**SUPPORTING STATEMENT**

**FOR THE COLLECTION OF INFORMATION REQUIREMENTS**

**FOR THE STANDARD ON CONFINED SPACES IN CONSTRUCTION**

**(29 CFR PART 1926, SUBPART AA)**[[1]](#footnote-1)

**OFFICE OF MANAGEMENT AND BUDGET (OMB) CONTROL NUMBER 1218-0258**

**(January 2015)**

**A. JUSTIFICATION**

**1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information**.

The main objective of the Occupational Safety and Health Act of 1970 (i.e., “the Act”) is to “assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources” (29 U.S.C. 651). To achieve this objective, the Act authorizes “the development and promulgation of occupational safety and health standards” (29 U.S.C. 651).

Section 6(b)(7) of the Act specifies that “[a]ny standard promulgated under this subsection shall prescribe the use of labels or other appropriate forms of warning as are necessary to insure that employees are apprised of all hazards to which they are exposed, relevant symptoms and appropriate emergency treatment, and proper conditions and precautions of safe use or exposure.” This provision goes on to state that “[t]he Secretary, in consultation with the Secretary of Health and Human Services, may by rule promulgated pursuant to section 553 of title 5, United States Code, make appropriate modifications in the foregoing requirements relating to the use of labels or other forms of warning . . . as may be warranted by experience, information, or medical or technological developments acquired subsequent to the promulgation of the relevant standard” (29 U.S.C. 655).

With regard to recordkeeping, the Act specifies that “[e]ach employer shall make, keep and preserve, and make available to the Secretary . . . such records . . . as the Secretary . . . may prescribe by regulation as necessary or appropriate for the enforcement of this Act . . . .” (29 U.S.C. 657). The Act states further that “[t]he Secretary . . . shall prescribe such rules and regulations as [he/she] may deem necessary to carry out [his/her] responsibilities under this Act, including rules and regulations dealing with the inspection of an employer’s establishment” (29 U.S.C. 657).

Under the authority granted by the Act, the Occupational Safety and Health Administration (i.e., “OSHA” or “the Agency”) promulgated at 29 CFR part 1926, subpart AA, a safety standard for the construction industry that regulates confined spaces (i.e., “the Standard" or “the final rule”). Items 2 and 12 below describe in detail the specific information collection requirements of the Standard.

**2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the Agency has made of the information received from the current collection**.

The Standard specifies a number of collection of information requirements. Employers and employees would use these collections of information whenever they identify a confined space at a construction worksite. The following sections describe who would use the information collected under each requirement, as well as how they would use it. The purpose of the information would permit employers and employees to systematically evaluate the dangers in confined spaces before entry is attempted, and to ensure that adequate measures have been implemented to make the spaces safe for entry. In addition, the collection of information provisions of the Standard specify requirements for developing and maintaining a number of records and other documents. Further, OSHA compliance safety and health officers would need the information to determine, during an inspection, whether employers are complying with the requirements.

As indicated in preamble, Section II-B, *History*, in response to public comments received OSHA is finalizing a Confined Spaces in Construction standard that more closely resembles the general industry standard, Permit-Required Confined Spaces, 29 CFR 1910.146, than the Notice of Proposed Rulemaking (NPRM). The information collection requirements of the 29 CFR 1910.146 (“the General Industry Standard”) are approved under OMB Control No. 1218-0203. OSHA's rationale for the need to collect information is set forth in the discussion generally in the introductory section of the preamble, and in the discussion of each of these specific provisions in the preamble. OSHA is using the organization, language, and most of the substantive requirements of the General Industry Standard as the basis for the final rule, with modifications (to clarify purpose, to confirm to a modern style of regulatory drafting, to include requirements from the proposed rule not found in the general industry rule, and to include new requirements). For a full discussion about how these collection of information requirements of the Standard differ from the General Industry Standard and the NPRM, and the public comments received concerning these collection of information requirements, refer to the Preamble, Section III, *Summary and Explanation of the Final Standard.*

The following discussion identifies the sections of the Standard that have collection of information requirements, and describes the content and purpose of these requirements.

**29 CFR 1926.1203 -- General Requirements**

29 CFR 1926.1203(b)(1) – Informing employees of PRCS dangers.

Paragraph 1203(b)(1) requires employers who identify a permit-required confined space (PRCS) to post danger signs or take other equally effective means to inform employees of the existence and location of, and the danger posed by, permit spaces. The note following paragraph 1203(b)(1) provides an example of the content of the optional danger sign.

For purposes of calculating the paperwork burden and costs associated with this provision, the Agency assumes that the provision will be accomplished with the posting of a sign at or near PRCS entrances. OSHA specifies language for the sign in the standard.(i.e., “Danger–Permit-Required Confined Space. Do Not Enter”). Therefore, in accordance with 5 CFR Section 1320.3(c)(2) implementing the Paperwork Reduction Act of 1995 (PRA-95), this requirement does not fall within the definition of a collection of information. However, OSHA allows the employer to use “similar” language on the warning sign if desired. The Agency believes an employer would only rarely, if ever, opt for the similar language; therefore, for purposes of calculating burden hours and costs, OSHA estimates that a small percentage of employers will include a warning sign with language other than that provided by OSHA in Item 12.

Note: Paragraph 1203(c) is a performance-oriented provision requiring the employer to take effective measures to prohibit non-authorized entry, such as by providing barriers. If the employer chooses to post a sign in conjunction with training to achieve compliance with 1203(c), and a warning sign is already posted at the permit space under 1203(b)(1), then the employer does not need to post an additional sign under 1203(c). Thus, the costs and burdens associated with use of a sign under paragraph 1203(c) are already included in the costs for 1203(b)(1).

*Purpose*:It is important to prevent unauthorized entry of confined spaced by identifying permit spaces andinforming exposed employees of their presence and the hazards involved. Employees need this information to understand the seriousness of potential hazards in PRCSs. Compliance with this requirement will prevent unauthorized entry into PRCSs. Everyone at the construction site benefits from this information even if they do not engage in construction activity (e.g., designers or architects).

29 CFR 1926.1203(b)(2) – Informing controlling contractors and employees’ authorized representatives about PRCS hazards.

Paragraph 1203(b)(2) requires employers to inform, in a timely manner and in a manner other than posting, its employees’ authorized representatives and the controlling contractor, of the hazards of confined spaces and the location of those spaces. The collection of information burden hours and costs associated with this provision are included in the information-exchange requirement calculations described in Item 12.

*Purpose*: Notifying employees and their authorized representatives of the presence of confined spaces on a worksite will contribute to the successful implementation of safe entry operations, and the prevention of unauthorized entry, by ensuring that they have knowledge of the hazards present in the confined space. Sharing this information with employees’ authorized representatives provides an additional way to ensure that this information reaches the employer’s employees, and alerts the authorized representatives that there is the potential for permit entry operations. This provision also will facilitate the effective sharing of this important information among other employers at the site whose activities may impact the PRCS, as well as the employees of those other employers.

29 CFR 1926.1203(d) – Written permit space program

Paragraph 1203(d) requires any employer that has employees who will enter a confined space to have and implement a written permit space program and to make the program available for inspection by employees and their representatives. Employers may write detailed permit space programs, while making the entry permits associated with the written programs less specific than the programs, provided the permits address the hazards of the particular space; conversely, the program may be less specific than the entry permit, in which case the employer must draft a detailed permit. Also see discussion of 29 CFR 1926.1204 and 29 CFR 1926.1212(a), additional requirements that pertain to the written program, in Item 2 of this Supporting Statement.

The proposed rule did not require an employer to have a written permit space program, and provided, in proposed §1219(a), that the employer could keep either a copy of the proposed rule on the worksite or a copy of a program that incorporated the requirements of the proposed rule. In agreement with comments received, OSHA wrote the final provision to require each employer whose employees will enter a permit space to have and implement a written program.

Paragraph 1203(d) is similar to the corresponding provision for the General Industry Standard, paragraph 1910.146(c)(4), with slight modifications. OSHA modified the language of this final provision slightly to clarify that entry employers do not necessarily have to develop a separate written program for each individual entry. Rather, an entry employer may reuse a program it developed previously, or a program developed by another employer, an industry association, or other entity, provided that the entry employer assesses the program to ensure that it is appropriate for the specific entry operations and the type of work involved, and that the program meets the requirements of § 1926.1204.

*Purpose*: The Agency believes that this requirement will protect employees from encountering PRCS hazards. The Agency also believes that it is necessary for employers to have a written permit space program at the worksite as a reference for employees involved in implementing safe entry procedures. A written program provides the basis for any permit-space entry operation, as well as a reference for guiding and directing supervisors and employees alike. A written program also will serve to assign accountability for all functions related to permit-space entry, and will aid in avoiding mistakes and misunderstandings. Additionally, because of the compliance flexibility and discretion that the standard provides to the employer, a written plan is essential to demonstrate that the employer took all aspects of permit-space entry into consideration.

29 CFR 1926.1203(e)(1)(v) and 1926.1203(e)(2)(ix) – Alternate procedure documentation and availability.

Paragraph 1203(e)(1) sets forth the six conditions that an employer must meet before its employees can enter a permit space under the alternate procedures specified in paragraph (e)(2).[[2]](#footnote-2)

Paragraph 1203(e)(1)(v)requires employers to document the initial conditions before entry, including the determinations and supporting data required by paragraphs (e)(1)(i) through (e)(1)(iii) of the Standard (develop monitoring[[3]](#footnote-3) and inspection data that supports the demonstrations required by paragraphs (e)(1)(i) and (e)(1)(ii), i.e., the elimination or isolation of physical hazards such that the only hazard in the space is an actual or potential hazardous atmosphere, and that continuous forced-air ventilation is sufficient to maintain the space safe for entry), and make this documentation available to employees who enter the spaces under the alternate procedures, or to their authorized representatives.

In addition, Paragraph § 1203(e)(2)(ix) requires the employer to verify that the permit space is safe for entry and that the employer took the measures required by paragraph 1203(e)(2) (the procedures that employers must follow for permit-space entries made under paragraph 1203(e)(1)).The verification must be in the form of a certification that contains the date, the location of the space, and the signature of the certifying individual. The employer must make the alternate procedure documentation of paragraphs (e)(1)(v) and (e)(2)(ix) available to entrants or to their employees authorized representatives before entry.

OSHA considers the physical inspection of hazards and atmospheric testing and monitoring requirements of paragraphs 1203(e)(1)(i)-(iii), (e)(2)(iii) and (e)(2)(vi) to be antecedent events associated with the alternate procedure documentation. In addition, to account for the portion of the alternate procedure documentation retained as employee-exposure records, OSHA is submitting a revision to OMB to increase the number of respondents under OMB # 1218-0065, “Access to Employee Exposure and Medical Records.”

*Purpose*: OSHA believes that in the context of construction work, these alternate procedures provide adequate safety measures while being more efficient, and less costly to implement, than complying with the full permit-program requirements specified by § 1926.1204. The data required by paragraph (e)(1)(iii) are essential for the employer and employees, as well as OSHA, to determine whether the employer can maintain the space safe for entry with the use of ventilation alone. The certification, in combination with the documentation required under paragraph 1203(e)(1)(v), will document the employer’s efforts to comply with paragraph 1203(e)(2), enable OSHA and the employer to evaluate compliance with the standard, and, if permit-space incidents occur, assist OSHA and the employer in ascertaining the causes of those incidents.

29 CFR 1926.1203(e)(2)(iii) – Atmospheric testing prior to entry under alternate procedures.

Paragraph 1203(e)(2)(iii) requires the employer to test the internal atmosphere of the permit space with a calibrated, direct-reading instrument before any employee enters the space. The employer must test the atmosphere, in sequence, for oxygen content, flammable gases and vapors, and potential toxic gases and vapors. OSHA considers the physical inspection of hazards and atmospheric testing and monitoring requirements of paragraphs 1203(e)(1)(i)-(iii), (e)(2)(iii) and (e)(2)(vi) to be antecedent events associated with the alternate procedure documentation.

*Purpose*: This provision is necessary to determine the appropriate amount of ventilation required to maintain the space safe for entry.

29 CFR 1926.1203(e)(2)(vi) – Atmospheric monitoring during entry under alternate procedures.

Paragraph 1203(e)(2)(vi) requires entry employers to continuously monitor the atmosphere in the permit space. Employers may use periodic monitoring, rather than continuous monitoring, only if the employer can demonstrate that the equipment for continuous monitoring is not commercially available or that periodic monitoring is sufficient to ensure that the conditions in the PRCS remain within planned limits. When the employer uses periodic monitoring, it must be of sufficient frequency to ensure the control of atmospheric hazards as planned and must be able to detect new hazards in time to protect employees. This requirement for continuous monitoring differs from the general industry rule, which requires “periodic testing.” Paragraph 1203(e)(2)(vi) also requires the employer to have continuous-monitoring equipment with a functional alarm that will notify all entrants when an atmospheric hazard reaches a specified threshold designed to give entrants an opportunity to escape before a hazardous atmosphere develop, or to check the monitor with sufficient frequency to alert other entrants when an atmospheric hazard reaches a specified threshold.

OSHA considers the atmospheric monitoring requirements of paragraphs 1203(e)(2)(vi) to be antecedent events associated with the alternate procedure documentation. To account for the employee-exposure records retained as part of the atmospheric monitoring conducted during entry under alternate procedures, OSHA is submitting a non-material change request to OMB to increase the number of respondents under OMB # 1218-0065, “Access to Employee Exposure and Medical Records.”

*Purpose*: Because construction work has a high level of unpredictability, OSHA believes that continuous monitoring will normally be needed to ensure that affected employees, especially the entrants, are protected. Continuous monitoring enables employers to quickly recognize deteriorating conditions, including the introduction of new atmospheric hazards into the confined space, and then to take timely actions to protect employees. For additional discussion of the need for continuous monitoring and its implementation, see the discussion of §1926.1204(e)(2) (discussion of continuous monitoring of permit spaces entered under a full permit program, rather than the alternative procedures).

29 CFR 1926.1203(e)(2)(viii) – Written approval for job-made hoisting systems.

Paragraph 1203(e)(2)(vii) allows for the use of job-made hoisting systems if a registered professional engineer approves these systems for personnel hoisting prior to use in entry operations regulated by §1926.1203(e). Unlike the proposed rule, the final rule requires engineer’s approval to be in writing to ensure that the specifications and limitations of use are conveyed accurately to the employees implementing the job-made hoist, and that the approval can be verified.

The FEA assumes no costs related to this provision because employers are unlikely to use a job-made hoist due to the relatively high cost for employers to choose this alternative instead of purchasing a tripod constructed specifically for personnel hoisting. Thus, no costs are included in Item 12 of this Supporting Statement.

*Purpose*: This provision provides employers with flexibility in choosing personnel hoisting systems by allowing a registered professional engineer to approve a job-made system. OSHA believes that either option ensures that the personnel hoisting system will meet the design specifications needed for employees to safely access a space. This final provision ensures that authorized entrants will always have a safe and effective means of entering and exiting the space, including escaping during an emergency.

29 CFR 1926.1203(g)(3) – Certification of former permit spaces as non-permit spaces

Paragraph 1203(g)(3) requires an entry employer seeking to reclassify a space from permit to non-permit status to document the basis for determining that it eliminated all permit-space hazards through a certification that contains the date, the location of the space, and the signature of the certifying individual. In addition, the employer must make the certification available to each employee entering the space or his or her authorized representative. A reevaluation aimed at reestablishing compliance with paragraph 1203(g) will involve the demonstrations, testing, inspection, and documentation required in paragraphs (g)(1) through (g)(3). The employer must substantiate all determinations so that employers, employees, and the Agency have the means necessary to evaluate those determinations and ensure compliance with the conditions that would enable the employer to conduct entry operations using the alternate procedures specified by § 1926.1203 following reclassification.

Under the Standard, it is not necessary for entry employers to maintain the certification required under paragraph 1203(g)(3) for review and evaluation after completion of the work. However, under existing 29 CFR 1910.1020 as incorporated by 29 CFR 1926.33, employers are required to retain employee exposure data, such as atmospheric testing and monitoring records, for 30 years.[[4]](#footnote-4) To account for the employee-exposure records retained as part of the certification, OSHA is submitting a revision to OMB to increase the number of respondents under OMB # 1218-0065, “Access to Employee Exposure and Medical Records.”

*Purpose*: The Agency believes that, in some instances, the procedures specified by paragraph 1203(g) will be more efficient and less costly to implement than permit-space requirements.

This provision is necessary to protect employees from physical or atmospheric hazards on initial entry into the space under this provision, and to ensure that the space remains safe during entry operations. The testing results also serve as a baseline against which employers and employees can compare current conditions within the space during entry operations. The requirement to make the certification available to employees or their authorized representatives ensures that entrants have the information necessary to detect developing hazards while they are working in the space.

29 CFR 1926.1203(h) – Permit Space Entry Communication and Coordination.

Timely information exchanges and coordination of work activities can be critical in safeguarding employees performing confined-space work, particularly on multi-employer worksites where one employer’s actions can affect the health and safety of another employer’s employees. As OSHA noted in its explanation of the proposed rule, there are a number of contractors and subcontractors performing jobs on most construction worksites, and there may be employees of different employers performing work within the same confined space. In many instances, employees of one subcontractor will enter a confined space after another subcontractor’s employees complete their work within the space.

In paragraph (h), OSHA designates the controlling contractor, rather than the host employer, as the information hub for confined-spaces information-sharing and coordination because the controlling contractor’s function at a construction site makes it better situated than the host employer (assuming the host employer is not also the controlling contractor) to contribute to and to facilitate a timely and accurate information exchange among all employers that have employees involved in confined-space work. On a construction worksite, the controlling contractor has overall authority for the site and is best situated to receive and disseminate information about the previous and current work performed there.

The final rule is substantively similar to the proposed rule, except that the proposal would have required the host employers to communicate directly with entry employers. OSHA assigned the controlling contractor that function in this final rule, giving only limited information-exchange requirements to the host employer. In the final rule, OSHA also clarified the scope of the information exchanges by requiring the controlling contractor to coordinate and share information with entities whose activities could foreseeably result in a hazard in the confined space, as opposed to all contractors “near” the permit space. Most other differences on information sharing between the proposed rule and the final rule are the result of OSHA’s decision to adopt a rule that is more similar to the general industry rule.

