**SUPPORTING STATEMENT FOR THE INFORMATION**

**COLLECTION REQUIREMENTS FOR THE STANDARD**

**ON PERMIT-REQUIRED CONFINED SPACES (29 CFR 1910.146)**[[1]](#footnote-1)

**OMB CONTROL NO. 1218-0203 (August 2021)**

This ICR is requesting an extension of a currently approved data collection.

**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 ensure 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 according 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 after the promulgation of the relevant standard” (29 U.S.C. 655).

About 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”) published at 29 CFR 1910.146 a safety standard for general industry regulating permit-required confined spaces (i.e., “the Standard"). The paperwork provisions of the Standard specify requirements for developing and maintaining inspection records.

**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. The information collection requirements are used by employers and employees whenever an entry is made into permit-required confined spaces. The following sections describe who uses the information collected under each requirement, as well as how they use it. The purpose of the information is to ensure that employers systematically evaluate the dangers in permit spaces before entry is attempted, and to ensure that adequate measures are taken to make the spaces safe for entry. In addition, the information is needed to determine, during an OSHA inspection by a compliance safety and health officer, if employers comply with the Standard.

Section 1910.146(c)(2) requires the employer to post danger signs to inform exposed employees of the existence and location of, and the danger posed by, permit spaces.

Section 1910.146(c)(4) requires the employer to develop and implement a written “permit-space program” when the employer decides that its employees will enter permit spaces. The written program is to be made available for inspection by employees and their authorized representatives. Section 1910.146(d) provides the employer with the requirements of a permit-required confined space program (“permit-space program”) required under this paragraph.

Section 1910.146(c)(5)(i)(E) requires that the determinations and supporting data specified by paragraphs (c)(5)(i)(A), (c)(5)(i)(B), and (c)(5)(i)(C) of this section are documented by the employer and are made available to each employee who enters a permit space or to that employee’s authorized representative.

Under paragraph (c)(5)(ii)(H) of §1910.146, the employer is required to verify that the space is safe for entry and that the pre-entry measures required by paragraph (c)(5)(ii) of this section have been taken, using a written certification that contains the date, the location of the space, and the signature of the person providing the certification. The certification is to be made before entry and is required to be made available to each employee entering the space or to that employee’s authorized representative. Sections 1910.146(c)(5)(ii)(C) and (c)(5)(ii)(F) require atmospheric hazard testing.

Section 1910.146(c)(7)(iii) requires the employer to document the basis for determining that all hazards in a permit space have been eliminated using a certification that contains the date, the location of the space, and the signature of the person making the determination. The certification is to be made available to each employee entering the space or to that employee’s authorized representative.

Section 1910.146(c)(8)(i) requires that the employer inform the contractor that the workplace contains permit spaces and that permit space entry is allowed only through compliance with a permit space program meeting the requirements of this section. Section 1910.146(c)(8)(ii) requires that the employer apprise the contractor of the elements, including the hazards identified and the host employer's experience with space, that make the space in question a permit space. Section 1910.146(c)(8)(iii) requires that the employer apprise the contractor of any precautions or procedures that the host employer has implemented for the protection of employees in or near permit spaces where contractor personnel will be working. Section 1910.146(c)(8)(v) requires the employer to debrief the contractor after the entry operations regarding the permit space program followed and regarding any hazards confronted or created in permit spaces during entry operations.[[2]](#footnote-2)

Section 1910.146(c)(9)(iii) requires that the contractor inform the host employer of the permit space program that the contractor will follow and of any hazards confronted or created in permit spaces, either through a debriefing or during the entry operation.[[3]](#footnote-3)

Section 1910.146(d)(5)(iii) provides for testing of atmospheric hazards.[[4]](#footnote-4) Section 1910.146(d)(5)(vi) requires the employer to immediately provide each authorized entrant or that employee's authorized representative with the results of any testing conducted following paragraph (d) of this section.

Section 1910.146(d)(14) requires employers to review the permit space program, using the canceled permits retained under paragraph (e)(6) within 1 year after each entry and revise the program as necessary, to ensure that employees participating in entry operations are protected from permit space hazards.

Section 1910.146(e)(1) requires the employer to document the completion of measures required by paragraph (d)(3) by preparing an entry permit before employee entry is authorized. Paragraph (f) of §1910.146 specifies the information to be included on the entry permit. Paragraph (e)(3) requires that the employer make the completed permit available at the time of entry to all authorized entrants by posting the permit at the entry portal or by any other equally effective means so that the entrants can confirm that pre-entry preparations have been completed. Paragraph (e)(6) requires the employer to retain each canceled entry permit for at least one year; any problems encountered during an entry operation must be noted on the pertinent permit so that revisions to the permit space program can be made.

Section 1910.146(g)(4) requires that the employer certify that the training required by paragraphs (g)(1) through (g)(3) has been accomplished by preparing a written certification record.[[5]](#footnote-5)

Section 1910.146(h)(3) requires the employer to ensure that all authorized entrants communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space as required by paragraph (l)(6) of the Standard. Section 1910.146(h)(4) requires the employer to ensure that all authorized entrants alert the attendant whenever the entrant recognizes any warning sign or symptom of exposure to a dangerous situation (paragraph ((h)(4)(i)), or the entrant detects a prohibited condition (paragraph (h)(4)(ii)).[[6]](#footnote-6)

Section 1910.146(i)(5) requires the employer to ensure that each attendant communicates with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space under the conditions specified in paragraphs (i)(6)(i)-(i)(6)(iv) of the Standard. Section 1910.146(i)(7) requires the employer to ensure that the attendant summons rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards. Section 1910.146(i)(8) requires that the employer ensure that the attendant warns unauthorized persons that they must stay away from the permit space (paragraph (i)(8)(i)); advise unauthorized persons that they must exit immediately if they have entered the permit space (paragraph (i)(8)(ii)), and inform authorized entrants and the entry supervisor if unauthorized persons have entered the permit space (paragraph (i)(8)(iii)).

