exit, **AND** is not designed for continuous employee occupancy. This section also contains definitions for the controlling contractor (overall responsibility for construction at the worksite) and host employer (own or manages the property where the construction work is taking place).

3. 1926.1203 contains general requirements to identify all confined spaces, notify employees, take measures to keep their unauthorized employees out of the spaces, and develop a written permit space program if they decide to enter a permit space.
4. 1926.1204 contains specific elements for a permit-required confined space program. This includes provisions to keep other employees out of the spaces as well as all the necessary procedures for safe entry operations.
5. 1926.1205 contains the requirements for permits prior to each entry into a confined space.
6. 1926.1206 contains the specifics of the entry permit.
7. 1926.1207 requires worker training for entrants, attendants and entry supervisors . Training must be provided in a language and vocabulary that employees can understand and be done prior to their first assigned duties or before any change in duties. Training records must be kept for the length of the employee's employment.
8. 1926.1208 contains requirements of the authorized entrants and includes a requirement that the employer ensure that the entrant understands the hazards and all that they will need to do in the space.
9. 1926.1209 contains requirements for the attendants and includes a requirement that the employer ensure that the attendant understands the hazards and all that they will need to do in their role, including staying outside the space until relieved by another attendant.
10. 1926.1210 contains requirements for the entry supervisor and includes a requirement that the employer ensure that the entry supervisor understands the hazards and all that they will need to do in their role, including when to terminate an entry or remove unauthorized individuals who attempt to enter a space.
11. 1926.1211 contains requirements for rescue and emergency services. Whenever an employer designates third-party rescue services they must evaluate their ability to respond to a rescue summons in a timely manner and proficiently. This section also requires the employer to inform each rescue service of the hazards they may confront at the site. When the employer designates their own employees to provide rescue services, the employer must ensure that they are trained, including CPR and basic first aid, and provide the necessary PPE.
12. 1926.1212 requires the employer to involve employees and their authorized representatives on the development and implementation of the program.
13. 1926.1213 requires the employer to provide documents to OSHA upon request.

B. 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.

C. Inspection Procedure:

The following guidelines are for determining when to evaluate an employer's Permit Required Confined Space (PRCS) program. Any OSHI who is familiar with the standard and with this inspection policy may evaluate an employer's PRCS 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 PRCS program is evaluated.

1. **Unprogrammed Inspections.** A comprehensive PRCS 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 PRCS 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.
2. **Programmed Inspections.** A PRCS 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.

D. 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.

E. Citation Guidance.

Citations for violations of the PRCS standard shall be issued in accordance with the FCM.

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

Cite 1926.1203(c) if the employer has not taken steps to prevent unauthorized entry by their employees. This paragraph anticipates that an employer will be informed of a permit space on the worksite, but that all or some of that 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.

2. If the employer has not implemented a confined space program but the employer intends or has employees 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:

- a. Cite 1926.1203(d) if the employer has not established a written confined space program. The employer is responsible for establishing appropriate procedures, including an entry permit system, prior to all entries. (Procedures prior to and during Entry)
- b. Cite 1926.1207(a) if the employer has not provided proper training to employees who will enter confined spaces, for those who will perform rescue operations, and for those who will conduct atmospheric testing. (Training).
- c. Cite 1926.1211(a) for deficiencies in selection and evaluation of designated rescue services; or 1926.1211(b) for deficiencies in employee rescue procedures; or 1910.1211(c) for deficiencies in non-entry rescue procedures.
- d. Cite 1926.1203(h)(1) if the host employer has not provided the location and potential hazards within each confined space to the controlling contractor. And/or,
- e. Cite 1926.1203(h)(2) if the controlling contractor has not provided the information from the host employer to each other employer whose employees enter, or could foreseeably enter, a confined space.

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

3. 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 when a vertical standard does not apply.

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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
Appendix D - Guidance on the Reclassification of Permit Required Confined Spaces

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: Additional Standards Addressing Confined Space

1926.1201(c) “Where this standard applies and there is a provision that addresses a confined space hazards in another applicable OSHA standard, the employer must comply with both that requirement and the applicable provisions of this standard”.

1926.64(f)(4) and (j) Process safety management requirements related to confined spaces.

1926.65(b)(4)(ii)(I), (c) through (p), and (j)(9) HAZWOPER requirements related to 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.

1926.956(a) and (b). Power Distribution and Transmission.

