

**SUPPORTING STATEMENT FOR
THE INFORMATION COLLECTION REQUIREMENTS OF
THE HYDROSTATIC TESTING PROVISION OF THE PORTABLE FIRE
EXTINGUISHERS STANDARD (29 CFR 1910.157(f)(16))¹
OFFICE OF MANAGEMENT AND BUDGET (OMB)
CONTROL NO. 1218-0218 (January 2024)**

This is a request to extend 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” (20 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”). The Standard includes a provision requiring hydrostatic testing of portable fire extinguishers at intervals specified by the Standard (§ 1910.157(f)(2) and Table L-1).

The hydrostatic testing provision (§ 1910.157(f)(16)) requires employers to certify that portable fire extinguishers have been hydrostatically tested as prescribed by the Standard by preparing a certification record upon completion of the test. The record must be maintained on file and made available to OSHA compliance staff.

¹ The 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; the 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 following section describes who uses the information in the certification record, as well as how they use it. The purpose of the requirement is to reduce workers' risk of death or serious injury by ensuring that portable fire extinguishers are in safe operating condition.

Test records (§ 1910.157(f)(16))

Paragraph (f)(16) requires employers to develop and maintain a certification record of hydrostatic testing of portable fire extinguishers. The certification record must include the date of inspection, the signature of the person who performed the test, and the serial number (or other identifier) of the fire extinguisher that was tested.

Disclosure of Test Certification Records

The certification record must be made available to the Assistant Secretary or his/her representative upon request. The certification record provides assurance to employers, workers, and OSHA compliance officers that the fire extinguishers have been hydrostatically tested in accordance with and at the intervals specified in § 1910.157(f)(16); thereby, ensuring that they will operate properly in the event workers need to use them. Additionally, these records provide the most efficient means for the compliance officers to determine that an employer is complying with the hydrostatic testing provisions.

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 burdens.

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 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 purposes described in A.2 above.

The requirement to collect and maintain information is specific to each employer and employee 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 any methods used to minimize 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 not conducted or is less frequently, and any technical or legal obstacles to reducing 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 collect the required information, or delay in providing this information, employees may inadvertently attempt to operate fire extinguishers that are not in 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 demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

Paragraph (f)(16) of 1910.157 requires employers to keep the most recent certification record verifying that hydrostatic testing of fire extinguishers has been performed at intervals specified in Table L-1 of the Standard. Table L-1 requires testing of fire extinguishers at intervals varying between 5 to 12 years, depending on the type of fire extinguisher. Employers who test fire extinguishers only at these intervals will be required to retain testing certification records for longer than 3 years.

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 before submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to those 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 three 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 (PRA) (44 U.S.C. 506(c)(2)(A)), OSHA published a notice in the Federal Register on January 9, 2024 (89 FR 1128) Citation (OSHA-2010-0025) soliciting comments on its proposal to extend the Office of Management and Budget's (OMB) approval of the information collection requirements specified in the Hydrostatic Testing Provision of the Portable Fire Extinguishers Standard (OSHA-2010-0025). This notice is part of a preclearance consultation program that provides interested parties the opportunity to comment on OSHA's request for an extension by OMB of a previous approval of

the information collection requirements found in the above Standard. The agency will respond to any comments in response to this notice.

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 collection 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 Determination

The number of portable fire extinguishers covered by the ICR is based on the number of establishments covered. The Agency used the Field's Fire Protection manual, thus, estimating 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. After consultation with Fire Safety Professionals, the Agency was convinced to move forward with the figures used for the prior ICR.

Wage Rates

The agency determined the wage rate 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 Wage Statistics (OEWS), June 2023 accessed: September 18, 2023. (OES data is available at [Employer Costs for Employee Compensation – June 2023 \(bls.gov\)](https://www.bls.gov/news.release/ocwst2.txt). To access a wage rate, select the year, "Occupation profiles," and the Standard Occupational Classification (SOC) code.)

