

**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 (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” (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 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 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 or is not conducted less frequently, as well as 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, 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 confidentially 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 (44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the *Federal Register* on July 13, 2020 (85 FR 42024) soliciting comments on its proposal to extend the Office of Management and Budget's approval of the information collection requirements contained in the Hydrostatic Testing Provision of the Portable Fire Extinguishers Standard (29 CFR 1910.157(f)(16)), (Docket No. OSHA-2010-0025). This notice was part of a preclearance consultation program that provided interested parties with 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 requirement found in the above standard. The Agency did not receive any public 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. The following hourly wage rates for the relevant occupational categories have been derived 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]. (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 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 release: *Employer Costs for Employee Compensation* news release text; released 10:00 AM (EDT), March 19, 2020 (<https://www.bls.gov/news.release/pdf/ecec.pdf>). BLS reported that for civilian workers, fringe benefits accounted for 29.9 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.

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 | \$28.82 | 0.299 | \$41.11 |

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 assure that the required hydrostatic testing of fire extinguishers (the “extinguisher”) has been performed in accordance with, and at the time

² Source: Employer costs for Employee Compensation Supplementary Table 2. U.S. Department of Labor, Bureau of Labor Statistics, March 2020.

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 it will take 1 minute (1/60 hour) to maintain each record. 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 hour) plus an additional 3 minutes (3/60 hour) 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: $33,262,831 \text{ extinguishers} / 7.5 \text{ years} \times 1/60 \text{ hour} = 73,917 \text{ hours}$

Cost: $73,917 \text{ hours} \times \$41.11 = \$3,038,728$

Burden hours: $5,869,911 \text{ extinguishers} / 7.5 \text{ years} \times 33/60 \text{ hour} = 430,460 \text{ hours}$

Cost: $430,460 \text{ hours} \times \$41.11 = \$17,696,211$

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 | \$41.11 | \$3,038,728 |
| Generating and/or Maintaining the Certification Record (In house) | | 5,869,911 | .133333345 | 782,655 | 33/60 | 430,460 | \$41.11 | \$17,696,211 |
| Total | | 5,869,911 | -- | 5,217,699 | -- | 504,377 | -- | \$20,734,939 |

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 \$10.63 to \$23.92³ depending on the type of test and the size of the extinguisher. Therefore, for calculating costs, the Agency is using an average of \$17.28. 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 $(33,262,831/7.5 \text{ years} \times \$17.28)$ **\$76,637,563**.

³ SOURCE: <https://sterlingfireassoc.wordpress.com/author/sterlingfireassoc/>

| 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 |

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.

OSHA is requesting an adjustment decrease in the burden hours for the collections of information in the Standard from 519,161 hours to 504,377 hours, for a total adjustment decrease of 14,784 burden hours. The decrease is primarily attributed to a drop of the number of extinguishers estimated to be in use in the United States.

There was an increase in the total cost for employers to hydrostatically test a portable fire extinguisher from \$72,069,467 to \$76,637,563 annually. The increase is due to an increase in the price to perform the test.

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.

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 employee 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 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 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 |
| 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 |
| 324 | Petroleum and Coal 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 |
| 326 | Plastics and Rubber Products | 116,972.6 | 11,250 | 10.4 | 8,268 | 85,967 |
| 327 | Nonmetallic | 48,443.2 | 11,250 | 4.3 | 11,997 | 51,660 |

| | | | | | | |
|-----|---------------------|-----------|--------|------|--------|-----------|
| | Mineral Products | | | | | |
| 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).