29 CFR 1926.1203(h)(1) – Pre-entry duties of host employer.

Paragraph 1203(h)(1) requires the host employer to share with the controlling contractor information the host has about the location of known permit spaces, the hazards or potential hazards in each space or the reason it is a permit space, and any previous steps that it took, or that other employers took, to protect workers from the hazards in those spaces.

*Purpose*: The host employer serves an important role in providing information because the host employer is likely to be the employer most familiar with the property and the most likely to retain, between separate construction projects, information about permit spaces on the property, particularly in construction involving existing facilities. As a result, the host employer may have information about hidden dangers or other information that can help reduce employee exposure to hazards in permit spaces. Telling other employers about each known permit space on the worksite is essential to achieving the purpose of the information-exchange requirements, which is to ensure that contractors with employees entering confined-spaces are aware of the type and degree of these hazards and can take necessary safety precautions. Having information about the previously identified hazards in a space, and the previous efforts to address them, will assist the entry employer in ascertaining if those hazards still exist, and help the entry employer avoid problems addressing the hazards that previous entry employers encountered.

29 CFR 1926.1203(h)(2) – Pre-entry information-sharing duties of controlling contractors.

OSHA requires controlling contractors to obtain the information specified in paragraph (h)(1) from the host employer (i.e., the location of permit spaces, the known hazards in those spaces, measures employed previously to protect employees in that space). Then, before permit space entry, it must relay that information to any entity entering the permit space and to any entity whose activities could foreseeably result in a hazard in the confined space. (See §1203(h)(2)(ii).) The controlling contractor must also share any other information that it has gathered about the permit space, such as information received from prior entrants

29 CFR 1926.1203(h)(2)(i) – Controlling contractor obtains information from host employer.

Paragraph 1203(h)(2)(i) requires the controlling contractor to obtain from the host employer, before permit-space entry, available information regarding permit-space hazards and previous entry operations.

*Purpose*: The controlling contractor needs this information for dissemination to entities entering permit spaces, and to fulfill its duty to coordinate permit-entry activities with other work occurring in and around the permit space.

29 CFR 1926.1203(h)(2)(ii) – Controlling contractor provides information to entities entering a permit space and other entities at the worksite.

Paragraph 1203(h)(2)(ii)(A) and (B) require the controlling contractor, before entry operations begin, to share with the entrants, and any other entity at the worksite whose activities could foreseeably result in a hazard in the permit space, the information that the controlling contractor received from the host employer, as well as any additional information the controlling contractor has about the topics listed in paragraphs (h)(1)(i) through (iii) (i.e., the location of permit spaces, the hazards in those spaces, and any previous efforts to address those hazards).

Paragraph 1203(h)(2)(ii)(C) requires the controlling contractor, before entry operations begin, to share with each specified entity any precautions or procedures that the host employer, controlling contractor, or any entry employer implemented earlier for the protection of employees working in permit spaces.

This provision was not in the proposal; the proposal required both the host employer and controlling contractor to share information directly with the entry employer. (See proposed §1204(a).) The parallel provision of the proposed rule, §1204(a)(1), was potentially duplicative and ambiguous because it required the controlling contractor and host employer to provide the same information to the same entities.

*Purpose*: OSHA requires the controlling contractor to obtain the information from the host employer before entry operations begin so that the controlling contractor can share the information with the entities specified in §1203(h)(2)(ii) in time to minimize potential employee exposure to hazards in the confined spaces. The controlling contractor is at the hub of the information exchanges in the final rule, so this step is critical to ensuring that the host employer’s information reaches the entities entering the permit space and others whose work may create hazards inside the permit space. For employers or other entities whose activities could foreseeably result in a hazard in the confined space, this information will make them aware of the confined spaces activity and improve their ability to assess whether those activities will create such a hazard, to prevent their employees’ unauthorized entry into a permit space, and to help them prepare for coordination of their activities under final §1203(h)(4).

29 CFR 1203(h)(3) – Pre-entry information-sharing duties of entry employers.

This provision sets forth the information-exchange requirements for entry employers. OSHA uses the term “entry employer” to clarify that the paragraph applies to employers who plan to perform permit-space entry operations.

*29 CFR 1926.1203(h)(3)(i)*

Paragraph (h)(3)(i) requires an entry employer to obtain information about the permit-space entry operations from the controlling contractor, and works with paragraph 1203(h)(2), which requires the controlling contractor to share information about permit-space entry operations with the entry employer.

*Purpose*: OSHA believes that the reciprocal obligations in this final rule, which are consistent with the general industry standard, will increase the effectiveness of the information exchange by placing the duty to share this information on both parties. Both employers will now have the duty to exchange information, although they will likely accomplish their duties in a single interaction. The information exchange will ensure that the entry employer understands the type of space it will be evaluating, and will allow it to anticipate the permit-space hazards that may be present during entry.

*29 CFR 1926.1203(h)(3)(ii)*

Paragraph (h)(3)(ii) requires an entry employer to inform the controlling contractor of the permit-space program that the entry employer will follow, including information about any hazards likely to be confronted or created in each permit space. This exchange must take place prior to entry to ensure that the controlling contractor is informed of all the hazards in a timely manner and can take action, if needed, to prevent an accident or injury before entry operations begin.

*Purpose*: The controlling contractor needs this information to coordinate entry and other activities on the worksite as necessary, and the exchange provides the controlling contractor with another opportunity to inform the entry employer about the hazards of the permit space as required by paragraph 1203(h)(2).

29 CFR 1926.1203(h)(4) – Coordination duties of controlling contractors and entry employers.

Paragraph 1203(h)(4) requires controlling contractors and entry employers to coordinate permit-space entry operations in two circumstances: (1) when more than one entity performs entry operations at the same time, or (2) when permit-space entry is performed at the same time any activities that could foreseeably result in a hazard in the permit space are performed.

*Purpose*: There is a need to coordinate entry operations whenever multiple entities are performing work simultaneously in or around a permit-space because of the possibility that one entity’s activity might create a hazard for workers employed by a different entity (e.g., welding next to the application of a flammable coating). The purpose of this provision is to protect employees from foreseeable hazards that could result from a lack of coordination between entry entities in the permit space, or with entities outside the space whose activities could create hazards inside the permit space. This paragraph works in concert with the requirement that entry employers inform the controlling contractor of the permit-space program that the employer will use and the hazards they are likely to encounter in the space, including hazards created after entry. The controlling contractor can use this information to coordinate the entry operations to ensure safety for all workers in the space.

It is important for the controlling contractor to participate in each coordination effort because construction worksites are constantly evolving, with multiple employers performing work. Consequently, the controlling contractor, as the employer with overall responsibility on the worksite, is in the best position to coordinate the entry operations. This provision also requires the entry employer to coordinate entry with the controlling contractor because it is the entry employer who evaluates a confined space, who will have employees under its direction entering the space, and who may have the most current information about the space.

29 CFR 1926.1203(h)(5) – Post-entry duties of controlling contractors and entry employers.

Paragraph 1203(h)(5)(i) requires the controlling contractor to debrief each entity that entered a permit space, at the end of entry operations, about the permit-space program followed, and any hazards confronted or created in the permit space(s) during entry operations, and then, as required by paragraph 1203(h)(5)(iii), relay appropriate information to the host employer. Paragraph 1203(h)(5)(ii) requires the entry employer to share the same information with the controlling contractor in a timely manner.

The final rule contains a new requirement for the controlling contractor to notify the host employer of any information it receives from debriefing the entry employer. OSHA added this provision to close a potential gap in the information-exchange process that could result because the final rule makes the controlling employer the hub of the information and exchange and does not require entry employers to provide information directly to the host employers. The host employer will still receive the information, but from the controlling contractor. OSHA expects that in many cases there will be no need for a separate exchange because the controlling contractor can relay this information as part of its regular communications with the host employer.

*Purpose*: These requirements serve three purposes. First, they ensure that the controlling contractor requests the information. Second, they establish an affirmative duty for the entry employer to provide this information. Third, they ensure that the host employer will receive information relevant to future permit-space entries. The intent is for entry employers to identify and share information about additional hazards, new procedures, or other new information not previously identified in the required pre-entry information exchange.

OSHA believes it is appropriate to place the duty on the entry employer to provide this information, as well as to require the controlling contractor to request it. The entry employer, by virtue of performing permit-space entry operations, will be the first employer to have access to new information. If the entry employer fails to communicate the information to the controlling contractor during the course of entry operations, the information transfer will occur during the entry employer debriefing.

29 CFR 1926.1203(i) – Absence of a controlling contractor.

Paragraph 1203(i) provides that, in the event no employer meets the definition of a controlling contractor on a particular worksite, the host employer or other employer that arranges for permit-space entry work must fulfill the information-exchange and coordination duties of a controlling contractor.

OSHA added this requirement to the final rule in response to a comment noting that some construction worksites do not have an employer that meets the definition of a controlling contractor. Because the controlling contractor is at the hub of the information-exchange and coordination requirements, failing to address this issue would leave a serious gap in a critical provision of the standard.

For the purposes of analyzing the costs of information exchanges, OSHA assumes that all projects have a controlling contractor to be consistent with the FEA. Thus, no burden hours or costs are associated with other types of employers fulfilling the information-exchange and coordination duties of a controlling contractor in Item 12 of this Supporting Statement.

*Purpose*: When no employer on a worksite meets the definition of controlling contractor, it is still necessary for one employer to be responsible for information exchange and coordination, thereby ensuring that entry employers are aware of the known hazards associated with the space, and that different entities do not create new hazards to each other.

**29 CFR 1926.1204 – Permit Required Confined Space Program**

The Agency requires each employer with employees who will enter a permit space to have and implement a written permit-space program at the construction site (with the exception of ventilation-only entries conducted in accordance with § 1926.1203(e)). Also see discussion of 29 CFR 1926.1203(d) and 29 CFR 1926.1212(a), requirements that pertain to the written program.

OSHA is conforming the language of the permit-required confined space provisions in § 1926.1204 of the final rule to the corresponding provisions for the General Industry Standard, paragraph 1910.146(d). The substance of this section generally is the same as the General Industry Standard except for minor revisions made for grammatical or clarification purposes.[[5]](#footnote-5) As the proposed rule did not require a written program, there is no discrete section of the proposed rule that corresponds directly to this section of the final rule, but OSHA also included most of the duties imposed by this final rule in the proposed rule. See, e.g., proposed §§ 1926.1205 (atmospheric monitoring and testing); 1209(c) (limiting entry) and (f) (safe termination procedures); 1210(f) (attendant required); 1210(j) (equipment); 1212(a) (safe termination procedures); and 1218 (equipment).

OSHA anticipates that, in practice, some employers in construction may operate with a general permit-space program that covers numerous types of permit spaces and hazards, along with a specific permit that includes the unique hazards and practices applicable to each of those spaces. The Agency has no objection to this approach, provided the permit conveys all of the applicable information to employees at the required times, this information is readily available to the employees for reference, and employees receive the training necessary for them to refer to the appropriate document for the required information. Therefore, for this purpose, OSHA allows employers to treat the permit as part of the written permit program required by this section.

As required elements of the written program, OSHA considers all provisions of § 1926.1204 to be information collection requirements, e.g. 1204(a) (implementation of the measures necessary to prevent unauthorized entry); 1204(b) (identification and evaluation of the hazards of PRCSs); 1204(c) (safe permit space entry operations); 1204(d) (equipment); 1204(e) (evaluation of PRCS conditions during entry operations); 1204(f) (attendant required); 1204(g) (attendant emergency procedures); 1204(h) (designation of entry operation duties); 1204(i) (summoning rescue and emergency services procedures); 1204(j) (system for cancellation of entry permits, including safe termination of entry operations); 1204(k) (entry operation coordination procedures); 1204(l) (entry operation conclusion procedures); 1204(m) (entry operation review); and 1204(n) (permit space program review). The burden hours and cost associated with the implementation of the written program elements are the same costs taken to conduct testing and monitoring, hazard evaluation or classification, and development of a permit or alternate procedure verification. In addition, some provisions of § 1926.1204 constitute information collection requirements or antecedent events for reasons other than inclusion in the written program, as described below.

29 CFR 1926.1204(c), (g), (h), (i), (j), (k) and (l)) – Development of procedures.

Paragraph 1926.1204(c) requires an employer to develop procedures needed to facilitate safe entry operations into permit spaces. The subparagraphs in 1204(c) provide specific elements of the required procedures that employers must include in the permit program: identifying safe entry conditions that employers must meet to initiate and conduct the entry safely (paragraph (c)(1)); providing each authorized entrant with the opportunity to observe monitoring or testing (paragraph (c)(2)); isolating the PRCS (paragraph (c)(3)); purging, inerting, flushing or ventilating the permit space (paragraph (c)(4)); ensuring that monitoring devices will detect an increase in atmospheric hazard levels in the event that the ventilation system malfunctions, and to do so in adequate time for employees to safely exist the space (paragraph (c)(5)); providing barriers to protect entrants from external hazards (paragraph (c)(6)); verifying that conditions are acceptable for entry and preventing employees from entering the permit space with a hazardous atmosphere unless demonstrating that PPE will be effective for each employee (paragraph (c)(7)); and eliminating any conditions that could make it unsafe to remove an entrance cover (paragraph (c)(8)). Before entry is authorized, each entry employer must document the completion of these measures by preparing an entry permit, as required by paragraph 1926.1205(a).

Under paragraphs 1204 (g) through (l), entry employers are also required to develop procedures for: having an attendant respond to emergencies affecting multiple permit spaces monitored (1926.1204(g)); specifying employees’ name, confined space entry roles and duties (1926.1204(h)); summoning rescue and emergency services, rescuing entrants from permit spaces, providing necessary emergency services to rescued employees, preventing unauthorized personnel from attempting a rescue (1926.1204(i)); cancelling entry permits (1926.1204(j)), coordinating entry operations (1926.1204(k)), and for terminating an entry permit and entry operations (1926.1204(l)).

*Purpose*: It is necessary for employers to have a written confined space program to effectively prevent unauthorized entry into PRCSs, to protect employees from encountering PRCS hazards, and as a reference at the worksite for employees who are involved with implementing safe entry procedures.

29 CFR 1926.1204(c)(3) and 1203(e)(1)(i) – Lockout/Tagout

Paragraphs 1204(c)(3) and 1203(e)(1)(i) (for PRCSs using alternate procedures) require tagging in accordance with the definition of “isolate” or “isolation” (see paragraph 1202) which requires employers to “lockout or tagout …all sources of energy.”

*Purpose*: Proper control of hazardous energy sources prevents death or serious injury among workers.

§§ 1926.1204(e)(1), (e)(1)(i) – Pre-entry testing in isolated and non-isolated PRCSs.

Paragraph 1926.1204(e)(1) requires an employer to test the permit space for acceptable entry conditions in an isolated permit space before entry is authorized to begin.[[6]](#footnote-6) This paragraph also acknowledges that testing an isolated permit space may be infeasible because the PRCS is large or is part of a continuous system, thereby limiting the value of the initial testing of entry conditions because the conditions in the work space could be affected by substances in the connected spaces and, therefore, subject to change. Accordingly, under (e)(1)(i), pre-entry testing must occur, to the extent feasible, when the space is large or part of continuous system (a non-isolated permit space), such as a sewer. OSHA considers the atmospheric testing requirements of paragraphs 1204(e)(1) and (e)(1)(i) to be antecedent events associated with the preparation of a permit under paragraphs 1205(a) and § 1926.1206.

*Purpose*: Information obtained from testing is vital to the identification of atmospheric hazards within the space, and is also needed to make accurate determinations for whether an employer must follow the unique procedures in paragraphs 1204(e)(1)(i-iii).

29 CFR 1926.1204 (e)(1)(ii) and (e)(2) – Continuous monitoring in isolated and non-isolated PRCSs.

Paragraph 1204(e)(2) requires an employer to continuously monitor atmospheric hazards during permit space entry operations unless the employer can demonstrate that the equipment for continuously monitoring a hazard is not commercially available or that periodic monitoring is sufficient. The Agency recognizes that, for some PRCSs, especially when the same PRCS has been entered and monitored repeatedly and found to have a stable atmosphere (such as a remote location that is not proximate to potential sources of atmospheric hazards), the employer may be able to show that periodic monitoring will be sufficient to ensure that the conditions in the PRCS remain within acceptable entry conditions. However, when periodic monitoring is used, it must be of sufficient frequency to ensure the control of atmospheric hazards at planned levels, and capable of detecting new hazards in time to protect employees.

Similarly, paragraph (e)(1)(ii) requires an employer to continuously monitor a non-isolated permit space (like a sewer) unless the employer can demonstrate that the equipment needed for continuous monitoring is not available commercially. This requirement is different than the monitoring requirement for isolated spaces in § 1926.1204(e)(2) because paragraph (e)(1)(ii) does not allow periodic monitoring *unless* continuous monitoring is not commercially unavailable.

OSHA considers the atmospheric monitoring requirements of paragraphs 1204(e)(1)(ii) and (e)(2) to be antecedent events associated with the preparation of a permit under paragraphs 1205(a) and § 1926.1206.

*Purpose*: Construction work tends to follow a less predictable course than work covered by the General Industry Standard and, thus, requires atmospheric monitoring more frequently. Because of this high level of unpredictability, OSHA believes, generally, that continuous monitoring is necessary to protect affected employees, especially the entrants. These provisions enable the employer to recognize deteriorating conditions quickly, and to identify new atmospheric hazards in time to take the actions required to protect employees.

Non-isolated permit spaces, relative to other PRCSs, have an enhanced risk of unexpected changes in hazardous atmosphere levels because atmospheric hazards could migrate in an uncontrolled manner from other areas, so OSHA only permitted periodic monitoring in non-isolated spaces in the absence of a viable alternative. By monitoring the space continuously, employers should detect rising levels of a hazardous atmosphere or the introduction of a new atmospheric hazard before it is too late to warn the authorized entrants and evacuate them from the space.