To account for fringe benefits, the agency used the (*Occupational Employment Wage Statistics (OEWS) (2023)*). Fringe markup is from the following BLS release: *Employer Costs for Employee Compensation* news release text; For release, September 2023 [Employer Costs for Employee Compensation – June 2023 \(bls.gov\)](https://www.bls.gov/news.release/ocwst2.txt). BLS reported that civilian workers, fringe benefits accounted for 29.4 percent of total compensation, and wages accounted for the remaining 70.4 percent.

The hourly wage is:

Table 1: WAGE HOUR ESTIMATES				
Occupational Title	Standard Occupational Code	Mean Hour Wage Rate (A)	Fringe Benefits ² (B)	Loaded Hourly Wage Rate C = (A)/1-(B)
Precision Instrument and Equipment Repairer	49-9069	\$30.76	0.294	\$43.57

Generating and/or Maintaining the Certification Record of the Hydrostatic Testing of Portable Fire Extinguishers - §1910.157(f)(16).

Paragraph (f)(16) requires employers to ensure that the required hydrostatic testing of fire extinguishers (the “extinguisher”) has been performed in accordance with, and at the time intervals, specified in Table L-1 of the Standard. The evidence must be in the form of a certification record which includes the date of the test, the signature of the person who performed the test, and the serial number, or other identifier, of the extinguisher that was tested. The records must be kept until the extinguisher is hydrostatically retested as specified by Table L-1 of the Standard or until the extinguisher is taken out of service.

OSHA estimates that 85 percent of all extinguishers (33,262,831) are sent to an outside contractor for the necessary testing. The Agency estimates that maintaining each record will take 1 minute (1/60 hour). OSHA estimates the remaining units (5,869,911) are tested in the workplace where they are used. There is a cost for the contracted maintenance service listed in Item 13 below.

For the extinguishers tested at the workplace, OSHA estimates the time involved is 30 minutes (30/60 hours) plus an additional 3 minutes (3/60 hours) to generate and maintain the record. Based on Table L-1 below, OSHA is using an average test interval of 7.5 years for each extinguisher (105 years divided by 14 types of extinguishers = 7.5 years). Therefore, the total annual burden hours and cost estimates for this paperwork requirement are:

Burden hours: 33,262,831 extinguishers/7.5 years x 1/60 hour = 73,917 hours

² Source: Employer costs for Employee Compensation Supplementary Table 2. U.S. Department of Labor, Bureau of Labor Statistics, June 2023

Cost: 73,917 hours x \$43.57= \$3,220,564

Burden hours: 5,869,911 extinguishers/7.5 years x 33/60 hour = 430,460 hours

Cost: 430,460 hours x \$43.57= \$18,755,142

Disclosure of Test Certification Records

OSHA determined that employers disclosing information to OSHA during an inspection is outside the scope of the PRA. See 5 CFR 1320.4(a)(2).

Table 2: Estimated Annualized Respondent Hour and Cost Burden

Information Collection Requirement	Type of Respondent	No. of Respondents	No. of Responses per Respondent	Total No. of Responses	Avg. Burden per Response (In Hrs.)	Total Burden Hours	Avg. Hourly Wage Rate	Total Burden Costs
Generating and/or Maintaining the Certification Record (Outsourced Testing)	Precision Instrument and Equipment Repairer	5,869,911	.755555578	4,435,044	1/60	73,917	\$43.634	\$3,220,564
Generating and/or Maintaining the Certification Record (In house)		5,869,911	.133333345	782,655	33/60	430,460	\$43.63	\$18,755,142
Total		5,869,911	--	5,217,699	--	504,377	--	\$21,975,706

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 hydrostatically test a portable fire extinguisher ranges from \$40 to \$55³ depending on the type of test and the size of the extinguisher. Therefore, for calculating costs, the Agency uses an average of \$47.50. As discussed in Item 12 on page 7 above, approximately 33,262,831 extinguishers are tested through contract with a fire extinguisher maintenance service. Using the same time interval of 7.5 years for testing, the cost per year is estimated at $(33,262,831 / 7.5 \text{ years} \times \$47.50) \$210,664,596$.