Section 1910.146(j)(2) requires the employer to ensure that each entry supervisor verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted, and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin.[[7]](#footnote-7)

Section 1910.146(k)(1)(i) requires the employer to evaluate a prospective rescuer's ability to respond to a rescue summons promptly, considering the hazard(s) identified; Section 1910.146(k)(1)(ii) requires the employer to evaluate a prospective rescue service's ability, in terms of proficiency with rescue-related tasks and equipment, to function appropriately while rescuing entrants from the particular permit space or types of permit spaces identified.[[8]](#footnote-8) Section 1910.146(k)(1)(iv) requires that the employer inform each rescue team or service of the hazards they may confront when called on to perform a rescue at the site.Section 1910.146(k)(1)(v) requires that the employer provide the rescue team or service selected with access to all permit spaces from which rescue may be necessary so that the rescue service can develop appropriate rescue plans.[[9]](#footnote-9)

Section 1910.146(k)(2)(ii) requires that the employer train affected employees to perform assigned rescue duties. The employer must ensure that such employees complete the training required to establish proficiency as an authorized entrant, as provided by paragraphs (g) and (h) of this section. Section [1910.146(k)(2)(iii)](http://www.osha.gov/pls/oshaweb/owalink.query_links?src_doc_type=STANDARDS&src_unique_file=1910_0146&src_anchor_name=1910.146(k)(2)(iii)) requires that the employer train affected employees in basic first-aid and cardiopulmonary resuscitation (CPR).[[10]](#footnote-10)

Section 1910.146(k)(4) requires that if an injured entrant is exposed to a substance for which a “Material Safety Data Sheet” (MSDS) [now referred to as an SDS (Safety Data Sheet)] or other similar written information is required to be kept at the worksite, that the employer make the MSDS or written information available to the medical facility treating the exposed entrant.[[11]](#footnote-11)

Section 1910.146(l)(1) requires that employers consult with affected employees and their authorized representatives on the development and implementation of all aspects of the permit space program required by paragraph (c).[[12]](#footnote-12)

Section 1910.146(l)(2) requires that employers make all information required to be developed by this section available to affected employees and their authorized representatives.

**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 may use automated, electronic, mechanical, or other technological information collection techniques, or other forms of information technology (e.g., electronic submission of responses) when establishing and maintaining the required records. The Agency wrote the paperwork requirements of the Standard in the performance-oriented language (i.e., in terms of what data to collect, not how to record the data).

**4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item A.2 above.**

The requirements to collect and maintain information are specific to each employer and employee involved, and no other source or agency duplicates these requirements or can make the required information available to OSHA (i.e., the required 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 collection of information requirements specified by the Standard do not have a significant impact on a substantial number of small entities.

**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 necessary to effectively regulate permit-required 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 required information collection, or delay in providing this information, employees may be subject to an increased risk of death and serious injury when working in permit-required 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 statistical data classification that has not been reviewed and approved by OMB**
* **that includes a pledge of confidentially 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 confidentially to the extent permitted by law.**

No special circumstances exist that require employers to collect information using the procedures specified by this item. The requirements are within the guidelines outlined in 5 CFR 1320.5.

**8. 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.**

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the *Federal Register* on June 23, 2021 (86 FR 32978) requesting public comment on its proposal to extend the Office of Management and Budget’s approval of the collection of information requirements found in the Standard on Permit-Required Confined Spaces (29 CFR 1910.146). This notice is part of a preclearance consultation program that provides the general public and government agencies with an opportunity to comment. The agency did not receive any comments in response to this notice.

**9. Explain any decision to provide any payments 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 paperwork 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 reasons 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 provisions 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. General, 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.**
* **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.**

**Burden-Hour and Cost Determinations**

Estimates of the burden hours for each collection of information requirement are shown below. Information regarding the number of permit spaces, establishments with permit spaces, and permit space entrants were based on information derived from Table II-1 of the Final Regulatory Impact Analysis and Regulatory Flexibility Analysis (RIA) of the final Permit-Required Confined Space Standard (58 FR 4542, January 14, 1992).

First, the Agency determined the ratio between the numbers of establishments with permit spaces, number of permit spaces, and number of permit space entrants in the 1992 Analysis and then applied this ratio to update the numbers of establishments with permit spaces and permit space entrants. Second, OSHA updated the Standard Industrial Classification (SIC) Codes used in the 1992 Analysis to the North American Industry Classification System (NAICS) codes[[13]](#footnote-13); then used the number from the U.S. Census Bureau’s 2018 County Business Patterns Survey to determine the number of new establishments. Third, OSHA applied the ratios from the 1992 analysis to the new establishments to arrive at new estimates for the number of permit spaces, establishments with permit spaces, and permit space entrants.