29 CFR 1926.1204(e)(6) – Providing testing and monitoring results to employees.

Paragraph 1204(e)(6) requires each entry employer to immediately provide the results of any testing conducted in accordance with § 1204 to each authorized entrant or that employee’s authorized representative. The collection of information burden hours and costs associated with this provision are included in the costs for posting the permit in Item 12.

*Purpose*: This requirement will ensure that employees and their representatives have the information necessary to identify potential inadequacies in the testing and take action under paragraph 1204(e)(5) to avoid unsafe entries. In some cases the testing may reveal specific conditions that fall within an employee’s expertise or may be relevant to an individual health condition of the employee.

29 CFR 1926.1204(m) – Review of entry operations and revision of procedures when inadequate.

Paragraph 1204(m) requires each entry employer to review its permit-space program whenever the procedures are inadequate, and to revise those procedures when necessary.

*Purpose*: See discussion of §§ 1926.1204(n) and 1926.1205(f) for explanation on the need to review an entry permit and make revisions as necessary.

29 CFR 1926.1204(n) – Annual review of written program.

Paragraph 1204(n) requires each entry employer to review its permit-space program at least every year and make revisions to its procedures as necessary. This provision requires an employer to review cancelled permits within one year after each entry.[[7]](#footnote-7)

*Purpose*: The purpose of this annual review is to evaluate the effectiveness of protection provided to employees involved in PRCS entries during this period. This requirement will help ensure that employers complete future PRCS entries in a similar manner if the entries were successful, or make changes to the permit program to improve future entry operations if any problems or concerns are discovered. As stated in the preamble, this 12 month period is a calendar year because the purpose of paragraph 1204(n) is to ensure that no than 12 months separates the date the employer cancels or terminates the confined-space entry and the date the employer reviews its confined-space operations for deficiencies. This approach also provides employers with the most flexibility in determining when to conduct the annual review.

**29 CFR 1926.1205 – Permitting Process**

An employer conducting a permit-space entry must post an entry permit outside the permit space to document the employer's efforts to identify and control conditions in that permit space. Section 1205 sets forth the required process for establishing entry permits and § 1206 sets forth the required specific information which must be identified on the permit.

29 CFR 1926.1205(a) – Preparing an entry permit.

Paragraph 1205(a) requires each entry employer to prepare, prior to entry into a PRCS, an entry permit containing all of the information specified in §1926.1204(c) (practices and procedures for ensuring safe entry). In the preamble, OSHA emphasizes that the permit is considerably more than a simple checklist; it requires careful attention and planning. The permit must list all measures necessary for making the particular permit space safe for entry; if the permit omits some procedures, serious consequences could result. Also, it is noted in the preamble that when more than one employer is performing confined-space entry, one permit will suffice, provided the controlling contractor properly coordinates the entry operations of the multiple employers as required under § 1926.1203(h)(4), and the permit identifies all of the hazards and safety measures required for all of the work conducted in that space.

*Purpose*: Entry permits are a critical component of the safety process for preparing to enter a confined space because they provide key information about hazards in the PRCS, and the methods used to protect employees from those hazards. The permits also specify who is authorized to perform work within the PRCS, their duties, and the extent of their authority with respect to safety in and around the PRCS. The Agency believes the use of this administrative tool is essential to enable the entry employer to ensure that the employees under its direction in the permit space are safe, and to account for each employee in the space in the event of an emergency. The permit also can be useful to the controlling contractor and other employers working near the confined space because it provides a readily accessible means of identifying the work performed and the provisions needed to ensure worker safety. Making the information on the permit accessible to employers and employees in and around the PRCS also allows them to maintain an elevated awareness of the conditions within the PRCS, as well as the equipment and procedures necessary for safe PRCS entry operations.

The permitting process is important because it helps the employer determine if conditions in the permit space are safe enough for entry, and it requires the involvement of the entry supervisor, thereby ensuring that a person with the qualifications needed to identify permit-space hazards, and the authority to order corrective measures for their control, will oversee entry operations.

29 CFR 1926.1205(b) and 1926.1210(b) – Signing the permit

Paragraph 1205(b) requires the entry supervisor to sign the permit before entry begins. Similarly, paragraph 1926.1210(b) requires the entry supervisor to verify that the employer performed all tests specified by the entry permit, and that all procedures and equipment so specified are in place before he or she may sign the permit and allow entry. The paragraph also specifies that the entry supervisor must verify this information by checking that the corresponding entries made on the permit.

*Purpose*: These preliminary checks are necessary to ensure that the conditions in the space are within the acceptable entry conditions – hazard levels are as planned, and protective measures are in place, working properly, and are effective – before entry operations commence. Although the employer remains ultimately liable for compliance with this standard, the entry supervisor’s signature underscores to the employer and the entry supervisor the importance of their determination that the PRCS entry operation meets the prerequisites for safe entry listed in the permit. OSHA believes that signing the form makes it more likely that the employer will address the items listed on the form than if they do not have to sign the form.

29 CFR 1926.1205(c) – Posting the permit.

Paragraph 1205(c) requires an employer to make the completed entry permit available to all authorized entrants, or their authorized representatives, at the time each employee enters the space, by posting it at the entry portal or by any other equally effective means, so that entrants can confirm that pre-entry preparations have been accomplished.

*Purpose*: One of the keys to protecting employees from PRCS hazards is for both employers and employees to know the location of the PRCSs at the job site, the characteristics of the hazards, and their associated dangers. The provisions in this paragraph are designed to achieve this goal. Once entrants are provided with this information, they will then be able to make their own judgments as to the completeness of pre-entry preparations and point out any deficiencies that they believe exist. Employees will also be more likely to bring new hazards to the attention of the supervisor if they are discovered while working in the permit space if the employees are aware of which hazards have already been identified and which have not. Posting the permit for employees to see at the entry point can also be useful when multiple employers will be working in the same permit space. Sharing this information with employee authorized representatives may help bring the representative’s expertise to bear in identifying additional hazards not accounted for in the permit process. In addition, the entry employer must continuously update the permit to reflect an updated list of all entrants. Posting this list provides an immediate reference for the entry supervisor and attendant to ensure that all entrants are evacuated in the event of an emergency.

29 CFR 1926.1205(f) – Retaining the permit.

Paragraph 1205(f) requires the employer to retain each entry permit for at least 1 year to facilitate the review of the permit-required confined space program required by paragraph 1926.1204(n) of the Standard. Any problems encountered during an entry operation must be noted on the pertinent permit so that appropriate revisions to the permit space program can be made.Among the problems encountered during entry, entry employers should list the problems resulting in the cancellation or suspension of a permit on the entry permit.

As the Agency noted in the proposed rule, these document-retention requirements are in addition to the document-retention requirements required by other OSHA standards, such as the 30-year retention period for employee-exposure records required by 29 CFR 1910.1020(d) (Preservation of records).[[8]](#footnote-8) (See note to proposed §1926.1219(b).) In some cases, entry permits may constitute employee-exposure records. (See definition of “employee exposure record” at 29 CFR 1910.1020(c)(5).) To account for the employee-exposure records retained as part of the permit, OSHA is submitting a revision to OMB to increase the number of respondents under OMB # 1218-0065, “Access to Employee Exposure and Medical Records.”

*Purpose*: The purpose of this document retention requirement, and the requirement to note problems directly on the permit, is to facilitate the evaluation of the effectiveness of protection provided to employees involved in PRCS entries during the annual review required under 1204(n). This requirement helps ensure that employees complete future PRCS entries in a similar way if the entries were successful, or that employers improve future PRCS entries by resolving any problems or concerns discovered.

**29 CFR 1926.1206 – Entry Permit**

An employer conducting a permit-space entry must post an entry permit outside the permit space to document the employer's efforts to identify and control conditions in that permit space (see §1926.1205(c)). The main purpose of the permit is to provide a concise summary of the permit-space entry requirements for a particular entry that will be useful to the personnel who are conducting the entry operations, to rescue personnel, to the controlling contractor, to other employers working near the confined space, and to any personnel who need to review the conduct of entry operations after the employer terminates the operations. Making the information on this document accessible to employers and employees affected by the hazards in and around the permit space also allows them to maintain an elevated awareness of the conditions within the permit space, as well as knowledge of the equipment and procedures necessary for safe permit-space entry operations. OSHA notes that the Standard does not require employers to include on the entry permit each determination or action taken with respect to the permit entry; however, employers still must make certain demonstrations (which likely would be made through documentation) about hazards, ventilation, monitoring or equipment, and to document other determinations as required by the Standard, and to make that information available to employees (See, e.g., paragraphs 1203(e)(1), 1203(g)(2) and 1203(g)(3)).

29 CFR 1926.1206 (a)-(p) and 29 CFR 1926.1209(c) – Contents of the permit.

Paragraphs 1206(a)-(p) and 1926.1209(c) set forth the information which must be identified on the permit.

*29 CFR 1926.1206(a)*

Paragraph 1206(a) requires the employer to identify the permit space workers are planning to enter.

*Purpose:* This information will ensure that employees use the correct permit for the PRCS.

*29 CFR 1926.1206(b)*

Paragraph 1206(b) requires the employer to record the purpose of the entry. This information must be sufficiently specific, such as identifying specific tasks or jobs employees are to perform within the space, to confirm that the employer considered performance of each specific construction activity in the hazard assessment of the PRCS.

*Purpose*: An entry employer’s failure to evaluate construction activities performed within the PRCS for their effect on the conditions within the space could result in serious injury or death to employees.

*29 CFR 1926.1206(c)*

Paragraph 1206(c) requires the employer to record the date and authorized duration of the planned entry.

*Purpose*: One purpose of this provision is to ensure that employees engaged in PRCS operations are informed of the period during which conditions in the PRCS must meet acceptable entry conditions as specified in the entry permit. A second purpose is to place some reasonable limit on the duration of the permit, because a permit of unlimited duration is not likely to account for changed PRCS conditions.

*29 CFR 1926.1206(d)*

Paragraph 1206(d) requires the employer to record the identity of the authorized entrants so that the attendant is capable of safely overseeing the entry operations.Employers can meet this requirement by referring in the entry permit to a system such as a roster or tracking system used to keep track of who is currently in the PRCS.

*Purpose*: The availability of this information would enable the attendant, entry supervisor, or rescue service to quickly and accurately account for entrants who might still be in the PRCS when an emergency occurs. A second purpose is to provide assurance that all authorized entrants have exited the PRCS at the end of entry operations. A third purpose would be to assist the attendant and entry supervisor in preventing unauthorized personnel from entering the space.

*29 CFR 1926.1206(e)*

Under paragraph 1206(e), when a permit program requires ventilation, OSHA requires employers to ensure that they have a monitoring system in place that will alert employees of increased atmospheric hazards in the event the ventilation system stops working. (See § 1926.1204(c)(5).) This provision requires the employer to record the means of detecting an increase in atmospheric-hazard levels if the ventilation system stops working.

*Purpose*: It is important for employers to provide this information on the entry permit so that any new employees can easily access this information, and respond appropriately and as quickly as possible to ensure the continued safety of entrants. For example, if the original entry supervisor is replaced by a new entry supervisor halfway through entry operations, the new entry supervisor can refer to the entry permit for this information.

*29 CFR 1926.1206(f)*

Paragraph1206(f) requires the employer to record the names of each attendant.

*Purpose*: Without this requirement, the employer could waste valuable time finding the attendant responsible for protecting authorized entrants during an emergency.

*29 CFR 1926.1206(g)*

Paragraph 1206(g) requires the employer to record the name of each employee currently serving as entry supervisor.

*Purpose*: The same reasons for requiring the names of the attendants apply for requiring the name of the entry supervisor: it provides an assured means of distinguishing these important individuals quickly and easily so that employees may alert them of a developing hazard, and it provides the opportunity for these individuals to review the permit and entry conditions to ensure that entry conditions remain safe.

*29 CFR 1926.1206(h)*

Paragraph 1206(h) requires the employer to record the hazards associated with the planned confined space entry operations. This list must include all hazards, regardless of whether the employer protects the authorized entrants from the hazards by isolation, control, or personal protective equipment.

*Purpose*: Providing this list will make it clear which hazards the employer already identified so that the entrants can confirm that they received training to work around such hazards, and will know to bring any other developing hazard to the attention of the entrance supervisor immediately.

*29 CFR 1926.1206(i)*

Paragraph 1206(i) requires the employer to record the measures used to isolate or control the hazards prior to entry.

This information must be consistent with the requirements specified in paragraph 1204(c), and must include the methods used to isolate or control the hazards, the type of personal protective equipment provided, the methods used to monitor each hazard (including the use of early-warning systems, if required by paragraph 1204(e), and how frequently each hazard is to be monitored.) Note that under paragraph 1204(e), employers must use continuous monitoring of atmospheric hazards unless the employer demonstrates that periodic monitoring is sufficient. The permit need only refer to the procedures used to meet the requirements of this paragraph in sufficient detail to enable employees to determine what measures they must take, and how to perform those measures.

These measures include, but are not limited to, the locking and tagging out of equipment. For analysis of the lockout/tagout requirements of this Standard, see: “29 CFR 1926.1204(c)(3) and 1203(e)(1)(i) – Lockout/Tagout,” above in Item 2.

*Purpose*: OSHA requires the employer to identify the measures used to isolate or control the hazards prior to entry on the permit so that the authorized entrants, attendants, and entry supervisors have this information on hand at the worksite, thereby ensuring safe entry operations. Proper control of hazardous energy sources prevents death or serious injury among workers.

*29 CFR 1926.1206(j)*

Paragraph 1206(j) requires the employer to specify the acceptable entry conditions. The list of acceptable entry conditions includes energy control considerations and conditions such as the permissible levels allowed for oxygen, flammable gases and vapors, other hazardous substances during PRCS entry. Additional information regarding PRCS conditions includes, for example, the methods used to maintain a water hazard at safe levels.

Paragraph (j) also requires employers, when applicable, to provide the ventilation-malfunction determinations made in paragraph (c)(5) of § 1926.1204. Some permit spaces may require ventilation to control the atmospheric hazards at levels that are below the levels at which they are harmful to entrants (that is, at a sufficiently low level that entrants will have time to exit the PRCS safely). In these spaces, the employer will be responsible for identifying that level and monitoring the permit-space atmosphere to detect any increase of the potentially hazardous substance. OSHA notes, as it did in the explanation of this provision in the general industry standard, that there is likely to be overlap between this requirement to list the acceptable entry conditions and the separate requirement in paragraph 1926.1206(i) to identify the hazard-control or elimination measures that the employer must also list on the permit. The Agency anticipates that employers may elect to combine these two elements when filling out the permit, and such an approach is permissible so long as the employer includes all of the relevant information in some form that the authorized entrant, attendant, or entry supervisor can identify quickly.

*Purpose*: The Agency’s requirement that the employer include these determinations on the permit informs employees (for example, entry supervisors, attendants, and authorized entrants) about the time required for the entrants to evacuate the PRCS should the ventilation system fail, and allows authorized entrants, attendants, and entry supervisors to respond quickly to any deviations in these conditions, including ventilation-system failure.

*29 CFR 1926.1206(k)*

Paragraph 1206(k) requires the employer to record the dates, times, and results of the tests and monitoring performed prior to entry, and the names or initials the individual/s who performed each test. Consistent with data collection from continuous monitoring under § 1910.146, the continuous monitoring values recorded on the entry permit are “real time” concentrations. Although the Standard does not specify the frequency with which the employer must record continuous monitoring measurements, from a compliance perspective, the quantity of data entered on the permit should indicate the number of times the entry supervisor or other entrant examined the monitoring data, and must be of sufficient frequency to demonstrate that the permit space was monitored such that these employee could identify a change in atmosphere or other potential hazard in time to allow entrants to exit the permit space safely. Employers also must include the initial entry-monitoring results on the entry permit; these results serve as a baseline for subsequent measurements.

*Purpose*: Entering the testing and monitoring results in the permit enables the entry supervisor, attendants, and authorized entrants to determine readily whether acceptable entry conditions exist with regard to atmospheric hazards in the PRCS. The employer also could use this information to identify atmospheric conditions within the PRCS that need to be monitored frequently because of the nature or degree of the hazard they present. Furthermore, documentation of test results on the permit also facilitates the review of canceled permits required under paragraph (d)(14). If testing indicates that levels of hazardous substances are increasing, the increased hazard will be easy to recognize through a review of the recorded test results on the canceled permit.

Listing the names of those who performed the testing identifies a point of contact to which entry supervisors and attendants can direct questions they may have regarding the results and procedures. The date and time (or, for continuous monitoring, a time period) provides a basis for detecting dangerous trends in atmospheric conditions that may indicate that more frequent observation of the atmospheric data is necessary.

*29 CFR 1926.1206(l)*

Paragraph 1206(l) requires the employer to identify the rescue and emergency services required by the Standard, and the means by which these services will be summoned when needed. In some cases, an employer must include pertinent information, such as communication equipment and emergency telephone numbers, on the permit to sufficiently identify the means by which the rescue services will be summoned.

*Purpose*: Identification of the rescue service and the means for summoning it enables attendants to summon the correct rescue service immediately in case of emergency. The inclusion of this specific information would allow attendants to avoid errors and delays in contacting the rescue service.

*29 CFR 1926.1206(m)*

Paragraph 1206(m) requires the employer to record all of the methods of communication used by authorized entrants and attendants during entry operations. OSHA anticipates that the method of communication chosen may vary according to the circumstances of the particular workplaces; however, the methods chosen must enable the attendants and the entrants to maintain effective and continuous contact. OSHA notes that, while such communication will normally be achieved through speech, other methods, such as tapping on a wall, may be acceptable as long as it achieves effective and continuous contact.

*Purpose*: OSHA notes that establishing a routine for maintaining contact between attendants and authorized entrants will help attendants detect problems within the PRCS and help facilitate rescue when necessary.

*29 CFR 1926.1206(n)*

Paragraph 1206(n) requires the employer to record the equipment it provides in accordance with the requirements of the Standard. This equipment would typically include, for example, personal protective equipment, testing equipment, communications equipment (including equipment needed for an attendant to monitor the space), alarm systems, rescue equipment, and other equipment that the employer would provide to ensure compliance with paragraph (d)(4) of § 1926.1204 (personal protective equipment) or any other part of the Standard.

*Purpose:* This requirement provides employees with a ready reference to the equipment required for safe entry operations.