³ SOURCE: [Hydrostatic Testing Equipment](#)

Table L-1 ⁴	
Type of Extinguishers	Test interval (years)
Cartridge operated water and/or antifreeze	5
Stored pressure water and/or antifreeze	5
Wetting agent	5
Foam (stainless steel)	5
Aqueous film forming foam (AFFF)	5
Loaded stream	5
Dry chemical with stainless steel	5
Carbon dioxide	5
Dry chemical, stored pressure, with mild steel, brazed brass or aluminum shells	12
Dry chemical, cartridge or cylinder operated, with mild steel shells	12
Halon 1211	12
Halon 1301	12
Dry powder, cartridge or cylinder operated with mild steel shells	12

⁴ Table 4 has been modified to remove soda acid (soldered brass shells) and foam (soldered brass shells). These extinguishers should have been removed from service on January 1, 1982.

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 hours, operational expenses (such as equipment, overhead, printing, and support staff), any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Item 12, 13, and 14 into a single table.

The Agency has no annualized cost associated with enforcing the Standard. OSHA would only review records in the context of an investigation of a particular employer to determine compliance with the Standard. These activities are outside the scope of the PRA. See 5 CFR 1320.4(a)(2).

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

The Agency conducted internal research and reached out to subject matter experts, statisticians as well as fire safety engineers. After careful analysis of available data, it was decided by them to retain the current assumptions. There was no reason to further decrease the number of extinguishers estimated to be in use in the United States as was done for the previous Information Collection Request. OSHA will retain the current number of burden hours of 504,377 for this Information Collection Request. There are no adjustments or program changes.

There was an increase in the total cost for employers to hydrostatically test a portable fire extinguisher from \$76,637,563 to 210,664,596 annually. The increase is due to an increase in the price to perform the test.

16. For collections of information whose results will be published, outline plans for tabulations, 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 provision.

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, 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. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

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

Table 1: Total Number of Portable Fire Extinguishers (Estimated)	
Source	No. 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 1 that there are 39,132,742 fire extinguishers in service in the United States.

Table 1 was derived from Tables 2 and 3. As demonstrated in Table 2, the Agency estimates 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 3, 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 11,250 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 2: 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	2,958,046
Enclosed mall	893,735	11,250	79.4	1,379	109,517
Food sales	16,216	11,250	1.4	176,739	254,755
Food service	6,349	11,250	0.6	379,711	214,293
Inpatient health care	597,148	11,250	53.1	9,579	508,443
Laboratory	180,327	11,250	16.0	15,505	248,530
Lodging	175,865	11,250	15.6	128,389	2,007,042
Nonrefrigerated warehouse	107,284	11,250	9.5	787,169	7,506,752
Nursing	90,604	11,250	8.1	29,535	237,867
Office	138,745	11,250	12.3	1,012,373	12,485,527
Other	76,598	11,250	6.8	109,260	743,923
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)

(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).

2010 MANUFACTURING ENERGY CONSUMPTION SURVEY (MECS)

Survey Data

[Source: DOE EIA, 2017](#)

Table 3: Fire Extinguishers in Non-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

US Department of Labor
Occupational Safety and Health Administration
Preclearance Supporting Statement OMB Control No. 1218-0218

	Leather and Allied					
316	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
	Printing and Related					
323	Support	31,952.6	11,250	2.8	15,313	43,492
	Petroleum and Coal					
324	Products	59,244.8	11,250	5.3	2,024	10,659
325	Chemicals	126,400.6	11,250	11.2	8,289	93,132
	Plastics and Rubber					
326	Products	116,972.6	11,250	10.4	8,268	85,967
	Nonmetallic					
327	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
	Fabricated Metal					
332	Products	52,974.8	11,250	4.7	32,368	152,417
333	Machinery	73,206.0	11,250	6.5	14,370	93,508
	Computer and					
334	Electronic Products	96,182.9	11,250	8.5	6,685	57,154
	Electrical Equip.,					
	Appliances, and					
335	Components	90,124.9	11,250	8.0	3,294	26,389
	Transportation					
336	Equipment	244,986.4	11,250	21.8	6,270	136,539
	Furniture and					
337	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/howmany-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).