Appendix B: PRCs Program Evaluation Considerations

This appendix has been included for general guidance only. It is not intended to direct the OSHI'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 1926.1203(a) or 1926.1204(b) 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 PRCS 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 1926.1207 and how are the employees informed of the policy?
 - 2. How are the affected employees referenced in 1926.1207 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 PRCS 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. PRCS 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 PRCS program?
 3. Does the written program or procedures provide for compliance with the applicable elements listed in 1926.1204 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 "authorized entrant", "attendant" or "entry supervisor" 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 1926.1203(e) "Alternate Procedure" entry undertaken. The following are some examples of questions the OSHI 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 the "safe for entry" conditions are 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 1926.1204(d).
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 1926.1203(e) have been taken?

1. What does the certifier know about the confined space being entered?
2. How is the certification made available to each employee entering the space?
3. Are there any entry procedures used beyond those required by 1926.1204-1208 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. 1926.1211
2. Review the rescue procedures as they compare with the written PRCS 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 1926.1211(b) 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 Entry Supervisor verify that the rescue service will be available during the time of employee entry?
9. Has the rescue service agreed to notify the employer immediately in the event that the rescue service becomes unavailable.

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 PRCS Standard Clarification

This Appendix was derived from federal OSHA Instruction CPL 02-00-100 for General Industry; it was originally modified to fit the Minnesota Rules. It is further modified in 2016 to fit the federal standard.

SECTION 1926.1201 Scope

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

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

2. What North American Industrial Classification System codes (NAICS) fall under the scope exemption of the standard?

Exact NAICS codes are not specified, but construction operations covered by subparts P (Excavations), Subpart S (Underground construction, caissons, cofferdams and compressed air); and Subpart Y (Diving) are exempt.

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 Subpart AA will be enforced for the work involved in the permit-required confined spaces?

As described in the preamble to the Standard, "OSHA will also treat compliance with this new rule as compliance with the general industry confined spaces rule when one or more employers are engaged in both general industry work and construction work at the same time in the same space".

SECTION 1926.1202 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.

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, ladder, 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, 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.

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 "hazardous atmosphere" in the definition of "permit 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 Subpart AA and employees must be appropriately protected in accordance with those health standards. The PRCS standard is intended to protect entrants against short-term, acute hazards: other standards address a broader range of health and safety concerns.

As noted in the definition of "hazardous atmosphere" 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 PRCS 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 PRCS, what would?

As previously stated, the mere presence of water alone would not be a basis for applying the PRCS 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.

- 11. The definition of permit-required confined space contains the phrase "any other recognized serious safety and health hazard" as one of its hazard characteristics which would result in a confined space being classified as a permit space. The "Types of Hazards" listing in the Confined Space Hazards section of OSHA's Confined Space Entry Course No. 226 identifies hazards. Does the mere presence of a non-specified hazards such as physical hazards (e.g. grinding, agitators, steam, mulching, falling/tripping, other moving parts); corrosive chemical hazards; biological hazards; and other hazards (i.e. electrical, rodents, snakes, spiders, poor visibility, wind, weather, or insecure footing), which do not pose an immediate danger to life or health or impairment of an employee's ability to escape from the space constitute a hazard which would invoke this characteristic?**

When a hazard in a confined space is immediately dangerous to life or health, the "permit space" classification is triggered. The list referenced above is only illustrative of the general range of confined space hazards which could, but not necessarily always, constitute a hazard which would present an immediate danger to life or health, such that "permit space" protection would be required. The determination of whether the resulting exposure to a hazard in a confined space will impair the employee's ability to perform self-rescue is the aspect that must be addressed by the employer.

In order for "**serious safety and health hazard**" to be recognized as being an impairment to escape, its severity potential for resulting physical harm to an employee must be considered.

SECTION 1926.1203 General Requirements

- 1. Are employers covered by the standard in violation of paragraph 1926.1203(a) 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 1926.1203(a) 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 1926.1203?**

No, 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 if a confined space is a permit space 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 1926.1203(b)(1) requiring employers to identify spaces to their employees?

The standard requires posting danger signs to inform exposed employees. The suggested wording for signs is "DANGER---PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER". 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 1926.1204(c)(1)?

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 uses the alternate procedure of paragraph 1926.1203(e)?