*29 CFR 1926.1206(o)*

Paragraph 1206(o) requires the employer to record any additional information needed to ensure safe confined space entry operations. Examples of the information required by paragraph (o) may include: problems encountered in the PRCS; problems that an attendant, entry supervisor, or authorized entrant believes may be relevant to the safety of the entrants working in the space; or any other information that may be relevant to employee safety under these conditions.

*Purpose*: As OSHA explained in the preamble to the general industry standard, this provision is necessary for employee protection due to the wide-ranging types of hazards found in permit-required confined spaces, there are many hazards that cannot be adequately addressed with any precision in a generic permit space standard.

*29 CFR 1926.1206(p)*

Paragraph 1206(p) requires the employer to record information about any other permits, such as for hot work, issued for work inside the confined space. If the employer identifies additional permits, these additional permits may be, but are not required to be, attached to the entry permit.

*Purpose*: Attachments to the entry permit provide information about the activity covered by the permit to employees involved in the entry operations so they can take appropriate precautions.

**29 CFR 1926.1207 – Training**

29 CFR 1926.1207(a) – Training.

Paragraph 1207(a) requires employers to train each employee who performs work regulated by the Standard, and specifies the requirements of that training.[[9]](#footnote-9) Paragraph (a) requires the training to impart the understanding, knowledge, and skills necessary for the safe performance of the duties assigned under those sections. In addition to this requirement, paragraphs 1204(h), 1207(b) and (c), 1208(a), 1209(a) and (b), 1210(a), and 1211(b)(1) - (b)(3) of the Standard specify in detail the knowledge requirements for authorized entrants, attendants, entry supervisors, and rescue service personnel.

Requirements to provide training to supervisors and workers are not considered collections of information under the implementing rules and guidelines of PRA-95. In addition, OSHA does not consider the development of training by employers to be an antecedent event to a collection of information because no written training plan is required by the Standard. Therefore, OSHA does not take burden hours or costs for training development or delivery in Item 12.

29 CFR 1926.1207(d) – Training records.

Under paragraph 1207(d), employers must maintain training records. In addition, the employer must contain the names of each employee trained, the trainer’s name, and the dates of training, and to make these records available for inspection by employees and their authorized representatives for the period of time the employee is employed by the employer. This documentation can take any form that reasonably demonstrates the employee’s completion of the training. Examples include a record of test scores, a photocopied card certifying completion of a class, or any other reasonable means. The employer may store these records electronically.

Once the employee ceases to work for the employer, there is no longer a significant benefit in tracking this information. Therefore, an employer must retain training documentation until the employee ceases to work for the employer. In the event an employee ceases to work for the employer, paragraph 1207(d) does not necessarily require the employer to continue to maintain or store the training records; however, there is an incentive for the employer to retain these records if there is a possibility that the employer might re-hire the employee, as in the example offered by the commenter. The standard does require the employer to maintain a set of training records for all employees performing confined space work, regardless of when the employer hired the employee, so if the employee is rehired the employer would be required to produce that employee’s training records or retrain the employee.

*Purpose*: Compliance with this provision provides employers and OSHA with an administrative tool that they can use to confirm which employees will be able to perform the duties required by this standard. Permit-space employees rely on their fellow employees for safe entry operations, and this provision provides that the training records that document employees’ training status be available to those employees and their representatives. This requirement can be especially important in the construction industry due to the high level of employee turnover and multiple employers present at construction sites, including employers who conduct simultaneous entry under paragraph 1204(k). If multiple employers will have employees in the same space, each employer can confirm that the other employer’s workers are properly trained. Consequently, making these records available for inspection by employees and their representatives provides an additional level of review to ensure that the employees received the proper training and are ready to engage in safe entry operations.

Moreover, these training records are a valuable resource for tracking whether an employee received the necessary training. If these records are to serve as a tool to confirm employee training, the records must be available during the period the employee is working for the employer.

**29 CFR 1926.1208 – Duties of Authorized Entrants**

29 CFR 1926.1208(c)/29 CFR 1926.1208(d) – Communicate with attendant.

Paragraph 1208(c) requires an employer to ensure that an authorized entrant communicates effectively with the attendant to facilitate the assessment of entrant status and timely evacuation as required by §1209(f).

Paragraph 1208(d), which is similar to § 1910.146(h)(4), requires an employer to ensure that an authorized entrant alerts the attendant whenever one of the following circumstances in paragraphs 1926.1208(d)(1)-(2) arises: (1) There is a warning sign or symptom of exposure to a dangerous situation; or (2) the entrant recognizes a prohibited condition. In some instances, a properly trained authorized entrant may be able to recognize and report his/her own symptoms, such as headache, dizziness, or slurred speech, and take the required action. In other cases, the authorized entrant, once the effects begin, may be unable to recognize or report them. In these latter cases, this provision requires that other, unimpaired, authorized entrants in the PRCS, who employers must properly train to recognize signs, symptoms, and other hazard-exposure effects in other authorized entrants, report these effects to the attendant.

*Purpose*: The authorized entrant’s communication with the attendant provides the attendant with information regarding any problems the entrant is having, which the attendant can use to determine whether there is a need to evacuate the PRCS. Reporting these effects will ensure that the authorized entrants can be removed from hazardous conditions in a timely manner.

**Section 1926.1209 – Duties of Attendants**

29 CFR 1926.1209(e) – Communicate with authorized entrants.

Paragraph 1209(e) requires the attendant to communicate with authorized entrants as necessary to assess and keep track of the entrants’ status and to notify entrants if evacuation under paragraph 1926.1209(f) of the Standard is necessary. Use of the word “assess” connotes an interactive duty in which the attendant may ask questions of the entrant, or ask the entrant to perform a task so the attendant can evaluate the entrant’s status.

As with the General Industry Standard, the attendant’s “communication” with the entrant may take different forms depending on the limitations of the particular permit space. In most instances, the attendant could use voice communication, including communication by phone, walkie-talkie, or other device that provides a clear and continuous means of communication with the entrant. In other cases, alternative methods, such as tapping on the walls of the space to allow for assessment through a pre-arranged code, may be sufficient to satisfy § 1926.1209(e).

*Purpose*: OSHA believes that an authorized entrant’s communication with the attendant provides information that the attendant needs to determine if the entry can continue. For example, subtle behavioral changes detected in the entrant’s speech, or deviations from set communication procedures, could alert the attendant that it is necessary to evacuate or rescue the entrant. This requirement may assist the attendant in fulfilling the attendant’s duties to identify signs and symptoms of exposure or behavioral changes. In addition, if the need arises, the attendant must communicate to the entrants an order to evacuate because the entrants may not know that there is an emergency.

29 CFR 1926.1209(f) – Order evacuation.

Paragraph 1926.1209(f) requires the attendant to assess the activities and conditions inside and outside the space to determine if it is safe for entrants to stay in the space. OSHA requires the attendant to evacuate the permit space under any of the four “conditions” listed in paragraphs 1926.1209(f)(1) through (f)(4): (1) the attendant notices a prohibited condition, (2) the attendant identifies the behavioral effects of hazard exposure in an authorized entrant, (3) there is a condition outside the space that could endanger the authorized entrants, or (4) the attendant cannot effectively and safely perform the duties required under § 1926.1209. If the attendant notices a condition or activity outside the space not addressed by the entry coordination procedures, then the attendant or entry supervisor could, directly or through the controlling contractor, seek to correct the condition or stop the activity (such as described in the example above). If the attendant cannot address the situation immediately, then the attendant must order the entrants to evacuate the permit space until the employer resolves the problem.

*Purpose*: The attendant may be in the best position to warn the entrants of hazardous conditions developing outside the space and impending danger within the space, and to recognize physical and behavioral changes in the entrants that indicate that conditions within the space may be deteriorating. Should the entrant become incapacitated, the attendant often is an entrant’s only contact with individuals outside the confined space. Therefore, the attendant is necessary to detect emergencies that develop in the space, and to retrieve the entrant or summon emergency assistance before it is too late to prevent injury or death to the entrant.

29 CFR 1926.1209(g) – Summon rescue services.

Paragraph 1209(g), which is identical to § 1910.146(i)(7), requires the attendant to call upon rescue and other emergency services as soon as he or she decides that authorized entrants may need assistance to escape from permit space hazards. The Agency notes that in some situations, the attendant may be the person designated to perform non-entry rescue and, therefore, may simply commence that rescue. If other personnel are necessary for non-entry rescue, or if entry rescue is necessary, then the attendant must summon those personnel immediately.

*Purpose*: This provision is necessary to ensure that rescue of authorized entrants occurs as soon as possible to maximize their chance of survival and limiting their injuries, as well as minimizing risk of injury to the rescue-service employees.

29 CFR 1926.1209(h) – Entry employer duties.

Paragraph 1209(h) requires the attendant to take the actions specified in §1926.1209(h)(1) through (h)(3) to prevent unauthorized persons from entering a permit space while entry is taking place.

29 CFR 1926.1209(h)(1) – Warn non-authorized entrants to stay away.

If someone other than an authorized entrant happens to approach the PRCS, paragraph 1209(h)(1) specifies that the attendant must make that individual aware that he/she must stay away from the PRCS. Some construction sites may be accessible to the public, so the attendant also would be responsible for warning members of the public who may attempt to enter a permit space at the site.

Purpose: These provisions protect employees who approach a permit spaces without proper authorization, training, or equipment, from the hazards of the permit space, and prevent injury to the entrants already in the permit space from the actions of unauthorized entrants and the items they may carry into the space.

29 CFR 1926.1209(h)(2) – Advise non-authorized entrants to exit the PRCS immediately.

Paragraph (h)(2) requires the attendant, should an unauthorized person enter the PRCS, to advise him/her to exit the space immediately.

*Purpose*: See 1209(h)(1), above.

29 CFR 1926.1209(h)(3) – Notify the entry supervisor of unauthorized persons in the PRCS.

Paragraph (h)(3) requires the attendant to notify the entry supervisor, along with the authorized entrants, of unauthorized persons who have entered the PRCS.

*Purpose*: Because an attendant may not have supervisory authority, or because the errant individual may work for another employer at a multi-employer construction site, an attendant may not have the authority to stop unauthorized individuals from entering the PRCS, or to require them to exit once they are inside the space. Therefore, this provision requires the attendant to notify the entry supervisor, along with the authorized entrants, of this situation, and to evacuate if necessary, as unauthorized entry will typically create a prohibited condition under the permit.

**Section 29 CFR 1926.1210 – Duties of Entry Supervisors**

Paragraph 1210(b) is described in the discussion of paragraph 1205(a) in Item 2, above. Paragraph 1210(d) is described in the discussion of paragraph 1211(c) in Item 2, below.

**Section 1926.1211 – Rescue and Emergency Services**

29 CFR 1926.1211(a)(1) and (a)(2) – Assess prospective rescue service’s response abilities.

Paragraph § 1926.1211(a)(1) requires an employer to assess a prospective rescue service’s ability to respond to a rescue summons in a timely manner. As discussed in more detail in the preamble, there are a number of factors that are relevant in evaluating the prospective rescue service. Some of those include: (1) whether the service is unavailable at certain times of the day or in certain situations; (2) the likelihood that key personnel of the rescue service might be unavailable at times and, if the rescue service becomes unavailable while an entry is underway, whether the service has the capability of notifying the employer so that the employer can abort the entry; (3) whether the permit space is difficult to reach, such as if the space is in a remote location or a continuous system, (4) the nature of the hazards, and (5) the time that it will take to enter the space and retrieve an employee.

Paragraph § 1926.1211(a)(2) requires an employer to assess a prospective rescue service’s ability to provide adequate and effective rescue services. In evaluating a prospective rescue provider's abilities, the employer also must consider the willingness of the service to become familiar with the particular hazards and circumstances faced during its permit-space entries. Paragraphs (a)(4) and (a)(5) of § 1926.1211 require the employer to provide its designated rescuers with information about its confined spaces and access to those spaces to allow the rescuers to develop appropriate rescue plans and to perform rescue drills. A rescue service's receptiveness to this information is directly relevant to its ability to function appropriately during actual rescue operations.

OSHA considers these assessment provisions to be performance-oriented and, therefore, is not taking burden for the requirement under Item 12 below. (The actual documentation of the rescue service is recorded on the permit (see discussion of paragraph 1206(l) in Item 2, above) and is taken as burden for the permit in Item 12.)

*Purpose*: Employers must develop rescue plans that anticipate and minimize potential harm to employees in the event an employee becomes trapped or exposed to an atmospheric hazard.

These requirements are necessary to ensure that the rescue service can perform rescue safely and effectively.

29 CFR 1926.1211(a)(4) – Communicate with rescue services.

Paragraph 1211(a)(4) requires an employer to inform the designated rescue service of the known hazards associated with the permit space in the event rescue become necessary. To meet the requirements of this provision, the employer would have to inform the rescue service that the employer selected the service to rescue its employees during entry operations, and that the employer is relying on the rescue services to perform these rescues when necessary.

Compliance with this paragraph, as well as with paragraphs (a)(1) and (a)(2) of this section, often requires the employer to provide this information to the rescue service immediately prior to each permit-space entry. Similarly, if an entry involves hazards not usually encountered by the rescue service, or hazards or a configuration that would require the rescue service to use equipment that it does not always have available, the employer would have to notify the rescue service of these hazards and conditions prior to beginning the entry operation.

*Purpose*: This provision provides the rescue service with information about hazards and conditions in the permit space that will protect the rescue-service employees who enter the permit space for rescue operations, training, or any other purpose. A rescue service's receptiveness to this information is directly relevant to its ability to function appropriately during actual rescue operations.

29 CFR 1926.1211(a)(5) – Develop a rescue service plan.

Paragraph 1211(a)(5) requires an employer to provide the designated rescue team or service with access to all permit spaces from which the rescue may need to perform a rescue so that the rescue team or service, whether in-house or third party, can develop appropriate rescue plans.

The documentation of the in-house rescue service plan is considered to be part of the rescue procedure component of the written PRCS program (see 1204(i) in Item 2 of this Supporting Statement, above) and is taken as burden for the written PRCS program in Item 12.

*Purpose*: OSHA believes that this provision will allow the rescue service to become familiar with the configuration and features of the permit space to which the employer may summon it to perform rescue operations, and thereby develop appropriate rescue plans and practice rescue operations.

29 CFR 1926.1210(d)/29 CFR 1926.1211(c) – Confirm rescue serviceavailability.

If an entry employer determines that it will use non-entry rescue, it must confirm, prior to entry, that emergency assistance *will be available* in the event that non-entry rescue fails. OSHA expects this confirmation would typically involve a quick phone call or other communication before making the first entry. The employer need not repeat such confirmation when there are several entries planned as part of the same project, provided the employer discusses during the initial contact with the rescue service the availability of emergency assistance for the expected duration of the project. This confirmation is especially important if the employer uses a 911 service or other third-party service that is small and has few teams on call because the service must be available to provide emergency assistance quickly when needed if the assistance is to be effective.

Likewise, paragraph 1210(d) requires the entry supervisor to verify that rescue services are available, and that the means for obtaining such services are operable.

*Purpose*: Emergency assistance, such as a 911 emergency-responder service or an on-site or off-site entry-rescue team, may prevent a situation from resulting in injury or death, so it is critical that emergency assistance be available to respond to the emergency.

29 CFR 1926.1211(d) – Provide SDS to treating medical facilities.

Paragraph 1211(d) requires an employer to provide relevant information about a hazardous substance to a medical facility treating an entrant exposed to the hazardous substance if the substance is one for which the employer must keep a Safety Data Sheet (SDS) or other similar information at the worksite.

*Purpose*: Such information would aid emergency medical services and medical facilities in correctly diagnosing and treating the employee rescued from the permit space.

**Section 29 CFR 1926.1212 – Employee Participation**

§ 1926.1212(a) – Consult with employees/authorized representatives on development and implementation of written program.

Paragraph 1212(a) requires employers to consult with affected employees and their authorized representatives in the development and implementation of the written permit-space program required by § 1926.1203.[[10]](#footnote-10)

*Purpose:* Allowing employees and their authorized representatives to participate in this manner will contribute to confined space safety. Employees who work in confined spaces, and their representatives, are particularly well qualified to contribute to the task analysis that is a necessary step in developing a confined space program. These employees are most familiar with the practices used during confined space entries. If those practices differ significantly from the practices planned by the employer, the employees can alert the employer to take appropriate steps to remedy any deficiencies in the permit-entry procedures. Likewise, employees may know of hazards within the space that non-entrants are not taking into consideration. This provision leaves the final contents of the confined space program up to the employer, by allowing for employee input this provision should promote safety and avoid the need to develop a cumbersome procedure to resolve conflicts between employers and employees regarding confined-space entries. Paragraph 1212(a) also is consistent with Section 2(b)(13) of the OSH Act, [29 U.S.C. 652(b)(13)](http://www.westlaw.com/Find/Default.wl?rs=dfa1.0&vr=2.0&DB=1000546&DocName=29USCAS652&FindType=L&ReferencePositionType=T&ReferencePosition=SP_aac5000007ec7), which emphasizes employer-employee cooperation by stating that one of the purposes of the Act is to encourage “joint labor-management efforts to reduce injuries and disease arising out of employment.”

29 CFR 1926.1212(b) – Employee access.

Paragraph 1212(b) requires that affected employees and their authorized representatives have access to all information developed under this standard. Other sections of this standard already specifically require that employers make information available to employees and their representatives. These provisions include §§1926.1203(d) (written program), 1203(e)(1)(v) and (e)(2)(ix) (alternate procedure certification) ; 1203(g) (reclassification certification); 1204(e)(6) (monitoring and testing results); 1926.1205(c) (completed permit); and 1926.1207(d) (training records). OSHA is adding this provision for purposes of emphasis and clarification. Final § 1926.1212(b) does not require employees or their authorized representatives to request or review this information; however, it provides them with the option of requesting and reviewing the information should they choose to do so. Employers need not provide separate copies of the information to each employee; employers have flexibility in determining how to distribute the information so long as each employee can access it.

*Purpose*: OSHA is adding this provision for purposes of emphasis and clarification. This provision emphasizes that employees and their representatives have a right to all information affecting their health and safety.