## Respondent Burden-Hour and Cost Burden Determinations

The Agency determined the wage rates from mean hourly wage earnings to represent the cost of employee time.  For the relevant standard occupational classification category, OSHA used the wage rates reported in the Bureau of Labor Statistics, U.S. Department of Labor.  *Occupational Employment and Wage Statistics (OEWS), May 2020* [date accessed: April 12, 2021].  (OES data is available at <https://www.bls.gov/oes/tables.htm>.  To access a wage rate, select the year, “Occupation Profiles,” and the Standard Occupational Classification (SOC) code.)

To derive the loaded hourly wage rate presented in the table below, the agency used data from the Bureau of Labor Statistics (BLS) *Occupational Employment and Wage Statistics (OEWS*), as described in the paragraph above.  Then, the agency applied to the wage rates a fringe benefit markup based on data found in Table 2 of the following BLS release: *Employer Costs for Employee Compensation* news release text, released 10:00 AM (EDT), March 18, 2021 (<https://www.bls.gov/news.release/archives/ecec_03182021.htm>).BLS reported that for civilian workers, fringe benefits accounted for 31.3 percent of total compensation and wages accounted for the remaining 68.7 percent.  To calculate the loaded hourly wage for each occupation, the agency divided the mean hourly wage rate by 1 minus the fringe benefits. These results are summarized in Table 1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TABLE 1: WAGE-HOUR ESTIMATES** | | | | |
| **Occupational Title** | **Standard Occupation Code** | **Mean Hour Wage Rate**  **(A)** | **Fringe Benefits (B)** | **Loaded Hourly Wage Rate**  **(C) = (A)/((1-(B))** |
| Professional/Manager | 51-1011 | $32.12 | .313 | $46.75 |
| Clerical/Secretary | 43-6014 | $19.43 | .313 | $28.28 |
| Non-supervisory laborer | 51-0000 | $20.08 | .313 | $29.23 |

1. **Preparation of a "Danger--Permit Required Confined Space" Sign**

**(§ 1910.146(c)(2))**

OSHA estimates that approximately 4,660,201permit spaces are entered annually, half of which (2,330,101) are susceptible to inadvertent entry and, therefore, must be marked by a warning sign. Signs are expected to last five years (averaged out to an annual rate of 20 percent).

The language for the required warning sign is provided by the Standard (i.e., “Danger–Permit-Required Confined Space. Do Not Enter”). Therefore, following 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 warning sign if desired. The Agency believes an employer would only rarely opt for the similar language; therefore, for purposes of this supporting statement, OSHA estimates that 2 percent of the susceptible spaces will include a warning sign with language other than that provided by OSHA. OSHA estimates that it takes five minutes (5/60 hours) for a laborer to make up the language for these signs.

Burden hours: 2,330,101 spaces × .02 × .20 × 5/60 hour = 776.66 hours

Cost: 776.66 hours × $29.23 = $22,701.96

(B)(1) **Preparation of a written permit-space entry program (§§ 1910.146(c)(4),**

**1910.146(d) and 1910.146(l)(1))**

Employers whose employees enter permit spaces are required to develop, implement, and use an entry permit system that includes written procedures describing how permits are to be issued at the establishment. OSHA estimates that there are 214,994establishments, with 4,660,201 permit spaces, subject to these provisions. The RIA posits that an employer without a written program can expect to spend a minimum of 16 hours developing a written program. Since the Standard has been in effect for several years, OSHA believes that existing establishments have already prepared and implemented their permit-space entry program. The Agency has no definitive number of new establishments that will be required to develop a written program; therefore, the Agency is using an estimate of 5 percent of the total number of establishments (10,750) to account for new establishments that must prepare a written permit space entry program. For purposes of this paperwork package, OSHA is assuming that all “new” establishments have no written program.

Burden hours: 10,750 new establishments × 16 hours = 172,000.00 hours

Cost: 172,000.00 hours × $46.75 = $8,041,000.00

(B)(2) **Annual review of written permit space entry program and cancelled permits §§** **1910.146(d)(14) and (e)(6))**

Based on the RIA, OSHA estimates 2 hours of supervisor time to review and revise 102,122 (50% of 204,244[[14]](#footnote-14))written permit space programs and the related canceled permits and other available information annually.The burden hour and cost estimates for reviewing and revising the written program are:

Burden hours: 102,122 permit programs × 2 hours = 204,244.00 hours

Cost: 204,244.00 hours × $46.75 = $9,548,407.00

(C) **Documentation of determinations and supporting data required for entries using the alternative procedures (§ 1910.146(c)(5)(i)(E))**

The Agency estimates that approximately 2,388,830 million permit spaces will be entered each year under the alternative procedures allowed in paragraph (c)(5) of the Standard.[[15]](#footnote-15) Documentation of the determinations and supporting data (required by paragraphs (c)(5)(i)(A), (c)(5)(i)(B), and (c)(5)(i)(C)) for each entry under the alternative procedures must be maintained by the employer and disclosed to each employee who enters a permit space. OSHA believes that the process takes 15 minutes (15/60 hours); accordingly, the Agency estimates that the total annual burden hours and cost of documenting determinations and supporting data required for entries using the alternative procedures is:

Burden hours: 2,388,830 permit spaces to be entered annually using the alternative procedures × 15/60 hours required to complete documentation = 597,207.50 hours

Cost: 597,207.50 hours × $29.23 = $17,456,375.22

(D) **Written certification for the alternative procedures (§ 1910.146(c)(5)(ii)(H))**

OSHA believes that approximately 2,388,830 permit spaces will be entered each year under the abbreviated permit system. A written certificate must be prepared following paragraph (c)(5)(ii)(H) of the Standard for each of these entries. OSHA estimates that it will take three minutes (3/60 hours) to generate and maintain the written certification (one-year retention).

