

**SUPPORTING STATEMENT FOR
THE INFORMATION COLLECTION REQUIREMENTS OF
THE STANDARD ON PORTABLE FIRE EXTINGUISHERS
(ANNUAL MAINTENANCE CERTIFICATION RECORD)
(29 CFR 1910.157(e)(3))¹
OFFICE OF MANAGEMENT AND BUDGET (OMB)
CONTROL NO. 1218-0238 (November 2020)**

This ICR is requesting the 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).

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”) published at 29 CFR 1910.157 a safety standard for general industry regulating portable fire extinguishers (i.e., “the Standard”). Paragraph (e)(3) of the Standard requires employers to: inspect portable fire extinguishers annually for normal operation; record the maintenance date; retain the maintenance record for one year after the last entry or for the life of the shell, whichever is less; and make the record available to an OSHA compliance officer upon request. The annual maintenance inspection ensures that portable fire extinguishers are in safe operating condition in case of a fire, while the maintenance record provides evidence to workers and Agency compliance officers that employers performed the required inspections.

¹The purpose of this Supporting Statement is to analyze and describe the burden hours and costs associated with the hydrostatic testing provision of the Standard on Portable Fire Extinguishers. This Supporting Statement does not provide information or guidance on how to comply with, or how to enforce 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 purpose of this requirement is to reduce workers' risk of death or serious injury by ensuring that portable fire extinguishers are in a safe operating condition.

§1910.157(e)(3) --Portable Fire Extinguishers--Inspection, maintenance, and testing.

Paragraph (e)(3) of the Standard specifies that employers must subject each portable fire extinguisher to an annual maintenance inspection and record the date of the inspection. In addition, this provision requires employers to retain the inspection record for one year after the last entry or for the life of the shell, whichever is less, and to make the record available to OSHA on request. This recordkeeping requirement assures workers and Agency compliance officers that portable fire extinguishers located in the workplace will operate normally in case of fire. In addition, this requirement provides evidence to OSHA compliance officers during an inspection that the employer performed the required maintenance checks on the portable fire extinguishers.

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 under the provision in 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 purpose(s) described in A.2 above.

The requirement to collect and maintain information is specific to each employer and worker involved, and no other source or agency duplicates the requirement 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 the methods used to reduce the burden.

The information collection requirement specified by the provision does 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 or is not conducted less frequently, and any technical or legal obstacles to reducing the burden.

The Agency believes that the information collection frequency required by the provision is the minimum frequency necessary to 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, workers may inadvertently attempt to operate fire extinguishers that are not in a proper working order; thus, increasing their risk of death or serious injury.

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 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 prove that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

This information request is consistent with the guidelines provided 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 July 23, 2020 (85 FR 44548) soliciting comments on its proposal to extend the Office of Management and Budget's approval of the information collection requirements contained in the Portable Fire Extinguishers (Annual Maintenance Certification Record Standard (29 CFR 1910.157(e)(3)), (Docket No. OSHA 2010-0039). This notice was part of a preclearance consultation program that provided interested parties the opportunity to comment on OSHA's request for an extension by the Office of Management and Budget (OMB) of a previous approval of the information collection requirements found in the above standard. The Agency did not receive any substantive comments regarding this proposed information collection request.

9. Explain any decision to provide any payments or gifts 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 provision 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.

The provision does not involve collection of 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.**
- **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.**

Respondent Burden-Hour and Cost Burden Determinations

The Agency determined the wage rate from mean hourly wage earnings to represent the cost of an employee's time. The following hourly wage rates for the relevant occupational categories are from the *National Occupational Employment and Wage Estimates United States, May 2019*, published by the Bureau of Labor Statistics. 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 Statistics (OES), May 2019* [date accessed: March 30, 2020].²

To account for fringe benefits, the Agency used the Bureau of Labor Statistics' (BLS) March 2020 National Compensation Survey. Fringe markup is from the following BLS press release: *Employer Costs for Employee Compensation* news release text; March 19, 2020 (<https://www.bls.gov/news.release/pdf/ecec.pdf>). BLS reported that for civilian workers, fringe benefits accounted for 29.8 percent of total compensation and wages accounted for the remaining 70.1 percent. To calculate the loaded hourly wage for each occupation, the Agency divided the mean hourly wage by 1 minus the fringe benefits as shown in Table 1.

² (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.)

Table 1 -- WAGE HOUR ESTIMATES				
Occupational Title	Standard Occupation Code	Mean Hourly Wage Rate (A)	Fringe Benefits (B) ³	Loaded Hourly Wage Rate (C) = (A)/((1-(B)))
Precision Instrument and Equipment Repairer	49-9069	\$28.82	.298	\$41.05

Source: <https://www.bls.gov/oes/current/oes499069.htm>

Using Field’s Fire Protection manual, the Agency estimates that there is, on average, one portable fire extinguisher for every 11,250 square feet of building space. Based on that, OSHA estimates in Table 1 that there are 39,132,742 fire extinguishers in service in the United States.