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 is meant by the phrase "immediate area where an employee is or will be present within the space" as used in paragraph 1926.1203(e)(2)(v)(ii)?

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.

8. When conducting an entry using the “Alternate Procedures” identified in 1926.1203(e), how much testing is required?

The atmosphere within the space must be continuously monitored unless the entry employer can demonstrate that equipment for continuous monitoring is not commercially available or periodic monitoring is sufficient.

9. What are the minimal credentials for the person authorized to certify the space safe for entry referred to in paragraph 1926.1210?

There are no minimum credentials specified in the standard. Nonetheless, the entry supervisor must be familiar with and understand the hazards, the procedures before and during entry and know when to terminate an entry.

10. What does the phrase "readily available" mean in 1926.1205(c)?

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.

11. What are the employer's responsibilities in multi-employer permit space entries under 1926.1203(h)?

The host employer who arranges for a permit space entry by contractor employees has a duty to instruct the controlling 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.

12. Does an employer who has permit spaces and had initially met its obligation under 1910.146(c)(3) or 1926.1203(h)(1) 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. Paragraph 1926.1203(c) requires each employer to take measures to prevent their employees from entering a confined space.

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

The host employer must provide:

The location of each known permit space;

The hazards or potential hazards in each space or the reason it is a permit space; and

Any precautions that the host employer or any previous controlling contractor or entry employer implemented for the protection of employees in the permit space.

Items such as, the applicable Safety Data Sheet (SDS) 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 shall be provided. All information generated in the original evaluation of the confined space must also be provided.

14. Are simple alarm devices considered to be the "direct reading instruments" referenced in paragraph 1926.1203(e)(2)(iii)?

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.

15. What does OSHA accept as a "calibrated" direct reading instrument required by 1926.1203(e)(2)(iii) 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.

16. Continuous monitoring is required by 1926.1203(e)(2)(vi) and 1926.1204(e)(1)(ii) 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.

17. Are there specific requirements for the placement of ventilation?

Under 1926.1203(e)(2)(v) 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.

18. What does OSHA consider to be examples of changes in "use or configuration" which might increase the hazard to entrants and require reevaluation and reclassifying confined spaces under 1926.1203(f)

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.

19. 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 1926.1209 Duties of Attendants

- 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? 1926.1209**

The benchmark 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.

SECTION 1926.1211 Rescue and Emergency Services

- 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 are required by 1926.1211(a) 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?**

1926.1201 "Duties of Entry Supervisors", paragraph (d) specifically states that the entry supervisor must verify that rescue services are available and that the means for summoning them are operable; and that the employer will be notified as soon as the services become unavailable.

- 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.

Appendix D: Guidance on the Reclassification of Permit Required Confined Spaces

A permit required confined space (PRCS) may be reclassified as a non-permit space under the following conditions as outlined in 1926.1203(g):

1. There is no actual or potential atmospheric hazard within the space.

This means that there are no atmospheric hazards in the space and none will develop during the entry period. Use of forced air ventilation to control atmospheric hazards is not considered the elimination of the hazard.

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=21970

When looking at atmospheric hazards in confined spaces OSHA is concerned about acute hazards that would impede the entrant's ability to escape the space. Chronic hazards such as silica, lead, asbestos, etc. would not constitute an atmospheric hazard in a confined space.

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=22715

2. All hazards of the space must be eliminated.

Typically this means that the employer can either remove hazards from the space, such as emptying bins, tanks, etc., or the employer can lock out mechanical or electrical hazards of the space. Lockout is considered to eliminate the hazard of electrical or mechanical hazards for the duration of the lockout. Flowable materials (fluids, finely divided solids, etc.) must be "isolated" (see definition in standard) from the permit space in order to eliminate the hazard.

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=22041

The employer shall document the basis for determining that all hazards of the space have been eliminated through a certification that contains the following:

1. Date
2. Location of the space
3. Signature of the person making the determination

MNOSHA should encourage the employer to use the entry permit to document the reclassification to NPRCS. The entry permit will document that hazards are not there or have been eliminated.

This certification is valid as long as the hazards remain eliminated. Once equipment is re-energized the space is again a PRCS. OSHI's should review these certifications to ensure that they are being conducted each time the hazards of the space are eliminated. The employer is also required to **document the basis** that all hazards have

been eliminated. This could be in a written paragraph, permit, checklist or other form but should clearly explain the hazards of the space and how they have been eliminated.