Burden hours: 2,388,830 permit spaces × 3/60 hours to generate and maintain the written certificate = 119,441.50 hours

Cost: 119,441.50 hours × $29.23 = $3,491,275.04

(E) **Written certification that all hazards have been eliminated (reclassification of a permit space) (§ 1910.146(c)(7)(iii))**

The Agency estimates that approximately 202,788 permit spaces will be reclassified each year under paragraph (c)(7) of the Standard.[[16]](#footnote-16) A certificate must be prepared following paragraph (c)(7)(iii) for each of these entries. OSHA estimates that it takes 3 minutes (3/60 hours) to generate and maintain the certification.

Burden hours: 202,788 permit spaces to be entered annually under the reclassification × 3/60 hours to generate and maintain (one year retention) = 10,139.40 hours

Cost: 10,139.140 hours × $29.23 = $296,374.66

**(F) Information Exchange – Host Employer and Contractor (§ 1910.146(c)(8)(i), (c)(8)(ii), (c)(8)(iii), (c)(8)(v) and (c)(9)(iii))**

The Agency believes that the information exchange requirements between employer and contractor are usual and customary communications at most establishments. The Agency has no reliable data to estimate the information exchange costs between host employers and their contractors. For purposes of estimating burden hours and costs only, OSHA estimates that approximately 2,150 establishments (1% of the estimated 214,994 establishments with permit spaces) are not in compliance with the required communications associated with contractor permit space operations. The Agency estimates that a host employer would communicate with one contractor for an average of 8 minutes (8/60 hours) for these requirements.

Burden hours: 2,150 establishments x 2 parties x 8/60 hours to exchange information 573.33 hours

Cost: 573.33 hours x $46.75 = $26,803.33

(G) **Written entry permits (§ 1910.146(e) and (f))**

OSHA estimates that approximately 1,926,481 permit spaces will be entered each year under the full permit system.[[17]](#footnote-17) A complete written permit, prepared following paragraph (f) of the standard, must be generated for each of these entries, made available to authorized entrants by posting it, and retained for one year. Employers must note any problems encountered during an entry operation on the permit, so the appropriate revisions to the permit space program can be made. The Agency estimates it takes an average of 15 minutes (15/60 hours) for a non-supervisory employee to generate, post, and maintain each entry.

Burden hours: 1,926,481 permit spaces × 15/60 hours = 481,620.25 hours

Cost: 481,620.25 hours × $29.23 = $14,077,759.90

(H) **Certification of training (§ 1910.146(g)(4))**

A certification record of training must be maintained for all existing employees. Accordingly, OSHA estimates that there are approximately 1,488,877, employees who enter permit spaces annually. OSHA believes that each year 10 percent of these employees (148,888) are considered new employees or are assigned new duties that will require that they receive new training. A new record of training must be generated and maintained for these employees.

OSHA believes it takes one minute (1/60 hours) for a secretary to maintain the training certification for each existing employee), and three minutes (3/60 hours) to generate and maintain the training certification for new or retrained employees. Thus, the burden hours for this provision are:

Burden hours: 1,339,989 existing employees × 1/60 hours to maintain record = 22,333.15

hours

Cost: 22,333.15 hours × $28.28 = $631,581.66

Burden hours: 148,888 new/retrained employees × 3/60 hours to generate and maintain record = 7,444.40 hours

Cost: 7,444.40 hours × $28.28 = $210,527.63

**(I) Information Exchange – Authorized Entrants (§ 1910.146(h)(3) and h)(4)) and Attendants (§ 1910.146(i)(5), (i)(6), (i)(7), and (i)(8))**

The RIA estimated that an additional 114,352 attendants would be necessary for the industry to comply with the Standard. Applying a ratio of the increase in employees affected by the Standard, the Agency estimates 124,186 attendants.[[18]](#footnote-18) The Agency estimates that an attendant would engage in 15 minutes (15/60 hours) of communication, on average, with authorized entrants.

The Agency has no reliable data on which to estimate the number of authorized entrants engaged in communications with an attendant during permit space operations. For purposes of estimating burden hours and costs only, the Agency estimates that one authorized entrant will communicate with each attendant.

Burden hours: (124,186 attendants + 124,186 authorized entrants) x 15/60 hours to communicate = 62,093.00 hours

Cost: 62,093 hours x $29.23 = $1,814,978.39

In addition, for the one percent (46,602) of entries (one percent of the 4,660,201 total permit spaces) which an attendant observes unsafe conditions, one minute (1/60 hours) to alert authorized entrants of the need to evacuate the permit space; for the 466 entries estimated to involve rescue operations (see below), two minutes (2/60 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 permit space; and, for ten percent (466,020) of these entries, one minute (1/60 hours) to warn any individual who is not an authorized entrant and approaches a permit space during entry operations to stay away from the permit space or to exit the permit space if that individual enters the permit space, as well as to inform the authorized entrant and entry supervisor of any such unauthorized entry.