# Section 29 CFR 1926.1213—Disclosure

Paragraph 1213 requires an employer, who must retain documentation under the Standard, to make that information available to the Secretary of Labor, or a designee, upon request. The request from the Secretary or the Secretary’s designee (for example, OSHA) may be either oral or written. Unless another provision of the Standard requires employers to maintain a document at the worksite, the employer may maintain these documents off site as long as the employer can produce them readily to the requesting official, such as through electronic transmission to the worksite where OSHA is conducting an inspection.

This provision creates no new retention requirement – it merely confirms that when employers are already required to maintain records, they must make those records available to the Secretary. The provision provides employers with flexibility in where and how such records are maintained.

Information collected by the Agency during an inspection is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost for this provision in Items 12 and 14 of this Supporting Statement.

*Purpose*: OSHA added this provision to enable the Agency to more accurately identify potential safety hazards at a worksite and to monitor compliance with the requirements of this standard.

These documents pertain to the determinations made, and actions taken, regarding hazards. They provide valuable information to use when inspecting the worksite, including evaluating any potential safety hazards.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

Employers would be able to use automated, electronic, mechanical, or other technological information-collection techniques, or other forms of information technology when establishing and retaining the required records. The following paragraphs would require employers to prepare written documents that must include the signature/initials of the individual who prepares the documentation: paragraphs (e)(2)(ix) and (g)(3) of 29 CFR 1926.1203; paragraphs (b), (e)(1) and (e)(2) of 1926.1205; and paragraph 1926.1210(b). Employers may scan and electronically maintain copies of these signed records.

**4. Describe efforts to identify duplication. Show specifically why any similar information already available**

The requirements to collect and retain information are specific to each employer and employee involved, and no other source or agency duplicates these proposed requirements or can make the information available to OSHA (i.e., the information is available only from employers).

5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.

The final standard differs from the earlier proposed standard. OSHA revised the proposal in response to numerous stakeholder comments, including those from the Office of Advocacy of the Small Business Administration, which indicated that employers in construction in large part followed the general industry standard and, therefore, preferred that this final rule not depart substantially from general industry standard.

In addition, OSHA did not include a proposed provision in the final rule that required an employer to summon an entry-rescue service whenever the employer initiated a non-entry rescue. OSHA also allows employers to use the alternative ventilation-only procedures under final §1203(e) if an employer is able to isolate all physical hazards in the space, which provides more flexibility to an employer than the general industry standard. Furthermore, OSHA allows employers to suspend a permit in certain circumstances, rather than cancelling and developing a new permit. Each of these options has the potential to significantly reduce the economic impact on employers, including small entities. The preamble for §§1203(e) and 1205(e) includes an in-depth explanation of the specific steps taken to minimize employer burden.

In this final rule, OSHA made every effort to minimize the impact of the information-exchange requirements on host employers and controlling contractors. OSHA believes that the affected parties conduct such multi-employer communication currently with minimal disruption to business operations, and that the obligations specified by the final standard will become routine and easy to fulfill for employers who must initiate a system for regular communication. OSHA provided a detailed explanation of its decision to retain these requirements, along with its authority for these requirements, in its discussion of final §1926.1203(h) and (i).

Also, a variety of examples of confined-space programs are widely available on the Internet, which employers may adapt for their needs; in addition, OSHA will provide a small entity compliance guide to aid employers in developing such programs.

For a complete explanation of methods used to minimize small business burden, see Section 8 of the final rule, “Final Regulatory Flexibility Analysis.”

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

The Agency believes that the information-collection frequencies required by the Standard are the minimum frequencies that would be necessary to effectively regulate confined spaces and, thereby, fulfill its mandate “to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources” as specified in the Act at 29 U.S.C. 651. Accordingly, if employers do not perform the information collections, or delay in providing this information, employees may be subject to an increased risk of death and serious injury when working in confined spaces.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

· **Requiring respondents to report information to the agency more often than quarterly;**

· **Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**

· **Requiring respondents to submit more than an original and two copies of any document;**

· **Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;**

· **In connection with a statistical survey that is not designed to produce valid and reliable results that can be generalized to the universe of study;**

· **Requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**

· **That includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**

· **Requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

No special circumstances exist that would require employers to collect the information under the Standard using the procedures specified by this Item. The requirements are within the guidelines set forth in 5 CFR 1320.5.

1. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the Agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the Agency in response to these comments. Specifically address comments received on cost and hour burden.

**Describe efforts to consult with persons outside the Agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported**.

**Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years-even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.**

The final Confined Spaces in Construction Standard contains collection of information requirements (paperwork) that are subject to review by the Office of Management and Budget (OMB). In accordance with the requirements of the Paperwork Reduction Act of 1995 (PRA-95) (44 U.S.C. 3506(c)(2)), the proposed regulation solicited comments on the information collection included in the proposal (72 FR 67351-67425; November 28, 2007). The Department also submitted an information collection request (ICR), titled “Information Collection Requirements for the Proposed Standard on Confined Spaces in Construction (29 CFR part 1926, Subpart AA),” to OMB for review in accordance with 44 U.S.C. 3507(d) on November 28, 2007, the same date the proposed regulation was published. On February 15, 2008, OMB informed the Department of Labor to use OMB Control Number 1218-0258 in future paperwork submissions involving this rulemaking. OMB also commented, “This OMB action is not an approval to conduct or sponsor an information collection under the Paperwork Reduction Act of 1995.” OMB also stated that “OMB will review the associated collection requirements in parallel with the final regulation prior to approval.”

As discussed in Section II of the preamble, OSHA is finalizing a Confined Spaces in Construction standard that more closely resembles the General Industry Standard than the Notice of Proposed Rulemaking. OSHA's rationale for the need to collect information is set forth in the discussion generally in the introductory section of the preamble, and in the discussion of each of these specific provisions in the preamble.

Although OSHA received no public comments on the *Confined Spaces in Construction (29 CFR 1926, subpart AA)* ICR, it did receive a number of comments responding to the Notice of Proposed Rulemaking and some of those contained information relevant to the burden hour and costs analysis that OSHA considered when it developed the revised ICR associated with this final rule. The major comments directed to the subjects addressed in the ICR are discussed below, as well as in the preamble explanation accompanying the final rule. The remainder of the comments, such as general criticism or support for the concept of a permit space program, are not as directly focused on the ICR discussions and are addressed in the preamble. This latter group of comments also includes comments such as those addressing reevaluation of non-permit spaces and reclassification of permit spaces (§1203(f) and (g)(3)); continuous monitoring of permit spaces (§1204(e)(2) and (e)(1)(ii)); permitting process (§ 1205(a), (e), (f) and (h)); order f of evaluation by attendant (§ 1209(f)); summoning rescue services (§ 1209(g)); and consultation with employees and their authorized representatives (§ 1212(a)).

*A. PRCS danger signs in final § 1203(b)*

One group of comments addressed the sign communications addressed the requirement for PRCS danger signs in final § 1203(b) (proposed §1926.1209(a)). In its proposal, OSHA had specified a two-step process that involved notifying employees who would be in or near the permit space, and then posting a sign. One commenter asserted that limiting notification to employees who the entry employer anticipates will be in or near the PRCS, as provided in proposed §1926.1209(a)(1), would allow entry employers to avoid this requirement by claiming they did not anticipate a particular employee was going to be in or near the PRCS (ID-086, p. 5). Final §1926.1203(b)(1) requires notification to exposed employees, which addresses this commenter’s concern.

Other commenters argued that notifying employees near a PRCS, or employees on the jobsite, was burdensome, and that posting a warning sign would be sufficient to notify employees of the PRCSs and their hazards (ID-124, pp. 6-7; ID-133, p. 2).[[11]](#footnote-11) At least one other commenter argued that the barriers required by proposed §1926.1209(b) would not always be feasible, and that posting warning signs would be sufficient (ID-104, p. 3). OSHA agrees with these commenters, and drafted final §1926.1203(b)(1) to specify that notification by posting a warning sign would provide adequate notice to employees of the existence, location, and hazards of the PRCSs.

Another commenter was unsure whether the posting requirement applies when employers physically barricade the space (ID-099, p. 3). It does. Other commenters asked for clarification about which employers, particularly on multi-employer sites, are required to post the sign (ID-099, p. 3; -133, p. 2). OSHA provided a full explanation in the preamble.

*B. Information exchange requirements in § 1203(h) and (i)*

Paragraphs 1203(h) and (i) of the final rule include several information exchange and coordination requirements to provide timely information to entrants about known permit spaces and their hazards and to foster communication between multiple employees working on the same permit-space worksite, including communications between controlling contractors, host employers, and subcontractors. A detailed discussion of these provisions and the comments OSHA received on these issues is included in the preamble, while the comments addressing the scope, cost, and burdens of the information collections are addressed below.

Some commenters noted the similar requirements in the general industry standard and supported the information exchange and coordination requirements as critical to identifying known hazards, particularly those that would not otherwise be readily apparent to a subsequent entry employer. (213.1, pg. 1; 220.2, pg. 10). Another commenter noted that the proposed rule did not account for the fact that work taking place near a permit space can create hazards that could harm other employers’ employees inside the space (ID-210, pg. 317-18), so OSHA addressed this concern by requiring exchanges and coordination with employers of those workers as well.

One commenter objected to the proposed requirement that the entry employer inform both the controlling contractor and host employer of the procedures the entry employer planned to use in the permit space. The commenter asserted that the proposed provision was “an unnecessary burden [that] in some cases may be infeasible” (ID-124, pg. 6). This final rule eliminates the requirement that the entry employer share this information with the host employer, eliminating any difficulties an entry employer may have communicating with a host employer. Instead, OSHA designated the controlling contractor as the focal point of the information-exchange process.

Other commenters requested clarification about the type of information that must be conveyed, which OSHA provided in the preamble, or expressed concern that the final rule imposes a duty on controlling contractors or host employers to verify the accuracy of the information they receive from other employers (ID-117, pg. 21; ID-078, pg. 1; ID-098, pg. 1; 153, pg. 18). Consequently, one commenter predicted that this duty would cause controlling contractors and host employers to spend too much time and money overseeing their subcontractors' work (ID-120, pg. 2). Two different commenters, however, indicated that a controlling contractor should have even more responsibility, particularly when multiple employers will be working in the same area. (ID-108, pg. 4; ID-210, pg. 60). One of these latter commenters expressed concern that, without controlling contractor verification, “untrained or unqualified persons would be likely to enter the spaces where a self-declaring system of monitoring is employed” (ID-108, pg. 4).

On a construction worksite, the controlling contractor has overall authority for the site and is best situated to receive and disseminate information about the previous and current work performed there. Evidence introduced at the hearing indicated that the controlling contractor communicates with entry employers more frequently than the host employer does (ID-210, pg. 315-320). In contrast, the record shows that host employers are not always directly involved in the construction process and, therefore, are often less well situated than controlling contractors to facilitate information-sharing (ID-220, pg. 14-15

A number of commenters expressed different concerns about the information exchange requirements, which OSHA addressed in full in the preamble discussion of §1203(h) and (i). For example, one commenter asserted that employers will have difficulty managing and recording the information they are required to communicate (ID-078, pg. 2). However, the record indicates that many construction employers already are following the general industry confined spaces standard, which requires host employers to share similar information (see §1910.146(c)(8)(ii) and (c)(8)(iii)). This final rule also does not prescribe how employers are to gather, record, or maintain this information. This commenter urged OSHA to provide a database of relevant information that all employers could access; however, such an action is beyond the scope of this rulemaking.

Another commenter asserted that the information-exchange requirements would not be beneficial in the context of residential construction because conditions change too rapidly (making it likely that the information will be inaccurate when exchanged), and that the “small likelihood that the provision would ever be of any use to employee safety” should not outweigh the “burden of compliance” in residential construction (ID-117, pg. 20). This comment misses the point: this is an important safety issue because the information exchange protects workers from exposure to harmful conditions. The rapidly changing confined-space conditions on residential construction sites is a major reason OSHA is requiring these information exchanges. Moreover, only the presence of a permit-required confined space triggers the information-sharing requirements, and every entry into a permit-required confined space, by definition, exposes the entrants to a hazardous atmosphere or other serious hazard absent the measures implemented through the permit program. The commenter offered no support for the assertion that sharing information to help entry employers identify these hazards as quickly as possible, and before employee exposure occurs, would not be of “any use to employee safety.” In light of the record as a whole, OSHA believes that there will be an important safety benefit, and, therefore, does not find the commenter’s argument persuasive.

Another commenter expressed concern that the preliminary information exchange requirements would be not useful because they could be incomplete or partial (ID-117, pg. 20). Another commenter suggested an alternative approach to avoiding piecemeal information exchanges by having the controlling contractor or host employer withhold relevant information if the contractor does not request it. (See also ID-219.2, pg. 37 (marked as pg. 34)) This approach is contrary to the purpose of paragraphs §1203(h) through (i): to ensure that employers have as much information as possible, and in a timely manner, when preparing to work safely in a confined space. Subcontractors are not likely to be aware of hidden dangers, and are, therefore, unlikely to request information about them. To protect their employees working inside a confined space, subcontractors would likely submit a pro forma request for information to the controlling contractor and host when they initially begin work at any site, but it is not clear that such a process would be substantively different from the approach specified in this final rule, except that it would be involve an extra step.

Other commenters objected that controlling contractors are not in the best position to coordinate because they often are not on the site to provide coordination, do not have the knowledge or experience to correctly identify the hazards of a permit space, and may not know of the planned entry (ID-117, pg. 21; ID-075, pg. 6). These commenters also argued that if the final standard requires coordination, such coordination should be between the involved host employer and entry employer(s), as is the case under the general industry standard (ID-117, pg. 22; ID-075, pg. 6).

OSHA disagrees with these comments. An employer that meets the standard's definition of controlling contractor has “overall responsibility for construction at the worksite.” As noted earlier, other commenters agreed that controlling contractors were better suited than host employers to serve at the center of this process in construction activities. (ID-210, pg. 315-20; ID-220.2, pg. 14-15). By virtue of their responsibility for the entire worksite, controlling contractors schedule and coordinate activities among different subcontractors to ensure that they perform construction tasks in the correct sequence, in the proper manner, and with minimal delay between the steps on a project. The vague hypothetical scenarios presented by the commenters do not persuade the Agency that the coordination required by this final rule is a significant departure from the type of coordination required on a regular basis under existing work practices. Accordingly, OSHA concludes that controlling contractors, as the entities actually managing construction activities at a worksite, are better able than host employers to coordinate the activities of the other employers whose employees work in or around a permit space. Coordination of entry operations under final §1203(h)(4) is a critical component of this standard.

Nevertheless, OSHA has structured the coordination provision in the final rule to minimize additional responsibilities and provide appropriate flexibility for controlling contractors. If the controlling contractor’s employees will not enter the permit space, the controlling contractor may fulfill its coordination duty by relying on information provided by entry employers.

Another commenter asserted that, in an effort to comply with this coordination duty, the controlling contractor may impose redundant and unnecessary safety measures on other employers to protect the controlling contractor from liability (ID-120, pg. 2). This comment is speculative and unsupported by specific examples, so it is difficult for the Agency to respond to it other than to note that the final rule does not impose duplicative requirements on employers, nor does the final rule require the controlling contractor to do so. OSHA believes that the final rule provides employers with sufficient flexibility in discharging their coordination duties. This flexibility should reduce duplication of effort and any associated costs.

In addition, this commenter asserted that it would be difficult for a controlling contractor to fulfill the coordination duties absent explicit contractual authority to do so. Id. But under this final rule, controlling contractors are the only employers at a worksite that “have overall responsibility” for the site, so they are in the best position to coordinate the work schedule. If controlling contractors prefer to augment their authority through contractual provisions with subcontractors or host employers, this final rule does not prevent them from doing so.

One commenter objected to the debriefing requirement, stating that it was unnecessary if other employers were not already scheduled to enter the space. If another employer does eventually enter the space, the commenter asserted, the subsequent employer’s independent hazard assessment should suffice (ID-124, pg. 6). OSHA disagrees. The subsequent employer must make an independent hazard assessment, but the rationale for requiring information exchanges in the final rule still applies: that assessment may not reveal previously identified hidden or latent dangers or conditions, and the new entry employer would less prepared to protect its employees than if it obtained the information the information that the controlling contractor received from debriefing the previous entrant.

A different commenter asserted that host employers have no need for information about newly constructed confined spaces, and that the requirement to provide information to the host employer is an unnecessary paperwork burden (ID-017, pg. 2). OSHA disagrees. It is important for the controlling contractor to notify the host employer of information about the host’s property, particularly any new hazards identified during the entry. In many cases, the same controlling contractor may not be present for future construction activities involving the space, so the host employer’s information will helpful for future entries.

Other commenters submitted a variety of objections about the information-exchange provisions, including that the controlling contractor and host employer information-sharing requirements “do not reflect an appropriate application of responsibilities, and expand the duties of general contractors in the residential construction industry” (117.1, pg. 7), thereby requiring the host employer to maintain extensive files about each confined space located on its property, which “would be impractical and infeasible in today’s business context” (153, pgs. 18-19). Commenters also complained that the coordination requirements were “unworkable” (219.2, pg. 40 (marked as pg. 37)). However, another commenter responded:

Throughout the hearings, participants argued, on the one hand, that OSHA should simply extend the general industry standard to construction and, on the other, that the proposed standard would impose unprecedented and unwarranted burdens on controlling contractors, which would expose them to substantial liability. . . . [T]here is, in fact, little new in the proposed multi-employer provisions. And, there is nothing in the record that . . . suggested that the information-sharing requirements under §1910.146 have proven to be either burdensome or unnecessary. . . . [Based on the record,] the provisions requiring information sharing between the entity that has the greatest familiarity with the worksite and contractors coming into the worksite for brief, discrete periods of times have proven to be effective means of assuring that employees can work safely in confined spaces without imposing notable burdens or liability on the host employers.

(220.2, pg. 13-14.) OSHA agrees with this comment. There are not many substantive differences between the new standard and the general industry standard, and employers have not raised significant obstacles to compliance with the general industry standard during the two decades following OSHA’s promulgation of that standard. OSHA is confident that the new construction standard will also be workable.