Table L-1 ⁵	
Type of Extinguishers	Test interval (years)
Cartridge operated water and/or antifreeze	5
Stored pressure water and/or antifreeze	5
Wetting agent	5
Foam (stainless steel)	5
Aqueous film forming foam (AFFF)	5
Loaded stream	5
Dry chemical with stainless steel	5
Carbon dioxide	5
Dry chemical, stored pressure, with mild steel, brazed brass or aluminum shells	12
Dry chemical, cartridge or cylinder operated, with mild steel shells	12
Halon 1211	12

⁵ Table 4 has been modified to remove soda acid (soldered brass shells) and foam (soldered brass shells). These extinguishers should have been removed from service on January 1, 1982.

US Department of Labor
Occupational Safety and Health Administration
Preclearance Supporting Statement OMB Control No. 1218-0218

Halon 1301	12
Dry powder, cartridge or cylinder operated with mild steel shells	12

SEC. 2. Congressional Findings and Purpose

(a) The Congress finds that personal injuries and illnesses arising out of work situations impose a substantial burden upon, and are a hindrance to, interstate commerce in terms of lost production, wage loss, medical expenses, and disability compensation payments. (b) The Congress declares it to be its purpose and policy, through the exercise of its powers to regulate commerce among the several States and with foreign nations and to provide for the general welfare, 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 USC 651

(1) by encouraging employers and employees in their efforts to reduce the number of occupational safety and health hazards at their places of employment, and to stimulate employers and employees to institute new and to perfect existing programs for providing safe and healthful working conditions; (2) by providing that employers and employees have separate but dependent responsibilities and rights with respect to achieving safe and healthful working conditions; (3) by authorizing the Secretary of Labor to set mandatory occupational safety and health standards applicable to businesses affecting interstate commerce, and by creating an Occupational Safety and Health Review Commission for carrying out adjudicatory functions under the Act; (4) by building upon advances already made through employer and employee initiative for providing safe and healthful working conditions; (5) by providing for research in the field of occupational safety and health, including the psychological factors involved, and by developing innovative methods, techniques, and approaches for dealing with occupational safety and health problems; (6) by exploring ways to discover latent diseases, establishing causal connections between diseases and work in environmental conditions, and conducting other research relating to health problems, in recognition of the fact that occupational health standards present problems often different from those involved in occupational safety; (7) by providing medical criteria which will assure insofar as practicable that no employee will suffer diminished health, functional capacity, or life expectancy as a result of his work experience; (8) by providing for training programs to increase the number and competence of personnel engaged in the field of occupational safety and health; affecting the OSH Act since its passage in 1970 through January 1, 2004. (9) by providing for the development and promulgation of occupational safety and health standards; (10) by providing an effective enforcement program which shall include a prohibition against giving advance notice of any inspection and sanctions for any individual violating this prohibition;

(11) by encouraging the States to assume the fullest responsibility for the administration and enforcement of their occupational safety and health laws by providing grants to the States to assist in identifying their needs and responsibilities in the area of

occupational safety and health, to develop plans in accordance with the provisions of this Act, to improve the administration and enforcement of State occupational safety and health laws, and to conduct experimental and demonstration projects in connection therewith; (12) by providing for appropriate reporting procedures with respect to occupational safety and health which procedures will help achieve the objectives of this Act and accurately describe the nature of the occupational safety and health problem; (13) by encouraging joint labor-management efforts to reduce injuries and disease arising out of employment.