Burden hours: 46,602 entries x 1/60 hours (evacuation alert) = 776.70 hours

Cost: 776.70 hours x $46.75 = $36,310.72

Burden hours: 466 entries x 2/60 hours (rescue operations) = 15.53 hours

Cost: 15.53 hours x $46.75 = $726.18

Burden hours: 466,020 entries x 1/60 hours (warn non-entrants) = 7,767.00

Cost: 7,767.00 hours x $46.75 = $363,107.2

(J) **Informing the Rescue Service About the Hazards of the Space (§ 1910.146 (k)(1)(iv))**

The Agency has no reliable data on which to estimate the number of in-house permit space rescues that occur each year. To estimate burden hours and costs only, the Agency estimates that 466 establishments (one-thousandth of one percent of the 4,660,201 permit spaces) would experience an in-house rescue per year. The Agency estimates that it would take two minutes (2/60 hours) to inform the rescue service of the hazards they may confront when called on to perform a rescue at the site. OSHA determines that the burden hours and the cost of this provision each year to be:

Burden hours: 466 entry rescues x 2/60 hours to inform = 15.53 hours

Cost: 15.53 hours x $46.75 = $726.18

(K) **Disclosure of records (§ 1910.146 (c)(5)(ii)(H), (c)(7)(iii), (d)(5)(vi), (g)(4) and (l)(2))**

OSHA has no data on the number of access requests made by workers and their designated representatives and, therefore, the Agency estimates that one percent of all affected employees (14,889) will request access to records under the Standard.

Burden hours: 14,889 x 5/60 hours = 1,240.75

Cost: 1,240.75 hours x $46.75 = $58,005.06

(L) **Atmospheric Testing and Monitoring**

The Agency estimates that atmospheric testing and monitoring for confined spaces will take an average of 5 minutes (5/60 hours) for a supervisor to perform per entry. The Agency believes that all of the estimated 4,660,201 permit spaces entered annually require atmospheric testing or monitoring. The estimated annual burden hours and cost for a supervisor to perform these requirements are:

Burden hours: 4,660,201 entries × 5/60 hours = 388,350.08 hours

Cost: 388,350.08 hours × $46.75 = $18,155,366.39

**Table 2** - **Estimated Annualized Respondent Hour and Cost Burdens**

| **Information Collection Requirement(s)** | **Type of Respondent** | **No. of Respondents** | **No. of Responses per Respondent** | **Total**  **Responses** | **Avg. Burden**  **(In Hours)** | **Total Burden Hours** | **Hourly Wage Rate** | **Total Burden Costs** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| (A) Preparation of a "Danger--Permit Required Confined Space" Sign (§ 1910.146(c)(2)) | Non-Supervisory laborer | 9,320 | 1 | 9,320 | 5/60 | 776.66 | $29.23 | $22,701.96 |
| (B)(1) Preparation of a written permit-space entry program (§§ 1910.146 (c)(4) and 1910.146(d)) | Professional/Manager | 10,750 | 1 | 10,750 | 16.00 | 172,000.00 | $46.75 | $8,041,000.00 |
| (B)(2) Annual Review of Written Permit Space Program and Cancelled Permits (§29 CFR 1910.146(d)(14) and (e)(6)) | Professional/Manager | 102,122 | 1 | 102,122 | 2.00 | 204,244.00 | $46.75 | $9,548,407.00 |
| (C) Documentation of determinations and supporting data required for entries using alternative procedures (§ 1910.146(c)(5)(i)(E)) | Non-Supervisory laborer | 2,388,830 | 1 | 2,388,830 | 15/60 | 597,207.50 | $29.23 | $17,456,375.22 |
| (D) Written certification for alternate procedures (§ 1910.146(c)(5)(ii)(H)) | Non-supervisory laborer | 2,388,830 | 1 | 2,388,830 | 3/60 | 119,441.50 | $29.23 | $3,491,275.04 |
| (E) Written certification that all hazards have been eliminated (reclassification of a permit space) (§ 1910.146(c)(7)(iii) |  | 202,788 | 1 | 202,788 | 3/60 | 10,139.40 | $29.23 | $296,374.66 |
| (F) Information Exchange - Host Employer and Contractor (§ 1910.146(c)(8)(i), (c)(8)(ii), (c)(8)(iii), (c)(8)(v) and (c)(9)(iii)) | Professional/Manager | 2,150 | 2 | 4,300 | 8/60 | 573.33 | $46.75 | $26,803.33 |
| (G) Written entry permits (§ 1910.146(e)) |  | 1,926,481 | 1 | 1,926,481 | 15/60 | 481,620.25 | $29.23 | $14,077,759.90 |
| (H) Certification of training (§ 1910.146(g)(4)) | Clerical/Secretary | 1,339,989 | 1 | 1,339,989 | 1/60 | 22,333.15 | $28.28 | $631,581.66 |
|  | Clerical/Secretary | 148,888 | 1 | 148,888 | 3/60 | 7,444.40 | $28.28 | $210,527.63 |
| (I) Information Exchange – Authorized Entrants (§ 1910.146(h)(3) and h)(4)) and Attendants (§ 1910.146(i)(5), (i)(6), (i)(7), and (i)(8)) |  |  |  |  |  |  |  |  |
|  |  | 248,372 | 1 | 248,372 | 15/60 | 62,093.00 | $29.23 | $1,814,978.39 |
|  | Professional/Manager | 46,602 | 1 | 46,602 | 1/60 | 776.70 | $46.75 | $36,310.72 |
|  | Professional/Manager | 466 | 1 | 466 | 2/60 | 15.53 | $46.75 | $726.18 |
|  | Professional/Manager | 466,020 | 1 | 466,020 | 1/60 | 7,767.00 | $46.75 | $363,107.25 |
| *Subtotal (I)* |  |  |  | 761,460 |  | 70,652.23 |  | $2,215,122.54 |
| (J) Informing the Rescue Service About the Hazards of the Space (§ 1910.146 (k)(1)(iv)) | Professional/Manager | 466 | 1 | 466 | 2/60 | 15.53 | $46.75 | $726.18 |
| (K) Disclosure of records (§§ 1910.146 (c)(5)(ii)(H), (c)(7)(iii) and (g)(4)) | Professional/Manager | 14,889 | 1 | 14,889 | 5/60 | 1,240.75 | $46.75 | $58,005.06 |
| (L) Atmospheric Testing and Monitoring | Professional/Manager | 4,660,201 | 1 | 4,660,201 | 5/60 | 388,350.08 | $46.75 | $18,155,366.39 |
| **TOTAL** |  |  |  | **13,959,314** |  | **2,076,038.80** |  | **$74,232,026.62** |