*C. §1926.1213 Provision of documents to Secretary of Labor*

Final §1926.1213 requires each employer who must retain documentation under this final rule to make that documentation available to the Secretary of Labor, or a designee, upon request. At least one commenter objected to this requirement, asserting that OSHA should have to demonstrate a need for a specific document and obtain a subpoena, and that this requirement is a paperwork burden and will not increase safety (ID-075, p. 11). Requesting such documentation is already part of OSHA’s standard inspection practice under the general industry standard, as it is under many other standards. See CPL-02-00-100, CPL-02-00-150. This provision creates no new retention requirement – it merely confirms that when employers are already required to maintain records, they must make those records available to the Secretary. The provision provides employers with flexibility in where and how such records are maintained. Though there is a small paperwork cost[[12]](#footnote-12) to this provision, OSHA believes the safety benefit of identifying any potential safety hazards supports the inclusion of this provision.

*D. §1926.1203(d) and §1926.1204 Requirement for a written permit program*

The final rule, like the general industry standard, requires an employer to have a written confined space program. The proposed rule did not. Instead, the proposed rule (proposed §1926.1219(a)) provided that the employer could keep either a copy of the standard on the worksite or a copy of a program that incorporated the requirements of the standard. There were a number of comments on the content of the program, which are addressed in the preamble discussion of §1203(d) and §1204, but several commenters focused specifically on whether that program needed to be in writing and available at the worksite. At least one commenter recommended that OSHA require employers to have a written copy of the final rule on site, regardless of whether the employer had a written copy of its confined spaces program (ID-108, p. 4). Several other commenters disagreed with OSHA’s approach in the proposal, and urged OSHA to require a written confined space program as the general industry standard does. One commenter stated, “For a confined space program to be effective, it must be easy to understand and implement. . . . Providing employees with the generic terms of the standard - even if they read it - would not provide that kind of clarity. Instead, they need information specific to working at the particular worksite [which a program provides]” (ID-220, p. 28-29). Another commenter asserted, “Having a written program gives everyone a clear idea of what is required and their roles and responsibilities. It also is an important reference document. Construction contractors commonly have written safety programs, and many already have written confined space programs as well, so compliance should not be difficult” (ID-150, p. 3). Another commenter asserted that the written program in the general industry standard contributed to employee safety, and that the lack of a written program in the proposal diminished employee safety and also weakened training because “the vision of what is expected can not be focused” (ID-129, p. 3). A different commenter stated that requiring a written plan was the most important provision of the standard because it ensures that employers plan the permit space entry carefully and are familiar with the hazard analysis; it also provides an important reference document (ID-130, p. 1). The latter two commenters also noted that the lack of a written program in the proposal was a step backwards from the general industry rule.

OSHA wrote this final standard in performance-based language to be consistent with the general industry rule; consequently, this final standard does not provide the specific classification system and detailed step-by-step procedures for employers to follow found in the proposed rule. Therefore, this final rule is less suitable as a replacement for a written permit program than was the proposed rule. Accordingly, OSHA does not believe that maintaining a copy of this final rule on site, in lieu of having a written permit-space program, will ensure that an employer’s confined space procedures will provide adequate employee protection. OSHA agrees with the commenters who supported a written program.

The Agency believes that final §1926.1203(d) will effectively prevent unauthorized entry into PRCSs, and so protect employees from encountering PRCS hazards. The Agency also believes that it is necessary for employers to have a written confined space program at the worksite as a reference for employees involved in implementing safe entry procedures. A written program provides the basis for any permit-space entry operation, as well as a reference for guiding and directing supervisors and employees alike. A written program also will serve to assign accountability for all functions related to permit-space entry, and will aid in avoiding mistakes and misunderstandings. Additionally, because of the compliance flexibility and discretion that the standard provides to the employer, a written plan is essential to demonstrate that the employer took all aspects of permit-space entry into consideration. For these reasons, OSHA decided to specify in the final rule that the permit-space program be in writing. The written plan must, in combination with the permit itself, address the employer’s particular facts and circumstances to ensure that the procedures will protect employees’ safety. For all of the reasons above, requiring an employer to have and implement a written permit-space program, rather than simply relying on a copy this final rule, will enhance the protection afforded to employees from confined space hazards.

*E. §1204(n) – Annual review of the permit program*

Final §1926.1204(n) is identical to §1910.146(d)(14) except for grammatical revisions, and requires an employer to review its permit-space program at least every year and make revisions to its procedures as necessary. In response to one commenter’s request, OSHA clarified that “every year” refers to a calendar year. (See ID-075, p. 10).

Some commenters asserted that requirements to review the program are pointless because they do not ensure that employers will discover hazards in a timely manner (i.e., they will discover any problems after the fact) (ID-075, p. 10; -099, p. 2; -101, p. 2). OSHA did not design final §1926.1204(n) to ensure that employers discover hazards during a particular confined-space entry operation; the Agency designed other sections of this final rule for that purpose, such as §1926.1203(h) and final §1926.1204(m). As OSHA explained in 72 FR 67381 of the preamble to the proposed rule, the purpose of this annual review is to evaluate the effectiveness of the permit program and the protection provided to employees involved in PRCS entries during this period. OSHA understands that some employers will use the same comprehensive permit program for many different spaces in conjunction with more specific information provided on the permits for individual spaces. This requirement will help ensure that employers complete future PRCS entries in a similar manner if the entries were successful, or make changes to the permit program to improve future entry operations if any problems or concerns occurred (72 FR 67381).

*F. §1207(d) Training documentation*

Final §1926.1207(d), which is substantively similar to the general industry standard at §1910.146(g)(4), requires an employer to “maintain training records.” This final paragraph also requires employers to document the names of employees trained, the trainer’s name, and the dates of the training performed, and to make these records available for inspection by employees and their authorized representatives. Final §1207(d) differs from the general industry standard in that it provides more flexibility in the documentation of training, and it requires the retention of this documentation.

In addition to several comments requesting clarification about the contents of the training documentation, which are addressed in the preamble discussion of §1207(d), several commenters objected more generally to the requirement for such documentation. One commenter had several concerns about the retention of training records. First, the commenter asserted that this retention requirement is an unnecessary burden on employers (ID-099, p. 4). OSHA’s experience under the documentation requirements of other standards indicates that employers typically use existing training records to meet these documentation requirements and, as explained above, final §1926.1207(d) allows significant flexibility in the form of the records and how an employer must store them. Next, the commenter was unsure whether final §1926.1207(d) requires an employer to maintain training records when the employer lays off an employee and then rehires him or her (id). In the event an employee ceases to work for the employer, final §1926.1207(d) does not necessarily require the employer to continue to maintain or store the training records; however, there is an incentive for the employer to retain these records if there is a possibility that the employer might re-hire the employee, as in the example offered by the commenter. The standard does require the employer to maintain a set of training records for all employees performing confined space work, regardless of when the employer hired the employee, so if the employee is rehired the employer would be required to produce that employee’s training records or retrain the employee. This commenter also asserted that employers should be free to establish their own policy for retaining training records (id). Final §1926.1207(d) leaves the employer with discretion in developing its training-documents retention policy, and requires retention only until the employee ceases to work for the employer.

Another commenter asserted that final §1926.1207(d) should require employers to keep these training records on site (ID-031, p. 1). OSHA finds that such a requirement would be an unnecessary burden on employers. The purpose of the final requirement is to ensure that employers can document their employees’ training in case an issue arises with respect to the training (e.g., whether the employee received training, whether the training was adequate). Though the training records need to be readily available, it is not necessary for the employer to have immediate access to these records at the site. Requiring the employer to maintain the records and make them readily accessible for inspection, even offsite and/or in electronic form, is sufficient to accomplish the purpose of the provision.

*Submission to OMB*

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3507), OSHA requested OMB approval of the collection of information requirement described in this Supporting Statement. A copy of the ICR is available at [*http://www.reginfo.gov*](http://www.reginfo.gov/). On [INSERT DATE PRIOR TO PUBLICATION], OMB approved the collection of information requirements under OMB Control Number [INSERT PRIOR TO PUBLICATION]. The ICR will expire on [INSERT DATE PRIOR TO PUBLICATION], The Department of Labor notes that a Federal agency cannot conduct or sponsor a collection of information unless OMB approves it under the PRA-95, and displays a currently valid OMB control number. Also, notwithstanding any other provision of law, no employer shall be subject to penalty for failing to comply with a collection of information if the collection of information does not display a currently valid OMB control number.

**9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

The Agency will not provide payments or gifts to the respondents.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

The collection of information requirements specified by the Standard do not involve confidential information.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reason sons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

None of the collection of information requirements in the Standard require sensitive information.

**12. Provide estimates of the hour burden of the collection of information. The statement should:**

* **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
* **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83‑I.**
* **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 13.**

Table 1 below provides a summary of burden hour and cost estimates for the information collection requirements specified by the Standard.

**Burden Hour and Cost Determinations**

In the Final Economic Analysis, the Agency calculated loaded hourly labor rates, based on Bureau of Labor Statistics (BLS) data, in 2009 dollars. Total compensation for these occupational categories includes an adjustment of 42.045% percent for fringe benefits (Source: BLS “Employer Costs for Employee Compensation,” June 2011); this figure represents the average level of fringe benefits in the private sector. The costs of labor used in this analysis are, therefore, estimates of total hourly compensation. These hourly wagesare:

|  |
| --- |
|  |
| **Labor Category** | **Wage Rate** |
| Construction supervisor | $42.16  |
| Skilled worker | $29.60  |
| General construction employee | $24.93  |
| Clerical employee | $22.53  |
| Unskilled worker | $22.67  |

Source: U.S. Department of Labor, OSHA, Directorate of Standards and Guidance, Office of Regulatory Analysis, based on Bureau of Labor Statistics data. (FEA Table IV-7)

1. **Posting of Danger Signs (§ 29 CFR 1926.1203(b)(1))**

OSHA estimates that approximately 34,110 projects of the 51,551 projects with confined spaces must be marked with 322,020 warning signs. [[13]](#footnote-13), [[14]](#footnote-14) The language for the required danger sign is provided by the Standard (i.e., “Danger–Permit-Required Confined Space. Do Not Enter” or “Do Not Enter”). Therefore, in accordance with Section 1320.3(c)(2) of the Paperwork Reduction Act of 1995 (PRA-95), this requirement does not fall within the definition of a collection of information.

However, OSHA allows the employer to use “similar” language on the danger sign if desired. The Agency believes an employer would only rarely opt for the similar language; therefore, for purpose of this supporting statement, OSHA estimates that 6,440 (2 percent of the 322,020 signs) will include a sign with language other than that provided by OSHA. OSHA estimates that it takes five minutes (.08 hour) for an unskilled worker to install signs each year. OSHA estimates the annual burden hours and cost for this requirement are:

Burden hours: 6,440 signs x .08 hour = 515 hours

 Cost: 515 hours × $22.67 = $11,675

1. **Written Permit Space Programs (§§ 29 CFR 1926.1203(d)), §1204, 1211(a)(5), and 1212(a))**

Employers whose employees enter permit spaces are required to have and implement a written permit space program at the construction site. Employers must consult with affected employees and their authorized representatives on the development and implementation of all aspects of the permit space program.

OSHA estimates that 36,593 projects with confined spaces must obtain new written programs in the first year of implementation of the Standard.[[15]](#footnote-15)  OSHA notes that, in practice, an employer is likely to develop one, somewhat generic, program, and then apply it later to other projects.

The proposed ICR included one hour for employers to develop a written permit space program and 30 minutes to develop procedures for safely terminating PRCS entry operations for both planned and emergency conditions (see paragraphs (E) and (S) of Item 12). No commenter challenged this estimate. As discussed in more detail in the preamble of the final rule, OSHA notes the wide availability of written model permit-space programs provided by government entities, trade associations, and others, that employers could adapt with a limited number of revisions to comply with the new standard. OSHA made the determination that the time to develop procedures for safely terminating PRCS entry operations is minimal and therefore combined this time with the 1 hour associated with developing the general written permit program. Therefore, OSHA estimates that it will take one hour of supervisor time to consult with affected employees, obtain or develop the permit space program and procedures.

The Agency also estimates an additional hour to obtain or develop rescue procedures for the 3,225 projects not currently in compliance with paragraph 1204(i).[[16]](#footnote-16) Therefore, overall, taken with the 1 hour associated with the general written permit program time, the time to develop procedures has increased by 30 minutes from the proposed ICR.

The burden hour and cost estimates for obtaining or developing the written program are:

Burden hours: 36,593 projects × 1 hour (new program) = 36,593 hours

 Cost: 36,593 hours × $42.16 (supervisor rate) = $1,542,761

Burden hours: 3,225 projects without rescue procedures x 1 hour (rescue procedures) = 3,225 hours

 Cost: 3,225 x $42.16 (supervisor rate) = $135,966

The total burden hours for obtaining or developing the written program, as well as rescue procedures, is 39,818 and the total cost is $1,678,727.

1. **Testing and Monitoring**
2. **Atmospheric Testing (§§ 29 CFR 1203(e)(1)(i)-(iii), 1203(e)(2)(iii), 1204(b), 1204(e)(1), 1204(e)(1)(i))) and Atmospheric Monitoring (§§ 1203(e)(2)(vi), 1204(e)(1)(ii) and 1204(e)(2))**

The Agency estimates that atmospheric testing and atmospheric monitoring for all confined spaces, including those entered under alternative procedures, will take an average of 10 minutes (.17 hours) for a supervisor to perform per entry.[[17]](#footnote-17)  (The results of these tests and monitoring must be recorded initially and periodically on the permit in accordance with 29 CFR 1926.1206(k).) Based on estimates in the FEA, there are 8,718 entries on the 29,352 projects requiring testing and atmospheric monitoring.[[18]](#footnote-18) The estimated annual burden hours and cost for a supervisor to perform these requirements are:

Burden hours: 8,718 entries × .17 hours (atmospheric testing) = 1,482 hours

 Cost: 1,482 hours × $42.16 = $62,481

1. **Atmospheric Monitoring Set-Up and Calibration**

The Agency estimates that it would take a supervisor twenty minutes (.33 hours) to set-up continuous or periodic monitoring equipment at each of the 349,508 confined space entries requiring this control. The Agency estimates that it would take a supervisor thirty minutes (.5 hours) to calibrate monitoring devices at 1,205 confined space projects per year. [[19]](#footnote-19) OSHA’s inclusion of costs and burden hours for atmospheric monitoring set-up and calibration is a new cost not included in the proposed ICR. OSHA estimates that the annual burden hours and costs for a supervisor to perform these provisions are:

Burden hours: 349,508 entries/monitoring set-ups ×.33 hours (set-up) = 115,338 hours

 Cost: 115,338 hours x $42.16 = $4,862,650

Burden hours: 1,205 projects ×.5 hours (calibrate) = 602 hours

 Cost: 602 hours x $42.16 = $25,380

The total burden hours for atmospheric monitoring set-up and calibration is 115,940, and the total cost is $4,888,030.

1. **Alternate Procedure Certification and Documentation (§§ 29 CFR 1926.1203(e)(1)(v)) and 1203(e)(2)(ix))**

The Agency estimates that approximately 7,016 confined spaces will be entered each year under the alternate procedure in §1926.1203(e) of the Standard.[[20]](#footnote-20) A written certification must be prepared, to verify that the PRCS is safe for entry under the alternate procedures, containing the date, the location of the space, and the signature of the person providing the certification, in accordance with paragraph (e)(2)(ix). The Agency believes that 194,500 written certifications will be generated to verify safe-entry in these spaces.[[21]](#footnote-21) The certification must be made available to each employee who enters the space. Prior to entry of a confined space under the alternate procedure, a supervisor must document the initial assessment determinations and supporting data, including atmospheric testing results as required by paragraphs (e)(1)(v).[[22]](#footnote-22)

For purposes of this ICR, it is assumed that the documentation of initial assessment determinations and supporting data will also describe: the type and location of the confined space, physical hazards and methods for isolating those hazards, atmospheric hazards and the safe levels of these hazards, and methods for controlling the atmospheric hazards. In addition, it is assumed that this document includes an attachment or print-out record of the atmospheric testing results which includes information about: the equipment used, model number, calibration time and date, and the name and signature of the individual collecting the sample and will describe the determination made to show that if the ventilation system stops working, atmospheric hazards will remain at safe levels long enough for entrants to recognize the problem and safely exit the space. New attachments will be added when changes occur.[[23]](#footnote-23)

OSHA believes that it takes a supervisor 3 minutes (.05 hour) to develop and generate an alternate procedure space certification and documentation of initial assessment determinations and supporting data.[[24]](#footnote-24) The burden hour and cost estimates for developing and generating these documents are:

Burden hours: 194,500 alternate procedure space entries × .05 hour = 9,725 hours

 Cost: 9,725 hours × $42.16 (supervisor) = $410,006

The Agency estimates that employers would make the alternate procedure documentation (written certification and documentation of initial assessment determinations and supporting data), available to the employees entering an alternate procedure space, and to their authorized representatives, by having a construction employee post a copy of the document near the entrance to the alternate procedure space (the same assumption made in the previous ICR). OSHA estimates that it will take a clerical employee 5 minutes (.08 hours) to make the certification available by posting. The burden hour and cost estimates for posting the certificate is:

Burden hours: 194,500 alternate procedure space entries x .08 hours (post) = 15,560 hours

 Cost: 15,560 hours x $22.53 (clerical) = $350,567

1. **Evaluation and Identification of Confined Spaces (§§1203(e)(1)(i) and (iii), 29 CFR 1926.1203(f), 1926.1203(g)(4), 1204(b) and 1204(e)(5))**

OSHA estimates that of the 51,551 confined space projects[[25]](#footnote-25) subject to the Standard annually, approximately 20,296 are not in compliance and would require a competent person to evaluate, reevaluate or identify the confined spaces, and identify the physical hazards within the confined spaces, at the project.[[26]](#footnote-26) In the FEA, OSHA takes the cost of a supervisor’s wage for the competent person, and indicates that it would take that person an average of 12 minutes (.20 hours) of time to evaluate (or reevaluate) a permit space and to identify hazards per project. The estimated annual burden hours and cost for these requirements are:

Burden hours: 20,296 projects × .20 hours = 4,059 hours

 Cost: 4,059 hours × $42.16 = $171,127

1. **Written Certification that All Hazards Have Been Eliminated (Reclassification of a Permit Space) (§ 29 CFR 1926.1203(g)(3))**

The Agency estimates that 27,955 confined spaces will be reclassified each year (4.2 percent of the 665,595 total confined spaces each year). [[27]](#footnote-27)  A certificate must be prepared for each entry and made available to workers.