SEC. 8. Inspections, Investigations, and Recordkeeping

(a) In order to carry out the purposes of this Act, the Secretary, upon presenting appropriate credentials to the owner, operator, or agent in charge, is authorized -- 29 USC 657

(1) to enter without delay and at reasonable times any factory, plant, establishment, construction site, or other area, workplace or environment where work is performed by an employee of an employer; and

(2) to inspect and investigate during regular working hours and at other reasonable times, and within reasonable limits and in a reasonable manner, any such place of employment and all pertinent conditions, structures, machines, apparatus, devices, equipment, and materials therein, and to question privately any such employer, owner, operator, agent or employee.

(b) In making his inspections and investigations under this Act the Secretary may require the attendance and testimony of witnesses and the production of evidence under oath. Witnesses shall be paid the same fees and mileage that are paid witnesses in the courts of the United States. In case of a contumacy, failure, or refusal of any person to obey such an order, any district court of the United States or the United States courts of any territory or possession, within the jurisdiction of which such person is found, or resides or transacts business, upon the application by the Secretary, shall have jurisdiction to issue to such person an order requiring such person to appear to produce evidence if, as, and when so ordered, and to give testimony relating to the matter under investigation or in question, and any failure to obey such order of the court may be punished by said court as a

contempt thereof.

(c) (1) Each employer shall make, keep and preserve, and make available to the Secretary or the Secretary of Health and Human Services, such records regarding his activities relating to this Act as the Secretary, in cooperation with the Secretary of Health and Human Services, may prescribe by regulation as necessary or appropriate for the enforcement of this Act or for developing information regarding the causes and prevention of occupational accidents and illnesses. In order to carry out the provisions of this paragraph such regulations may include provisions requiring employers to conduct periodic inspections. The Secretary shall also issue regulations requiring that employers, through posting of notices or other appropriate means, keep their employees informed of their protections and obligations under this Act, including the provisions of applicable standards.

(2) The Secretary, in cooperation with the Secretary of Health and Human Services, shall prescribe regulations requiring employers to maintain accurate records of, and to make periodic reports on, work-related deaths, injuries and illnesses other than minor injuries requiring only first aid treatment and which do not involve medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job.

(3) The Secretary, in cooperation with the Secretary of Health and Human Services, shall issue regulations requiring employers to maintain accurate records of employee exposures to potentially toxic materials or harmful physical agents which are required to be monitored or measured under section 6. Such regulations shall provide employees or their representatives with an opportunity to observe such monitoring or measuring, and to have access to the

records thereof. Such regulations shall also make appropriate provision for each employee or former employee to have access to such records as will indicate his own exposure to toxic materials or harmful physical agents. Each employer shall promptly notify any employee who has been or is being exposed to toxic materials or harmful physical agents in concentrations or at levels which exceed those prescribed by an applicable occupational safety and health standard promulgated under section 6, and shall inform any employee who is being thus exposed of the corrective action being taken.

(d) Any information obtained by the Secretary, the Secretary of Health and Human Services, or a State agency under this Act shall be obtained with a minimum burden upon employers, especially those operating small businesses. Unnecessary duplication of efforts in obtaining information shall be reduced to the maximum extent feasible.

(e) Subject to regulations issued by the Secretary, a representative of the employer and a representative authorized by his employees shall be given an opportunity to accompany the Secretary or his authorized representative during the physical inspection of any workplace under subsection (a) for the purpose of aiding such inspection. Where there is no authorized employee representative, the Secretary or his authorized representative shall consult with a reasonable number of employees concerning matters of health and safety in the workplace.

(f) (1) Any employees or representative of employees who believe that a violation of a safety or health standard exists that threatens physical harm, or that an imminent danger exists, may request an inspection by giving notice to the Secretary or his authorized representative of such violation or danger. Any such notice shall be reduced to writing, shall

set forth with reasonable particularity the grounds for the notice, and shall be signed by the employees or representative of employees, and a copy shall be provided the employer or his agent no later than at the time of inspection, except that, upon the request of the person giving such notice, his name and the names of individual employees referred to therein shall not appear in such copy or on any record published, released, or made available pursuant to subsection (g) of this section. If upon receipt of such notification the Secretary determines there are reasonable grounds to believe that such violation or danger exists, he shall make a special inspection in accordance with the provisions of this section as soon as practicable, to determine if such violation or danger exists. If the Secretary determines there are no reasonable grounds to believe that a violation or danger exists he shall notify the employees or representative of the employees in writing of such determination.