**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 collection 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.**

**Gas Monitor**

OSHA estimates that approximately 2,150 establishments (1 percent of the estimated 214,994 establishments with permit spaces) will purchase a gas monitor estimated to be $1,000, with a useful life of 5 years, to conduct atmospheric testing and monitoring and record the results on the permit. A 10 percent operation and maintenance cost is also assumed.

(2,150 establishments/5 years) x ($1,000.00 monitor) = $ 430,000.00 per year

2,150 establishments x ($1,000.00 x .10) operation and maintenance costs = $215,000.00

**Total Costs per year:**  $430,000 + $215,000 = **$645,000.00**

There are no costs to the Federal Government associated with this Information Collection Request. The requirements of the PRA do not apply to the disclosure of records during an investigation of specific individuals or entities (see 5 CFR 1320.4(a)(2)).  OSHA would only review records in the context of an open investigation of a particular employer to determine compliance with the Standard.

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

OSHA is requesting an adjustment increase for the information collection requirements of 415,512.80 burden hours (from 1,660,526 to 2,076,038.80). The burden hour increase is related to updated data estimates showing an increase in the number of permit space entrants (from 1,471,634 to 1,488,877) and establishments with permit spaces (from 210,281 to 214,994) affected by the Standard. It is also related to the adjustment of the estimated percentage of establishments assumed to incur burden hour costs conducting atmospheric monitoring and testing.

The Agency is requesting an increase in capital and operation and maintenance costs of $14,100.00 (from $630,900.00 to $645,000.00) for atmospheric testing and monitoring equipment. This increase is also related to the updated data estimates showing an increase in the number of permit space entrants and establishments with permit spaces affected by the Standard.

**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 the 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 in ROCIS.

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

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

**Table A: Proposed Burden Hours**

| **Information Collection Requirement** | **Responses** | **Current Burden Hours** | **Proposed Burden Hours** | **Adjustment (Hours)** | **Cost Under Item 12** |
| --- | --- | --- | --- | --- | --- |
| (A) Preparation of a "Danger--Permit Required Confined Space" Sign (§ 1910.146(c)(2)) | 9,320 | 732 | 776.66 | 44.67 | $22,701.96 |
| (B)(1) Preparation of a written permit-space entry program (§§ 1910.146 (c)(4) and 1910.146(d)) | 10,750 | 168,224 | 172,000.00 | 3,776.00 | $8,041,000.00 |
| (B )(2)Annual Review of Written Permit Space Program and Cancelled Permits (§29 CFR 1910.146(d)(14) and (e)(6)) | 102,122 | 199,768 | 204,244.00 | 4,476.00 | $9,548,407.00 |
| (C) Documentation of determinations and supporting data required for entries using alternative procedures (§ 1910.146(c)(5)(i)(E)) | 2,388,830 | 575,705 | 597,207.50 | 21,502.50 | $17,456,375.22 |
| (D) Written certification for alternate procedures (§ 1910.146(c)(5)(ii)(H)) | 2,388,830 | 115,141 | 119,441.50 | 4,300.50 | $3,491,275.04 |
| (E) Written certification that all hazards have been eliminated (reclassification of a permit space) (§ 1910.146(c)(7)(iii)) | 202,788 | 9,779 | 10,139.40 | 360.40 | $296,374.66 |
| (F) Information Exchange - Host Employer and Contractor (§ 1910.146(c)(8)(i), (c)(8)(ii), (c)(8)(iii), (c)(8)(v) and (c)(9)(iii)) | 4,300 | 547 | 573.33 | 26.33 | $26,803.33 |
| (G) Written entry permits (§ 1910.146(e )) | 1,926,481 | 464,481 | 481,620.25 | 17,139.25 | $14,077,759.90 |
| (H) Certification of training (§ 1910.146(g)(4)) | 1,339,989 | 26,489 | 22,333.15 | -4,155.84 | $631,581.66 |
| 148,888 | 7,358 | 7,444.40 | 86.40 | $210,527.63 |
| (I) Information Exchange – Authorized Entrants (§ 1910.146(h)(3) and h)(4)) and Attendants (§ 1910.146(i)(5), (i)(6), (i)(7), and (i)(8)) | 761,460 | 72,804 | 70,652.23 | -2,151.77 | $2,215,122.54 |
| (J) Informing the Rescue Service About the Hazards of the Space (§ 1910.146 (k)(1)(iv)) | 466 | 14 | 15.53 | 1.53 | $726.18 |
| (K) Disclosure of records (§§ 1910.146 (c)(5)(ii)(H), (c)(7)(iii) and (g)(4)) | 14,889 | 1,177 | 1,240.75 | 63.75 | $58,005.06 |
| (L) Atmospheric Testing and Monitoring | 4,660,201 | 18,307 | 388,350.08 | 370,043.08 | $18,155,366.39 |
| **TOTAL** | **13,959,314** | **1,660,526** | **2,076,038.80** | **415,512.80** | **$74,232,026.62** |