For purposes of this ICR, it is assumed that the certification document will describe: the type and location of the confined space, physical hazards and methods for isolating those hazards, atmospheric hazards, and methods of isolating the atmospheric hazards. It will also include the name and signature of the individual who completed isolating the physical hazards. New attachments will be added when changes occur.

OSHA believes that it takes a supervisor 3 minutes (.05 hour) to develop and generate a certificate associated with reclassification. The estimated annual burden hours and cost for these requirements are:

Burden hours: 27,955 permit spaces to be reclassified annually x .05 hour to develop and generate = 1,398 hours

 Cost: 1,398 hours × $42.16 = $58,940

OSHA estimates that it will take a clerical worker 5 minutes (.08 hours) to make the reclassification certification available to employees.[[28]](#footnote-28)

Burden hours: 27,955 permit spaces to be reclassified annually x .08 hours (post) = 2,236 hours

 Cost: 2,236 hours x $22.53 (clerical) = $50,377

1. **Information Exchange**

Although OSHA believes that employers on construction sites currently conduct the information exchange described in the Standard as part of their usual and customary business practices, in the FEA for this Standard (unlike in the PEA) the Agency included estimated costs for information-exchange requirements.

1. **Duties of Host Employer and Controlling Employer (§§ 29 CFR 1926.1203(h)(1)(i)-(iii), (h)(2)(i), (h)(5)(iii) and 1203(i))**

Host employers and the controlling contractor must exchange information about known permit spaces, such as location, past experiences with hazards in the spaces, any changes in hazards, and other pertinent information, both before entry operations begin and again after entry operations. In the FEA, OSHA estimates that a supervisor for the host employer and a supervisor for the controlling contractor will engage in 8 minutes of conversation per project to fulfill these information-exchange requirements. The Agency estimates that there are 35,324 confined space projects not currently in compliance with these information exchange provisions.[[29]](#footnote-29) The estimated annual burden hours and cost for these requirements are:

Burden hours: 35,324 confined space projects x 2 parties x .13 hours = 9,184 hours

 Cost: 9,184 hours x $42.16= $387,197

1. **Duties of Entry Employer and Controlling Employer (§§ 29 CFR 1926.1203(b)(2), (h)(2)(ii), (h)(3)(i)-(ii), (h)(5)(i)-(h)(5)(ii) and 1203(i))**

Controlling contractors and entry employers must exchange information about permit spaces and their hazards, both before entry operations begin and again after entry operations. In addition, under §1926.1203(b)(2), they also must share this information with employee representatives. OSHA estimates the information exchange requirement can be fulfilled with an average of 20 minutes of communication (one pre-entry and one post-entry, each lasting 10 minutes) between 3 parties (a supervisor for the controlling contractor and an entry employer plus a worker-authorized representative of that entry employer) to fulfill these information exchange requirements. The Agency estimates that there are 35,324 confined space projects not currently in compliance with these information exchange requirements and 64,019 entry employers are associated with these projects.[[30]](#footnote-30)  The estimated annual burden hours and cost for these requirements are:

Burden hours: 64,019 entry employers x 3 parties x 2 conversations x .17 hours = 65,299 hours

 Cost: 65,299 hours x $42.16 = $2,753,006

1. **Duties of Controlling Employer to Provide Information to Non-entry Employers and Entities (§ 29 CFR 1926.1203(h)(2)(ii) and 1203(i))**

Before entry operations begin, the controlling contractor must provide information about permit-required spaces to non-entry employers and entities whose employees’ activities could, either alone or in conjunction with the activities within a PRCS, foreseeably result in a hazard within the PRCS. To estimate the cost of compliance with this provision, OSHA anticipates that the controlling contractor’s supervisor will engage in one 5-minute (.08 hour) conversation with 10% of non-entry employers (29 non-entry employers) with nearby workers who could pose hazards.[[31]](#footnote-31)  The estimated annual burden hours and cost for these requirements are:

Burden hours: 29 non-entry employers x 2 supervisors x 1 conversation x .08 hours = 5 hours

 Cost: 5 hours × $42.16 = $211

1. **Entry Coordination (§§ 29 CFR 1926.1203(h)(4)(i), (h)(4)(ii) and 1203(i))**

The controlling contractor must coordinate entry operations when multiple employers enter simultaneously or when an employer makes an entry while other work is performed at the site (outside the confined space) that may result in a hazard within the confined space. In the FEA, OSHA estimates that three parties (the controlling contractor and two employers) will engage in one 10-minute conversation per coordinated entry. OSHA assumes that all estimated simultaneous entries will require coordination and estimates that 10 percent of all entries will be subject to hazards as a result of work outside the confined space. The Agency estimates that there are 63,546 simultaneous entries and 522,276 entries with hazards posed by non-entrant workers.[[32]](#footnote-32) The estimated annual burden hours and cost for these requirements are:

Burden hours: (63,546 number of simultaneous entries × 3 supervisors x .17) + (522,276 number of entries with hazards posed by non-entrant workers x 3 supervisors x .17) = 298,769 hours

 Cost: 298,769 hours × $42.16 = $12,596,101

1. **Lockout/Tagout (§§ 29 CFR 1204(c)(3) and 1206(i))**

The Agency estimates that it would take a skilled construction worker 10 minutes (.17 hours) of time per confined space entry requiring lockout or tagout of equipment to apply a tag and/or lock and to deenergize the power source for that equipment at 66,750 project entries.[[33]](#footnote-33) The estimated annual burden hours and cost for these requirements are:

Burden hours: 66,750 entries ×.17 hours = 11,347 hours

 Cost: 11,347 hours x $29.60 = $335,871

1. **Entry Permits (§§1926.1205(a),(c), and (f), 1206, and 1204(e)(6))**

Before any employee enters a PRCS, employers are required to prepare a written entry permit. The entry supervisor identified on the permit must sign the entry permit to authorize entry. The employer must cancel the entry permit when a condition that is not allowed under the entry permit arises in or near the permit space and suspension of the permit is not allowed. The permit must be made available for inspection by employees and their authorized representatives by posting it at the entry portal or by any other equally effective means, and retained for one year after cancellation. Employers must note on the permit any problems encountered during an entry operation so that appropriate revisions to the permit space program can be made.[[34]](#footnote-34)

OSHA estimates that of the 913,087 entry permits completed annually under the Standard, approximately 61,987 are not in compliance with requirements for issuance of the permit, while 487,537 entry permits are not currently in compliance with recordkeeping requirements.[[35]](#footnote-35) The Agency estimates it takes an average of 10 minutes (0.17 hour) for a supervisor to develop and generate the permit, including time for the documentation of any problems encountered during entry operations on the permit.[[36]](#footnote-36)  The burden hour and cost estimates for permits are:

Burden hours: 61,987 permits × .17 hour (develop and generate permit) = 10,538 hours

 Cost: 10,538 hours × $42.16 (supervisor) = $444,282

Entry permits must be made available for inspection by employees and their authorized representatives by posting or other equally effective means, and retained for one year after cancellation. The Agency estimates that 487,537 permits will incur recordkeeping costs.[[37]](#footnote-37) OSHA estimates that it will take a clerical employee 5 minutes (.08 hours) to post the permit and one minute (.02) to maintain the record. The burden hour and cost estimates for permits are:

Burden hours: 487,537 permits × .10 hour (post and maintain) = 48,754 hours

 Cost: 48,754 hours x $22.53 (clerical) = $1,098,428

1. **Annual Review of Written Permit Space Program (§29 CFR 1926.1204(m)) and Cancelled Permits (§29 CFR 1926.1204(n))**

OSHA estimates 5 minutes of supervisor time per project to review and revise 44,225 written permit space programs and the related cancelled permits and other available information annually, beginning in the second year after implementation of the Standard.[[38]](#footnote-38) The burden hour and cost estimates for reviewing and revising the written program are:

Burden hours: 44,225 projects × .08 hour = 3,538 hours

 Cost: 3,538 hours × $42.16 (supervisor rate) = $149,162

1. **Training Records (§29 CFR 1926.1207(d))**

The employer must maintain training records to show that the training required by paragraphs §1926.1207(a) through (c) of this standard has been accomplished. The training records must contain each employee’s name, the name of the trainers, and the dates of training. OSHA estimates that 241,811 workers and supervisors will be trained annually under the Standard.OSHA believes that each year, 13% of the 241,811 workers and supervisors, or 31,435 (241,811 x 13%) will be considered new workers and supervisors who receive new PRCS-related tasks, or are exposed to a new PRCS hazard.

The agency estimates that a clerical worker would take two minutes (.03 hours) to generate and one minute (.02) to maintain a training record. [[39]](#footnote-39)  Thus, the annual burden hours and costs for this provision are estimated to be:

Burden hours: ((241,811 workers and supervisors + 31,435 new workers and supervisors) x .05 hours to generate and maintain = 167 hours

 Cost: 819 hours × $22.53 (clerical rate) = $18,452

1. **Attendant Communications**
2. **Authorized Entrant Communications with Attendants (§§ 29 CFR 1926.1208 (c) and (d))**

The Agency assumes that authorized entrants, who are general construction employees, would take a total of fifteen minutes (.25 hours), during each of the 29,510 entries involving attendant supervision, to communicate with the attendant who is monitoring their status to: 1. enable the attendant to assess entrant status and to alert the entrants of the need to evacuate the space; and 2. to inform the attendant of any warning signs, symptoms, unusual behavior, other effects of PRCS hazards in themselves or other authorized entrants, or prohibited conditions.[[40]](#footnote-40) The Agency determines that the yearly burden hours and cost of these proposed provisions to be:

Burden hours: 29,510 entries x .25 hours = 7,378 hours

 Cost: 7,378 hours x $24.93 (general employee rate) = $183,934

1. **Attendant Communications (§§ 29 CFR 1926.1209(e), (f), (g) and (h)(1)-(3))**

OSHA estimates the following burden hours for an attendant, who is a general construction employee, to accomplish the following paperwork requirements: during each of the 29,510 entries involving attendant supervision,[[41]](#footnote-41) fifteen minutes (.25 hours) to communicate with authorized entrants as necessary while monitoring their status; for the one per cent (295) of entries in which an attendant observes unsafe conditions, one minute (.02 hours) to alert authorized entrants of the need to evacuate the PRCS; for the 92 entries estimated to involve rescue operations, two minutes (.03 hours) to recognize unsafe conditions, summon rescue (and other emergency services, if necessary) as soon as the attendant determines that assistance is needed, and inform the employer when a non-entry or entry rescue begins or an authorized entrant may need medical aid or assistance in escaping from the PRCS; and, for ten percent (2,951) of these projects, one minute (.02 hours) to warn any individual who is not an authorized entrant and approaches a PRCS during entry operations to stay away from the PRCS or to exit the PRCS if that individual enters the PRCS, as well as to inform the authorized entrant and entry supervisor of any such unauthorized entry. [[42]](#footnote-42) The estimated burdens hours and cost for these proposed requirements each year are:

Burden hours: (29,510 entries x .25 hours) + (295 entries x .02 hours) + (92 entry rescues x .03 hours) + (2,951 entries x .02 hours) = 7,446 hours

 Cost: 7,446 hours x $24.93 (general employee rate) = $185,629

1. **Rescue**

1. **Confirmation of Rescue Service Availability (§§ 29 CFR 1926.1210(d) and 1926.1211(c))**

For the 9,168 projects[[43]](#footnote-43) that may involve in-house entry rescue, OSHA estimates that a supervisor would take two minutes (.03 hours) to confirm, prior to PRCS entry, that emergency assistance would be available in the event that non-entry rescue fails, the means for summoning them are operable, and the service would notify the employer as soon as the services become unavailable.[[44]](#footnote-44) The estimated annual burden hours and cost of this provision are:

Burden hours: 9,168 projects x .03 hours = 275 hours

 Cost: 275 hours x $42.16 (supervisor rate) = $11,594

1. Informing the Rescue Service About the Hazards of the Space **(1211(a)(4))**

The Agency estimates that covered employers would perform 92 entries involving in-house rescue per year.[[45]](#footnote-45) The Agency estimates that it would take two minutes (.03 hours) to inform the rescue service of the hazards they may confront when called on to perform rescue at the site. OSHA determines that the burden hours and cost of this provision each year to be:

Burden hours: 92 entry rescues x.03 hours (inform) = 6 hours

 Cost: 6 hours x $42.16 = $253

1. **Providing SDS to Treating Medical Facility (§ 1926.1211(d))**

The agency estimates that a supervisor would take five minutes (.08 hours) to collect relevant information about a hazardous substance, if the substance is one for which the employer must keep an SDS or other similar information at the worksite, and provide or communicate it to a medical facility that is treating an employee exposed to the hazardous substance. The Agency assumes that 46 such treatments would occur each year.[[46]](#footnote-46)  The yearly burden hours and cost for this provision is estimated to be:

Burden hours: 46 treatments × .08 hours = 4 hours

 Cost: 4 hours x $42.16 (supervisor’s rate) = $169

1. **Access**
2. **Employee Access to Records (§§ 29 CFR 1926.1212(b), 1203(d), 1204(e)(6) and 1207(d))**

OSHA has no data on the number of access requests made by workers and their designated representatives and, therefore, the Agency estimates that 1% of all affected employees will request access to these types of records, not already made available by posting. The Agency estimates that it would take a supervisor five minutes (.08 hours) to disclose such records in response to an employee request. OSHA’s inclusion of costs and burden hours for disclosure of records to employees is a new cost not included in the proposed ICR. The estimated annual burden hours and cost of this proposed provision are:

Burden hours: 5,236 employees x .08 hours = 419 hours

 Cost: 419 hours x $42.16 (supervisor’s rate) = $17,665

**13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the**

**collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).**

 **• The cost estimate should be split into two components: (a) a total capital and start-up cost component**

 **(annualized over its expected useful life) and (b) a total operation and maintenance and purchase of**

 **service component. The estimates should take into account costs associated with generating,**

 **maintaining, and disclosing or providing the information. Include descriptions of methods used to**

 **estimate major cost factors including system and technology acquisition, expected useful life of capital**

 **equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and**

 **start-up costs include, among other items, preparations for collecting information such as purchasing**

 **computers and software; monitoring, sampling, drilling and testing equipment; and record storage**

 **facilities.**

 **• If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and**

 **explain the reasons for the variance. The cost of purchasing or contracting out information collections**

 **services should be a part of this cost burden estimate. In developing cost burden estimates, agencies**

 **may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission**

 **public comment process and use existing economic or regulatory impact analysis associated with the**

 **rulemaking containing the information collection, as appropriate.**

 **• Generally, estimates should not include purchases of equipment or services, or portions thereof, made:**

 **(1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated**

 **with the information collection, (3) for reasons other than to provide information or keep records for**

 **the government, or (4) as part of customary and usual business or private practices**.

**Capital and Operation and Maintenance Cost Determinations**

The assumptions used in calculating the capital, operation and maintenance cost estimates presented are based on information in the Final Economic Analysis for the Standard and supporting spreadsheets. From these determinations, the Agency estimates that the total capital, operations and maintenance cost of these requirements to be $ 1,017,859.

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**(A) Signs (§§ 1926.1203(b) and (b)(1); 1205(e)(2))**

The Agency estimates that 34,110 projects will obtain and post 6,440 warning signs with a useful life of 5 years. Each sign will cost $18.92.[[47]](#footnote-47)

 (6,440 signs /5 years) x $18.92 (sign) = $24,369 per year

(B) Tags (§§ 1926.1204(c)(3); 1206(i))

OSHA estimates that 16,501 projects will have 438,790 confined space entries each requiring an average of .2 tags (useful life of 5 years) at a cost of $1.61 per tag.[[48]](#footnote-48)

438,790 entries x .2 tags x $1.61 (tag) = $141,290 per year

(C) Gas Monitor (§§1203(e)(1)(iii), 1203(e)(2)(iii); 1204(b), 1204(e)(1), (e)(1)(i))) and §§ 1203(e)(2)(vi); 1204(e)(1)(ii) and (e)(2))

The cost of a gas monitor is $1,000 and 4,079 confined spaces projects will purchase the monitor, with a useful life of 5 years, to conduct all atmospheric testing and monitoring and record the results on the permit. [[49]](#footnote-49)

 (4,261 projects/5 years) x $1,000 (monitor) = $852,200 per year

14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 in a single table.

**Costs to Federal Government**

There are no costs to the Federal Government associated with these collections of information.

**15. Explain the reasons for any program changes or adjustments.**

The burden hours for the collection of information requirements contained in the final Standard result in a total program change of 654,514 hours. Although no costs were reported under Item 13 in the previous ICR, $1,017,859 costs are now estimated for signs, tags and gas monitors.

**16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection information, completion of report, publication dates, and other actions.**

OSHA will not publish the information collected under the Standard.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

OSHA lists current valid control numbers in §§1910.8, 1915.8, 1917.4, 1918.4, and 1926.5, and publishes the expiration date in a Federal Register notice announcing OMB approval of the information collection requirement. (See 5 CFR 1320.3(f)(3).) OSHA believes that this is the most appropriate and accurate mechanism to inform interested parties of these expiration dates.

**18. Explain each exception to the certification statement.**

OSHA is not seeking an exception to the certification statement.

**B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

This Supporting Statement does not contain any collection of information requirements that employ statistical methods.