(2) Prior to or during any inspection of a workplace, any employees or representative of employees employed in such workplace may notify the Secretary or any representative of the Secretary responsible for conducting the inspection, in writing, of any violation of this Act which they have reason to believe exists in such workplace. The Secretary shall, by regulation, establish procedures for informal review of any refusal by a representative of the Secretary to issue a citation with respect to any such alleged violation and shall furnish the employees or representative of employees requesting such review a written statement of the reasons for the Secretary's final disposition of the case.

(g) (1) The Secretary and Secretary of Health and Human Services are authorized to compile, analyze, and publish, either in summary or detailed form, all reports or information obtained under this section.

(2) The Secretary and the Secretary of Health and Human Services shall each prescribe such rules and regulations as he may deem necessary to carry out their responsibilities under this Act, including rules and regulations dealing with the inspection of an employer's establishment.

(h) The Secretary shall not use the results of enforcement activities, such as the number of citations issued or penalties assessed, to evaluate employees directly involved in enforcement activities under this Act or to impose quotas or goals with regard to the results of such activities.

Pub. L. 105-198 added
subsection (h).

§ 1910.157 Portable fire extinguishers.

(a) ***Scope and application.*** The requirements of this section apply to the placement, use, maintenance, and testing of portable fire extinguishers provided for the use of employees. [Paragraph \(d\)](#) of this section does not apply to extinguishers provided for employee use on the outside of workplace buildings or structures. Where extinguishers are provided but are not intended for employee use and the employer has an emergency action plan and a fire prevention plan that meet the requirements of [29 CFR 1910.38](#) and [29 CFR 1910.39](#) respectively, then only the requirements of [paragraphs \(e\)](#) and [\(f\)](#) of this section apply.

(b) ***Exemptions.***

(1) Where the employer has established and implemented a written fire safety policy which requires the immediate and total evacuation of employees from the workplace upon the sounding of a fire alarm signal and which includes an emergency action plan and a fire prevention plan which meet the requirements of [29 CFR 1910.38](#) and [29 CFR 1910.39](#) respectively, and when extinguishers are not available in the workplace, the employer is exempt from all requirements of this section unless a specific standard in part 1910 requires that a portable fire extinguisher be provided.

(2) Where the employer has an emergency action plan meeting the requirements of [§ 1910.38](#) which designates certain employees to be the only employees authorized to use the available portable fire extinguishers, and which requires all other employees in the

fire area to immediately evacuate the affected work area upon the sounding of the fire alarm, the employer is exempt from the distribution requirements in [paragraph \(d\)](#) of this section.

(c) *General requirements.*

- (1) The employer shall provide portable fire extinguishers and shall mount, locate and identify them so that they are readily accessible to employees without subjecting the employees to possible injury.
- (2) Only approved portable fire extinguishers shall be used to meet the requirements of this section.
- (3) The employer shall not provide or make available in the workplace portable fire extinguishers using carbon tetrachloride or chlorobromomethane extinguishing agents.
- (4) The employer shall assure that portable fire extinguishers are maintained in a fully charged and operable condition and kept in their designated places at all times except during use.
- (5) The employer shall remove from service all soldered or riveted shell self-generating soda acid or self-generating foam or gas cartridge water type portable fire extinguishers which are operated by inverting the extinguisher to rupture the cartridge or to initiate an uncontrollable pressure generating chemical reaction to expel the agent.