**Table B: Profile of the Affected Establishments and Employees**[[19]](#endnote-1)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Column 1** | **Column 2** | **Column 3** | **Column 4** | **Column 5** | **Column 6** |
| **Industry** | **SIC (1992)** | **NAICS (2017)i** | **2021 Total Number of Establishmentsii** | **2021 Number of Establishments with Confined Spacesiii** | **2021 Number of Permit Spacesiv** | **2021 Number of Permit Space Entrantsv** |
| Agricultural Services | 7 | 115 | 11,748 | 6,555 | 47,849 | 28,218 |
| Oil & Gas Extraction | 13 | 211 | 6,277 | 3,094 | 3,713 | 3,404 |
| Food and Kindred Products | 20 | 311 | 27,728 | 13,641 | 189,615 | 132,322 |
| Tobacco Products | 21 | 3122 | 149 | 91 | 1,021 | 2,653 |
| Textile Mill Products | 22 | 314 | 5,749 | 1,955 | 22,288 | 36,558 |
| 313 | 1,981 |
| Wood Products (except furniture) | 24 | 321 | 14,463 | 4,151 | 15,774 | 43,391 |
| Furniture and Fixtures | 25 | 337 | 14,581 | 6,576 | 32,880 | 44,059 |
| Paper Products | 26 | 322 | 3,999 | 2,740 | 59,450 | 28,766 |
| Printing and Publishing | 27 | 323 | 24,809 | 17 | 76 | 34 |
| Chemicals & Allied Products | 28 | 325 | 13,615 | 9,191 | 193,921 | 81,800 |
| Petroleum Refining | 29 | 324 | 2,106 | 1,630 | 92,887 | 15,482 |
| Rubber Products | 30 | 326 | 12,065 | 4,790 | 109,696 | 109,217 |
| Leather and Leather Products | 31 | 316 | 1,162 | 87 | 295 | 607 |
| Stone, Clay, Glass & Concrete | 32 | 327 | 15,076 | 11,397 | 154,992 | 102,576 |
| Primary Metals Industry | 33 | 331 | 4,112 | 1,764 | 22,403 | 35,810 |
| Fabricated Metal Products | 34 | 332 | 55,022 | 12,765 | 134,036 | 51,061 |
| Machinery, Except Electrical | 35 | 333 | 23,060 | 1,845 | 14,758 | 49,808 |
| Electric/Electronic Equipment | 36 | 334 (50%) | 6,022 | 4,525 | 121,269 | 76,019 |
| 335 | 5,549 |
| Transportation Equipment | 37 | 336 | 11,567 | 3,388 | 1,114,473 | 32,527 |
| Instruments & Related Products | 386 | 325992 | 185 | 43 | 601 | 341 |
| 333314 | 419 |
| Miscellaneous Manufacturing | 391 | 33991 | 2,055 | 618 | 21,823 | 4,019 |
| 394 | 33992 | 1,646 |
| 33993 | 532 |
| Motor Freight Transportation | 42 | 484 | 134,769 | 17,654 | 243,629 | 49,432 |
| Electric, Gas, Sanitary Services | 49 | 22 | 19,028 | 27,001 | 1,495,830 | 251,110 |
| Wholesale Trade – Durable | 50 | 423 | 236,609 | 1,893 | 2,726 | 2,272 |
| Wholesale Trade – Nondurable | 515 | 4245 | 6,147 | 21,710 | 240,979 | 115,060 |
| 516 | 4246 | 12,373 |
| 517 | 4247 | 6,266 |
| 5,198 | 424950 | 1,885 |
| Food Stores | 54 | 445 | 150,289 | 8,416 | 8,416 | 8,416 |
| Miscellaneous Retail | 5,983 | 45431 (80%) | 6,431 | 4,309 | 16,804 | 6,463 |
| 5,984 |
| Real Estate (Commercial) | 65 | 531 | 361,500 | 21,329 | 70,364 | 19,409 |
| Hotels/Other Lodging | 701 | 7211 | 59,497 | 7,259 | 110,343 | 113,972 |
| Personal Service | 721 | 8123 | 33,165 | 2,598 | 17,976 | 5,196 |
| 561740 | 7,432 |
| Miscellaneous Repair Services | 76 | 8112 | 12,339 | 611 | 653 | 611 |
| 8113 | 21,973 |
| 8114 | 21,233 |
| Motion Pictures | 7,812 | 512110 | 15,251 | 15 | 44 | 89 |
| Health Services | 806 | 622 | 6,906 | 11,049 | 96,017 | 36,462 |
| 807 | 6215 | 18,218 |
| 339116 | 5,740 |
| Museums, Botanical Gardens, Zoos | 84 | 712 | 7,736 | 286 | 2,600 | 1,714 |
| **Totals** |  |  | **1,410,464** | **214,994** | **4,660,201** | **1,488,877** |