Table 3 was derived from Tables 4 and 5. As demonstrated in Table 4, the Agency estimates that there are 37,917,943 extinguishers in non-manufacturing establishments, based on the Commercial Building Energy Consumption Survey. OSHA estimates that there are an additional 1,214,799 extinguishers, as shown in Table 5, in manufacturing establishments, based on information from the U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics. These two numbers were derived by multiplying the average square foot per building (for each type of building), as reported by the aforementioned surveys, times the estimated 11,250sq.ft. per extinguisher estimate, to determine the total number of fire extinguishers present, on average, per building. That number is multiplied by the total number of buildings (for non-manufacturing), or the total number of establishments (for manufacturing), to determine the total number of portable fire extinguishers needed for each sector.

§1910.157(e)(3) -- Portable Fire Extinguishers -- Inspection, maintenance, and testing.

OSHA believes that a large number of establishments will subject their fire extinguishers to the annual maintenance inspection as a usual and customary business practice to meet local fire codes and/or to reduce fire insurance premiums. From table 3, there are 39,132, 742 portable fire extinguishers in the United States. Based on past information from a senior fire prevention engineer, it was estimated that approximately 85 percent of the (39,132,742) portable fire extinguishers (33,262,831) will undergo the annual maintenance inspection as a usual and customary business practice. Therefore, OSHA is not including these inspections and associated records in determining the burden hours and cost of the information collection requirement specified by paragraph (e)(3) of the Standard. Based on this determination, this burden hour estimate only covers the remaining 15 percent (i.e., 5,869,911) of the portable fire extinguishers.

³ Source: Employer costs for Employee Compensation Supplementary Table 2. U.S. Department of Labor, Bureau of Labor Statistics, March 2020. <https://www.bls.gov/news.release/ecec.nr0.htm>

Past discussions by the Agency with a leading fire extinguisher servicing company indicate that they collect and test, under contract, about 90 percent of the 5,869,911-portable fire extinguishers (i.e.,5,282,920) covered by 29 CFR 1910.157(e)(3). Accordingly, employers perform their own inspections and recordkeeping on the remaining 10 percent (586,991) of these extinguishers.

For employers who perform their own inspections, OSHA estimates that an inspector will take approximately 30 minutes (30/60) to perform and record the required maintenance inspection on each portable fire extinguisher (this estimate is based on information from staff familiar with the inspection testing). The inspector typically records the inspection date on a readily-visible tag attached to the extinguisher; therefore, disclosure of the recorded information to OSHA compliance officers imposes no burden on employers. The estimated burden hours and cost associated with performing and recording the required maintenance inspections are:

Burden hours:	586,991 fire extinguishers x 30/60 hour = 293,496 hours
Cost:	293,496 hours x \$41.05= \$12,048,011

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Table 2: Estimated Annualized Respondent Cost and Hour Burden								
Collections of Information	Type of Respondent	No. of Respondents	No. of Responses per Respondent	Total No. of Responses	Burden Per Response (In Hours)	Total Burden Hours	Loaded Hourly Wage Rate	Total Burden Cost
§1910.157(e)(3) -- Portable Fire Extinguishers -- Inspection, maintenance, and testing.	Precision Instrument and Equipment Repairer	586,991	1	586,991	30/60	293,496	\$41.05	\$12,048,011
TOTAL		586,991	--	586,991	--	293,496	--	\$12,048,011

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 respondent (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.**

The cost to conduct the annual inspection of a portable fire extinguisher ranges from \$10.63 to \$23.92⁴ depending on the size of the extinguisher; therefore, for calculating cost, the Agency is using an average of \$17.28. As discussed in Item 12, about 5,869,911 extinguishers are tested through contract with a fire extinguisher maintenance service. The total cost associated with performing the required annual maintenance inspections under contract on 5,282,920 portable fire extinguishers is:

$$\text{Cost: } 5,282,920 \text{ fire extinguishers} \times \$17.28 = \$91,288,857$$

14. Provide estimates of the annualized cost to the Federal Government. Also, provide a description of the method used to estimate cost, which should include quantification of

⁴Source: <http://sterlingfire.vicbc.com/extinguishers.htm>

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 into a single table.

There is no cost to the Federal Government.

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

OSHA will retain the current number of burden hours of 293,496 for this Information Collection Request. There are adjustments to the costs to respondents because the total number of respondents under A13 was overestimated in the last request. This in turn created overestimates of the costs to respondent. Item 13 from \$95,386,054 in 2017 to the 2020 figure of \$91,288,857 (a decrease of \$4,097,197). Under A13, the number of respondents in 2017 was over-estimated by 586,991 (5,869,911 vs. 5,282,920).

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.

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

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.

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

This supporting statement does not contain any collection of information requirements that employ statistical methods. We do, however, show the calculations of the number of portable fire extinguishers for manufacturing and non-manufacturing establishments.

**Table 3: Total Number of Portable Fire Extinguishers
(Estimated)**

Source	Number of Fire Extinguishers
Non-Manufacturing Establishments	37,917,943
Manufacturing Establishments	1,214,799
Total	39,132,742

Using Field's Fire Protection manual, the Agency estimates that there is, on average, one portable fire extinguisher for every 11,250 square feet of building space. Based on that, OSHA estimates in Table 3 that there are 39,132,742 fire extinguishers in service in the United States.