(d) *Selection and distribution.*

- (1) Portable fire extinguishers shall be provided for employee use and selected and distributed based on the classes of anticipated workplace fires and on the size and degree of hazard which would affect their use.
- (2) The employer shall distribute portable fire extinguishers for use by employees on Class A fires so that the travel distance for employees to any extinguisher is 75 feet (22.9 m) or less.
- (3) The employer may use uniformly spaced standpipe systems or hose stations connected to a sprinkler system installed for emergency use by employees instead of Class A portable fire extinguishers, provided that such systems meet the respective

requirements of [§ 1910.158](#) or [§ 1910.159](#), that they provide total coverage of the area to be protected, and that employees are trained at least annually in their use.

(4) The employer shall distribute portable fire extinguishers for use by employees on Class B fires so that the travel distance from the Class B hazard area to any extinguisher is 50 feet (15.2 m) or less.

(5) The employer shall distribute portable fire extinguishers used for Class C hazards on the basis of the appropriate pattern for the existing Class A or Class B hazards.

(6) The employer shall distribute portable fire extinguishers or other containers of Class D extinguishing agent for use by employees so that the travel distance from the combustible metal working area to any extinguishing agent is 75 feet (22.9 m) or less. Portable fire extinguishers for Class D hazards are required in those combustible metal working areas where combustible metal powders, flakes, shavings, or similarly sized products are generated at least once every two weeks.

(e) ***Inspection, maintenance and testing.***

(1) The employer shall be responsible for the inspection, maintenance and testing of all portable fire extinguishers in the workplace.

(2) Portable extinguishers or hose used in lieu thereof under [paragraph \(d\)\(3\)](#) of this section shall be visually inspected monthly.

(3) The employer shall assure that portable fire extinguishers are subjected to an annual maintenance check. Stored pressure extinguishers do not require an internal examination. The employer shall record the annual maintenance date and retain this record for one year after the last entry or the life of the shell, whichever is less. The record shall be available to the Assistant Secretary upon request.

(4) The employer shall assure that stored pressure dry chemical extinguishers that require a 12-year hydrostatic test are emptied and subjected to applicable maintenance procedures every 6 years. Dry chemical extinguishers having non-refillable disposable containers are exempt from this requirement. When recharging or hydrostatic testing is performed, the 6-year requirement begins from that date.

(5) The employer shall assure that alternate equivalent protection is provided when portable fire extinguishers are removed from service for maintenance and recharging.

(f) ***Hydrostatic testing.***

(1) The employer shall assure that hydrostatic testing is performed by trained persons with suitable testing equipment and facilities.

(2) The employer shall assure that portable extinguishers are hydrostatically tested at the intervals listed in Table L–1 of this section, except under any of the following conditions:

- (i) When the unit has been repaired by soldering, welding, brazing, or use of patching compounds;
- (ii) When the cylinder or shell threads are damaged;
- (iii) When there is corrosion that has caused pitting, including corrosion under removable name plate assemblies;
- (iv) When the extinguisher has been burned in a fire; or
- (v) When a calcium chloride extinguishing agent has been used in a stainless steel shell.

(3) In addition to an external visual examination, the employer shall assure that an internal examination of cylinders and shells to be tested is made prior to the hydrostatic tests.

Table L–1

Type of extinguishers	Test interval (years)
Soda acid (soldered brass shells) (until 1/1/82)	(¹)

Type of extinguishers	Test interval (years)
Soda acid (stainless steel shell)	5
Cartridge operated water and/or antifreeze	5
Stored pressure water and/or antifreeze	5
Wetting agent	5
Foam (soldered brass shells) (until 1/1/82)	(¹)
Foam (stainless steel shell)	5
Aqueous Film Forming foam (AFFF)	5
Loaded stream	5
Dry chemical with stainless steel	5
Carbon dioxide	5
Dry chemical, stored pressure, with mild steel, brazed brass or aluminum shells	12
Dry chemical, cartridge or cylinder operated, with mild steel shells	12
Halon 1211	12

Type of extinguishers	Test interval (years)
Halon 1301	12
Dry powder, cartridge or cylinder operated with mild steel shells	12

¹ Extinguishers having shells constructed of copper or brass joined by soft solder or rivets shall not be hydrostatically tested and shall be removed from service by January 1, 1982. (Not permitted)

(4) The employer shall assure that portable fire extinguishers are hydrostatically tested whenever they show new evidence of corrosion or mechanical injury, except under the conditions listed in paragraphs (f)(2)(i)–(v) of this section.