1. The purpose of this Supporting Statement is to analyze and describe the burden hours and costs associated with provisions of this 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. This section identifies usual and customary communications between employers, contractors, and employees; therefore, it does not impose burden hours or costs on the employer. For example, as a matter of business practice, information about hazards and permit-confined spaces, etc., would be conveyed to contractors during initial discussions of work to be performed. Estimated burden hours and costs for establishments not in compliance with these requirements are included in Item 12, below. [↑](#footnote-ref-2)
3. This section identifies usual and customary communications between employers, contractors, and employees; therefore, it does not impose burden hours or costs on the employer. For example, as a matter of business practice, information about hazards and permit-confined spaces, etc., would be conveyed to contractors during initial discussions of work to be performed. Estimated burden hours and costs for establishments not in compliance with these requirements are included in Item 12, below. [↑](#footnote-ref-3)
4. The Agency believes the burden hours and costs associated with testing of atmospheric hazards, and recording those results on the permit, are included in the burden hours and costs for the permit. Note: There are document retention requirements in other OSHA standards, such as the 30-year retention period for employee exposure records required by 29 CFR 1910.1020(d) (Preservation of records) which may apply to this documentation. See definition of “employee exposure record” at 29 CFR 1910.1020(c)(5). Employee exposure records retention is covered under OMB Control # 1218-0065, “Access to Employee Exposure and Medical Records.”

   [↑](#footnote-ref-4)
5. OSHA is not taking burden for this activity under Item 12 of this Supporting Statement. However, the Agency retains burden hours and costs related to training certification. [↑](#footnote-ref-5)
6. These sections identify usual and customary communications between employers, contractors, and employees. Estimated burden hours and costs for establishments not in compliance with these requirements are included in Item 12, below. [↑](#footnote-ref-6)
7. The burden hours and costs associated with endorsing the permit are considered part of the cost of the permit. [↑](#footnote-ref-7)
8. OSHA considers these assessment provisions to be performance-oriented and, therefore, is not taking burden for the requirements under Item 12 below. [↑](#footnote-ref-8)
9. The burden hours and costs of developing an in-house rescue plan are part of the cost of program development. [↑](#footnote-ref-9)
10. The requirement that employers provide training to workers under these provisions is not considered to be a collection of information. OSHA is not taking burden for training delivery under Item 12 of this Supporting Statement. The Agency assumes that the cost of training records associated with this activity are included in the general training records burden hours and costs under Item 12. [↑](#footnote-ref-10)
11. The burden hours and cost for SDS accessibility is taken under OMB Control Number 1218-0072 (the Hazard Communication Standard (HCS) ICR). [↑](#footnote-ref-11)
12. The burden hours and costs of the employee consultation provision are included in the burden hours and costs for the development of the written program. [↑](#footnote-ref-12)
13. See Table B at the end of this document for a complete list of establishments, permit-confined spaces, and permit-confined space entrants. [↑](#footnote-ref-13)
14. The Agency subtracted 10,750 establishments from the total, 214,994 establishments, since burden hours and costs were attributed to them for developing a new program. [↑](#footnote-ref-14)
15. The previous ICR estimated that there were 2,302,819 million permit spaces entered each year under the alternative procedures discussed in this section. Given that the total number of permit spaces increased by 3.69 percent, it was assumed that the number of permit spaces discussed in this section increased by 3.69 as well. [↑](#footnote-ref-15)
16. The previous ICR estimated that there were 195,571 permit spaces covered under this paragraph. As discussed above, the Agency assumes that the number of permit spaces discussed in this section increased by 3.69 percent. [↑](#footnote-ref-16)
17. The previous ICR estimated that there were 1,857,924 million permit spaces covered under this paragraph. As discussed above, the Agency assumes that the number of permit spaces discussed in this section increased by 3.69 percent. [↑](#footnote-ref-17)
18. According to the RIA, there were an estimated 1,629,201 confined space entrants and 114,352 attendants covered by the Standard. The current ICR analysis estimates 1,488,877 confined space entrants (see Table B). This is a decrease of 8.6% from the RIA estimate. Therefore, the Agency estimates there are 125,444 attendants (114,352 – (114352 x -8.6%)). [↑](#footnote-ref-18)
19. i Source: U.S. Department of Labor, Occupational Safety and Health Administration, Office of Regulatory Analysis. *Final Regulatory Impact Analysis and Regulatory Flexibility Analysis of the Final Permit-Required Space Standard (§1910.146, Subpart J)*. Table I-1: Profile of Affected Establishments and Employees. December 1992. Supplemented where possible by information derived from: CONSAD Research Corporation. *Development of Industry Profile Data for OSHA’s Draft Proposed Standard for Permit Entry Confined Spaces*. May 20, 1988.

    ii Source: 2018 County Business Patterns Survey. This value represents the total number of establishments in the indicated NAICS code.

    iiiValues in this column were calculated using the ratio of the number of establishments with permit spaces (in Table I-1) to total firms in the specified SIC according to the 1992 Economic Census. This ratio was then applied to the total number of establishments listed in column 3.

    ivValues in this column were calculated using the ratio of permit spaces to establishments with permit spaces as described in Table I-1. This ratio was then applied to the updated number of establishments with permit spaces listed in column 4.

    vValues in this column were calculated using the ratio of permit space entrants to establishments with permit spaces as described in Table I-1. This ratio was then applied to the updated number of establishments with permit spaces. [↑](#endnote-ref-1)