**Table 1**

**Summary of Annual Burden Hour and Cost Estimates**

| **Collection of Information Requirement** | **Responses** | **Burden Hours** | **Item 12 Costs** |
| --- | --- | --- | --- |
| 1. **Posting of Danger Signs (§ 29 CFR 1926.1203(b)(1))**
 | 6,440 | 515 | $11,675 |
| 1. **Written Permit Space Programs (§§ 29 CFR 1926.1203(d)), 1204, 1211(a)(5), and 1212(a))**
 | 39,818 | 39,818 | $1,678,727 |
| 1. **Testing and Monitoring**
 |   |   |   |
| 1. Atmospheric Testing and Physical Inspection (§§ 29 CFR 1926.1203(e)(1)(iii), 1203(e)(2)(iii), 1204(b), 1204(e)(1), 1204(e)(1)(i))) and Atmospheric Monitoring (§§ 1203(e)(2)(vi), 1204(e)(1)(ii) and 1204(e)(2))
 | 8,718 | 1,482 | $62,481 |
| 1. Atmospheric Monitoring Set-Up and Calibration
 | 340,175 | 115,940 | $4,888,030 |
| 1. **Alternate Procedure Certification and Documentation**
 |   |   |   |
| 1. Develop and Generate (§§ 29 CFR 1203(e)(1)(v) and 1203(e)(2)(ix))
 | 194,500 | 9,725 | $410,006 |
| 1. Provide Access by Posting
 | 194,500 | 15,560 | $350,567 |
| 1. **Evaluation and Identification of Confined Spaces (§§ 29 CFR 1926.1203(f), 1203(g)(4), 1204(b), and 1204(e)(5))**
 | 20,296 | 4,059 | $171,127 |
| 1. **Written Certification that All Hazards Have Been Eliminated (Reclassification of a Permit Space) (§ 29 CFR 1926.1203(g)(3))**
 |   |   |   |
| 1. Develop and Generate
 | 27,955 | 1,398 | $58,940 |
| 1. Provide Access by Posting
 | 27,955 | 2,236 | $50,377 |
| 1. **Information Exchange**
 |   |   |   |
| 1. Duties of Host Employer and Controlling Employer (§§29 CFR 1926.1203(h)(1)(i)-(iii), (h)(2)(i), (h)(5)(iii) and 1203(i))
 | 70,648 | 9,184 | $387,197 |
| 1. Duties of Entry Employer and Controlling Employer (§§ 29 CFR 1926.1203(b)(2), (h)(2)(ii), (h)(3)(i)-(ii), (h)(5)(i)-(h)(5)(ii) and 1203(i))
 | 384,114 | 65,299 | $2,753,006 |
| 1. Duties of Controlling Employer to Provide Information to Non-entry Employers and Entities (§**§**  29 CFR 1926.1203(h)(2)(ii)) and 1203(i))
 | 58 | 5 | $211 |
| 1. Entry Coordination (§§ 29 CFR 1926.1203(h)(4)(i), (h)(4)(ii), and 1203(i))
 | 1,757,466 | 298,769 | $12,596,101 |
| 1. **Lockout/Tagout (§§ 29 CFR 1926.1204(c)(3) and 1206(i))**
 | 66,750 | 11,347 | $335,871 |
| 1. **Entry Permits (§§ 29 CFR 1926.1205(a), (c) and (f) and 1206))**
 |   |   |   |
| 1. Develop and Generate
 | 61,987 | 10,538 | $444,282 |
| 1. Provide Access by Posting and Maintain
 | 487,537 | 48,754 | $1,098,428 |
| 1. **Annual Review of Written Permit Space Program (§ 29 CFR 1926.1204(m)) and Cancelled Permits (§ 29 CFR 1926.1205(n))**
 | 44,225 | 3,538 | $149,162 |
| 1. **Training Records (§ 29 CFR 1926.1207(d))**
 | 273,246 | 819 | $18,452 |
| 1. **Attendant Communications**
 |   |   |   |
| 1. Authorized Entrant Communications with Attendants (§§ 29 CFR 1926.1208 (c) and (d))
 | 29,510 | 7,378 | $183,934 |
| 1. Attendant Communications (§§ 29 CFR 1926.1209(e), (f), (g) and (h)(1)-(3))
 | 32,848 | 7,446 | $185,629 |
| 1. **Rescue**
 |   |   |   |
| 1. Confirmation of Rescue Service Availability (§§ 29 CFR 1926.1210(d) and 1926.1211(c))
 | 9,168 | 275 | $11,594 |
| 1. Informing the Rescue Service about the Hazards of the Space (§ 1211(a)(4))
 | 92 | 6 | $253 |
| 1. **Providing SDS to Treating Medical Facility (§ 1926.1211(d))**
 | 46 | 4 | $169 |
| 1. **Access**
 |   |   |   |
| 1. Employee Access to Records (§§ 29 CFR 1926.1212(b), 1203(d), 1204(e)(6), and 1207(d))
 | 5,236 | 419 | $17,665 |
| **TOTAL** | **4,093,825** | **654,514** | **$25,863,884** |

1. The purpose of this Supporting Statement is to analyze and describe the burden hours and costs associated with provisions of the proposed Standard that contain paperwork requirements; this Supporting Statement does not provide information or guidance on how to comply with, or how to enforce, these provisions. [↑](#footnote-ref-1)
2. These types of spaces were classified as “controlled atmosphere confined spaces” (CACS) under the proposal. [↑](#footnote-ref-2)
3. In this context, the final rule uses “monitoring” to match the general industry language, and the term encompasses both the initial testing of atmosphere and the subsequent measurements. [↑](#footnote-ref-3)
4. Note: With regard to retention and access to employee exposure records, the employer must comply with the requirements of 29 CFR 1910.1020 (Access to employee exposure and medical records), which are made applicable to construction by 29 CFR 1926.33. [↑](#footnote-ref-4)
5. The introductory language in final § 1926.1204 provides that the entry employer must perform the procedures set forth in that section. OSHA simplified the introductory language from the language in § 1910.146(d), and edited the language to reflect this final standard’s use of the term “entry employer” when discussing an employer engaged in entry operations. OSHA made this change to clarify which employers must comply with these procedures on a multi-employer worksite. [↑](#footnote-ref-5)
6. Final § 1926.1203(a) requires each employer that has employees who may work in a confined space to ensure that a competent person identifies all confined spaces on the site, and to determine, through initial testing as necessary, which of these spaces are permit spaces. For purposes of estimating paperwork burden and costs, the Agency assumes this testing is the same testing required by § 1926.1204(e)(1) and (e)(1)(i), and for alternate procedures, the same testing required by § 1926.1203(e). [↑](#footnote-ref-6)
7. The Agency notes that, in interpreting the same language in the General Industry Standard, OSHA permitted employers to rely on documentation of quarterly reviews, rather than cancelled entry permits, in conducting its annual review, so long as that documentation contains the same information required to be in the cancelled entry permits, including “any information regarding problems encountered during entry operations that was recorded to comply with paragraph (e)(6)” and “any revision of the program that resulted from such problems.” See 10/21/93 letter to John Anderson, available at [www.osha.gov](http://www.osha.gov). The Agency will accept the equivalent documentation under this construction final rule. [↑](#footnote-ref-7)
8. The note in 29 CFR 1926.33 makes the provisions of 29 CFR 1910.1020 (Access to employee exposure and medical records) applicable to construction operations. [↑](#footnote-ref-8)
9. Paragraph 1203(a) requires that a competent person, which Section 1202 defines, have training. The training required for competent persons under the Standard is the same training required under Section 1207. [↑](#footnote-ref-9)
10. Paragraph 1212(a) is nearly identical to § 1910.146(l)(1). This employee participation requirement was not required in the proposed rule. (Employee participation in the proposed rule was limited to the requirement in proposed rule paragraph 1204(e) that employers offer entry employees the opportunity to observe the evaluation and monitoring of the permit space.) [↑](#footnote-ref-10)
11. References in parentheses are to exhibits or transcripts in the docket for this rulemaking. Documents from the Subpart AA rulemaking record are available under Docket OSHA-2007-0026 on the Federal eRulemaking Portal at http://www.regulations.gov or in the OSHA Docket Office. The term “ID” refers to the column labeled “ID” under Docket No. OSHA-2007-0026 on http://www.regulations.gov. This column lists individual records in the docket. This ICR will identify records only by the last three digits of the record, such as “ID-032” for OSHA-2007-0026-0032. [↑](#footnote-ref-11)
12. Usually, OSHA will request access to records during compliance inspections. While the Agency understands there are costs associated with providing OSHA access to records during compliance inspections, information collected by the Agency during an investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost for this access provision in Items 12 and 14 of this Supporting Statement. [↑](#footnote-ref-12)
13. While the ICR associated with the proposed rule (“the proposed ICR”) often referenced the number of confined space entries to estimate burden hours and costs, this ICR frequently uses the number of confined spaces projects, rather than entries, to be consistent with FEA estimates. [↑](#footnote-ref-13)
14. “Confined Spaces Compliance Costs” FEA spreadsheet, “Giving Notice of CS to Employees” and Table 1 of this Supporting Statement. (In the proposed ICR, OSHA took the costs and burdens associated with permit required spaces separately from spaces where ventilation-only entries are conducted in accordance with the alternate procedures of final rule paragraph 1926.1203(e). These ventilation-only spaces were referred to as “controlled-atmosphere confined spaces” (CACSs) in the proposed rule. The final rule does not include the more complex proposed classification system, thus, spaces which would have been identified as CACSs in the proposal are included in the permit space calculations where appropriate.) [↑](#footnote-ref-14)
15. Source: “Confined Spaces Compliance Costs” FEA spreadsheet, “Annual Review” and Table 2 of this Supporting Statement. [↑](#footnote-ref-15)
16. Source: “Confined Spaces Compliance Costs” FEA spreadsheet, “Rescue Procedures and Training.” Also see Table 3 of this Supporting Statement. [↑](#footnote-ref-16)
17. OSHA considers the atmospheric testing and monitoring and physical inspection requirements to be antecedent events associated with the alternate procedure and permit documentation. [↑](#footnote-ref-17)
18. Source: “Confined Spaces Compliance Costs” FEA spreadsheet, “Testing Costs,” “Total Number of Projects Requiring Control,” “% of All Projects that Should Use Some Type of Testing,” and “Adjusted No. of Entries Requiring This Control” Also see Table 5 of this Supporting Statement. [↑](#footnote-ref-18)
19. Source: FEA spreadsheet, “Continuous Monitoring,” “Periodic Monitoring” and “Calibration” worksheets. These costs are included as antecedent events to the recording of the monitoring results on the permit. [↑](#footnote-ref-19)
20. Source: FEA spreadsheet, “Issue Permits” worksheet, “Number of entries not needing permit.” [↑](#footnote-ref-20)
21. See Table 7 of this Supporting Statement. [↑](#footnote-ref-21)
22. Both section 1926.1203(e)(1)(v) and 1203(e)(2)(ix) require employers, before entry, to document the basis for use of the alternate procedures, and to make that documentation available to each employee who enters the permit space or to that employee’s authorized representative. In the proposed ICR, OSHA estimated two separate documentation requirements prior to entry and during entry of a controlled-atmosphere confined space (under proposed 1926.1216 (a)(3) and (d)(4)). However, under the final Standard, the Agency believes that only one instance of documentation of the basis for use of the alternate procedures would be needed. Thus, OSHA takes the burden for employers to develop, generate and post the certificate under 1926.1203(e)(1)(v) and 1926.1203(e)(2)(ix). [↑](#footnote-ref-22)
23. The burden and cost associated with these attachments are taken in paragraph C.1. of Item 12. [↑](#footnote-ref-23)
24. Source: “Confined Spaces Compliance Costs” FEA spreadsheet, “Issue Permits,” “Written Verification of Safe[*sic*].” In the NPRM ICR, the Agency included .17 hours for completion of the alternate procedure verification (see paragraph N of the NPRM ICR), the Agency believes that this estimate was an overestimation because the time for conducting hazard evaluation and obtaining atmospheric testing and monitoring results is accounted for separately in the FEA. These costs are now included in Paragraphs C. and E. of Item 12 in this ICR. [↑](#footnote-ref-24)
25. Source: “Confined Spaces Compliance Costs” FEA spreadsheet, “Main Database,”“Total Number of Projects with Confined Spaces.” [↑](#footnote-ref-25)
26. Source: “Confined Spaces Compliance Costs” FEA spreadsheet, “Classify.” Also see Table 8 of this Supporting Statement. [↑](#footnote-ref-26)
27. Source of the total number of confined spaces: “Confined Spaces Compliance Costs” FEA spreadsheet, “Main Database.” To determine the percentage of reclassified spaces each year, OSHA used assumptions from the 2009 Confined Spaces in General Industry ICR. [↑](#footnote-ref-27)
28. Source for 5 minutes total recordkeeping time: “Confined Spaces Compliance Costs” FEA spreadsheet, “Issue Permits,” “Written Verification of Safe[*sic*].” [↑](#footnote-ref-28)
29. Source of time estimate and total projects: “Confined Spaces Compliance Costs,” FEA spreadsheet, “Info Exchange.” [↑](#footnote-ref-29)
30. Source for total number of entry employers: “Confined Spaces Compliance Costs,” FEA spreadsheet, “Info Exchange.” [↑](#footnote-ref-30)
31. The number of non-entry employers was calculated from estimates of the average number of non-entry workers per project, modeled upon an average employer size of 20 employees. The estimate of non-entry employers is calculated using data from the “Confined Spaces Compliance Costs” FEA spreadsheet, “Information Exchange,” “Non-entry employers with “nearby” workers who could pose hazard.” [↑](#footnote-ref-31)
32. Source: “Confined Spaces Compliance Costs” FEA Spreadsheet, “Information Exchange,” “Total simultaneous entries” and “Number of confined space entries which could be endangered by non-entrant workers.” [↑](#footnote-ref-32)
33. Source: “Confined Spaces Compliance Costs” FEA Spreadsheet, “LOTO” and Table 9 of this Supporting Statement. [↑](#footnote-ref-33)
34. OSHA considers the requirements of 1204(e)(2), suspension of the entry permit, and 1204(e)(3), cancelling the entry permit when a condition that is not allowed under the entry permit arises in or near the permit space, as antecedent events associated with the employer’s notation of problems encountered during entry operations under 1205(f). [↑](#footnote-ref-34)
35. Source: “Confined Spaces Compliance Costs” FEA Spreadsheet, “Issue Permits,” “Complete Entry Permits.” Also see Table 10 of this Supporting Statement. (The Agency notes that the permit estimates are overestimations because suspension of permits under 1926.1205(e)(2) now provides an alternate approach to cancellation of permits.) [↑](#footnote-ref-35)
36. In the proposed ICR, OSHA estimated that it would take 15 minutes (.25 hours) for a general construction worker to generate and post each entry permit, one minute for a supervisor to certify and sign the permit, 10 minutes to document hazards on the permit and 1 minute to retain the permit (see Item 12, paragraphs (F), (G), (H) and (S)). OSHA believes that the previous ICR overestimated the time needed to document hazards on the permit, which is already included in the time allocated to generate and develop the permit. [↑](#footnote-ref-36)
37. Source: “Confined Spaces Compliance Costs” FEA Spreadsheet, “Issue Permits,” “Recordkeeping.” . The Agency assumes recordkeeping costs for 653,512 permits. This includes all permits not currently in compliance, and 50% of permits in compliance (61,987 + (913,087 –61,987) x .5)). [↑](#footnote-ref-37)
38. See Table 11 of this Supporting Statement for calculations on the number of projects. (In the proposed ICR, the Agency included 15 minutes of supervisor time to review each of 115,963 cancelled entry permits and other available related information collected each year. The Agency believes that this estimate was an overestimation.) [↑](#footnote-ref-38)
39. Source: “Confined Spaces Compliance Costs” FEA Spreadsheet, “Training” and “Super. Training” worksheets (one additional minute added to maintain record). Also see Table 12 of this Supporting Statement. In the second year, the time allotted for existing employee’s records will decrease to account only for maintenance of the record, as the records will already have been generated. In the proposed ICR, training records were broken out as two separate calculations (for CACSs and all others); this calculation combines all training records. The FEA estimates include training records for all training delivered under the Standard, including rescue, CPR and PPE training for workers on in-house rescue teams, and gas-monitor and gas-monitor calibration training. [↑](#footnote-ref-39)
40. Except for the entries estimated to involve rescue operations, the applied percentages and time estimates are estimates retained from the proposed ICR. Source for projects with attendants: “Confined Spaces Compliance Costs” FEA Spreadsheet , “Attendant Communications.” Also see Table 13 of this Supporting Statement for attendant entry calculation. The estimate of entries involving rescue operations is based on the analysis below in Item 12, Section M.2., Informing the Rescue Service About the Hazards of the Space. [↑](#footnote-ref-40)
41. Ibid. [↑](#footnote-ref-41)
42. The applied percentages and time estimates are estimates retained from the proposed ICR. These estimates are for the purpose of calculating collection of information burden hours and costs only and are not direct estimates. The proposed ICR also contained burden hours and costs for a supervisor to summon rescue services under proposed 1211(h)(2); however, under the final rule, this is solely an attendant responsibility. [↑](#footnote-ref-42)
43. Source: “Confined Spaces Compliance Costs” FEA Spreadsheet, “Rescue” worksheet. Also see Table 14 of this Supporting Statement. [↑](#footnote-ref-43)
44. The time estimate in this Section is retained from the proposed ICR. [↑](#footnote-ref-44)
45. The Agency conservatively estimates that 1% of the 9,168 projects prepared to perform in-house entry rescue would conduct an actual rescue (92 entry rescues). This estimate is for the purpose of calculating collection of information burden hours and costs only and is not a direct estimate. [↑](#footnote-ref-45)
46. . As stated above, the Agency conservatively estimates that 1% of the 9,168 projects prepared to perform in-house entry rescue would conduct an actual rescue (92 entry rescues). The Agency estimates that 50% of these rescues (46) would involve providing an SDS to a treating medical facility. This estimate is for the purpose of calculating collection of information burden hours and costs only and is not a direct estimate [↑](#footnote-ref-46)
47. OSHA notes that this calculation is an overestimate because it does not account for reuse of the signs for different projects. [↑](#footnote-ref-47)
48. Source: “Confined Spaces Compliance Costs” FEA Spreadsheet, “Lockout Tagout.” Also see Table 15 of this Supporting Statement. [↑](#footnote-ref-48)
49. Source: “Confined Spaces Compliance Costs” FEA Spreadsheet ,“Any Testing.” Also see Table 16 of this Supporting Statement. OSHA notes that this calculation is an overestimate because it does not account for reuse of the monitors. [↑](#footnote-ref-49)