Table 3 was derived from Tables 4 and 5. As demonstrated in Table 4, the Agency estimates that there are 37,917,943 extinguishers in non-manufacturing establishments, based on the Commercial Building Energy Consumption Survey. OSHA estimates that there are an additional 1,214,799 extinguishers, as shown in Table 5, in manufacturing establishments, based on information from the U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics. The steps to calculate these estimates are:

1. Each of these estimates were derived by multiplying the average square foot per building (for each type of building), as reported by the aforementioned surveys, times the estimated 11,250 sq.ft. per extinguisher estimate, to determine the total number of fire extinguishers present, on average, per building.

That number is multiplied by the total number of buildings (for non-manufacturing), or the total number of establishments (for manufacturing), to determine the total number of portable fire extinguishers needed for each sector.

Table 4: Fire Extinguishers in Non-Manufacturing Establishments

Principal Building Activity	Avg. Sq. Footage per Building (a)	Square feet per Extinguisher (b)	No. of Fire Extinguishers per Building	Total Buildings (a)	Total No. of Fire Extinguishers
Education	85,623	11,250	7.6	388,659	2,958,058
Enclosed mall	893,735	11,250	79.4	1,379	109,493
Food sales	16,216	11,250	1.4	176,739	247,435
Food service	6,349	11,250	0.6	379,711	227,827
Inpatient health care	597,148	11,250	53.1	9,579	508,645
Laboratory	180,327	11,250	16.0	15,505	248,080
Lodging	175,865	11,250	15.6	128,389	2,002,868
Nonrefrigerated warehouse	107,284	11,250	9.5	787,169	7,478,106
Nursing	90,604	11,250	8.1	29,535	239,234
Office	138,745	11,250	12.3	1,012,373	12,485,527
Other	76,598	11,250	6.8	109,260	742,968
Outpatient health care	63,741	11,250	5.7	147,155	833,761
Public assembly	141,541	11,250	12.6	352,014	4,428,823
Public order and safety	119,609	11,250	10.6	83,841	891,386
Refrigerated warehouse	180,714	11,250	16.1	8,499	136,523
Religious worship	21,806	11,250	1.9	411,799	798,188
Retail other than mall	38,045	11,250	3.4	438,261	1,482,117
Service	16,835	11,250	1.5	618,544	925,593
Strip shopping mall	79,307	11,250	7.0	162,687	1,146,859
Grand Total					37,917,943

(a) Commercial Buildings Energy Consumption Survey (CBECS) building characteristics public use microdata files (2012 data released June 2015)

Table 5: Fire Extinguishers in Manufacturing Establishments						
NAICS Code	Subsector and Industry	Average Enclosed Floorspace per Establishment (sq ft) (a)	Square feet per Extinguisher (b)	No. of Fire Extinguishers per Establishment	Establishments (c)	Total No. of Fire Extinguishers
311	Food	107,293.7	11,250	9.5	13,271	126,568
312	Beverage and Tobacco Products	129,956.5	11,250	11.6	2,093	24,178
313	Textile Mills	192,402.3	11,250	17.1	1,341	22,934
314	Textile Product Mills	49,465.6	11,250	4.4	3,531	15,526
315	Apparel	33,989.3	11,250	3.0	4,194	12,671
316	Leather and Allied Products	56,567.1	11,250	5.0	452	2,273
321	Wood Products	69,308.6	11,250	6.2	7,727	47,604
322	Paper	180,654.8	11,250	16.1	3,734	59,961
323	Printing and Related Support	31,952.6	11,250	2.8	15,313	43,492
326	Plastics and Rubber Products	116,972.6	11,250	10.4	8,268	85,967
327	Nonmetallic Mineral Products	48,443.2	11,250	4.3	11,997	51,660
331	Primary Metals	209,580.1	11,250	18.6	3,196	59,539
332	Fabricated	52,974.8	11,250	4.7	32,368	152,417

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	Metal Products					
333	Machinery	73,206.0	11,250	6.5	14,370	93,508
334	Computer and Electronic Products	96,182.9	11,250	8.5	6,685	57,154
335	Electrical Equip., Appliances, and Components	90,124.9	11,250	8.0	3,294	26,389
336	Transportation Equipment	244,986.4	11,250	21.8	6,270	136,539
337	Furniture and Related Products	71,534.2	11,250	6.4	8,258	52,509
339	Miscellaneous	33,443.8	11,250	3.0	13,495	40,118
	Total					1,214,799

(a) Source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Form EIA-846, '2010 Manufacturing Energy Consumption Survey.'

(b) Field's Fire Protection Inc. (2017). How Many Extinguishers are Required? Available at <http://www.fieldsfire.com/how-many-extinguishers-are-required>. (Accessed March 9, 2017).

(c) U.S. Census Bureau. (2014). County Business Patterns - 2014 (Released April 24, 2016). Available at <http://www.census.gov/data/datasets/2014/econ/cbp/2014-cbp.html>. (Accessed July 13, 2016).