(5) The employer shall assure that hydrostatic tests are performed on extinguisher hose assemblies which are equipped with a shut-off nozzle at the discharge end of the hose. The test interval shall be the same as specified for the extinguisher on which the hose is installed.

(6) The employer shall assure that carbon dioxide hose assemblies with a shut-off nozzle are hydrostatically tested at 1,250 psi (8,620 kPa).

(7) The employer shall assure that dry chemical and dry powder hose assemblies with a shut-off nozzle are hydrostatically tested at 300 psi (2,070 kPa).

(8) Hose assemblies passing a hydrostatic test do not require any type of recording or stamping.

(9) The employer shall assure that hose assemblies for carbon dioxide extinguishers that require a hydrostatic test are tested within a protective cage device.

- (10) The employer shall assure that carbon dioxide extinguishers and nitrogen or carbon dioxide cylinders used with wheeled extinguishers are tested every 5 years at 5/3 of the service pressure as stamped into the cylinder. Nitrogen cylinders which comply with [49 CFR 173.34\(e\)\(15\)](#) may be hydrostatically tested every 10 years.
- (11) The employer shall assure that all stored pressure and Halon 1211 types of extinguishers are hydrostatically tested at the factory test pressure not to exceed two times the service pressure.
- (12) The employer shall assure that acceptable self-generating type soda acid and foam extinguishers are tested at 350 psi (2,410 kPa).
- (13) Air or gas pressure may not be used for hydrostatic testing.
- (14) Extinguisher shells, cylinders, or cartridges which fail a hydrostatic pressure test, or which are not fit for testing shall be removed from service and from the workplace.
- (15)
- (i) The equipment for testing compressed gas type cylinders shall be of the water jacket type. The equipment shall be provided with an expansion indicator which operates with an accuracy within one percent of the total expansion or .1cc (.1mL) of liquid.
- (ii) The equipment for testing non-compressed gas type cylinders shall consist of the following:
- (A) A hydrostatic test pump, hand or power operated, capable of producing not less than 150 percent of the test pressure, which shall include appropriate check valves and fittings;
- (B) A flexible connection for attachment to fittings to test through the extinguisher nozzle, test bonnet, or hose outlet, as is applicable; and
- (C) A protective cage or barrier for personal protection of the tester, designed to provide visual observation of the extinguisher under test.

(16) The employer shall maintain and provide upon request to the Assistant Secretary evidence that the required hydrostatic testing of fire extinguishers has been performed at the time intervals shown in Table L–1. Such evidence shall be in the form of a certification record which includes the date of the test, the signature of the person who performed the test and the serial number, or other identifier, of the fire extinguisher that was tested. Such records shall be kept until the extinguisher is hydrostatically retested at the time interval specified in Table L–1 or until the extinguisher is taken out of service, whichever comes first.

(g) *Training and education.*

(1) Where the employer has provided portable fire extinguishers for employee use in the workplace, the employer shall also provide an educational program to familiarize employees with the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting.

(2) The employer shall provide the education required in [paragraph \(g\)\(1\)](#) of this section upon initial employment and at least annually thereafter.

(3) The employer shall provide employees who have been designated to use fire fighting equipment as part of an emergency action plan with training in the use of the appropriate equipment.

(4) The employer shall provide the training required in [paragraph \(g\)\(3\)](#) of this section upon initial assignment to the designated group of employees and at least annually thereafter.

[[45 FR 60708](#), Sept. 12, 1980; [46 FR 24557](#), May 1, 1981, as amended at [51 FR 34560](#), Sept. 29, 1986; [61 FR 9239](#), Mar. 7, 1996; [67 FR 67964](#), Nov. 7, 2002]